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for Reconstruction and Development

TRANSITION REPORT 2016-17



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Transition for all:
Equal opportunities in an unequal world

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ABOUT THIS REPORT

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

The responsibility for the content of the report is taken by the Office of the Chief Economist. The assessments and views expressed are not necessarily those of the EBRD. All assessments and data in the online country assessments are based on information as of late October 2016.

COUNTRY ABBREVIATIONS

Albania	ALB	Romania	ROM	Germany	GER
Armenia	ARM	Russia	RUS	India	IND
Azerbaijan	AZE	Serbia	SER	Indonesia	IDN
Belarus	BEL	Slovak Republic	SVK	Ireland	IRL
Bosnia and Herz.	BOS	Slovenia	SLO	Israel	ISR
Bulgaria	BUL	Tajikistan	TJK	Italy	ITA
Croatia	CRO	Tunisia	TUN	Japan	JPN
Cyprus	CYP	Turkey	TUR	Mexico	MEX
Egypt	EGY	Turkmenistan	TKM	Netherlands	NED
Estonia	EST	Ukraine	UKR	Portugal	PRT
FYR Macedonia	FYR	Uzbekistan	UZB	Saudi Arabia	SAU
Georgia	GEO			Singapore	SGP
Greece	GRC			South Africa	ZAF
Hungary	HUN	Argentina	ARG	South Korea	KOR
Jordan	JOR	Australia	AUS	Spain	ESP
Kazakhstan	KAZ	Austria	AUT	Sweden	SWE
Kosovo	KOS	Belgium	BGM	Thailand	THA
Kyrgyz Republic	KGZ	Brazil	BRA	United Kingdom	UK
Latvia	LAT	Canada	CAN	United States of America	USA
Lithuania	LIT	Chile	CHL		
Moldova	MDA	China	CHN		
Mongolia	MON	Czech Republic	CZE		
Montenegro	MNG	Denmark	DNK		
Morocco	MOR	Finland	FIN		
Poland	POL	France	FRA		

GLOSSARY

A glossary for this *Transition Report* is available at tr-ebd.com

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EXECUTIVE SUMMARY

This is the first *Transition Report* to deal exclusively with the important subject of inequality and economic inclusion. It focuses on a number of key aspects of inclusive growth: the distribution of income; the impact that the transition process has had on people's well-being and happiness; equality of opportunity; and financial inclusion. The analysis in this report draws on the third round of the *Life in Transition Survey* (LiTS III), a household survey conducted by the EBRD and the World Bank in 34 countries in late 2015 and the first half of 2016. The results of that survey are compared with those of the first two rounds, which were conducted in 2006 and 2010. The report also uses the results of a unique survey of bank managers (the EBRD's *Banking Environment and Performance Survey*) and other rich sources of data.

The transition from planned to market economies was far from smooth, especially in the early years. The social, economic and physical costs of those reforms were so substantial that men and women born at the start of the transition process are an average of around 1 cm shorter than those born just before or after that period. It is no wonder, then, that most people in the transition region were, until recently, less happy than people with similar income levels elsewhere in the world. Now, though, that is no longer the case: people in those formerly communist countries are, on average, just as satisfied with their lives as their counterparts in other parts of the world.

The EBRD region has not only caught up with richer countries in terms of happiness; it has also closed some of the income gap. However, not everybody has benefited equally. Only 44 per cent of all men and women in post-communist countries have enjoyed total income growth that is higher than the average for the G-7 economies. This means that more than half of all people in the transition region have not seen their earnings converge with those of people living in richer countries.

What can we do to help distribute the benefits of growth more equally? Redistributing income can help, but the key is to improve people's opportunities to succeed in life – regardless of their gender, place of birth or parental background. To achieve this, the region needs improved access to tertiary education, stronger links between secondary education and employment, better infrastructure links and more affordable childcare. Enhanced access to financial services, aided by the introduction of digital payment systems and improved information comparing the cost of different banking products, will also make it easier for rural populations, women and people in poorer countries to participate more fully in the local economy.

The last part of the report examines recent economic developments in the region. After four years of economic slow-down, average annual growth in the region fell close to zero in 2015. This largely reflects the impact that low commodity prices and the recession in Russia have had on the economies of eastern Europe, the Caucasus and Central Asia. Elsewhere in the region, moderate growth momentum has been sustained. Assessments of economic developments and structural reforms in individual countries across the region are available online at tr-ebd.com.

CONVERGENCE AND INEQUALITY



The region has achieved an impressive amount of income convergence since the start of the transition process. Furthermore, significant progress has been made in terms of reducing poverty. However, people's individual experiences of growth and convergence have differed vastly depending on their position on the income ladder.

In post-communist countries, average income growth corresponds to the experience of someone in the top 27 per cent of the income distribution. Furthermore, only 44 per cent of people in those countries have personally experienced income convergence – that is to say, long-term income growth above the average level in the G-7 economies. The shifts seen in income patterns over the last two-and-a-half decades reflect both broader globalisation trends and experiences unique to the region – a legacy of the wage decompression and deep recessions seen in the early years of the transition process, as well as the very fast shift from manufacturing and agriculture-based economies to a more service-oriented model.

Before the start of the transition process, levels of inequality in the region were very low by international standards. Although inequality has increased sharply, it remains moderate in comparison with other parts of the world. Despite this, people are overwhelmingly of the view that inequality levels are high and rising. These perceptions may, to a significant extent, be guided by the fact that wealth is strongly concentrated among the very rich – even when compared with other emerging market economies. In contrast with advanced economies and emerging markets elsewhere in the world, the richest individuals in the EBRD region derive their wealth predominantly from commodity rents and related sectors, as opposed to IT-based innovation or competitive manufacturing.

The fact that wealth is strongly concentrated among the very rich across the region calls for higher standards of governance, transparent processes for privatisation and public procurement, the disclosure of detailed information on contracts and revenue management in extractive industries, as well as consistent enforcement of competition law and efforts to diversify economies away from excessive dependence on natural resource rents. The taxation of wealth could also play a more prominent role as a source of government revenue. Meanwhile, at the bottom of the income distribution, the reduction of poverty requires targeted, well-designed social transfer programmes. Tackling broader inequality requires a combination of redistribution through taxation and public spending and measures to reduce inequality of opportunity in society (as discussed in Chapter 3).

<http://2016.tr-ebrd.com/convergence-and-inequality>

THE IMPACT OF TRANSITION ON WELL-BEING



In the last 25 years, people living in formerly communist countries have seen their economic, political and social institutions undergo dramatic changes. In the early years of the reform process, they also suffered severe economic recessions. Chapter 2 of this report uses newly available data from LiTS III to analyse the impact that the early years of the transition process had on the well-being of people in those countries.

Previous studies have identified a “transition happiness gap”, with residents of post-communist countries reporting significantly lower levels of life satisfaction than their counterparts in non-transition countries with similar income levels. However, data from LiTS III show that this gap has finally closed, with residents of formerly communist countries now expressing just as much satisfaction with life as their peers in other countries.

This optimistic finding comes with three caveats, though. First of all, that “happiness convergence” is only partially explained by increases in satisfaction in those transition countries; declining life satisfaction levels in non-transition countries such as Germany and Italy have also played an important role.

Second, such happiness convergence does not mean that the acute social costs incurred at the start of the transition process were any less painful. Anthropometric measures made available by LiTS III data indicate that the early years of that process were a period of substantial deprivation, with permanent physical effects. Indeed, people born around the start of the transition process are an average of 1 cm shorter than their older and younger peers, pointing to the significant hardship that their families endured as a result of those reforms. However, data also show that those people have gone on to enjoy better lives: they are, on average, now better educated and more satisfied with life than their peers.

Third, while residents of post-communist countries have, on average, overcome the dramatic experience of transition, specific sections of society have been left behind. People born to families with lower levels of education and income have proved to be more vulnerable to the changes experienced during the transition process, and they are still lagging behind in terms of both objective and subjective well-being.

<http://2016.tr-ebrd.com/well-being>

INEQUALITY OF OPPORTUNITY



People's circumstances at birth – their gender, place of birth, ethnicity and parental background – often have a significant impact on their educational qualifications, the type of job they get and, ultimately, their earnings. Such inequality of opportunity is both inefficient and unfair. It prevents people from making the best use of their skills or realising their entrepreneurial ideas, and that can, in turn, negatively affect a country's long-term growth, leading to persistently high income and wealth inequality. A lack of opportunities can also result in a loss of confidence in the key economic and political institutions that underpin market-based economic systems, eventually resulting in reform reversals.

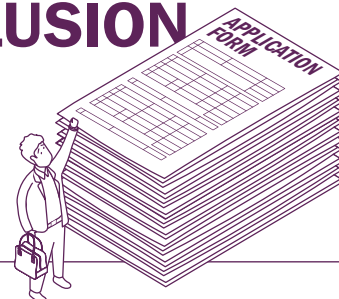
Inequality of opportunity in the EBRD region remains higher than in western European countries such as Germany, according to estimates based on LiTS III data. It accounts for an average of 20 to 50 per cent of total income inequality in many EBRD countries of operations. Parents' level of education is the key factor determining inequality of opportunity, followed by gender and place of birth. Inequality of opportunity is also strongly correlated with inequality of observed incomes: all countries with high levels of inequality of opportunity also have high levels of income inequality.

Inequality of opportunity is substantially higher in terms of getting a good job – one that provides a stable income stream of sufficient size – than it is in terms of getting a job in general. Moreover, when it comes to education, inequality of opportunity appears to have increased, since it is estimated to be significantly higher for people who started school after 1989 relative to older cohorts. High levels of inequality of opportunity in society reduce people's support for open markets and democracy. In contrast, inequality of outcomes does not have such an effect and may actually strengthen support for market economics and democracy, provided that differences in outcomes are driven by differences in effort, rather than circumstances at birth.

Economic policies can play an important role in reducing inequality of opportunity and levelling the playing field, for instance by improving access to tertiary education (through targeted scholarship programmes, for example), by strengthening links between secondary education and employment, by improving infrastructure links and by increasing the availability of affordable childcare.

<http://2016.tr-ebrd.com/inequality-of-opportunity>

FINANCIAL INCLUSION



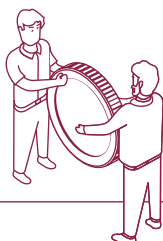
An inclusive financial system can reduce both inequality of opportunity and, ultimately, inequality of outcomes. While access to financial services is reasonably high in richer parts of the EBRD region, it is not so good in less developed economies. In those poorer countries, financial access is also distributed unevenly. In particular, many women, young people and rural populations remain disconnected from the financial system.

The reasons for such exclusion vary depending on the circumstances of the household or individual in question, with many young people being discouraged by onerous documentation requirements, while older people are often deterred by long distances to the nearest bank branch. While gender gaps in terms of access to bank accounts have nearly been eliminated in richer parts of the EBRD region, they persist in poorer countries across all age groups. There are also significant differences between rural and urban areas of poorer countries in terms of access to bank accounts, with rural women having the worst access. While foreign banks' entry into local markets has improved competition – and thus access to financial services – in many countries, evidence suggests that these gains have been uneven, with less educated and lower-income households continuing to have less access to such services. Many of these households do not normally apply for loans – and when they do, they receive fewer loan offers than their peers.

Governments can stimulate the use of bank accounts and encourage more people to connect to the formal financial system by introducing digital payments for wages and transfers. At the same time, banks can design financial products that better meet the needs of excluded groups, such as “no-frills” accounts and mobile banking, as well as tailoring documentation requirements to the realities of younger and poorer individuals. Focusing efforts on improving access to finance in rural communities, where the social benefits of financial inclusion are considered to be high, can help to foster the economic integration of this important segment of society, which is currently underserved in the region. Meanwhile, participation in credit markets can be encouraged by establishing credit registries, fostering the expansion of branch networks (and thus competition) in underserved areas, publicising the interest rates available in the local area using official comparison websites and promoting financial literacy campaigns.

<http://2016.tr-ebrd.com/financial-inclusion>

MACROECONOMIC OVERVIEW



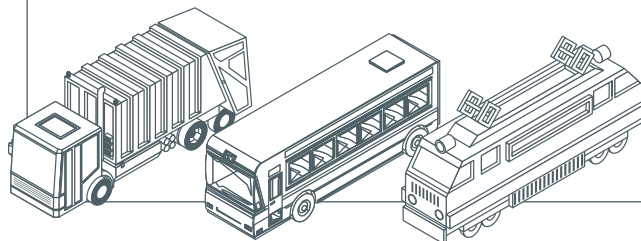
Following four consecutive years of deceleration, the average annual growth rate in the region fell further to stand at 0.5 per cent in 2015, down from 1.9 per cent in 2014. Growth is expected to pick up modestly in 2016 and 2017. Low commodity prices and the continued recession in Russia are weighing on the economic performance of both Central Asia and eastern Europe and the Caucasus. At the same time, decreases in the cost of energy imports are benefiting the economies of central and south-eastern Europe, as well as in Turkey, where growth momentum has been sustained. Those economies have also benefited from accommodative policies in the eurozone. At the same time, monetary tightening in the United States of America has led to a decline in capital flows to the EBRD region.

Declining revenue from tourism, partly owing to security concerns, has negatively affected the outlook for Turkey and countries in the southern and eastern Mediterranean region. Meanwhile, Ukraine's economy, which contracted by almost 10 per cent in 2015, is expected to return to positive growth in 2016 and 2017 as structural reforms are gradually implemented. The UK's vote to leave the European Union is expected to have only a limited direct impact on countries where the EBRD invests.

The economic outlook for the EBRD region is subject to major risks relating to geopolitical tensions in and around the region and a general weakening of investor confidence with regard to emerging markets in general.

<http://2016.tr-ebd.com/outlook>

STRUCTURAL REFORM



Political and economic challenges persist across the region, and governments are continuing to respond with a variety of approaches. On balance, policy responses remain positive, with many countries pursuing ambitious reform objectives.

New analysis focusing on the development of small and medium-sized enterprises shows that providing non-bank financing to such firms and helping them to acquire better business skills are particular hurdles for many countries in the EBRD region. Updates to regional inclusion gap scores point to some improvements in the area of inclusion, particularly in more advanced economies, but also some stagnation and backtracking. This highlights the remaining challenges of building more inclusive societies, especially in eastern and south-eastern Europe, Central Asia and the southern and eastern Mediterranean region.

<http://2016.tr-ebd.com/reforms>

FOREWORD

This is the first time that a *Transition Report* has focused on economic inequality and inclusion. The thinking on transition has evolved significantly since the first *Transition Report* was published back in 1994. Initially, much of the emphasis was on the extent and structure of markets and policies that fostered price and trade liberalisation, privatisation, macroeconomic stability, competition and the development of the financial sector. It was clear that market economies outperformed planned economies and that, even if the path towards capitalism involved short-term pain, this was a price worth paying.

In some countries, those reforms were indeed rapid and successful. They managed to create market economies and democratic political systems, and economic growth resumed after only a brief decline in income. Other countries suffered deep and protracted recessions that delayed further reforms – and in some cases, initial reforms were even reversed. The *Transition Report 2013*, entitled “*Stuck in Transition?*”, studied these experiences and identified important patterns. It established that countries which managed to ensure that the benefits of reforms were shared widely across society retained democratic political institutions and continued on a pro-market path. In sharp contrast, countries where the majority of people perceived reforms to be designed for somebody else’s gain saw the reversal of both political and economic transition. In these countries, anti-reform populists took over and built institutions of crony capitalism. Although the initial “short-term pain, long-term gain” logic was correct, these opportunistic politicians managed – by dismantling political checks and balances and suppressing freedom of speech and civil society – to prevent pro-reform parties from challenging them in fair elections.

Thus, even if reforms are beneficial in the long run, they still may not succeed. The benefits of reforms may not materialise if economic gains are not delivered to the majority of the population straight away. What is more, this applies far beyond the EBRD’s countries of operations. Indeed, today many developed countries are also struggling with the appeal of populist politicians. While nativists and Eurosceptics offer no constructive solutions, they do highlight an important problem. Namely, although globalisation and technological progress have delivered great benefits for developed and developing countries *on average*, they have also resulted in “job polarisation”. In rich countries, automation and globalisation have benefited highly skilled professionals. The industries in which those professionals work have enjoyed access to cheaper inputs and exploited economies of scale in selling their products and services to global markets. Income growth has also created low-skilled jobs – in sectors where jobs could not be automated or outsourced to other countries. At the same time, many middle-skilled jobs have been either outsourced or automated. The former holders of those jobs have either left the labour force entirely or moved down the skills pyramid – thus enduring reduced pay and further depressing the wages of low-skilled workers. Through this mechanism, globalisation and technological progress



have hollowed out the career opportunities of a substantial percentage of the middle class in OECD countries.

Post-communist transition economies have not suffered from job polarisation. In those countries, globalisation has created – not destroyed – high-value-added jobs in exporting sectors. However, as this *Transition Report* shows, those countries have also suffered from rising inequality and a lack of inclusion. In many countries, inequality rose substantially at the start of transition. The experience of such transition countries has shown that reform processes can get stuck, or even go into reverse, in the absence of sufficient inclusion. If mainstream politicians want to withstand the challenge presented by opportunistic populists, they need to design reforms that do more than just deliver growth on average in the long run. Reformers need to ensure that they enjoy the support of the majority at all times.

Indeed, a well-functioning market economy should be more than just competitive; it should also be inclusive, well-governed, environmentally friendly, resilient and integrated. This is necessary in order to ensure that reforms are politically sustainable: reforms should deliver benefits to the majority of the population in both the short and the long term, preventing populism both in times of crisis and in normal times.

The evaluation of progress in these areas requires new measurement tools. This is why the EBRD has, since 2006, complemented its *Business Enterprise Environment and Performance Survey* (BEEPS – a survey of business executives) and its *Banking Environment and Performance Survey* (BEPS – a survey of bank managers) with the *Life in Transition Survey* (LiTS – a survey of households). In late 2015 and the first half of 2016, the EBRD carried out the third round of the *Life in Transition Survey* in cooperation with the World Bank, surveying more than 51,000 households in 34 countries (29 post-communist

countries, plus Cyprus, Germany, Greece, Italy and Turkey). The analysis of these LiTS data lies at the heart of this year's *Transition Report*, allowing us to look beyond average GDP per capita figures and investigate the precise details of individual transition experiences. The report's four chapters focus on the key aspects of inclusion: the distribution of income and wealth; the impact that the transition from planned to market economies has had on people's well-being; equality of opportunity; and financial inclusion. The report identifies large sections of society that have suffered – rather than benefited – as a result of pro-market reforms and are excluded from the opportunities that a market economy offers.

Inequality of opportunity is especially important in this regard, since it is ultimately the root of all inequality. Chapter 3 shows that there are no countries with high levels of inequality of opportunity but low levels of inequality of income. Inequality of opportunity is inefficient, as it means that talented individuals cannot achieve their full potential. Also – and most importantly – inequality of opportunity is unfair, and it is regarded as such by the majority of people. Consequently, economic reforms that increase inequality of opportunity are not sustainable in the longer term.

Inequality of opportunity at birth does not necessarily have to result in inequality of outcomes (such as income or wealth inequality). Redistribution of income (through inheritance taxes or wealth taxes, for instance), equal access to education and health care, and geographical mobility all reduce income and wealth inequality for the next generation, even if the previous generation faced high levels of inequality of opportunity. And that decline in inequality of income and wealth then reduces inequality of opportunity for the generation after that. This is why Chapter 1's analysis of the evolution of inequality over the last 25 years is so important. Unfortunately, that analysis shows that levels of inequality have risen dramatically in most post-communist countries. In many of those countries, economic growth has mostly benefited the rich minority (in some cases, just the top 10 or 20 per cent of households), while the middle class and the poor have lagged behind in terms of income growth. In the EBRD's newer countries of operations, however, the picture is very different. In those countries, growth has been far more inclusive. In Turkey, for example, it is the middle 80 per cent who have benefited the most from the last 25 years of economic growth.

Chapter 2 shows that the transition experience has indeed been highly traumatic – especially the early years. It shows that people born around the beginning of the transition process have grown up to be an average of around 1 cm shorter than their older and younger peers, indicating that the early years of reforms were a period of substantial socioeconomic deprivation. Interestingly, this pain has eventually been overcome, with the result that these people are now actually happier than their younger and older counterparts in other countries. This is attributable to the increased access to education that has been brought about by the transition process. Education also features prominently in the analysis in Chapter 3, which shows that inequality of opportunity is still higher in post-communist

transition countries than it is in western Europe – and that much of the inequality of opportunity seen in those countries is due to parents' level of education.

Chapter 4 looks at inequality in access to financial services. Financial inclusion remains a major challenge in many countries where the EBRD invests – especially the poorer ones, where substantial gender gaps persist in terms of access to finance. In richer EBRD countries of operations, gender gaps continue to be observed for older generations, but they have been eliminated for younger people.

While this analysis of inequality in the EBRD region results in many worrying findings, there are also a number of reasons for optimism. Chapter 2 shows that the notorious “transition happiness gap” has finally been closed. In the past, residents of post-communist countries used to report significantly lower levels of life satisfaction than their counterparts in non-transition countries with similar income levels. Academics argued that the transition happiness gap was driven by the dramatic events of the early years of the transition process, so the negative impact on subjective well-being should be temporary, rather than permanent. This prediction has finally come true, with residents of post-communist countries now expressing just as much satisfaction with their lives as their peers in other countries.

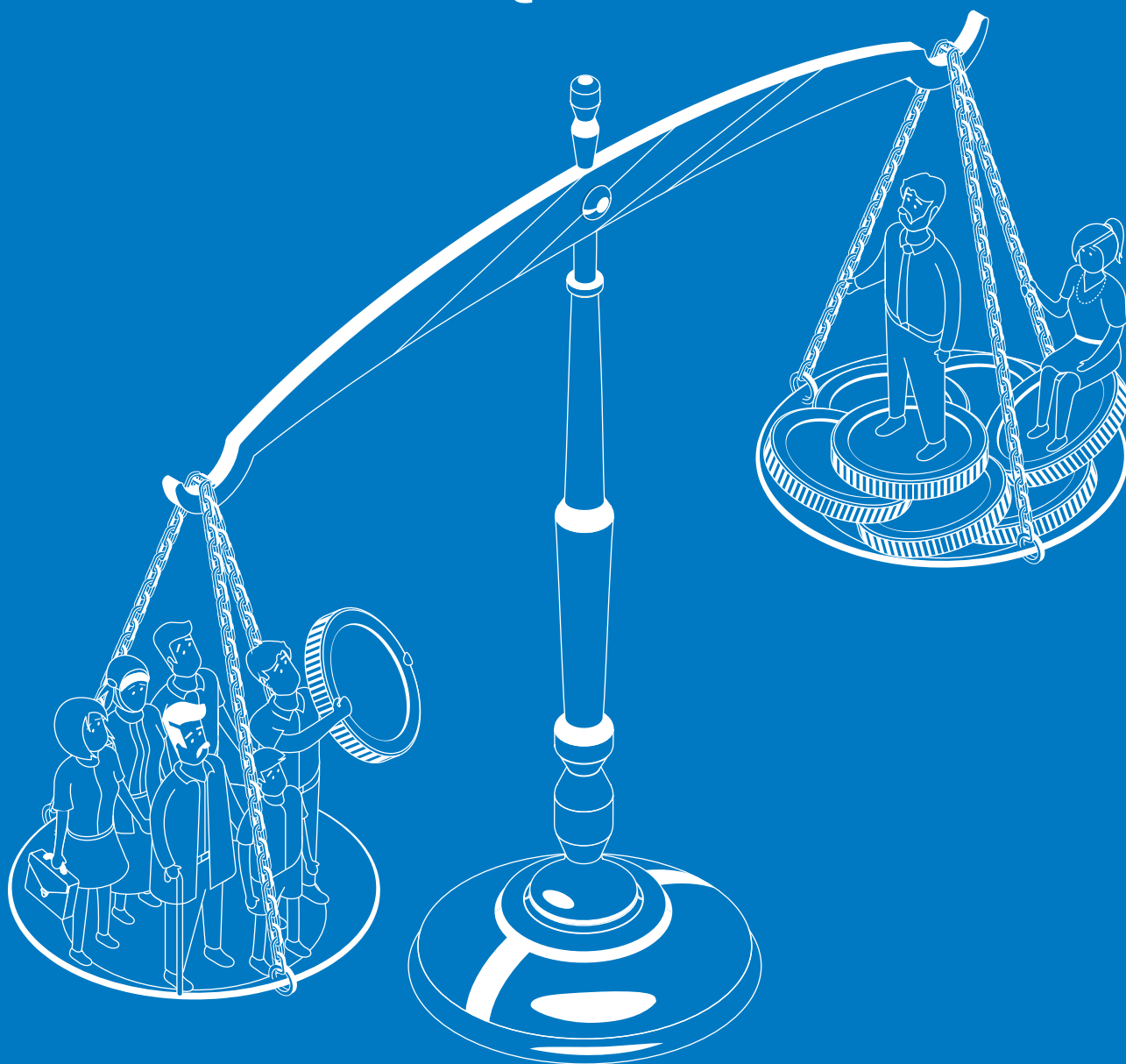
Although this *Transition Report* focuses on distributional aspects of the transition process and looks beyond growth in average income, this does not mean that the EBRD believes inclusion to be a substitute for growth. A successful market economy must have both. Without inclusion, pro-growth reforms are not politically sustainable. Without growth, however, inclusion policies become a zero-sum game – redistributing the pie, rather than growing it – and therefore result in conflict. Thus, growth remains at the heart of the EBRD's work and will be studied in detail in future *Transition Reports*.



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**“THE THINKING ON
TRANSITION HAS EVOLVED
SIGNIFICANTLY SINCE THE
FIRST TRANSITION REPORT
WAS PUBLISHED BACK
IN 1994.”**

CONVERGENCE AND INEQUALITY



AROUND
60%
AVERAGE SHARE OF
SERVICES IN THE EBRD
REGION'S GDP, COMPARED
WITH LESS THAN 40%
IN 1990

TWO-THIRDS
OF INCOME INEQUALITY
IN THE REGION
IS ACCOUNTED FOR
BY INEQUALITY
WITHIN COUNTRIES,
WITH ONE-THIRD
ATTRIBUTABLE TO INCOME
DIFFERENCES BETWEEN
COUNTRIES

ONLY
44%
OF THE POPULATION
OF POST-COMMUNIST
COUNTRIES HAVE
PERSONALLY EXPERIENCED
LONG-TERM INCOME
CONVERGENCE

AROUND
60%
OF THE WEALTH OF THE
REGION'S BILLIONAIRES
IS DERIVED FROM
COMMODITIES, UTILITIES
AND REGULATED SECTORS,
COMPARED WITH AROUND
13% IN ADVANCED
ECONOMIES

The EBRD region has achieved an impressive amount of income convergence with the living standards of advanced economies since the start of the transition process. However, people's individual experiences of growth and convergence differ vastly depending on their position on the income ladder. Only a minority of people in post-communist countries – the top 27 per cent of the income distribution – have actually experienced average income growth for their country. Meanwhile, those in the bottom 23 per cent of the income distribution are still worse off today than they were in 1989. Although the resulting income inequality remains moderate by international standards, wealth is more concentrated among the very rich than it is in comparable economies elsewhere in the world. People are also overwhelmingly of the view that inequality levels are high and rising.

Introduction

Average incomes in the EBRD region have risen markedly since the late 1990s. Back then, the average level of income in the region was only a quarter of that seen in the G7 advanced economies when measured at purchasing power parity (PPP).¹ By 2011, it had reached 38 per cent of that level. Per capita incomes in the region today are around 50 per cent higher, on average, than they were in 1989. These average figures point to a strong performance in terms of income convergence, despite the fact that convergence has virtually stalled since 2011.² However, they also mask large differences – differences both between economies and, more importantly, between individuals within economies.

Has everyone benefited from post-transition income convergence? Who has benefited the most and who has benefited the least? Whose growth experience are we actually referring to when we quote average figures for income growth and convergence? The answers to these questions vary from

country to country. They also determine, to a significant extent, whether or not the broad gains of transition and globalisation are economically and politically sustainable.

In order to provide answers to these questions, this chapter looks at the income growth patterns experienced by different segments of the population (namely, the poor, the middle classes and the better-off), without necessarily passing judgement on the root causes of any trends observed. Income inequality is partly a reflection of differences in people's efforts and abilities, but it also reflects differences in people's opportunities to apply their skills or finance their ideas (for instance, if good jobs are reserved for those with connections). These issues are explored in greater detail in subsequent chapters, which look at equality of opportunity and financial inclusion.

When it comes to shifts in income inequality and differing experiences of growth since the late 1980s, the trends observed in countries that have experienced price liberalisation and a transition recession (referred to as "post-communist countries" in the interests of simplicity) often differ fundamentally from those witnessed in southern and eastern Mediterranean (SEMED) countries, as well as Cyprus, Greece and Turkey. This distinction is maintained throughout the analysis in this chapter.

We can see that people's individual experiences of growth and convergence differ vastly depending on their position on the income ladder. In post-communist countries, only people in the top 27 per cent of the income distribution have experienced average or above-average income growth. In contrast, 23 per cent of people are actually worse off today than they were in 1989, while a further 33 per cent have experienced income growth below the G7 average, implying that only 44 per cent of people in those countries have personally experienced income convergence in the long run.³

Broadly speaking, the region has made considerable progress in terms of reducing poverty, but the extent to which wealth is concentrated among the very rich appears to be particularly high by global standards, partly reflecting the legacy of privatisation programmes implemented during the transition process. Poverty, income inequality and the concentration of wealth among the very rich are virtually uncorrelated across countries. These are separate phenomena that require separate policy responses, which will be discussed in the course of the report.

The chapter is structured as follows. A brief review of global trends in inequality is followed by an examination of income growth patterns across the EBRD region, with a focus on differences between the experiences of the poor, those in the middle of the income distribution and the better-off. The next section examines trends in poverty, income inequality and the concentration of wealth. This is followed by a discussion of broad economic policies that can help to tackle poverty, rising inequality and excessive concentration of wealth among the very rich.

¹ The G7 comprises Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

² See EBRD (2013) for a discussion of this issue.

³ See also Jones and Klenow (2016), who show that the increases seen in inequality in some emerging markets in recent decades mean that average income convergence overstates the true extent of convergence in terms of the welfare of individuals.

Trends in inequality: a global perspective

The transition process has coincided with a period of technology-enabled globalisation. Over this period, inequality between countries has generally declined as income levels in emerging markets have risen towards those seen in advanced economies, while inequality within countries has increased. As a result of these two conflicting trends, the Gini coefficient measuring income inequality at the level of the world as a whole has been broadly stable over the last 30 years and may have begun to gradually decline.⁴

A number of factors have contributed to the shifts seen in the global distribution of income. Income convergence between countries has been supported by a long period of relatively high commodity prices which has benefited commodity-exporting developing countries, by improvements in macroeconomic policies in emerging markets and by technology-enabled globalisation of production based on global value chains. At the same time, the automation of routine jobs and new technologies that have increased productivity differentials between people with higher and lower skill levels have resulted in increased inequality within countries.⁵

At a global level, the main winners as a result of these changes have been the very rich, as well as those in the middle of the global income distribution (that is to say, the middle classes and the better-off in emerging markets and developing countries). This can be seen in Chart 1.1, which shows changes in people's real incomes based on their position in the global distribution of income (with points A and C corresponding to the main winners). In contrast, the middle classes in developed countries (those around the 80th percentile in the global income distribution – point B in the chart) have seen their pay rising only slowly – if at all – as many of their jobs have been automated or outsourced to emerging markets.⁶

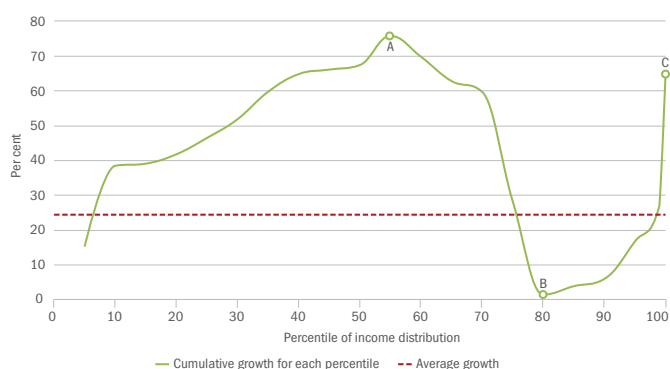
These shifts have coincided with increases in the concentration of wealth, with the result that the richest 10 per cent of people in advanced economies are now estimated to account for more than half of all wealth in those countries.⁷ At the very top end – that is to say, the top 0.1 per cent or 0.01 per cent of the global income distribution – the stock of wealth is now significantly more concentrated among top earners than annual income.⁸

Is growing inequality within countries a concern?

There is growing evidence that excessive inequality hurts long-term growth prospects. Specifically, the concentration of earnings in the top quintile (20 per cent) of the income distribution may hamper subsequent growth. Furthermore, high levels of wealth concentration that are driven by political connections (as opposed to innovation, for instance) are associated with weaker long-term growth performance.⁸

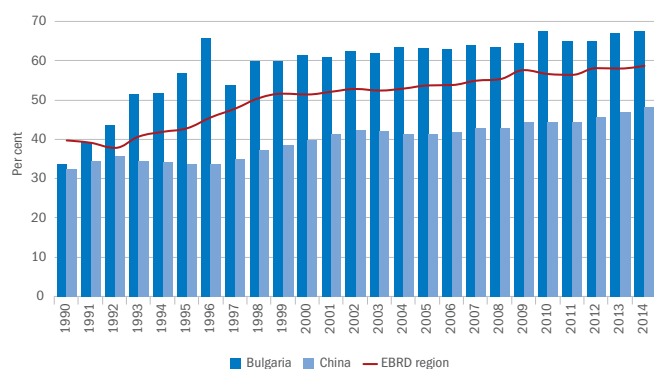
An unchecked increase in inequality may jeopardise people's ability to invest in their human capital or develop new ideas. In other words, excessive inequality of outcomes may, over time, negatively affect equality of opportunity in society. High levels of income and wealth inequality may also lead to a loss

CHART 1.1. Cumulative growth in global real incomes, 1988-2008



Source: Milanović (2016).

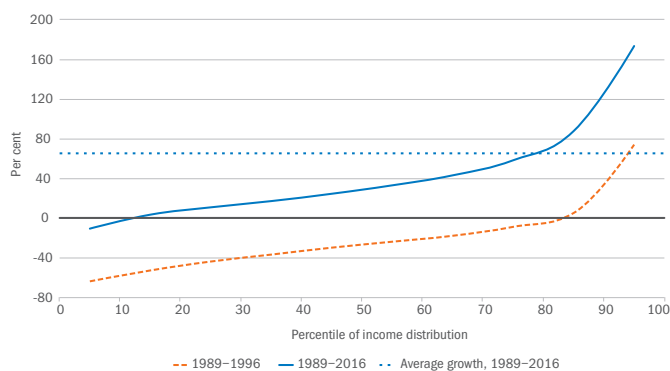
CHART 1.2. Share of services in GDP



Source: World Development Indicators and authors' calculations.

Note: Data for the EBRD region represent an unweighted average of figures for the following 19 countries: Albania, Armenia, Azerbaijan, Belarus, Cyprus, Egypt, FYR Macedonia, Georgia, Jordan, the Kyrgyz Republic, Moldova, Mongolia, Morocco, Romania, Tajikistan, Tunisia, Turkey, Ukraine and Uzbekistan.

CHART 1.3. Cumulative income growth in Russia since 1989 by income decile



Source: National authorities, World Bank Povcal database, International Monetary Fund (IMF), UN and authors' calculations.

⁴ See Milanović (2016). The Gini coefficient measures the concentration of income. A coefficient of 1 corresponds to a situation where all income is earned by a single individual, while a coefficient of 0 corresponds to a situation where all incomes are equal.

⁵ See Cowen (2013).

⁶ See Milanović (2016).

⁷ See Piketty (2013) for a discussion of this issue.

⁸ See Aghion et al. (2015), Berg et al. (2008), Dabla-Norris et al. (2015) and Bagchi and Svejnar (2015).

⁹ See Alesina and Rodrik (1994) for a discussion of redistributive politics and growth.

¹⁰ See Jenkins (2015). Tax data – a common alternative in advanced economies – are not readily available for most emerging markets and developing countries.

of confidence in core economic and political institutions and a backlash against market reforms, shifting public consensus towards populist policies that target redistribution and may potentially be detrimental to productivity growth.⁹

In this chapter, we look at measures of inequality of economic outcomes (as opposed to inequality of opportunity). Outcome-based measures are more readily available and feature much more prominently in policy debates; they also enable us to look more closely at poverty and the concentration of wealth among the very rich – important aspects of the overall distribution of income and wealth that are typically not captured by the survey data used to determine inequality of opportunity.¹⁰

For countries in the EBRD region, analysis of income growth on the basis of people's position in the income distribution requires a number of crude simplifying assumptions in order to fill in data gaps.¹¹ Indeed, many countries in the region do not feature in the analysis of global trends presented in Chart 1.1 owing to such data limitations. This chapter represents an important – albeit imperfect – attempt to fill in those gaps.

Post-transition convergence: differing experiences

In the EBRD region, the globalisation trends of the last three decades have been compounded by the transition to market economies. At the start of the transition process, reported income inequality was low by international standards, although official measures may have understated the level of inequality in economies with shortages of goods. As various goods and services (from cars to summer holidays to basic food staples) were often distributed in the form of employment-related privileges while being unavailable in shops, some people will have had similar incomes, but vastly differing opportunities to spend their money based on their status within society. Unfortunately, it is virtually impossible to correct for such inequality of spending power before the start of the transition process. Cross-country income comparisons (in US dollars at PPP) are likewise complicated by issues relating to currency convertibility and shortages of goods.

Reported inequality rose sharply in the 1990s. During the early years of the transition process, newly created markets placed a premium on new skills – such as business acumen – as well as political connections. This resulted in wage decompression, with upward and downward adjustments in wages for large sections of the population.¹² In addition, many women left jobs owing to the loss of universal childcare. In numerous countries, the privatisation of large companies – as opposed to the privatisation of small and medium-sized enterprises (SMEs) – also made a major contribution to the rise in inequality and, in particular, the concentration of wealth among the very rich.¹³ Moreover, in a number of countries in the region, the armed conflicts and civil wars that followed the collapse of the Soviet Union and Yugoslavia further exacerbated the rise in inequality.¹⁴

The transition process has also involved an unprecedented shift from an economic model favouring manufacturing and agriculture to a more service-oriented structure. On average, the

share of services in gross domestic product (GDP) has jumped from less than 40 per cent in 1990 to almost 60 per cent today. Moreover, in some economies (such as Bulgaria), almost all of this increase occurred in the space of several years in the early 1990s (see Chart 1.2). Mirroring this, the average share of agriculture in GDP has halved, falling from around a quarter in the early 1990s to around 12 per cent today.

While other emerging market economies, such as China, have undergone similar shifts, the pace of the structural change seen in the early years of the transition process was unparalleled. Urban areas were much better placed to facilitate the development of the new service-oriented economy and benefit from it than rural areas, which exacerbated the rise in inequality and deepened the rural-urban divide in many transition economies.

Should inequality have increased?

Some of the increase in inequality seen during the early years of the transition process was inevitable, and perhaps even desirable. Income inequality is partly a reflection of differences in effort on the part of individuals (both in education and at work). To the extent that inequality strengthens incentives for people to excel, compete and invest in education and ideas, it can be necessary for growth.¹⁵ The transition process was expected to establish closer links between individuals' efforts and rewards and thus improve economic efficiency, but the speed of the increase seen in inequality and the resulting distribution of income and wealth are cause for concern.

The transition experience at different points in the income distribution

The combination of the very low levels of inequality at the start of the transition process and the deep transition recession of the early 1990s mean that people's experiences of income growth have differed widely depending on their position on the income ladder. Chart 1.3 plots cumulative growth in real income per capita since 1990 for each decile of Russia's population today – the average for the poorest 10 per cent of the population, then the average for the second-poorest decile and so on, all the way up to the richest 10 per cent of the population. The calculation is based on real GDP growth data (adjusted for changes in the size of the population and shifts in the ratio of disposable income to GDP), as well as changes in the income shares of each decile of the population based on the World Bank's Povcal database. (The earliest data on income shares are typically from 1988-89, while the most recent are from 2012-13.)

The chart reveals that, in Russia, average per capita income growth – the key statistic in a typical analysis of growth and convergence – corresponds to the individual circumstances of someone in the 77th percentile of the income distribution (that is to say, the point where the curve crosses the horizontal line denoting average growth). In other words, only 23 per cent of Russians have actually experienced average or above-average cumulative income growth over the last quarter of a century. Meanwhile, the richest decile have experienced income growth of more than six times the median growth rate. In sharp contrast,

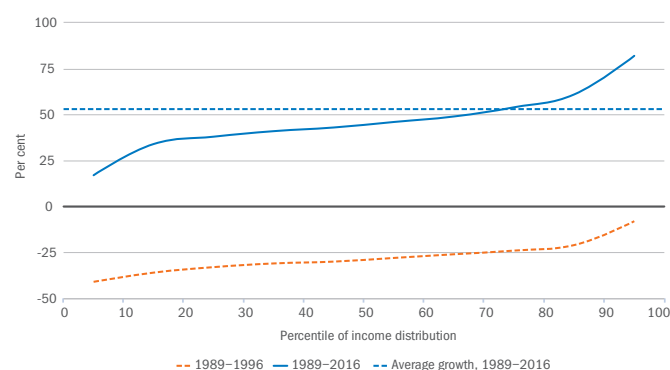
¹¹ For example, this chapter combines household surveys on income for the early years of the transition process with household surveys on consumption for subsequent years. This will typically underestimate differences in growth, as the distribution of income tends to be more unequal than the distribution of consumption. Furthermore, the income distributions used for 1988-89 for a number of former republics of the Soviet Union and Yugoslavia have been calculated on the basis of data available for the respective countries as a whole.

¹² See Shleifer and Treisman (2005) and Guriev and Rachinsky (2006).

¹³ See Milanović and Ersado (2010).

¹⁴ See Bircan et al. (2016) for details of the links between violent conflict and inequality.

¹⁵ See, for instance, Barro (2000).

CHART 1.4. Cumulative income growth in post-communist countries since 1989 by income decile

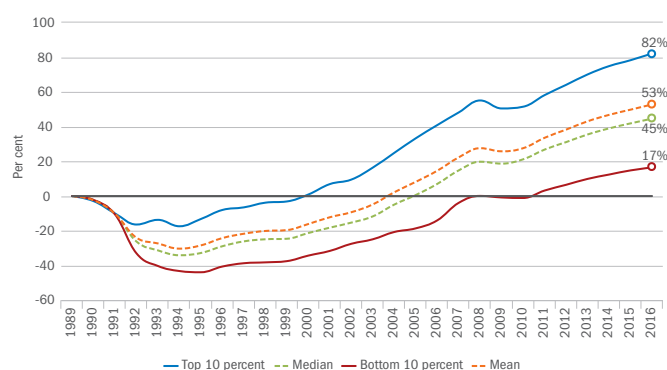
Source: National authorities, World Bank Povcal database, IMF, UN and authors' calculations.

Note: Data represent unweighted averages for each decile across the following 26 countries: Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

13 per cent of the population (the people to the left of the point where the curve crosses the horizontal axis) have lower real incomes today than they did in 1989. Similarly, in many other countries, large parts of the electorate may feel that they have not benefited from the growth seen in the last two and a half decades. This is understandable, as in many countries average growth rates – the ones typically reported in the press and used by policy-makers – simply do not apply to significant sections of the population.

This analysis is based on a number of simplifications and does not account for people's mobility between income strata. Indeed, these growth rates are obtained by comparing the incomes of today's poor with those of the poor of the past (and likewise for the rich). In fact, people under the age of 45 today would typically have had no income of their own before the start of the transition process, while those at the bottom of the income distribution 20 years ago could theoretically be at the top today and vice versa. The results would be unlikely to change significantly even if such movements could be fully accounted for (see Box 1.1, which is based on panel survey data for Russia).¹⁶ Nonetheless, the results should be seen as attempting to compare the incomes of particular segments of the distribution, rather than seeking to track the fortunes of individual people, similar to the concept of shared prosperity used by the World Bank (which looks at the income growth of the bottom 40 per cent).

Equivalent data for 26 post-communist countries in the region (that is to say, countries that experienced price liberalisation and a transition recession) reveal a broadly similar picture. Chart 1.4 provides a representative curve for those countries, showing unweighted averages of the growth rates for each individual decile across 26 countries. Thus, each decile may potentially contain people with substantially different levels of

CHART 1.5. Cumulative income growth in post-communist countries since 1989

Source: National authorities, World Bank Povcal database, IMF, UN and authors' calculations.

Note: Data represent unweighted averages across the 26 post-communist countries listed in the note below Chart 1.4. The median is calculated as the mean of the fifth and sixth deciles.

income (as the poorest decile in Slovenia may be substantially better off than the poorest decile in the Kyrgyz Republic, for example). A different calculation is used later on to construct an income distribution for all individuals in the region.

This analysis confirms that most of the changes in the income distribution took place in the early years of the transition process. During that period, the income curve sank and acquired a pronounced slope (see Chart 1.4). A steeper slope generally corresponds to a stronger rise in inequality, as it means that the poor experience much weaker growth than the well-off. Since the late 1990s, income inequality in the region has been broadly stable. Correspondingly, the curve representing income growth by decile has shifted upwards, while becoming only marginally steeper, as convergence has benefited all deciles of the income distribution, albeit to varying degrees.¹⁷ Note that this synthetic analysis is shown for illustrative purposes only, as the use of unweighted averages hides many individual experiences. (For instance, the incomes of the bottom decile increased on average, but in many individual countries they did not.)

A similar pattern can be observed when looking at an index of real income for various deciles over time (see Chart 1.5). Inequality shot up during the early months and years of the transition process, as the incomes of the top deciles fell less sharply (and rose in some countries), while those of the majority of the population fell dramatically – mainly owing to wage decompression.

Growth and convergence during the 2000s benefited almost everyone, but the median citizen experienced overall growth of around 45 per cent – below the reported mean. Nevertheless, that median growth is still higher than the median rate estimated for the G7 economies. In those advanced economies, too, median income growth since 1989

¹⁶ Krugman (2014), for instance, looks at why actual income mobility is not sufficient to materially alter conclusions about the distribution of the benefits of economic growth.

¹⁷ This is consistent with the findings of Dollar et al. (2015), who show that growth typically raises welfare across populations.

has lagged behind the mean, with the two estimated at around 17 and 39 per cent respectively.¹⁸

Has the region's transition experience been exceptional?

The experiences of other emerging markets have been similar in some respects, but very different in others. In China and much of emerging Asia, inequality has risen sharply, resulting in large differentials between the growth experienced by the rich and median rates (see Chart 1.6). However, as these countries have enjoyed consistently strong growth and have not experienced a major recession of the kind seen in the EBRD region in the early years of the transition process, even the poorest sections of those populations have enjoyed very strong growth.

Growth in Latin America has been weaker, but appears to have benefited the lower and middle segments of the income distribution to a greater extent (see Chart 1.7, which provides data for Brazil).¹⁹ This reflects the very high levels of inequality seen in the late 1980s, which have since improved, partly owing to increases in taxation, greater redistribution through government spending and increases in minimum wages. In advanced economies, most of the gains have been accrued by the top decile, while income growth in the middle and bottom segments of the distribution has been modest, as reflected in diverging mean and median growth rates.

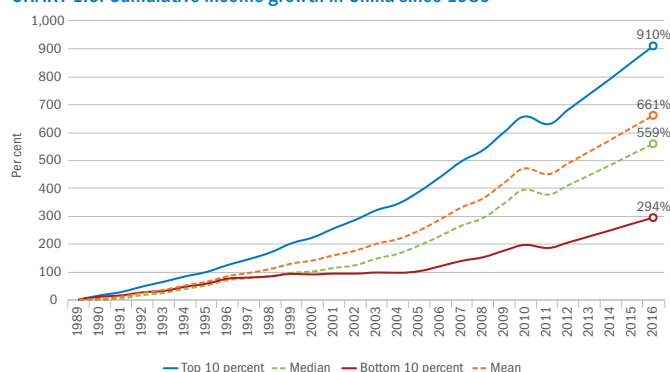
Some individual countries within the EBRD region have also had different experiences. In Turkey, people in the middle section of the income distribution have experienced stronger growth than the poorest and richest in the country, while in Egypt, Jordan and Tunisia, people in the lower-middle segment of the income distribution have seen the strongest rises in incomes.

The convergence pattern for the region as a whole

Let us now consider the EBRD region in its entirety. This means looking at people with a particular level of income (expressed in US dollar terms at PPP) independently of their country of residence. Incomes within individual countries vary widely. For instance, with the exception of Tajikistan, Uzbekistan and the Kyrgyz Republic, every country contains a decile of people with an average income corresponding to the median income for the region as a whole, but in Moldova this is the top decile, whereas in Lithuania it is the second poorest decile (see Chart 1.8).

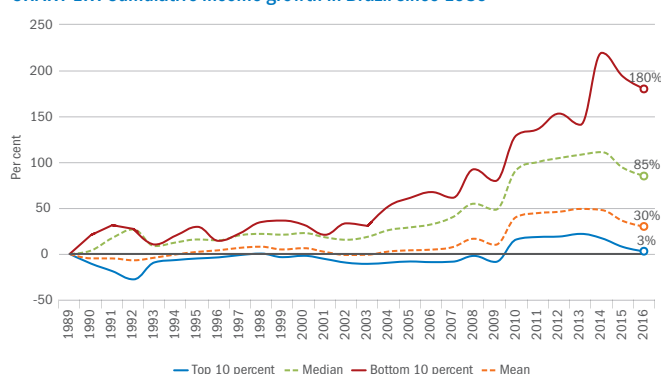
By combining all of the income deciles for the various countries, we can construct an income distribution for the region as a whole (see Box 1.2). The second richest decile in the region-wide income distribution for the present day comprises people from 22 countries, including: the richest decile in Armenia, Jordan and Montenegro; the second-richest decile in Kazakhstan and Serbia; several upper-middle income deciles in Poland, Romania and Russia; and several middle-income deciles in the Slovak Republic and Slovenia. The analysis presented in Chart 1.9 aggregates the income growth rates of specific deciles in individual countries on the basis of their position in the region-wide income distribution in 1989. (As before, calculations cannot

CHART 1.6. Cumulative income growth in China since 1989



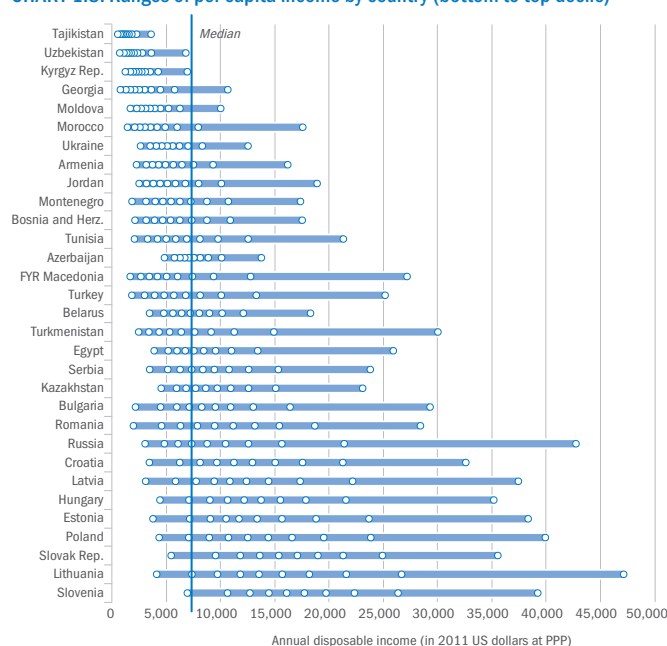
Source: National authorities, World Bank Povcal database, IMF, UN and authors' calculations.

CHART 1.7. Cumulative income growth in Brazil since 1989



Source: National authorities, World Bank Povcal database, IMF, UN and authors' calculations.

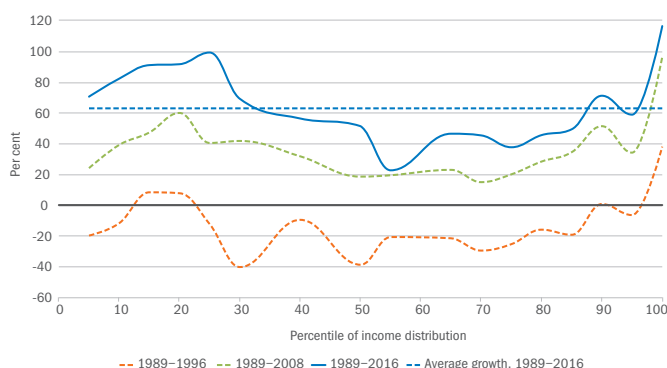
CHART 1.8. Ranges of per capita income by country (bottom to top decile)



Source: National authorities, World Bank Povcal database, IMF, UN and authors' calculations.
Note: Based on estimated income for 2016. Dots show the average income for each decile.

¹⁸ The median for the G7 is estimated by extrapolating from the data reported in Nolan et al. (2016).

¹⁹ See Tsounta and Osueke (2014) for a discussion of this issue.

CHART 1.9. Cumulative income growth in the EBRD region since 1989 by initial income percentile

Source: World Bank Povcal database, IMF, UN and authors' calculations.

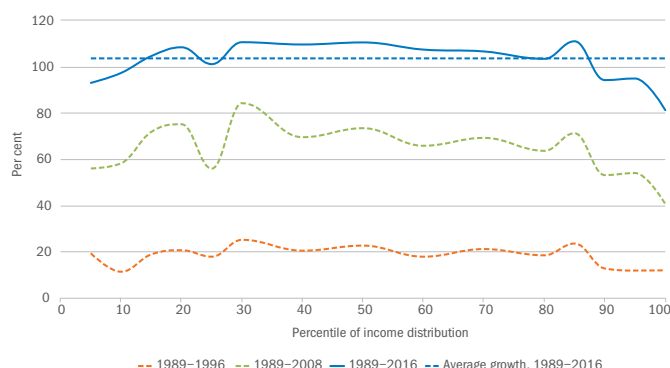
Note: See Milanović (2016) for a discussion regarding methodology. The income distribution on the x-axis is based on 1989 incomes in US dollars at PPP.

account for the income mobility of individual citizens within countries.) Thus, the shifts depicted in the chart reflect the redistribution of income within individual economies, as well as differences in growth rates between economies (similar to the analysis for the global population presented in Chart 1.1). The pattern that emerges for the EBRD region as a whole is broadly in line with the global pattern, albeit with some differences.

In general, those in the middle of the 1989 income distribution have experienced weaker growth than the very richest and poorest. The well-off in higher-income transition countries have done particularly well. In fact, the income distribution for the EBRD region as a whole has acquired an unusual feature since the mid-1990s – a second mini-mode at high levels of income (in excess of US\$ 50,000 at PPP in 2011 prices; see Box 1.2). Increases in inequality within countries and differences in rates of convergence across countries (with poorer countries generally growing faster) mean that the upper and middle classes in lower-income countries have also been among the main beneficiaries of transition and globalisation, while poor residents of lower-income countries have done less well.

The initial transition shock and the subsequent recession affected the entire population of the region to more or less the same extent, while benefiting (in relative terms) the few people who had the technical skills and entrepreneurial vision demanded by a market-based economic system. Low-income countries (which had a less developed industrial base) were also less affected by the transition recession.

The divergence seen in individual rates of income growth has become more pronounced since the 2008 crisis (see Chart 1.9). In recent years, people in the middle of the income distribution have seen particularly sharp slow-downs in income growth (as shown by fact that the income growth curve is now less flat than

CHART 1.10. Cumulative income growth in Turkey and the SEMED countries since 1989 by initial income percentile

Source: World Bank Povcal database, IMF, UN and authors' calculations.

Note: See Milanović (2016) for a discussion regarding methodology. The income distribution on the x-axis is based on 1989 incomes in US dollars at PPP.

it was in the 2000s), while the incomes of poorer sections of the population have grown more strongly (partly because lower-income economies have been less affected by the 2008 crisis and partly because a number of countries have adopted post-crisis fiscal stimulus targeting social spending such as pensions).

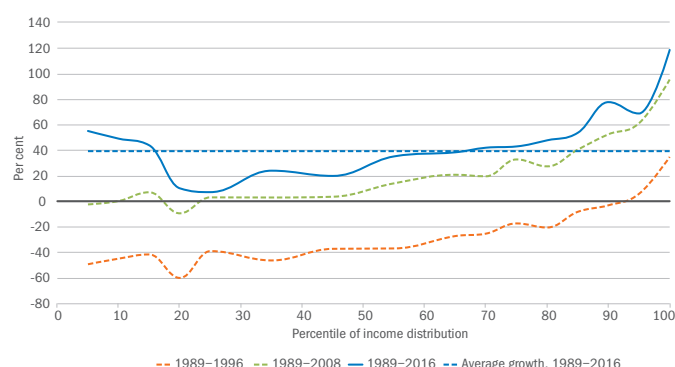
In Turkey and the SEMED countries, which did not suffer a transition recession following price liberalisation, growth experiences at different points in the income distribution have been more homogeneous, and the middle of the income distribution has, if anything, experienced slightly stronger economic growth (see Chart 1.10). This is one of the factors that have lifted the lower-middle part of the curve for the region as a whole. If we look specifically at the post-communist countries (see Chart 1.11), the pattern is similar to that observed for the region as a whole, apart from the fact that the section of the distribution that has experienced the weakest growth has shifted to the left, with the lower-middle segment being worst affected.

Whose growth?

Individual experiences vary widely within countries, yet they are typically summarised in a single figure: the average rate of income growth. But whose income growth does this average figure correspond to? The answer depends on the specific circumstances in the country in question.

Overall, only 27 per cent of the total population of the post-communist countries have experienced average or above-average income growth (see Chart 1.12). The remaining 73 per cent of the population have experienced income growth that is below the average for these countries. (The percentage experiencing at least average income growth rises to around 40 per cent if Turkey and the SEMED countries are included.) Only in Azerbaijan, Egypt, Jordan, the Slovak Republic, Tunisia and Turkey has median income growth equalled or surpassed the mean.

CONVERGENCE AND INEQUALITY

CHART 1.11. Cumulative income growth in post-communist countries since 1989 by initial income percentile

Source: World Bank Povcal database, IMF, UN and authors' calculations.

Note: See Milanović (2016) for a discussion regarding methodology. The income distribution on the x-axis is based on 1989 incomes in US dollars at PPP.

In most countries, the upper deciles of the income distribution have experienced the strongest growth, in line with the region-wide pattern presented in Chart 1.4. In several cases, however, some of the lower deciles have also experienced above-average growth, similar to the pattern observed for the SEMED region and Turkey in Chart 1.10 (see the data for Ukraine, Kazakhstan, the Kyrgyz Republic, Azerbaijan, Egypt, Jordan, Turkey and Tunisia in Chart 1.12).

Has everyone benefited from transition and globalisation?

On the basis of this calculation, 15 per cent of the region's population are worse off today than they were in 1989 (see

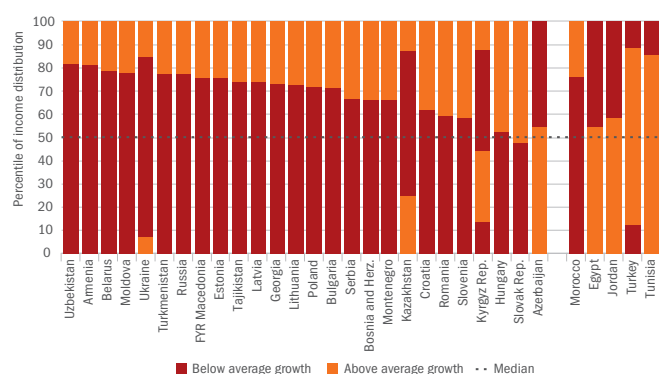
Chart 1.13). The corresponding figure for post-communist economies is 23 per cent. A further 21 per cent of the region's population have experienced long-term income growth that is below the average observed in the G7 economies – in other words, they have not seen their incomes converge with those of advanced economies. In post-communist economies, this figure is even higher, at 33 per cent.

The remaining 64 per cent of the region's population (44 per cent if Turkey and the SEMED countries are excluded) have personally experienced long-term income convergence. In most countries, those who have experienced income convergence tend to be higher up the income ladder. The most notable exception here is Azerbaijan, where only those with lower incomes are estimated to have experienced growth above the G7 average (with the result that the green segment of the bar is located at the bottom). This probably reflects the redistribution of oil revenues across Azerbaijan's economy.

Only in around half of all the countries has the majority of the population experienced per capita income growth above the G7 average. In nine countries (Turkey, the SEMED countries, Armenia, Belarus, Poland and Turkmenistan), income growth has exceeded the G7 average in all deciles, resulting in a near-universal (though far from complete) convergence experience.

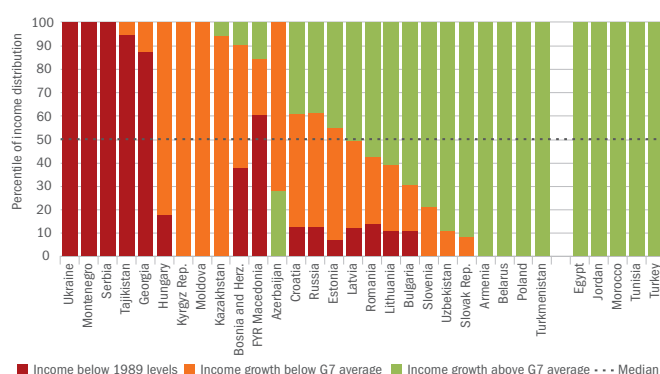
Inequality in the transition region from an international perspective

Today, most transition countries display levels of income inequality similar to those observed in many advanced economies, with significant variation from country to country. For instance, Georgia, Russia and Turkey have higher Gini coefficients, on a par with that of the United States, while measures of inequality are lower in Hungary, the Slovak Republic

CHART 1.12. Percentiles of the population with above/below-average income growth, 1989-2016

Source: World Bank Povcal database, IMF, UN and authors' calculations.

Note: Data for each percentile are based on linear extrapolation of averages for each decile.

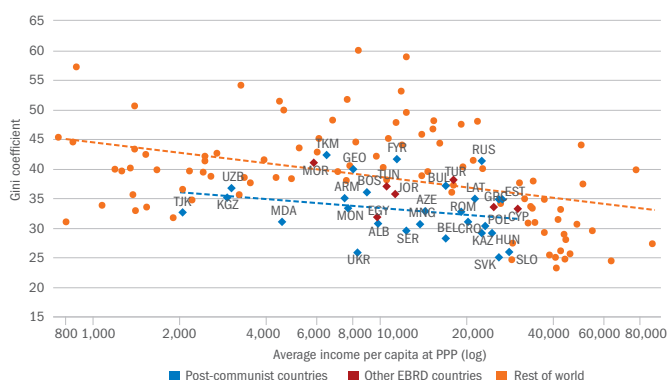
CHART 1.13. Percentiles of the population with income growth above/below the G7 average, 1989-2016

Source: World Bank Povcal database, IMF, UN and authors' calculations.

Note: Data for each percentile are based on linear extrapolation of averages for each decile.

TRANSITION FOR ALL: EQUAL OPPORTUNITIES IN AN UNEQUAL WORLD

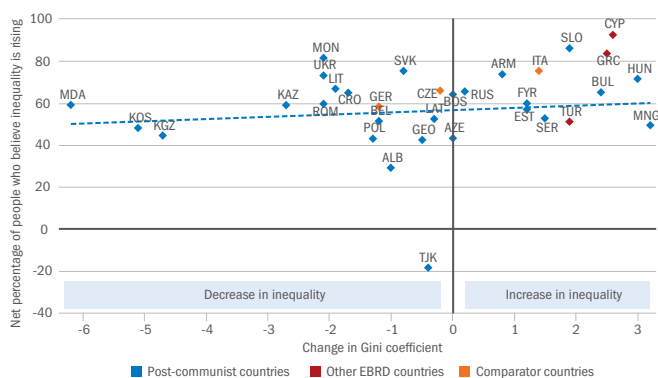
CHART 1.14. Gini coefficients and average income per capita



Source: World Bank Povcal database, Solt (2014) and authors' calculations.

Note: Based on the latest available data. Calculations underlying Gini coefficients are not fully comparable across countries. Income per capita is measured at PPP. The dotted lines are the lines of best fit for the rest of the world and the sample of post-communist countries.

CHART 1.15. Changes in measured and perceived inequality



Source: World Bank Povcal database, Solt (2014), LITS III and authors' calculations.

Note: Changes in Gini coefficients are over four years, based on available data for the period closest to 2011-15.

and Slovenia, on a par with advanced European economies. Inequality in the region tends, on average, to be lower than in other emerging markets, although the gap has narrowed since the start of the transition process (see Chart 1.14).

People's perceptions of inequality

Most people in the region believe that inequality has increased in their country of residence (see Chart 1.15), despite official data indicating that there has been no clear trend in recent years – and, if anything, a slight decline in inequality since the mid-1990s. The lack of correspondence between perceptions and official data can clearly be seen in the results of the third round of the Life in Transition Survey (LiTS III). That survey, which was conducted by the World Bank and the EBRD in late 2015 and the first half of 2016, spanned more than 51,000 households in EBRD countries, as well as the Czech Republic, Germany and Italy. In all countries bar Tajikistan, the percentage of people who believe that inequality has risen over the last four years exceeds the percentage who believe it has fallen, despite official data indicating that the number of countries where inequality has risen is broadly similar to the number of countries where it has fallen. Furthermore, those perceived changes in inequality are only weakly correlated with official estimates of changes to Gini coefficients.

This disconnect between people's perceptions of inequality and official estimates may reflect the large concentration of wealth at the top end of the income distribution, which tends to be poorly reflected in household surveys and national statistics. It may also be influenced by the legacy of the transition experience or symptomatic of people's generally poor track record when it comes to perceptions of income distribution. Regardless of the factors underlying those misperceptions regarding inequality, perceptions matter. In fact, perceptions of inequality tend to matter more than officially reported figures when it comes to social conflict and backlashes against reforms, according to recent studies.²⁰

Poverty

While trends in income inequality have been mixed, poverty rates in the EBRD region have declined rapidly since the late 1990s as countries have benefited from higher rates of growth and convergence. Poverty headcounts have declined, in terms of both national definitions and the World Bank's universal definition (namely, people living on less than US\$ 3.10 per person per day in 2011 prices at PPP). For instance, on the basis of its national threshold, Russia's poverty rate has declined from 29 per cent in the aftermath of the 1998 crisis to 11 per cent in 2014.²¹ Tajikistan, the country in the EBRD region with the lowest income per capita, has also seen rapid improvements, with its poverty rate falling from 86 per cent in 1999 to 23 per cent in 2009 (on the basis of the US\$ 3.10 threshold). In comparison, 78 per cent of the population of Bangladesh – an economy with comparable levels of income per capita – are classified as being in poverty under that definition. Today, based on internationally comparable rates of

²⁰ See Gimpelson and Treisman (2015).

²¹ In many countries, national poverty lines are based on a standardised consumption basket. However, in central Europe and the Baltic states, most south-eastern European economies and Turkey, they are calculated as a percentage of median income (typically 60 per cent), making meaningful cross-country comparisons of national poverty headcounts difficult.

CONVERGENCE AND INEQUALITY

absolute poverty, the region compares favourably with emerging markets and developing countries elsewhere in the world that have similar levels of income per capita (see Chart 1.16).

Concentration of wealth among the very rich

The global trend of strong and growing concentration of wealth appears to be even more pronounced in the EBRD region. In particular, the transition process appears, in a number of countries, to have contributed to strong concentration of wealth among the very rich. The latest list of the world's billionaires published by *Forbes* magazine includes more than 1,800 individuals from 67 countries, with a combined wealth of around US\$ 6.5 trillion. Eleven countries where the EBRD works are featured in that list: Cyprus, Egypt, Georgia, Greece, Kazakhstan, Morocco, Poland, Romania, Russia, Turkey and Ukraine.

With a combined wealth of almost US\$ 400 billion, billionaires in the EBRD region account for 7 per cent of all wealth held by the world's billionaires – slightly more than the region's 6 per cent share of global GDP. In the case of emerging Asia, Latin America and other emerging and developing countries, the opposite is true (see Chart 1.17).

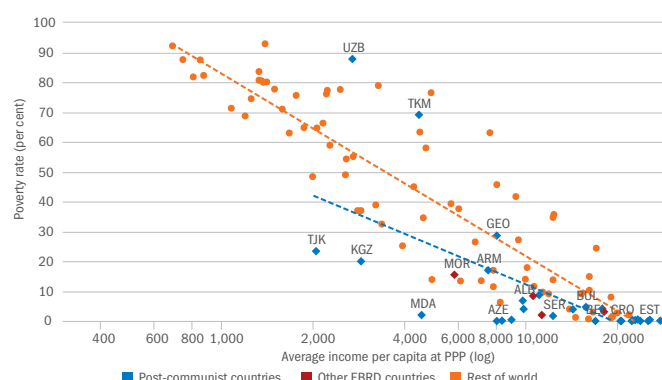
The EBRD region's share in global billionaire wealth has increased sharply as a percentage of its share in global GDP, rising from around 50 per cent in 2002 (the earliest year with broad data coverage) to around 115 per cent in 2015. For a number of years, Russia came second worldwide in terms of the total combined wealth of the listed individuals (after the United States), but it has dropped to fourth place in recent years as commodity prices have declined. Cyprus, Georgia and Ukraine also feature among the countries with the highest billionaire wealth-to-GDP ratios in the world.

In terms of the sources of their wealth, billionaires in the EBRD region owe much more to commodities and much less to innovation and competitive manufacturing than those in other regions. In advanced economies, 17 per cent of billionaire wealth is derived from innovation (in sectors such as software and IT hardware), while a further 36 per cent of their money is derived from various manufacturing industries (such as clothing, food and beverages). A similar picture can be seen in emerging Asia. In the EBRD region, however, innovation and manufacturing account for only 1 and 7 per cent of billionaire wealth respectively, as billionaires derive a disproportionate amount of wealth from commodity-related sectors (such as oil, gas and basic metals; see Chart 1.18).²² Moreover, in a number of transition countries, large-scale privatisation made an important contribution to the initial accumulation of wealth by a select group of individuals.²³

This distinction may be important, as concentration of wealth caused by rent-seeking behaviour and lobbying is found to be significantly more detrimental to economic growth than concentration caused by innovation in the manufacturing and service sectors.²⁴

The picture that emerges from the *Forbes* list is undoubtedly incomplete. In particular, as the list only includes people whose wealth exceeds US\$ 1 billion, it may tell us less about the

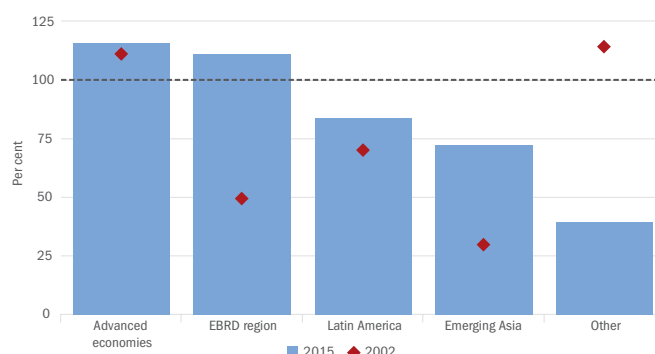
CHART 1.16. Poverty rates and income per capita



Source: World Development Indicators, IMF and authors' calculations.

Note: Based on the latest available data. The poverty threshold is set at US\$ 3.10 per person per day at PPP in 2011 prices. The dotted lines are the lines of best fit for the rest of the world and the sample of post-communist countries.

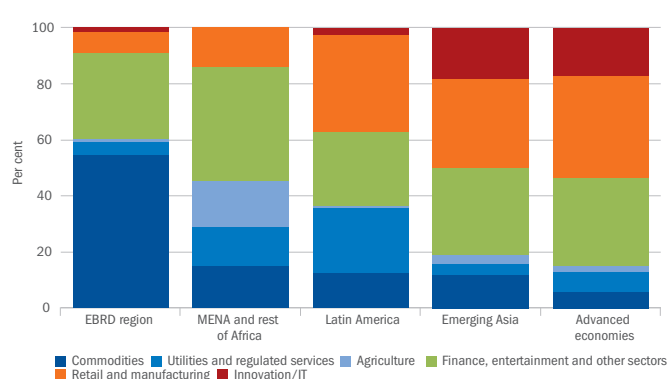
CHART 1.17. Ratios of regional share of global billionaire wealth to regional share of global GDP



Source: *Forbes*, IMF and authors' calculations.

Note: This chart reports the ratio of (i) the combined wealth of each region's billionaires as a share of global billionaire wealth to (ii) the relevant region's share of global GDP. Advanced economies are classified using the IMF's definition.

CHART 1.18. Sources of billionaires' wealth



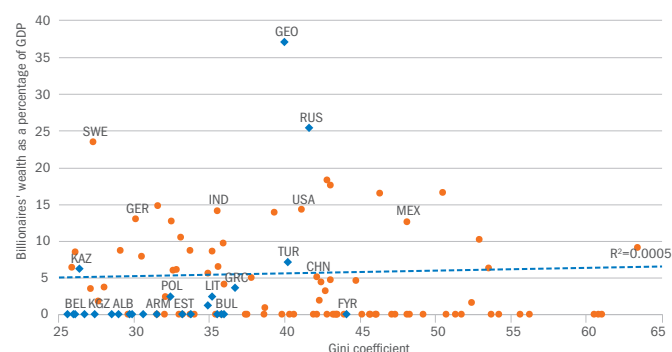
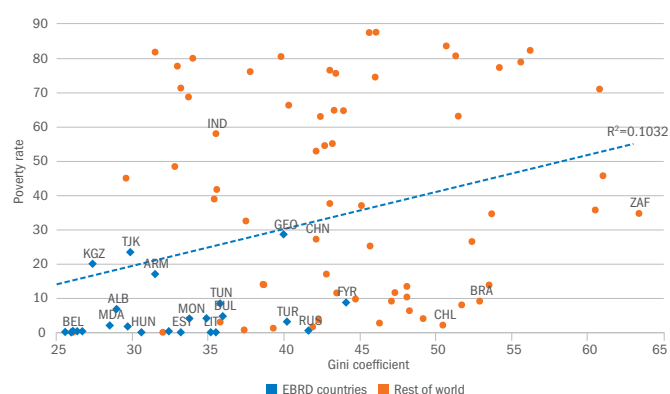
Source: *Forbes* and authors' calculations.

Note: Advanced countries are classified using the IMF's definition. Data relate to 2016.

²² See also Freund and Oliver (2015).

²³ See Milanović and Ersado (2010).

²⁴ See Aghion et al. (2015).

CHART 1.19. Concentration of wealth among the very rich, income inequality and poverty**Panel A****Panel B**

Source: World Bank, Forbes, IMF and authors' calculations.

Note: The poverty threshold is set at US\$ 3.10 per person per day at PPP in 2011 prices.

concentration of wealth in small countries. Nonetheless, in the absence of tax data for the EBRD region, it provides a useful snapshot of the concentration of wealth and its sources.

Distinct policy challenges

Strikingly, measures of the concentration of wealth among the very rich are virtually uncorrelated with overall measures of inequality or poverty in a large sample of countries (see Panel A of Chart 1.19). Nor is there a strong relationship, on average, between inequality and poverty (see Panel B of Chart 1.19). In other words, countries where most people have relatively low incomes may have a number of very rich people (as in the case of India or Georgia); relatively equal societies may have a poverty problem (as in the case of Ethiopia or Tajikistan); and societies with moderate levels of inequality overall may see significant wealth being accumulated by a handful of individuals (as in the case of Sweden or Ukraine).

Determinants of poverty, inequality and the concentration of wealth

This section looks at determinants of poverty, income inequality and the concentration of wealth for a large sample of developed and developing countries. The regression specification used to examine determinants of the concentration of billionaires' wealth is a two-stage Heckman selection model. The first stage explains the probability of a country having at least one billionaire (which around half of all economies do) as a function of the size of the economy, its income level and other variables. The second stage explains the levels of non-zero billionaire wealth-to-GDP ratios using a similar set of economic factors (the first two columns in Table 1.1). This two-stage procedure takes account of the fact that billionaires are only found in a subset of countries with certain characteristics – for instance, their population size or income per capita.²⁵ The equation for poverty (fourth column) is estimated using a Tobit model to account for the large number of zero observations in advanced economies. The findings presented should be viewed as indicative and not necessarily causal, as inequality, for instance, may itself influence income per capita or the extent to which a country is open to trade.

The results indicate that levels of income inequality tend to be lower in countries with higher-quality economic institutions (as reflected in average scores for Worldwide Governance Indicators measuring the rule of law, control of corruption, regulatory quality and government effectiveness). A 1-standard-deviation improvement in the quality of economic institutions – the difference between the levels in Albania and Poland – is associated with a reduction of more than 3 points in the Gini coefficient. In contrast, democratic institutions (as measured by the Polity II index) appear to play an important role in limiting excessive accumulation of wealth among the very rich, without having a significant effect on income inequality or poverty.²⁶ Recent armed conflicts increase the probability of having billionaires in a country and the country's wealth-to-GDP ratio by as much as 10 percentage points.

Higher levels of government spending (excluding military

²⁵ See Heckman (1979).

²⁶ For a discussion of the relationship between inequality and institutions, see Sonin (2003) and Chong and Gradstein (2007).

CONVERGENCE AND INEQUALITY

TABLE 1.1. Determinants of poverty, inequality and the concentration of wealth

Dependent variable	Selection equation	Billionaires' wealth as a % of GDP	Inequality (Gini coefficient)	Poverty rate
Population (log)	1.01***	-4.03**	-1.11*	1.26
	(0.20)	(1.68)	(0.66)	(1.08)
Income per capita (log)	1.16***	1.80	0.01	-19.18***
	(0.39)	(3.93)	(1.44)	(2.21)
Quality of institutions	0.73*	-0.53	-3.42**	3.69
	(0.44)	(4.26)	(1.71)	(3.21)
Democracy (Polity II index)	-0.04	-1.07**	0.18	-0.08
	(0.05)	(0.46)	(0.18)	(0.30)
Conflict index		10.72*	-1.54	0.01
		(6.24)	(3.05)	(4.85)
Conflict since 1989? (yes/no)	1.22***			
	(0.43)			
Non-military government spending (% of GDP)	-0.01	-0.05	-0.18*	-0.02
	(0.02)	(0.22)	(0.10)	(0.15)
Working age population (% of total)	-0.08	0.58	0.25	
	(0.05)	(0.49)	(0.20)	
Birth rate (children per female)				7.09***
				(1.54)
Commodity rent (% of GDP)	-0.02	-0.64**	-0.04	-0.3
	(0.03)	(0.32)	(0.10)	(0.18)
Openness to trade (% of GDP)	-0.01		-0.02	0.01
	(0.01)		(0.02)	(0.05)
EBRD dummy	0.69	-4.07	-9.08***	-11.94***
	(0.49)	(5.16)	(2.06)	(3.41)
Constant	-14.37***	6.31	42.42***	159.00***
	(3.18)	(40.67)	(12.51)	(25.45)
No. of observations	129	129	109	113
R ²			0.36	0.27

Source: World Bank, IMF, *Forbes*, Polity and authors' calculations.

Note: Estimates for the ratio of billionaires' wealth to GDP are calculated using a Heckman selection model. Poverty rates are estimated on the basis of a Tobit model. Standard errors are reported in parentheses, and *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. The conflict index takes a value of 1 if a country is in conflict and declines to 0 after 30 years without a conflict.

expenditure) are associated with lower levels of inequality, as they increase redistribution relative to pure market outcomes. The size of government does not appear to influence the accumulation of wealth or poverty, which points to the importance of adopting targeted measures (rather than simply increasing the volume of government spending) when it comes to reducing poverty. Poverty generally declines as incomes rise and birth rates fall.

Once these and various other factors have been taken into account, the EBRD region currently has significantly lower levels of inequality and poverty than other countries in the global sample. In the case of the concentration of wealth among the very rich,

however, those differences are not statistically significant.²⁷

Overall, this analysis suggests that the concentration of wealth, income inequality and poverty are separate – albeit related – phenomena that may require separate policy responses. Relative to other parts of the world, the EBRD region exhibits high levels of wealth concentration, moderate levels of income inequality and fairly low levels of absolute poverty. However, circumstances vary from country to country: some have particularly high levels of wealth concentration; others exhibit high levels of income inequality across the board; and in certain countries, poverty remains a pressing concern.

²⁷ The picture is broadly similar if we look at changes in poverty and inequality since the mid-1990s and changes in the concentration of wealth since the early 2000s instead of the levels of these variables.

Policy responses

Avoiding excessive concentration of wealth

Excessive concentration of wealth warrants the attention of policy-makers, as it may negatively affect equality of opportunity and cause a backlash against key economic and political institutions underlying market economies, which may in turn lead to weaker growth in the long run. A number of policies can be pursued to limit the concentration of wealth among the very rich.

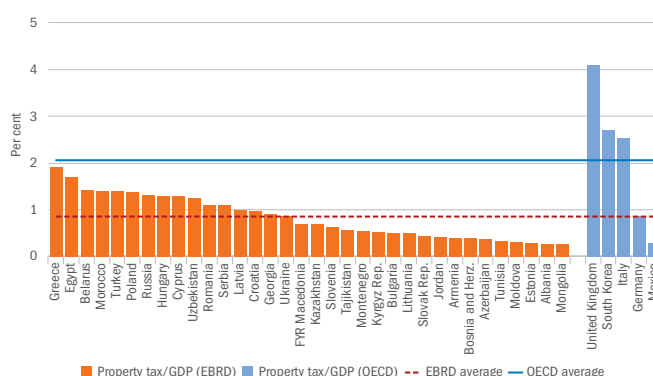
Taxing wealth (a significant percentage of which tends to be held in immobile assets) may be an effective method of fiscal redistribution, as well as a means of raising additional revenue. Taxes on inheritance, in particular, tend to be less distortionary, in the sense that they affect people's level of effort or employment decisions to a lesser extent. They may, in practice, be difficult to collect in the absence of sufficient international cooperation, as some wealth that is subject to inheritance tax may be moved to tax havens. The taxation of financial wealth faces similar challenges. Recurrent taxes on wealth, particularly immovable wealth, can also be a relatively non-distortionary instrument. In order to be effective, these require a comprehensive and regularly updated register of land and property values. Taxes on property transactions (such as stamp duty in the United Kingdom) are easier to implement, but may prevent economically efficient transactions from taking place.

Historically, taxes on wealth (including property taxes and taxes on inheritance) used to generate significant amounts of public income, but their role has gradually diminished. These days, they generate average annual revenues totalling only 2 per cent of GDP in member countries of the Organisation for Economic Co-operation and Development (OECD).²⁸

In the EBRD region, property taxes and other taxes on wealth raise an average of only 0.8 per cent of GDP (see Chart 1.20). Levels of taxation in the EBRD region are generally somewhat lower than in OECD countries. Nonetheless, average wealth tax receipts in the EBRD region are about 2 percentage points below the OECD average when expressed as a percentage of total tax revenue.

Strong concentration of wealth also calls for further improvements in the overall quality of economic and political institutions that limit the ability of the elite to appropriate economic rents. This can be particularly important in countries where rents – from natural resources, tourism or agricultural commodities – account for a large proportion of total value added. In this regard, efforts to diversify economies away from excessive dependence on natural resources may also help to prevent excessive concentration of wealth in the hands of economic elites. Initiatives promoting greater accountability in commodity-related industries (such as the Extractive Industries Transparency Initiative, which aims to make company and project-level data relating to natural resource management widely available) can also play an important role in this regard. Furthermore, future privatisation initiatives need to learn lessons from the early years of the transition process and employ transparent and fully competitive procedures.

CHART 1.20. Revenue from wealth taxes as a percentage of GDP



Source: OECD, IMF, national authorities and authors' calculations.
Note: Based on data for 2015 or the latest available year.

It is also essential to pursue higher standards of governance and transparency, as well as strengthening competition and ensuring consistent enforcement of competition laws. While there is no evidence that having a higher percentage of small businesses in the economy is associated with lower levels of inequality,²⁹ a lack of SMEs may be symptomatic of a poor business environment that holds back entrepreneurs and results in the concentration of wealth.

Addressing inequality

Tackling broader inequality requires a combination of redistribution through taxation and public spending and measures to reduce inequality of opportunity in society.

The provision of high-quality education, health care and social services can play an important role in reducing inequality of outcomes, as well as tackling inequality of opportunity (as discussed in Chapter 3). If one attaches a notional monetary value to almost-free education and health care services (the result of “predistribution policies”³⁰), the distribution of income becomes less unequal. In fact, public services account, on average, for more than two-thirds of the reduction seen in inequality relative to pure market outcomes (as reflected in income inequality before taxation). Civil society also has a role to play in improving equality of opportunity (see Box 1.3).

Direct fiscal measures aimed at income redistribution (such as progressive income taxes and cash transfers) account for around a third of the reduction in income inequality.³¹ In contrast, fiscal spending focused mainly on infrastructure, public administration and defence may exacerbate – rather than mitigate – income inequality. Consumption-based taxes may also be regressive, as the tax paid by the poor may account for a larger percentage of their income. In addition, the recent influx of refugees arriving in countries such as Turkey, newer EU member states and SEMED countries highlights the difficulty of delivering equality and

²⁸ See Clements et al. (2015).

²⁹ See Beck et al. (2005).

³⁰ This term was coined by Hacker (2011) to highlight the fact that these policies improve equality of opportunity and help to distribute income more evenly *before* market outcomes are realised.

³¹ See Clements et al. (2015), Chapter 16.

economic inclusion for migrants – and refugees in particular (see Boxes 1.4 and 1.5).

Chapters 3 and 4 of this report discuss policies aimed at facilitating access to financial services and improving equality of opportunity for all people, regardless of their gender, social background and ethnicity and any other characteristics that are beyond their control.

Reducing poverty

Subsidies and cash transfers are often used to improve the lives of the poor. Untargeted subsidies (such as energy subsidies) can be blunt and costly ways of reaching out to those with the lowest incomes. The fact that energy accounts for a much higher percentage of consumption among the poor relative to the rich is often used to justify energy subsidies. However, such subsidies are a highly inefficient and costly way of helping the poor. The majority of the subsidies, in volume terms, accrue to the rich, who use much more petrol and air conditioning. Moreover, low energy prices may further discourage more affluent consumers from saving energy. As a result, energy subsidies undermine governments' finances and reduce authorities' ability to finance other spending programmes aimed at helping the poor.

A switch to targeted subsidies may therefore be highly beneficial in terms of reducing poverty. At the same time, the provision of targeted subsidies and means-tested benefits requires a high degree of administrative capacity, which may often be lacking in less developed economies and countries with weaker economic institutions.

The effectiveness of social transfer programmes may, in certain cases, be further enhanced if they include the monitoring of outcomes and address certain behavioural traits that exacerbate inequality of opportunity. For instance, parents receiving assistance could be obliged to send their children to school (thus forgoing the additional income that working children can provide, in return for improvements in human capital and higher expected incomes in the future). Such programmes have been successful in Brazil, Colombia and Mexico.³² Similarly, the long-term unemployed (that is to say, those who have been out of work for more than 12 months) could be required to sign up for job search programmes or undergo retraining.

Conclusion

The EBRD region as a whole has achieved a remarkable degree of income convergence over the last 20 years. However, the benefits of this convergence have been distributed unequally, with fairly complex patterns in evidence.

In fact, people's experiences of growth and convergence have differed vastly depending on their position on the income ladder. In post-communist countries, average income growth corresponds to the experience of someone in the top 27 per cent of the income distribution, while 23 per cent of those countries' populations are, on average, worse off today than they were in 1989. Only 44 per cent of those populations have experienced income growth in excess of the average for the G7.

In addition to broader globalisation trends, income patterns over the last two-and-a-half decades also reflect experiences unique to the region – namely, wage decompression and the deep recession seen in the early years of the transition process, as well as a very rapid shift from manufacturing and agriculture-based economies to a more service-oriented model.

Before the start of the transition process, levels of inequality in the region were very low by international standards (at least as far as measurable inequality is concerned). Although they then increased dramatically in the early years of the transition process, they remain moderate by comparison with other parts of the world. Furthermore, significant progress has been made in terms of reducing poverty.

Despite this, people are overwhelmingly of the view that levels of inequality are high and rising. This may, in part, reflect the legacy of the transition experience. These perceptions may, to some extent, also be a result of the strong concentration of wealth among the very rich, with the region displaying high levels of concentration even relative to other emerging market economies. The chapters that follow look in more detail at the ways in which the transition process has affected people's well-being and people's perception of that process, as well as their attitudes towards open markets, democracy and reform.

Poverty, inequality and excessive concentration of wealth among the very rich represent distinct challenges requiring separate policy responses. The fact that wealth is strongly concentrated among the very rich across the region's economies is a source of concern, as it may limit equality of opportunity and undermine confidence in key economic and political institutions, resulting in weaker long-term growth. This highlights the need for further improvements in the overall quality of institutions, higher standards of governance and transparency, the consistent enforcement of competition laws and efforts to diversify economies away from excessive dependence on natural resource rents. Taxation of wealth (as opposed to the taxation of income or consumption) could also be given a more prominent role as a source of government revenues.

The reduction of poverty requires targeted, well-designed social transfer programmes. These programmes may also need to address certain behavioural traits that exacerbate inequality of opportunity – for instance, by forcing parents receiving assistance to send their children to school.

Tackling broader inequality requires a combination of redistribution through taxation and public spending and measures to reduce inequality of opportunity in society. Policies aimed at boosting equality of opportunity for all people (regardless of their gender, social background and ethnicity and any other characteristics unrelated to their abilities and efforts) include better access to higher-quality education and measures supporting financial development. These are discussed in chapters 3 and 4 of the report.

³² See, for instance, Bastagli et al. (2016).

Box 1.1. Income mobility and income growth

Estimates of the income growth experienced by people with differing levels of income assume that there is no mobility between income deciles – that is to say, those who were at the bottom of the income distribution two decades ago are assumed to remain among the poorest today. This assumption is driven purely by the availability of data. The income shares of the various deciles are derived from household surveys, and survey respondents differ from year to year.

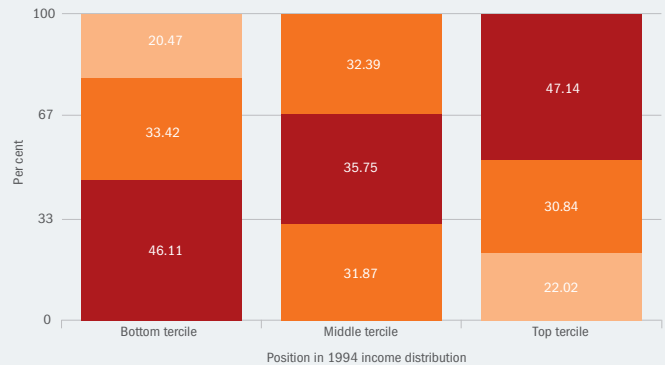
How significant has income mobility been since the start of the transition process? And does it alter the main conclusions regarding the very large differences between the growth experiences of individuals within a given country? Data from the Russian Longitudinal Monitoring Survey (RLMS) conducted by the Higher School of Economics in Moscow may help to shed some light on this issue. That survey monitored a representative sample of more than 8,000 people from 1994 to 2014 and, despite some people dropping out of the survey, contains useable income data on more than 1,600 people covering the entire period. Thus, it is possible to calculate the probability of someone who was in a given decile in 1994 being in a particular decile in 2014 (for instance, the probability of someone remaining in the poorest decile or rising all the way to the top decile). These probabilities can then be applied to national survey data in order to construct “adjusted” income growth curves. In addition, each respondent’s income standing can be assessed within their age cohort, in order to take account of the fact that people’s incomes tend to grow, on average, as they move from their 20s to their 40s.

The survey reveals a substantial degree of income mobility, comparable with – and perhaps even higher than – estimates obtained for the United States.³³ For instance, people who were in the bottom tercile of the income distribution in 1994 had a 20 per cent chance of being in the top tercile by 2014 (see Chart 1.1.1). Even so, people in all parts of the income distribution were still most likely to remain in the same tercile (see the large rectangles on the diagonal in the chart).

Estimates of income mobility can be used to carry out a “forward-looking” adjustment of the income growth curve for each decile of the population (see Chart 1.1.2). This analysis takes individuals from each income level in 1989 and calculates their income in 2016, resulting in a very egalitarian growth curve relative to the unadjusted “zero-mobility” curve (which is identical to the one in Chart 1.3).³⁴ This is partly because the distribution of lifelong income will typically be more equal than a snapshot of any given year, as the rich have nowhere to go but down the income ladder and the poor can only move upwards. At the same time, the results for Russia also highlight the fact that incomes during and after the transition process may have had little in common with incomes under central planning. It is not clear to what extent today’s generation can expect a similar degree of income mobility in the future.

We can also adopt a “backward-looking” approach, taking the rich and poor of today and asking where they have come from in terms of their standing back in 1989. This results in differences between individual growth experiences which are even larger than those observed under a zero-mobility assumption. For instance, the top decile

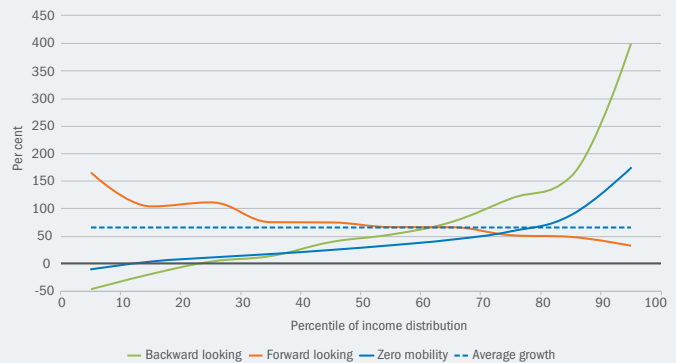
CHART 1.1.1. Income mobility in Russia for each tercile of the income distribution, 1994-2014



Source: RLMS and authors' calculations.

Note: Each bar shows the probability of being in the top, middle or bottom tercile of the income distribution in 2014 on the basis of an individual's position in the income distribution in 1994 (taking into account that person's age). Darker colours correspond to lower levels of mobility.

CHART 1.1.2. Cumulative real disposable income growth in Russia since 1989 by income decile when correcting for income mobility



Source: World Bank Povcal database, IMF, World Development Indicators, RLMS and authors' calculations.

Note: The “forward-looking” curve traces the incomes of each decile of the 1989 distribution over time, using inter-decile mobility assumptions based on the RLMS data for the period 1994-2014. The “backward-looking” curve traces the incomes of each decile of the 2016 distribution using those same assumptions.

experience cumulative income growth of more than 400 per cent, while the bottom 25 per cent see no growth at all.

Ultimately, the question of whether income mobility affects conclusions about differing income growth experiences depends on how mobility is corrected for and whether we are interested in the future prospects of today’s workers or their past experiences. Besides, the circumstances in Russia, for which longitudinal survey data are available, may be different from those in other countries in the region. With this in mind, the “zero-mobility” assumption appears reasonable – albeit by no means an accurate reflection of the situation – when looking at disparities between individual income growth rates.

³³ See Krugman (2014).

³⁴ This is consistent with the findings of Lukiyanova and Oshchepkov (2012) and Treisman (2012).

Box 1.2. Distribution of income for the EBRD region as a whole

What would an income distribution for the EBRD region as a whole look like? Chart 1.2.1 provides the answer, presenting region-wide distribution curves based on 2011 US dollars at PPP.

By 1996, in the wake of the transition process, the income distribution for the EBRD region had shifted strongly to the left, with the median income declining by 26 per cent. At the same time, a large number of high earners emerged at the right-hand end of the distribution. That second mini-mode represents around 2.5 per cent of the region's population, whose incomes increased and surpassed the median income in the G7 economies.

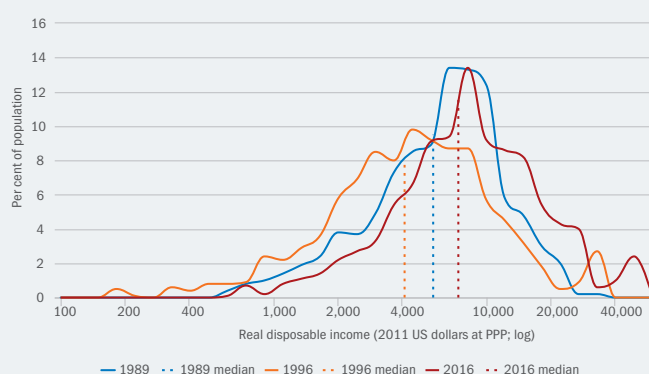
That second mode then remained in place as the entire curve gradually shifted to the right of the 1989 distribution (see the 2016 curve). While the incomes of both the better-off and the poor have shifted to the right, as has the median income, the distribution has become more unequal, as convergence between the income levels of poorer and richer countries has not been strong enough to offset increases in inequality within individual countries.

Indeed, inequality within countries (as opposed to income differences between countries) now accounts for two-thirds of the region's total income inequality, up from 57 per cent in 1989.³⁵ In fact, the incomes of the top quintile are now 19 times those of the bottom quintile, up from 13 in 1996 and around 7 in 1989. This contrasts with the global distribution of income, which has, if anything, become slightly less unequal, as poor countries' convergence with the income levels of advanced economies has more than offset rising inequality within individual economies.

The 1989 and 2016 distributions intersect at around US\$ 11,000 in 2011 prices at PPP. At higher levels of income (which are earned by around a third of the region's population today, compared with around 15 per cent in 1989), the share of the population is larger in 2016 for every level of income.

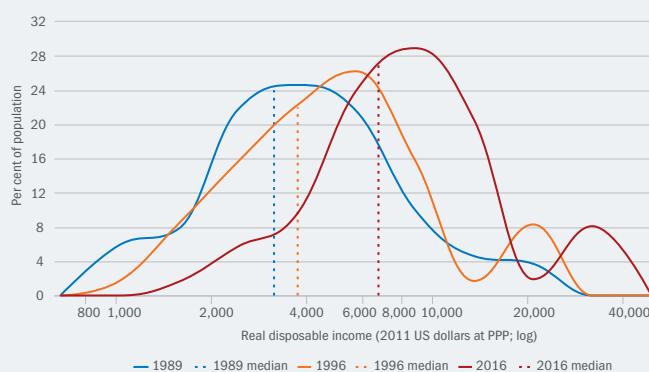
The income distribution for the subregion comprising Turkey and the SEMED countries has evolved in a different manner. As that subregion did not experience the price liberalisation and transition recession of the early 1990s, its income distribution has shifted further and further to the right over time (see Chart 1.2.2). It has also become less skewed as people at the left-hand end of the distribution have experienced stronger income growth. In contrast, the income distribution for the post-communist countries is broadly similar to that of the region as a whole.

CHART 1.2.1. Income distribution for the EBRD region as a whole



Source: World Bank Povcal database, World Development Indicators, UN, national authorities and authors' calculations.

CHART 1.2.2. Income distribution for the SEMED countries and Turkey



Source: World Bank Povcal database, World Development Indicators, UN, national authorities and authors' calculations.

³⁵ See Anand and Segal (2008) for technical details.

Box 1.3. Civil society and inclusion

Civil society – organisations and groups of individuals that occupy the space between the state and the private sector, promoting a wide range of interests and values through voluntary collective actions – are an essential component of inclusive political and economic systems. Factors that are conducive to civil society include a supportive legal framework and access to justice, access to diverse sources of information, and respect for civil rights and political freedoms. In the days of communism, civil society was largely silenced. Several countries have made extraordinary progress since the start of the transition process in terms of supporting civil society, while others still have a long way to go when it comes to putting the necessary framework in place. In some cases, though, there has also been some reversal of progress.

Many of the activities organised by this sector in developing and transition countries are about inclusion – promoting equal rights, equal opportunities and access to services. Indeed, many civil society organisations and groups are set up specifically in order to address inclusion-related issues, such as labour rights, gender equality, minority rights, rural development, the economic empowerment of young people and the needs of an ageing population. Civil society organisations help to voice the concerns of those segments of the population that are excluded from educational or social opportunities. Civil society stakeholders often promote work-based learning initiatives, social entrepreneurship, and inclusive and sustainable resourcing and management practices at municipal level. Since 2013, the EBRD has, through its Civil Society Capacity Building Framework, provided support for initiatives of this kind targeting economic opportunities for young people and rural communities.

Civil society also plays a crucial role in providing products and services to disadvantaged groups – empowering them, for example, with

skills and knowledge. In particular, local civil society organisations have a direct link to local communities and can achieve a significant impact on the ground by serving as a bridge between citizens, local authorities and businesses. Such organisations are therefore well placed to reach out to economically and socially excluded groups, seeking to understand their needs and helping to find local solutions.

In Ukraine, for instance, civil society organisations promote rural youth employment opportunities in sustainable dairy farming. Since 2015, the EBRD has been working with the Danone Ecosystem Fund, Danone's corporate social responsibility arm, and ICF Community Wellbeing, the Ukrainian chapter of civil society organisation Heifer International, with a view to upgrading the training offered by a demonstration farm in Dnipropetrovsk and facilitating youth employment opportunities in agribusiness through work-based learning. This initiative also supports the use of mobile units to train more than 450 small farmers across Ukraine, with a view to helping to raise quality standards in milk production and enable small farmers to work with large buyers of milk. The programme also involves twinning arrangements with farms in the Caucasus.

Given the inclusion work that is carried out by such organisations, the shrinking of civil society in some countries in the region is a cause for concern. There have been increased reports of civil society actors being intimidated and threatened by state and non-state actors with a view to delegitimising them and isolating them from their communities.³⁶ These developments do not bode well for the future inclusiveness of political and economic systems.

³⁶ See CIVICUS (2016) and United Nations High Commissioner for Human Rights (2016). More than 100 laws restricting the activities of civil society organisations have been adopted around the world since 2015

³⁷ Gobat and Kostial (2016) estimate that it could take more than 20 years for Syria's GDP to return to pre-war levels.

Box 1.4. Economic inclusion of refugees

More than 60 million people around the world are currently displaced by conflict and instability, the highest level ever recorded. The current proliferation of security and environmental threats suggests that such displacement of large numbers of people is set to become the norm, and the EBRD region is directly affected by this trend.

After five years of brutal civil war, Syrians now represent the largest refugee population fleeing a single conflict in a generation (see Chart 1.4.1). In February 2016, the Office of the United Nations High Commissioner for Refugees (UNHCR) estimated that more than 4.7 million Syrians had fled to Syria's immediate neighbours. Given the extent of Syria's economic devastation,³⁷ the majority of those refugees will not be able to return home for many years. With 90 per cent of refugees in Jordan, Lebanon and Turkey living outside camps, the economic and social integration of refugees into their host communities represents a major challenge for those host countries.

The influx of refugees has further increased inequality in the host countries. Nearly nine out of ten registered Syrian refugees living in Jordan and Turkey are either living in poverty or expected to be in the near future. Around half of those Syrian refugees are children or adolescents, and the majority are women (with the percentage of women particularly high among refugees in Turkey).

In Turkey, only around a quarter of Syrian children outside camps are in formal education, although this figure may increase with EU funding. Despite an estimated 195,000 Syrians aged between 18 and 25 living in Jordan and Lebanon alone, the numbers enrolled in tertiary education programmes are negligible. Low levels of education among this new generation of young Syrians may impede their social and economic inclusion, trapping them in poverty. With this in mind, governments and international donors are taking steps to promote the verification/mapping of skills and provide education and language training for refugees.

Thus far, the large influx of refugees has had only a limited impact on formal labour markets.³⁸ However, some displacement has been

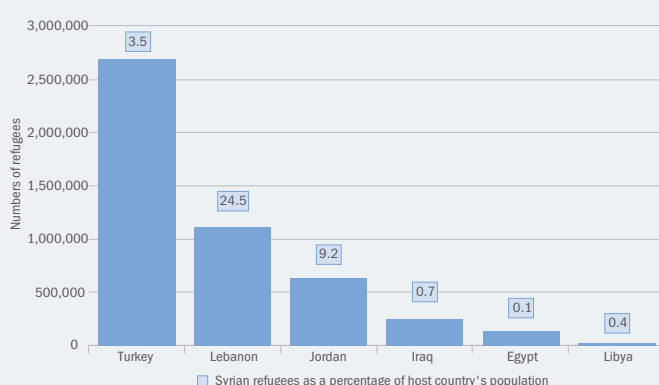
noted with regard to low-skilled workers – mostly in the informal sector, where many refugees have ended up being employed. In some cases, they have displaced other migrant workers.³⁹

That increase in informal employment has helped to reduce the prices of some manufactured goods and provided basic incomes for some refugees. In the longer term, however, reliance on informal labour is likely to weaken the competitiveness of the private sector by discouraging innovation and limiting productivity growth. Recognising this, governments are taking steps to regularise the employment of refugees through work permits.⁴⁰

The key medium-term priority identified by the governments of the host countries is to ensure that refugees are able to make a living for themselves on a sustainable basis, while preserving the social cohesion of their host communities, which often suffer from pre-existing economic constraints (such as high levels of poverty, scarce resources and poor infrastructure). The key challenge for those host governments is to upgrade their strained municipal infrastructure in a timely and cost-efficient manner.

The private sector can play an important role in creating economic opportunities for communities hosting refugees (in the form, for instance, of work-based learning schemes and access to finance for SMEs established by refugees). Indeed, entrepreneurship has become the key factor contributing to the economic inclusion of Syrian refugees, particularly for those living in larger cities in Turkey and Jordan. According to the latest figures from the Union of Chambers and Commodity Exchanges of Turkey, the number of Syrian-partnered firms established annually in Turkey increased from 30 in 2010 to 1,599 in 2015, with most of them concentrated in the catering, construction, retail, real estate, transport, textile and food industries.

CHART 1.4.1. Syrian refugees registered in neighbouring countries



Source: UNHCR and *Jordan Times*.

Note: Data relate to February 2016 or more recent updates. Actual numbers of refugees (including people who have not been registered) may be substantially higher.

³⁸ See Fakhri and Ibrahim (2016).

³⁹ More than 400,000 refugees are employed in the informal sector in Turkey. A 2015 study by the International Labour Organization claims that 99 per cent of Syrian refugees in Jordan are working in the informal economy (that is to say, outside of the country's labour regulations). The total number of Syrians working informally is estimated to be between 160,000 and 200,000.

⁴⁰ In Turkey and Jordan, work permits are the responsibility of employers, who apply on behalf of their employees once residency, registration and health care requirements have been met. In January 2016, Turkey adopted legislation allowing work permits to be granted to Syrians, although employment is capped at 10 per cent of a firm's workforce. By May 2016, only 3,800 Syrians had been granted work permits. The Jordanian authorities issued more than 11,000 work permits to Syrian refugees in the first half of 2016, as well as launching a pilot project employing 4,000 Syrian refugees in the clothing sector and agriculture.

Box 1.5. The refugee crisis and economic migration from the Western Balkans

The Syrian refugee crisis has resulted in renewed attention being paid to migrant flows from the Western Balkans to western Europe. Migration from the Western Balkans has been a consistent phenomenon since at least the 1990s – and several decades earlier in the case of the former Yugoslavia. The migration pattern that has emerged in this most recent episode bears many of the traditional hallmarks of economic migration, but also features some surprising aspects.

In March 2015, the number of asylum applications in Germany – the main destination in western Europe for refugees and migrants alike – was triple what it had been just four months earlier (see Chart 1.5.1). The fact that so many Kosovans and Albanians decided to migrate at that precise moment in time appears to be due, in part, to the sharp decline seen in the cost of migration on the back of the wave of Syrian refugees.

However, Kosovans' consistently strong preference for migration whenever an opportunity presents itself seems to stem largely from conditions at home (the sluggish economy, the slow pace of institutional development and political change, and so on). While the unemployment rate in Kosovo is high at 35 per cent, employment status appears to play a limited role in the decision to emigrate, with many people leaving local private-sector jobs in order to move abroad. Moreover, that strong willingness to migrate spans all sections of the Kosovan population, running counter to the perception that most migrants are young, male and unemployed.⁴¹

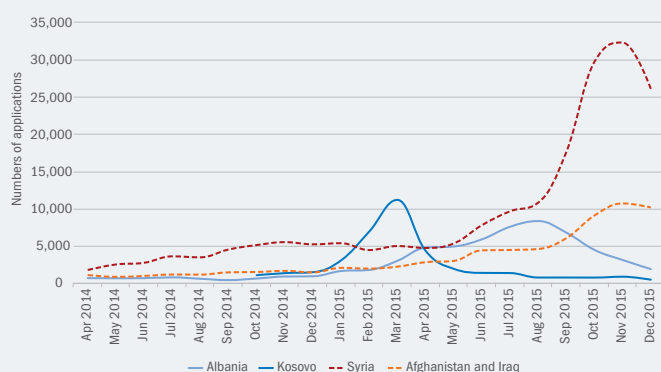
A lack of adequate health care and reliable electricity and water supplies are frequently cited as key factors affecting people's quality of life. Indeed, the LiTS II and III household surveys reveal a strong correlation between dissatisfaction with utilities and plans to move abroad in the next year. As political fatigue and disillusionment with a country's progress grow, conditions that were once deemed acceptable may start to seem intolerable.

Developing growth-enhancing policies that reduce people's desire to emigrate is a challenge. Fostering the development of the private sector and economic vitality can help to reduce unemployment

and create higher-quality jobs. In addition, policy-makers should not overlook the provision of public services and infrastructure when seeking to encourage skilled individuals to stay. However, these represent medium-term objectives. In the short term, large numbers of people will probably continue to want to emigrate.

The management of economic migration requires proactive policy responses by the governments of both home and host countries. Circular migration policies – such as fixed-term work permits (potentially targeting specific skills), reductions in the cost of transferring remittances through formal financial institutions and tax regimes facilitating the reinvestment of migrants' earnings in home countries – can help to mobilise short-term migrant and diaspora resources in support of economic development in home countries,⁴² as well as addressing specific labour market imbalances in host countries. Alternative ways of handling migration, such as the use of fences, deportations and strict penalties for employers, may reduce the number of migrants, but they can also have a negative impact on migrants' skill profiles and incentivise smuggling.⁴³

CHART 1.5.1. New asylum applications in Germany



Source: German Federal Office for Migration and Refugees.

⁴¹ See Group for Legal and Political Studies (2015).

⁴² See European Commission (2008).

⁴³ See Friebe and Guriev (2006).

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THE IMPACT OF TRANSITION ON WELL-BEING



ON AVERAGE,
PEOPLE BORN AROUND
THE TIME OF TRANSITION
ARE AROUND

1 CM SHORTER
THAN PEOPLE BORN
BEFORE OR AFTER
THAT PERIOD

EXPERIENCE OF
TRANSITION DURING
A PERSON'S FORMATIVE
YEARS INCREASES
THE LIKELIHOOD OF
HIM/HER SUPPORTING
DEMOCRACY AND
THE MARKET ECONOMY
BY APPROXIMATELY

3 PERCENTAGE POINTS

ON AVERAGE,
PEOPLE BORN AROUND THE
TIME OF TRANSITION ARE

14 PERCENTAGE
POINTS MORE LIKELY TO BE
SATISFIED WITH LIFE

IN 2015-16 MORE THAN
51,000
HOUSEHOLDS
TOOK PART IN THE THIRD
ROUND OF THE *LIFE IN
TRANSITION* SURVEY

This chapter re-evaluates the impact that the transition process has had on well-being, finding that residents of post-communist countries are no longer less satisfied with their lives than their counterparts in comparator countries that have not experienced transition from a planned to a market economy. Nevertheless, there is also clear evidence of the high social cost of early transition reforms: cohorts born during transition are shorter than their older and younger peers, pointing to major deprivation in the early years of the reform process. However, those cohorts are also better educated and happier with their lives today than their peers. These results suggest that the transition process has been a dramatic experience, but its negative impact on well-being has, on the whole, finally been overcome. While this optimistic message holds for an average resident of post-communist countries, this chapter also identifies certain vulnerable groups who are still suffering the ill-effects of the initial transition shock.

Introduction

The transition from a planned to a market economy that has been undertaken by the post-communist countries in the EBRD region represents a unique political, social and economic transformation that has taken place in a relatively short period of time. In the last 25 years, the people of those countries have lived through a complete overhaul of their public and social institutions, the emergence of a new private sector, and their reintegration into the global economy. All of those countries suffered an economic recession in the early years of the transition process. In some countries the recession was short-lived, but in others it was deep and lasted many years.

On the whole, that economic transformation has been a success.¹ However, as the previous chapter showed, the benefits of transition have not been distributed equally. In many countries, this has resulted in declining support for the market economy and democracy. In some cases, major policy reversals – both economic and political – have taken place.²

While transition trajectories have varied significantly from country to country (particularly when comparing countries in central and eastern Europe with former Soviet republics), academic research has identified one important common characteristic shared by all of those countries: a “transition happiness gap”. Residents of all post-communist countries have, in the past, reported significantly lower levels of life satisfaction than their counterparts in countries with similar income levels that have not undergone transition from a planned to a market economy. Indeed, satisfaction levels in those countries initially fell as incomes declined in the early years of the transition process, but they then picked up again as economic growth strengthened.³ Until very recently, however, satisfaction levels in those countries have not been on a par with those seen in comparator countries with similar per capita incomes,⁴ defying academics’ predictions that the transition happiness gap would eventually disappear as the quality of public services improved and newly educated cohorts entered the labour market.

Why did residents of post-communist countries report lower levels of life satisfaction? Leo Tolstoy’s *Anna Karenina* opens with the conjecture that “every unhappy family is unhappy in its own way”. However, economists have been able to identify a number of common factors contributing to the transition happiness gap in post-communist countries. In eastern Europe, people’s satisfaction levels may be explained, in part, by their dissatisfaction with their governments.⁵ The transition happiness gap has also been linked to the traumatic macroeconomic instability experienced at the start of the transition process, the deterioration in public goods and the increase in income inequality during transition.⁶ The depreciation of human capital accumulated under central planning has also had a considerable impact, with skills acquired prior to the transition process declining in value in the market economy.

This chapter re-examines the impact that the transition process has had on levels of life satisfaction and on other measures of well-being using newly available data from the

¹ See Djankov (2016).

² See EBRD (2013).

³ See Easterlin (2014).

⁴ This finding has been documented in all major international sources of data on life satisfaction. Sanfey and Teksoz (2007), Guriev and Zhuravskaya (2009) and Easterlin (2014) all identify a transition happiness gap using the World Values Survey (see the first five rounds, which cover the period up to

2008); Deaton (2008) identifies one using the first round of the Gallup World Poll, which was conducted in 2006; and Djankov et al. (2016) identify one using the first and second rounds of the *Life in Transition Survey* (2006 and 2010 respectively), the Pew Global Attitudes Survey, Eurobarometer and the European Values Survey.

⁵ See Djankov et al. (2016).

⁶ See Guriev and Zhuravskaya (2009).

third round of the *Life in Transition Survey* (LiTS III). LiTS III was conducted by the EBRD and the World Bank in late 2015 and the first half of 2016 and spans more than 51,000 households in 29 post-communist countries (but not Turkmenistan) and five comparator countries (Cyprus, Germany, Greece, Italy and Turkey). The survey includes questions on economic well-being, life satisfaction, beliefs and attitudes, as well as questions on anthropometric variables such as respondents' weight and height (which allow an assessment of the quality of life in the early years of the transition process).

As literature on development economics shows, socio-economic deprivation in the first two years of a child's life can result in a reduced height as an adult (when other genetic and non-genetic determinants of height are controlled for).⁷ Thus, comparing cohorts born at the beginning of the transition process with older and younger peers allows claims that transition has been accompanied by major hardship to be subjected to rigorous evaluation. This is an important issue, as the traumatic experiences of the early years of the transition process – whether caused by reforms or the bankruptcy of the previous regime – are often cited as the key factor explaining subsequent declines in the popularity of the market economy and democracy and the resulting policy reversals.

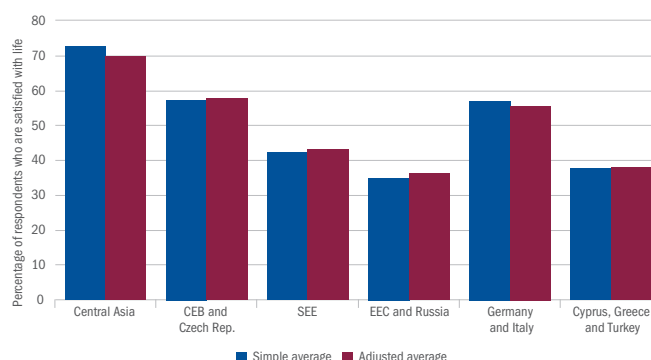
Given that the transition process (as defined in Box 2.1) took place in the early 1990s, LiTS III represents the first opportunity to carry out this exercise. Just a few years ago, the cohorts who were born during the transition process were still growing up. Only now can their adult height and life satisfaction be compared with those of their counterparts in other countries.

The main results are as follows. First of all, the transition happiness gap has finally closed. When income is controlled for, satisfaction levels among residents of post-communist countries are now similar to those of their western European peers – and even higher than those of people in Cyprus, Greece and Turkey.⁸

Second, analysis of the height of cohorts born around the time of transition shows that the early years of that process were indeed accompanied by major socio-economic deprivation, with those people ending up shorter than their peers. It also shows that the impact on those people's height cannot be fully explained by the decline in GDP alone. The early years of the transition process were more than just an economic recession. They involved dramatic changes to the functioning of the state, affecting the provision of basic public services (such as education and health care) and the functioning of the labour market, and had a significant impact on households' expectations regarding their future prosperity. However, the results show that transition has not had negative long-term implications for the perceived well-being of cohorts born around the time of that process. If anything, people born during transition report higher levels of satisfaction than their peers. In this sense, while the negative effects of being born at that time are still tangible, they no longer seem to affect people's well-being, perceptions and preferences.

This optimistic message holds on average, but (as discussed in Chapter 1) the impact of the transition process has been highly heterogeneous. The resulting shock has been especially severe

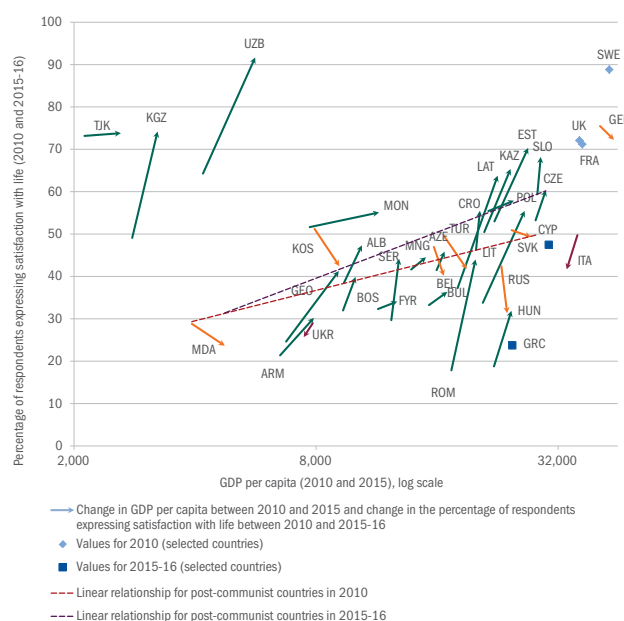
CHART 2.1. Percentage of respondents who are satisfied with life



Source: LiTS III and authors' calculations.

Note: The chart shows the percentage of respondents who agree or strongly agree with the statement "All things considered, I am satisfied with my life now". The blue bars indicate simple regional averages. The red bars indicate the level of satisfaction when adjusted for individual and household-level characteristics (see Table 2.1). The average for the SEE region does not include Cyprus or Greece, which are shown separately with Turkey.

CHART 2.2. Life satisfaction and GDP per capita in post-communist and comparator countries



Source: LiTS II and III, World Development Indicators and authors' calculations.

Note: The vertical axis shows the percentage of respondents who agree or strongly agree with the statement "All things considered, I am satisfied with my life now". The horizontal axis shows GDP per capita in purchasing power parity (PPP) terms (based on 2011 US dollars). Arrows show changes in GDP per capita between 2010 and 2015 and changes in the percentage of respondents expressing satisfaction with their life between 2010 and 2015-16. A green arrow indicates that the country is now better off on both counts, a red arrow indicates that it is worse off on both counts, and a yellow arrow indicates that the country has seen positive income growth but registered a decline in satisfaction levels. The light blue diamonds show GDP per capita in 2010 and the percentage of respondents expressing satisfaction with their life in 2010 for those countries that were surveyed as part of LiTS II only. The blue squares show GDP per capita in 2015 and the percentage of respondents expressing satisfaction with their life in 2015-16 for those countries that were surveyed as part of LiTS III only. The dotted lines show the linear relationships for post-communist countries (excluding the three outliers: the Kyrgyz Republic, Tajikistan and Uzbekistan) in 2010 and 2015-16.

⁷ See Case and Paxson (2010) for a review. Duflo (2003) and Case (2004) show that, in South Africa, positive income shocks resulting from the introduction of a generous new pension system have led to height gains (especially among girls). Conversely, extreme adversity, such as an infectious environment, food shortages or a mother smoking in a child's early years (or even while the child is in the womb), can lead to stunted growth (see Almond (2006), Li et al. (2004) and Saenger et al. (2007)).

⁸ The findings of this chapter are in line with those of Nikolova (2016), who uses the latest round of the World Values Survey (2010-13). That dataset, however, includes only a few post-communist countries.

for those born during transition to disadvantaged families; these people report lower levels of satisfaction than peers of the same age from more privileged backgrounds.

This chapter also looks at whether cohorts whose formative years coincided with the transition process differ from other people in terms of their attitudes and beliefs.⁹ Analysis of those cohorts' current attitudes provides evidence regarding the attitudes and expectations that prevailed in those societies at the start of the transition process. In fact, there is no sign that the transition process has had a significant impact on those individuals' satisfaction levels, trust in other people or preferences regarding redistribution. However, the positive sentiment surrounding the reform process does seem to have had an impact on some of their beliefs, with those cohorts expressing more support for the market economy and democracy than their peers. This finding is remarkable, given that the onset of the transition process had a dramatic impact on those individuals' career prospects. They had just finished their education under the old system when the transition process began, and their human capital could have become less valuable in the new environment.

Closing the transition happiness gap

LITS III data show that there is no longer a gap between post-communist countries and comparators in terms of life satisfaction. Chart 2.1 reports average satisfaction levels for various groups of countries. Countries in Central Asia report very high levels of satisfaction, while central Europe and the Baltic states (CEB) are roughly on a par with Germany and Italy. South-eastern Europe (SEE), eastern Europe and the Caucasus (EEC) and Russia have satisfaction levels similar to those seen in Cyprus, Greece and Turkey.

The average level of satisfaction in post-communist countries is 51 per cent – well below the 57 per cent seen in Germany and Italy. However, this difference is fully explained by the fact that post-communist countries have lower levels of income per capita. Chart 2.2 shows changes in both the percentage of residents expressing satisfaction with their life and countries' GDP per capita between 2010 and 2015-16. With the exception of three outliers (the Kyrgyz Republic, Tajikistan and Uzbekistan), there is a strong positive correlation between a country's level of development and life satisfaction. Even without the Kyrgyz Republic, Tajikistan and Uzbekistan – which report unusually high levels of satisfaction given their income per capita – satisfaction levels in post-communist countries are no lower than those seen in comparator countries with similar income levels. Indeed, when income per capita is controlled for, there is no significant difference between post-communist and other countries. This result is not driven by any particular country.

Chart 2.2 also shows that this “happiness convergence” is the result of both substantial increases in satisfaction in most post-communist countries and decreases in satisfaction in comparator countries between 2010 and 2015-16. In Germany and Turkey, satisfaction declined despite income growth. In Italy,

meanwhile, satisfaction declined in parallel with a fall in GDP per capita, but the decline in satisfaction was more pronounced than the fall in GDP would have predicted. Cyprus and Greece were not covered by LiTS II, which was conducted in 2010, but their current satisfaction levels are lower than their per capita incomes would predict. This is in stark contrast with the picture in 2010, when satisfaction levels in all Western countries were significantly higher than their per capita incomes would have suggested.

Thus, the transition happiness gap was still present in 2010. A number of academics predicted that it would disappear by 2010, and that might well have happened, had the global financial and economic crisis not had a disproportionate impact on the post-communist countries, resulting in a pronounced negative effect on satisfaction levels. Since 2010, satisfaction levels in those countries have recovered strongly, while the comparator countries have suffered a prolonged stagnation, resulting in satisfaction levels falling and converging toward those of their post-communist counterparts.

The absence of a transition happiness gap in Chart 2.2 is confirmed by econometric testing. These tests (the results of which are reported in Table 2.1) are based on a conventional model of life satisfaction – that is to say, satisfaction is regressed on various individual and household-level characteristics, such as education, age, gender, marital status, the number of children in the household, religion, being a member of an ethnic minority, whether the respondent's place of birth is urban (rather than rural) and employment status. Several proxies for income are also included: self-reported household income, as well as answers to questions on whether the household can afford (i) holidays and meat, chicken or fish and (ii) unexpected expenses. Using self-reported income significantly reduces the size of the sample, as only a third of households report their income, whereas answers to the questions on what households can afford are available for almost all households.

In order to simplify the interpretation of the results, Table 2.1 reports only results for the binary measure of life satisfaction (that is to say, whether the respondent is satisfied with life or not); the results for the five-point measure of satisfaction are very similar.

The effects of the variables above are intuitive and consistent with what has been found in previous literature on life satisfaction. Each additional level of education (that is to say, moving from no education to primary education, from primary to secondary education, and from secondary to tertiary education) increases the probability of being satisfied with life

57%
OF RESPONDENTS LIVING
IN GERMANY AND ITALY
WERE SATISFIED WITH LIFE

⁹ Events experienced during an individual's impressionable formative years (defined as the period between the ages of 18 and 25) have a lasting effect on his/her personality. Giuliano and Spilimbergo (2014) analyse cross-country data from the World Values Survey, as well as data on the United States of America from the General Social Survey and the National Longitudinal Survey, showing that people who face a macroeconomic recession in their formative years tend to go on to favour redistribution, vote for left-wing parties and believe that success is driven by luck rather than effort.

TABLE 2.1. Cross-sectional analysis of life satisfaction using LITS III data

Satisfied with life (0/1)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post-communist country	-0.038 (0.108)	0.012 (0.108)	-0.004 (0.093)	0.008 (0.105)	-0.009 (0.093)	0.065 (0.057)	0.039 (0.057)
Income		0.041*** (0.007)		0.040*** (0.007)		0.041*** (0.007)	
Can afford holidays and meat			0.198*** (0.016)		0.188*** (0.016)		0.190*** (0.014)
Can afford unexpected expenses			0.128*** (0.013)		0.121*** (0.013)		0.117*** (0.011)
Primary education	0.105*** (0.034)			0.046 (0.130)	0.107*** (0.034)	0.019 (0.121)	0.095*** (0.027)
Secondary education	0.211*** (0.037)			0.191 (0.132)	0.169*** (0.036)	0.160 (0.124)	0.157*** (0.034)
Tertiary education	0.314*** (0.040)			0.297** (0.137)	0.218*** (0.037)	0.262** (0.128)	0.205*** (0.035)
Female	0.026*** (0.006)	0.052*** (0.009)	0.031*** (0.006)	0.042*** (0.009)	0.033*** (0.006)	0.041*** (0.009)	0.030*** (0.005)
Urban area	-0.023** (0.011)	-0.033** (0.016)	-0.037*** (0.011)	-0.045*** (0.015)	-0.044*** (0.011)	-0.048*** (0.016)	-0.049*** (0.012)
Unemployed and looking for a job	-0.188*** (0.020)		-0.127*** (0.018)		-0.124*** (0.018)		-0.118*** (0.017)
Ethnic minority	0.003 (0.035)	0.002 (0.032)	-0.005 (0.034)	0.014 (0.031)	0.002 (0.033)	0.009 (0.030)	-0.000 (0.030)
Number of children	0.016* (0.009)	0.010 (0.007)	0.026*** (0.009)	0.011 (0.007)	0.027*** (0.008)	0.011 (0.007)	0.028*** (0.008)
Married	0.034** (0.013)	0.044** (0.018)	0.023* (0.013)	0.042** (0.018)	0.022* (0.012)	0.042** (0.017)	0.020 (0.012)
Divorced or separated	-0.060*** (0.019)	-0.084*** (0.024)	-0.046** (0.017)	-0.081*** (0.025)	-0.050*** (0.017)	-0.078*** (0.024)	-0.049*** (0.017)
Widow or widower	-0.032 (0.020)	-0.060* (0.032)	-0.031* (0.017)	-0.050 (0.032)	-0.025 (0.018)	-0.042 (0.031)	-0.028 (0.017)
Age	-0.009*** (0.002)	-0.013*** (0.003)	-0.009*** (0.002)	-0.013*** (0.003)	-0.010*** (0.002)	-0.011*** (0.003)	-0.010*** (0.002)
Age squared, divided by 100	0.008*** (0.002)	0.013*** (0.003)	0.008*** (0.002)	0.013*** (0.003)	0.010*** (0.002)	0.011*** (0.003)	0.009*** (0.002)
No. of observations	44,551	14,715	44,551	14,715	44,551	15,956	48,963

Source: LITS III and authors' calculations.

Note: This table reports the results of a linear probability model. Standard errors in parentheses are clustered at the country level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. Income is self-reported in local currency and converted to US dollars and log terms. Dummies for religion (not reported) are statistically significant. Data on the number of children relate to the number of children under the age of 18 who are living at home. Specifications 1 to 5 comprise the 29 post-communist countries plus Germany and Italy. Specifications 6 and 7 also include Cyprus, Greece and Turkey.

ON AVERAGE, BEING
UNEMPLOYED REDUCES
THE PROBABILITY OF
BEING HAPPY BY

12
PERCENTAGE
POINTS

THE IMPACT OF TRANSITION ON WELL-BEING

by 5-10 percentage points. Being unemployed reduces the likelihood of satisfaction by 12 percentage points. And a 10 per cent increase in income increases the probability of satisfaction by 0.4 percentage point.¹⁰ Women are 3-4 percentage points more likely to be happy, while residents of urban areas are 3-5 percentage points less likely to be happy. People who are married are 3-4 percentage points more likely to be happy than single people, while people who are divorced or separated are 5-8 percentage points less likely to be happy. Each additional child increases the probability of happiness by 3 percentage points. Meanwhile, the effect of age is non-linear: for people under the age of 50, satisfaction declines with age, but after that point it starts to increase with age. (Table 2.1 presents results with linear and squared terms for age; the results with birth year dummies are very similar.)

The main variable of interest in Table 2.1 is residence in a post-communist country. The coefficient for this variable is not statistically significant in any of the specifications. This means that satisfaction levels in post-communist countries are the same as in comparator countries in the sample (when controlling for other individual or household-level determinants of satisfaction). Columns 1 to 5 compare post-communist countries with Germany and Italy. Column 1, which reports results without controlling for respondents' income, indicates that the probability of satisfaction is 4 percentage points higher in Germany and Italy, but this effect is not statistically significant. Once income is controlled for, there is no difference in satisfaction between those Western countries and the post-communist countries in the sample (see columns 2 to 5).

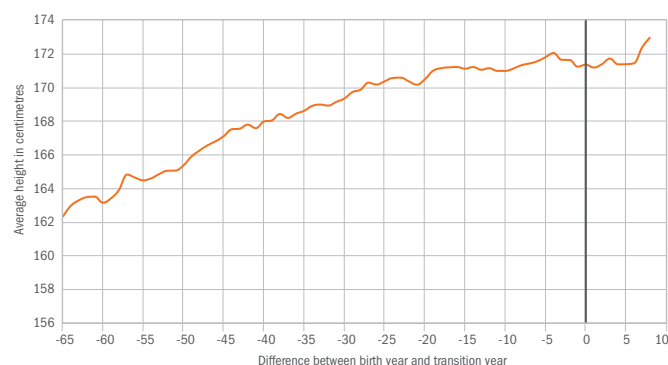
Columns 6 and 7 compare the post-communist countries with all five comparator countries in the sample (that is to say, Cyprus, Germany, Greece, Italy and Turkey). On average, satisfaction levels are higher in post-communist countries than they are in these five countries (especially when controlling for income); however, that effect is not significant. All of the specifications above include the Kyrgyz Republic, Tajikistan and Uzbekistan; a model excluding these countries produces similar results.

Overall, these results suggest that, in terms of life satisfaction, there is no longer a statistically significant difference between countries that have experienced transition from a planned to a market economy and those that have not.

Lasting impact of the early years of the transition process

Chart 2.3 shows the evolution of average height in post-communist countries as a function of the difference between respondents' birth year and the year when transition occurred. Average height gradually increased over time, before declining in cohorts born two to three years before transition occurred and remaining depressed for a number of years. The first sustained increases in average height were observed in cohorts born six years after transition, at which point average height returned to the pre-transition trend level. Differences in height between

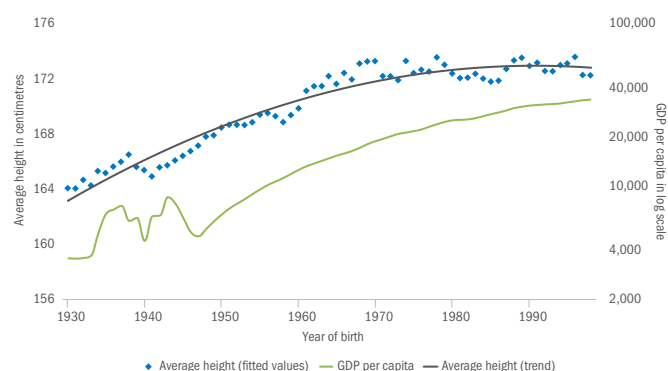
CHART 2.3. Changes in average height over time in post-communist countries



Source: LITS III and authors' calculations.

Note: The line denotes average height in post-communist countries, calculated as a three-year moving average. The horizontal axis shows the difference between the respondent's year of birth and the year when transition occurred (with the transition year varying from country to country, as Box 2.1 explains).

CHART 2.4. Average height and GDP per capita in comparator countries



Source: Gapminder, LITS III and authors' calculations.

Note: The blue diamonds show average height by birth year, calculated as a three-year moving average, while the green line shows a population-weighted three-year moving average of GDP per capita. Averages are calculated for four comparator countries: Cyprus, Germany, Greece and Italy. GDP per capita is expressed in PPP terms (based on 2011 US dollars).

people born around the time of the transition process and the trend are statistically significant.

Just how unusual are these developments in average height? Chart 2.4 shows the evolution of average height over time for four developed economies: Cyprus, Germany, Greece and Italy. Given that there are fewer observations for each cohort in these countries, it makes more sense to look at the fitted trend line, rather than the actual data. The trend line rises sharply until the 1970s, before flattening out at a level corresponding to the average GDP per capita of around US\$ 15,000 in PPP terms (see right-hand scale). Such stagnation is known as "height satiation": beyond a certain level of development, additional material resources do not contribute much more to increases in height.¹¹

¹⁰ The magnitude of this effect is similar to what Stevenson and Wolfers (2008) found (taking into account the fact that they used a 10-point scale for satisfaction with life).

¹¹ For results for developed countries, see NCD Risk Factor Collaboration (2016).

TABLE 2.2. Impact of being born or turning one in transition year on reported height (in cm)

	(1)	(2)	(3)	(4)
	Born in transition year	Born or one year old in transition year	Born in transition year	Born or one year old in transition year
Born in transition	-1.057*** (0.398)	-0.768*** (0.282)	-0.777* (0.409)	-0.544* (0.292)
Average of log GDP per capita			1.129*** (0.215)	1.190*** (0.221)
No. of observations	42,853	42,853	40,854	40,887
R²	0.382	0.382	0.384	0.384

Source: LITS III, Correlates of War Data, EBRD transition indicators, Gapminder, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: Standard errors in parentheses are clustered at the PSU level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for country fixed effects and country-specific linear time trends. In addition, the gender of the respondent, whether the respondent was born in an urban or rural location, the respondent's religion, the parents' level of education and the incidence of war are also included as controls. Specifications 3 and 4 also control for the parents' employment sector and the log of GDP per capita.

TABLE 2.3. Impact of changes in the price liberalisation indicator on reported height (in cm)

	(1)	(2)	(3)	(4)
	Born in transition year	Born or one year old in transition year	Born in transition year	Born or one year old in transition year
Change in price liberalisation indicator	-0.565*** (0.194)	-0.343*** (0.114)	-0.466** (0.204)	-0.274** (0.119)
Average of log GDP per capita			1.267*** (0.229)	1.323*** (0.233)
No. of observations	36,507	36,507	34,660	34,693
R²	0.373	0.373	0.375	0.375

Source: LITS III, Correlates of War Data, EBRD transition indicators, Gapminder, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: Standard errors in parentheses are clustered at the PSU level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for country fixed effects and country-specific linear time trends. In addition, the gender of the respondent, whether the respondent was born in an urban or rural location, the respondent's religion, the parents' level of education and the incidence of war are also included as controls. Specifications 3 and 4 also control for the parents' employment sector and the log of GDP per capita.

TABLE 2.4. Impact of being born or turning one in transition year on life satisfaction

	Satisfied with life (0/1)		Satisfaction with life (1-5)	
	(1) Born in transition year	(2) Born or one year old in transition year	(3) Born in transition year	(4) Born or one year old in transition year
Born in transition	0.141* (0.079)	0.104* (0.056)	0.148*** (0.057)	0.094** (0.041)
No. of observations	47,059	47,059	47,059	47,059

Source: LITS III, Correlates of War Data, EBRD transition indicators, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: Standard errors in parentheses are clustered at the PSU level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for country fixed effects and birth year fixed effects. In addition, the gender of the respondent, whether the respondent was born in an urban or rural location, the respondent's religion, the parents' level of education and the incidence of war are also included as controls.

Almost all post-communist countries began the transition process with average incomes below this threshold. Analysis later in the chapter distinguishes between countries that are above and below this threshold, finding that there is only a "height gap" in countries that are below the threshold.

The presence of the height gap identified in Chart 2.3 is confirmed by econometric analysis of the impact that the transition process has had on the average height of various cohorts (see Table 2.2). The main finding from this analysis is that people who were born during periods of price liberalisation are, on average, 1.1 cm shorter than older and younger cohorts (see column 1). If that group is expanded to include people who were one year old when price liberalisation took place, the people in that group are, on average, 0.8 cm shorter than their younger and older counterparts (see column 2). This represents a significant effect, showing that the early years of the transition process had a deep and lasting impact on respondents born at that time.¹²

Further analysis shows that the negative effect of the transition process is only partially explained by fluctuations in GDP (see columns 3 and 4). Thus, while the economic recessions seen in the early years of the transition process represented an important mechanism in terms of the impact on households,¹³ they were not the only channel in operation. Other channels through which society was affected included decreases in the quality of public goods and the deterioration of state institutions and social capital.

Other econometric results (not reported in the table) indicate that parents' level of education (particularly the mother's) has a positive impact on height. Meanwhile, the effects of parents' employment sector are not statistically significant. Being born or turning one during a war has a negative impact on height that is similar in magnitude to the effect of transition; however, once changes in GDP are controlled for, the impact of war ceases to be statistically significant. All of the results presented in the table are robust to the replacement of country-specific linear trends with birth year fixed effects and country fixed effects.

The analysis above uses a binary measure of transition, assuming that transition began in the year of price liberalisation (the "transition year"). Table 2.3 presents the results of alternative analysis based on a continuous measure of reform, using changes in the EBRD's price liberalisation indicator as a proxy for the speed of the reform process. The results are the same as in Table 2.2, in terms of both statistical significance and the magnitude of the effect. A two-point increase in the transition indicator, from 1 (signalling that most prices are formally controlled by the government) to 3 (indicating that significant progress has been made with reforms), translates into a reduction in height – relative to trend levels – of approximately 1.1 cm.

The results remain the same if the speed of the reform process is measured on the basis of an average of all six of the EBRD's transition indicators, rather than just the price liberalisation indicator.

The fact that cohorts born around the time of transition are shorter than their peers is evidence of the hardship associated

¹² When respondents who were two years old when price liberalisation took place are added to the group, the effects of the transition process remain negative but are only marginally significant (not reported in table).

¹³ The magnitude of the coefficient for GDP per capita in Table 2.2 implies that a 10 per cent decline in GDP per capita results in a 0.1 cm reduction in height.

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with the early years of the reform process. Does this mean that these individuals are still disadvantaged today? LiTS data show that the transition process has not had a lasting negative impact on the satisfaction levels of these cohorts. On the contrary, respondents who were in their infancy when transition occurred are now more – rather than less – satisfied than their peers; specifically, they are 14 percentage points more likely to be satisfied with life. This effect is robust to various specifications and applies to both definitions of satisfaction: both the binary measure and the five-point scale (see Table 2.4).

Why are these cohorts happier than their peers? Econometric tests show that these cohorts are not significantly different from their younger and older peers in terms of incomes, employment or family outcomes. However, they are better educated than their predecessors (even when controlling for age). Thus, the expansion of education systems in the post-communist period is at least one explanation for the higher levels of satisfaction seen in these cohorts.

In addition to affecting the physical well-being of people who experience it in the first two years of life, the transition process also influences the attitudes and beliefs of people who experience it in their formative years. Table 2.5 reports the results of analysis looking at the attitudes of respondents who were between 18 and 25 when transition took place.¹⁴ Individuals who experienced transition in their formative years are approximately 3 percentage points more likely than their peers to express a preference for the market economy and democracy, but there are no other significant differences – that is to say, they do not differ from their peers in terms of life satisfaction, optimism, preferences regarding redistribution, social capital or other attitudes.

Heterogeneity in the impact of transition

The impact of transition has not been equally distributed across society. This section documents the ways in which the transition process has affected different social groups. Not surprisingly, the most vulnerable people have been those born to disadvantaged families.

There are no data on the living standards of the parents of LiTS respondents prior to the transition process. Consequently, for the purposes of the analysis in this section, those living standards are proxied by parental labour force participation and parents' level of education. In this section, the impact that the transition process has had on well-being is estimated separately for subsamples with different parental backgrounds. In particular, Chart 2.5 reports the impact that transition has had on satisfaction on the basis of the mother's labour force participation. As was shown in the previous section, cohorts who were born or turned one in the transition year are, on average, actually happier than their peers. However, this is not the case where the respondent's mother has never worked. On the contrary, those respondents appear to be less satisfied with their lives as a consequence of being born at that time. Such families account for around 20 per cent of the sample.

Parents' level of education also plays an important role. A child

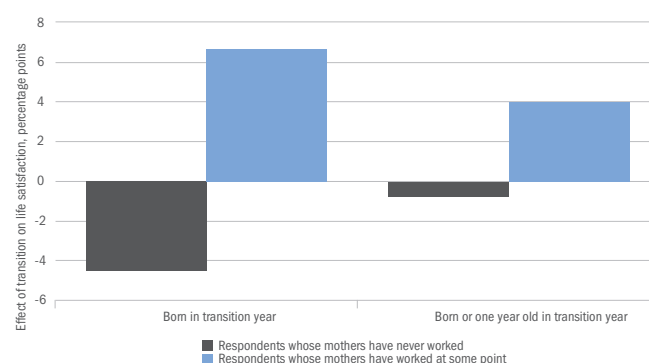
TABLE 2.5. Impact of experiencing transition in formative years on life satisfaction and on attitudes

	(1) Satisfied with life (0/1)	(2) Preference for a market economy	(3) Preference for democracy	(4) Preference for redistribution	(5) Trust
Experience of transition in formative years	-0.019 (0.014)	0.026* (0.014)	0.026* (0.014)	0.040 (0.084)	0.039 (0.029)
No. of observations	42,489	37,927	39,280	41,676	41,599

Source: LiTS III, Correlates of War Data, EBRD transition indicators, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: Standard errors in parentheses are clustered at the PSU level. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for country fixed effects and birth year fixed effects. In addition, the respondent's gender, whether the respondent was born in an urban or rural location, the respondent's religion, the parents' level of education and the incidence of war are also included as controls.

CHART 2.5. Impact of being born or turning one in transition year on life satisfaction, broken down by mother's labour force participation



Source: LiTS III, Correlates of War Data, EBRD transition indicators, Gapminder, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: The dark grey bars show the sum of the coefficients for the "born in transition" indicator and the interaction term (signalling that the mother has never worked) and indicate the impact that transition has had on those respondents whose mothers have never participated in the labour market. The blue bars show the coefficient for the "born in transition" indicator and indicate the impact that transition has had on those respondents whose mothers have participated in the labour market at some point in their life. These effects are calculated after controlling for individual and parental characteristics.

AROUND
20%
OF RESPONDENTS IN POST-COMMUNIST COUNTRIES BORN DURING TRANSITION COME FROM A HOUSEHOLD WHERE THE MOTHER HAS NEVER WORKED

¹⁴ Similar analysis looking at the attitudes of cohorts born around the time of the transition process shows no statistically significant results. That is to say, those individuals do not differ from their peers in terms of their level of trust, preferences regarding redistribution, social capital and support for democracy or the market economy. This is consistent with the view that attitudes and beliefs are shaped in an individual's formative years, rather than in early childhood.

of a tertiary-educated mother is much more likely to be satisfied with life after being born during transition than a child whose mother has completed only primary education or has had no formal education (see Chart 2.6). For families in the latter category (which make up around 13 per cent of the sample), being born during transition has a negative impact on life satisfaction. This is consistent with the evidence presented in Chart 2.7, which shows that these families also experienced a greater degree of socio-economic deprivation during the early years of the transition process. The negative impact that being born during transition has had on height is concentrated in these families. At the same time, the transition process has had almost no impact on height in families where mothers have completed tertiary education.

Another important question is whether the transition process has affected ethnic majorities and minorities to differing extents. The data suggest that there has been no significant difference between ethnic majorities and minorities or between people born in their country of residence and people born elsewhere in terms of the impact that being born during transition has had on their height or life satisfaction. However, there is a difference in terms of the attitudes of the cohorts that experienced transition during their formative years. Within those cohorts, ethnic minorities report significantly lower levels of support for the market economy and democracy and have less trust in other people. Indeed, the fact that, on average, people who have experienced transition in their formative years show higher levels of support for the market economy and democracy is driven solely by ethnic majorities.

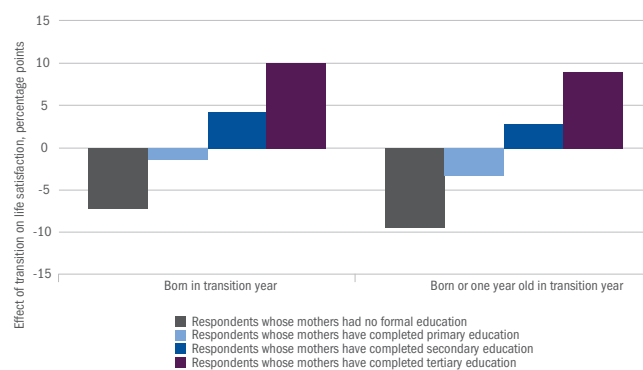
Ruling out alternative explanations

Could the results detailed above be driven by other events that coincided with the transition process? The transition period was preceded by various highly consequential political and economic developments – primarily the fall of the Berlin Wall and the dissolution of the Soviet Union – which marked the end of an era and heralded the beginning of a new order. In order to rule out the possibility that the results set out in this chapter were driven by those events, a set of placebo tests have been run to ensure that people who were born or in their infancy in the two years in question (namely, 1989 and 1991 respectively) do not differ from their younger and older peers in terms of height or satisfaction. The results of those tests show that those events do not explain the main findings of this chapter, demonstrating that it really is exposure to the transition process (which began at different times in different countries) – and not simply being born around the time of the fall of the Berlin Wall or the dissolution of the Soviet Union – that has caused respondents in post-communist countries to be shorter than their peers.

Another placebo test has been used to check whether cohorts born in the early to mid-1990s in comparator countries also have an average height that is significantly different from that of their peers. This test also finds no significant effects.

A further test looks at whether cohorts experiencing transition really are the best groups to focus on. Could it be, for example, that the transition process has simply affected everyone who has

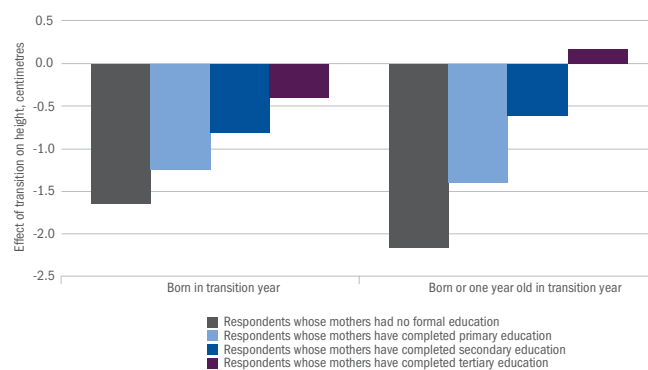
CHART 2.6. Impact of being born or turning one in transition year on life satisfaction, broken down by mother's level of education



Source: LITS III, Correlates of War Data, EBRD transition indicators, Gapminder, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: The bars show the sum of the coefficients of the "born in transition" indicator and the interaction term (indicating the mother's level of education). These effects are calculated after controlling for individual and parental characteristics.

CHART 2.7. Impact of being born or turning one in transition year on height, broken down by mother's level of education



Source: LITS III, Correlates of War Data, EBRD transition indicators, Gapminder, UCDP/PRIO Armed Conflict Dataset, and authors' calculations.

Note: The bars show the sum of the coefficients for the "born in transition" indicator and the interaction term (indicating the mother's level of education). These effects are calculated after controlling for individual and parental characteristics.

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grown up since that process began? Econometric analysis looking at the height of people born one to three years after transition and three to five years after transition confirms the pattern shown in Chart 2.3. If anything, people born some time after transition tend to be taller, suggesting that the hardship that accompanied the transition process had a severe impact on those experiencing it at that age, but was mostly temporary in nature.

In addition to the first two years of life, there are two other critical periods for a child's growth: the time spent *in utero* and adolescence (defined here as the period from the age of 11 to the age of 14, which coincides with the second period of fast speed in height growth). Adverse environmental conditions during these two periods have been shown to delay growth and negatively affect the final outcome in terms of adult height.¹⁵ However, respondents who were in their mother's womb in the year when transition occurred or experienced transition in their adolescent years show no statistically significant differences in terms of their height and life satisfaction.

Lastly, it is important to look at whether post-communist countries experience height satiation. The LiTS data on comparator countries show that when GDP per capita reaches US\$ 15,000 in PPP terms, additional economic growth has only a limited impact on height (see Chart 2.4). In order to see whether this is also the case for post-communist countries, another exercise divides those countries into two separate groups – one with GDP per capita of less than US\$ 12,500 and another with GDP per capita in excess of US\$ 15,000 – and looks at the impact that transition has had on height in those two groups. The results of that exercise suggest that the overall effect is driven by countries with GDP per capita of less than US\$ 12,500, confirming that the height satiation observed in developed countries is also present in some post-communist countries.

Conclusion

This chapter uses a unique *Life in Transition Survey* to measure the impact that transition from a planned to a market economy has had on well-being. In the past, research has found people in post-communist countries to be less happy than peers in countries that have not experienced such a transition (even after controlling for income), with some researchers suggesting that this “transition happiness gap” represents a temporary phenomenon that will eventually disappear. LiTS III, which surveyed more than 51,000 households in 29 post-communist countries and five comparator countries, confirms that this gap has finally been closed: when income is controlled for, residents of post-communist countries no longer lag behind their counterparts in terms of reported levels of satisfaction.

However, this does not mean that the pain of the transition process was not real. LiTS III provides information that helps to quantify the magnitude of the socio-economic shock that was experienced in the first few years of the transition process. Comparing the height of individuals experiencing transition in their first two years of life, this chapter finds that those individuals are, on average, around 1 cm shorter than their younger and

older peers. This confirms the view that the first few years of the transition process were a period of substantial socio-economic deprivation. At the same time, that shock does not seem to have had negative long-term implications for those individuals' levels of satisfaction or attitudes. If anything, cohorts born around the time of the transition process are now happier (and better educated) than their peers.

The other important finding in this chapter is that, while the process of “happiness convergence” has, on the whole, been completed, certain sections of society still lag behind. Not surprisingly, this concerns individuals born to families with low levels of maternal education and employment (who make up 20 per cent of the cohorts born around the time of the transition process).

This analysis of the impact that transition has had on well-being has important implications not only for the few remaining command economies around the world, but also, more generally, for countries undertaking major structural reforms. First of all, it is important that happiness convergence has finally been achieved. In this respect, economic reforms – despite being incomplete in some countries – have eventually delivered (albeit much later than was initially expected). Second, the fact that it has taken these post-communist countries 25 years to catch up with their peers in terms of happiness should not discourage reformers elsewhere. Even major reforms to labour markets and pension systems are less disruptive – and, therefore, arguably less painful – than the systemic changes that these post-communist countries have gone through. Third, lessons learned from previous reforms can help to make such initiatives less painful and more inclusive in the future. Potential losers in such reform processes should be given not only one-off compensation, but also the skills necessary to ensure their future employability. Unfortunately, the complexity of such reforms, the large number of stakeholders involved and the dynamic nature of the interaction between them mean that the identification of potential losers is highly context-specific.¹⁶

Lastly, this chapter's optimistic overall message also points to a major risk relating to the “short-term pain, long-term gain” scenario. The risk here is that the political reaction to the pain of reforms could persist even after the pain has gone. Although the effects of the initial transition shock in post-communist countries can no longer be seen at the level of households, some countries have experienced policy reversals that persist to this day. That transition shock has armed opportunistic politicians with an anti-reform narrative, which has ultimately resulted in de-democratisation.¹⁷ Where these politicians have gained power, they have gone on to undermine both democratic political institutions and economic institutions.¹⁸ The subsequent removal of democratic checks and balances has now made it hard to vote these politicians out of office, despite their original anti-transition platform having ceased to be valid. In order to avoid such lasting political implications, reformers should try to compensate potential losers in reform processes from the outset, preventing populists from potentially destroying political institutions.

¹⁵ See Steckel (1995). For details of growth in utero, see Saenger et al. (2007) and Almond (2006). For information on growth during adolescence and its impact in later life, see Beard and Blaser (2002) and Persico et al. (2004).

¹⁶ See Treisman (2014).

¹⁷ See EBRD (2013), Roland (2014), Treisman (2014) and Djankov (2016) for a discussion of policy reversals and de-democratisation in post-communist countries. While policy reversals are strongly correlated with historical factors (such as geography, religion and culture), those countries which have managed to consolidate democratic political institutions have also managed to maintain good economic institutions – even in the presence of adverse historical legacies.

¹⁸ See EBRD (2013) and Treisman (2014).

Box 2.1. Methodology used to analyse the impact on well-being

This chapter analyses the impact that the transition process has had on objective and subjective well-being at the level of individual respondents. The primary data source for this chapter is the third round of the *Life in Transition Survey*, which was conducted by the EBRD and the World Bank in 34 countries in late 2015 and the first half of 2016. The results of that survey will be published later this year. A total of 75 locations were visited in each of the countries surveyed, with more than 51,000 interviews being conducted with randomly selected households.

The main variables that are of interest for the analysis presented here are (self-reported) height and life satisfaction.¹⁹ The latter is captured in two ways: using a binary variable that simply indicates whether or not the respondent agrees or strongly agrees with the statement “All things considered, I am satisfied with my life now”; and using a continuous variable with a five-point scale. LiTS III also provides data on respondents’ support for democracy and the market economy, optimism,²⁰ preferences regarding income redistribution, generalised social trust and active membership of associations.

The chapter begins with analysis of the transition happiness gap, which is based on the conventional econometric model of satisfaction:

$$\text{satisfied with life}_{ica} = \beta * \mathbf{1}[\text{post} - \text{communist country}]_c + \gamma' \mathbf{x}_i + e_{ica} \quad (1)$$

where the binary dependent variable for individual i , born in country c and aged a , is regressed on an indicator that takes a value of 1 if c is a post-communist country, as well as a vector of individual characteristics ($\mathbf{x}_i$) listed in Table 2.1. These include age and age squared (or, alternatively, birth year fixed effects). Standard errors e_{ica} are clustered at the country level.

The coefficient β denotes the effect that living in a post-communist country has on life satisfaction (when controlling for conventional individual and household-level determinants of happiness). If β is negative and significant, this means that the transition happiness gap is still present; if there is no significant negative effect, the gap has been closed.

The second part of the chapter looks at the way in which the effect of the transition process varies depending on when people were born. First, it evaluates the physical impact of the transition process by comparing anthropometric indicators for people who were born or turned one or two during transition with those of individuals who were born before or after that period.²¹ Although the environment where a person grows up determines only around 20 per cent of adult height, it accounts for most of the cross-population variation in that indicator.²² Final adult height depends crucially on the speed of growth during the first two years of life – which, in turn, depends on living standards in the household during that period. A similar analysis is repeated for the life satisfaction of cohorts who were born or turned one or two during transition.

It then assesses the impact that the transition process has had on people’s attitudes and life satisfaction. This analysis is based on

the assumption that individual beliefs and attitudes are shaped in a person’s formative years, which are defined as the period between the ages of 18 and 25 and broadly correspond to the moment when individuals enter the labour market for the first time.²³ Interdisciplinary research provides evidence of the importance of this stage in life as regards the formation of political and interpersonal attitudes.²⁴

For the purposes of the statistical analysis in this chapter, the transition period is defined as the year when the country in question made significant progress with price liberalisation reforms (which corresponds to the point at which the EBRD’s price liberalisation indicator for that country reached a value of 3 for the first time). Overall, 12 countries implemented the bulk of their price liberalisation reforms between the fall of the Berlin Wall and the dissolution of the Soviet Union, and 12 other countries followed suit between 1992 and 1993. The five remaining countries did not implement reforms until later, doing so between 1994 and 1995.

This analysis also includes alternative continuous measures of transition tracking ongoing progress with reforms – namely, changes in the EBRD’s price liberalisation indicator and changes in the average of all six transition indicators over a given period of time.²⁵ As with the approach described above, three variables are created, indicating (i) the change in the respondent’s year of birth relative to the previous year, (ii) the change in the year when the respondent turned one relative to the year before his/her birth, and (iii) the change in the year when the respondent turned two relative to the year before his/her birth. For the analysis of formative years, changes are calculated for the period when the respondent was 18 to 25 years old.

These binary and continuous measures of reform should not be seen as substitutes, but rather as complements, since they assess different facets of the transition process and address critical concerns regarding the causality of the analysis. Indeed, a major challenge for the analysis is the question of reverse causality. In planned economies that were bankrupt and experiencing severe shortages of vital nutrients before reforms took place, political and economic transition might, in fact, have been a consequence of deprivation, rather than the other way round. Controlling for fluctuations in GDP and using continuous variables indicating changes in the price liberalisation indicator or the average of all transition indicators should address these concerns.

This chapter’s analysis of the impact that the transition process has had on height is based mainly on the following specification:

$$\begin{aligned} \text{reported height}_{icy} &= \alpha_c + \beta * \mathbf{1}[\text{born in transition}]_i + \gamma' \mathbf{x}_i \\ &+ \delta * \text{birth year}_i + \theta_{cy} * [\text{country} - \text{specific linear time trend}]_{cy} \\ &+ e_{icy} \end{aligned} \quad (2)$$

where the reported height of individual i , born in year y and country c , is regressed on an indicator – “born in transition” – which takes a value of 1 if the individual was born or turned one in the year when transition occurred. $\mathbf{x}_i$ is a vector of individual and household-level characteristics, as well as country-specific factors, all of which are likely to affect the outcomes of interest. These controls include gender,

¹⁹ While the survey does provide information on measured height for a few individuals in each country, the analysis here focuses on self-reported data. Additional checks show no systematic differences between self-reported heights and measured heights for those individuals for whom a measured height is available.

²⁰ Optimism is captured using a binary variable that indicates whether or not the respondent agrees or strongly agrees with the statement “Children who are born now will have a better life than my generation”.

²¹ Three binary indicators are created that take a value of 1 if price liberalisation reforms occurred at specific moments in the life of the respondent, indicating (i) whether the respondent was born in the transition year, (ii) whether the respondent was born or turned one in the transition year, and (iii) whether

the respondent was born, turned one or two years old in the transition year.

²² See Steckel (1995).

²³ A binary variable here indicates whether the respondent was aged 18 to 25 during transition.

²⁴ See Giuliano and Spilimbergo (2014) for a review of this literature.

²⁵ The EBRD’s transition indicators assess the progress made by individual countries in six different areas of the transition process: price liberalisation; small-scale privatisation; large-scale privatisation; governance and enterprise restructuring; the trade and foreign exchange system; and competition policy. The scores for those indicators, which range from 1 (denoting little or no progress) to 4.33 (denoting standards and performance typical of advanced industrialised economies),

whether the respondent was born in an urban or rural location, religion and parental background (namely, parents' level of education and employment sector). At the country level, regressions control for GDP per capita and incidence of war.²⁶ Country fixed effects (α_c) capture any time-invariant country characteristics, while country-specific linear time trends control for the natural increases in height that are typically seen over time in most middle-income countries.²⁷

The same specification is used for the continuous measures of reform discussed above. The "born in transition" indicator is replaced with the change in the price liberalisation indicator or the change in the average of all six transition indicators over the relevant period of time.

The analysis of the impact on attitudes and satisfaction with life uses a third specification:

$$outcome_{icy} = \alpha_c + \beta * 1[born\ in\ transition]_i + \gamma' x_i + \delta_y + e_{icy} \quad (3)$$

where the outcome (satisfaction with life, trust, and attitudes to the market economy, democracy, redistribution and so on) is regressed on the "born in transition" indicator, as well as x_i – a vector of controls including gender, whether the respondent was born in an urban or rural location, religion, parents' level of education and incidence of war. Country fixed effects (α_c) and birth year fixed effects (δ_y) are also included.

Birth year fixed effects control for highly non-linear relationships between age and life satisfaction, while the regressions can still identify the effects of being "born in transition" because countries are considered to have undergone transition in different years. A 25-year-old living in a country where transition took place in 1990 is classified as having been born after transition (if the survey was conducted in 2016). However, a person of the same age living in a country where transition took place in 1993 is considered to have been born two years before the start of transition, so his/her height and satisfaction with life are likely to have been affected by that process.

As above, the same specification is used to repeat this analysis using the continuous measures of reform. Lastly, the same specification is also used to analyse the impact on the attitudes and satisfaction levels of people who were aged 18 between 25 when the transition process occurred.²⁸

THE "TRANSITION HAPPINESS GAP" HAS BEEN CLOSED: ON AVERAGE, RESIDENTS OF POST-COMMUNIST COUNTRIES ARE NO LONGER LESS SATISFIED WITH LIFE THAN PEERS IN OTHER COUNTRIES WITH SIMILAR INCOME LEVELS

were first set out in the *Transition Report 1994*.

²⁶ The war variable indicates whether or not the relevant country was involved in a conflict that caused at least 25 casualties per year in the respondent's year of birth (or in the year when the respondent turned one or two, depending on the definition). Similarly, average GDP per capita is calculated over the same period. Data on conflicts are taken from the UCDP/PRIO Armed Conflict Dataset (version 4-2016) and the Correlates of War Data 1816 - 2007 (version 4); GDP data are taken from Gapminder. In the analysis of the impact on individuals in their formative years, the war variable is constructed with reference to the period between the year when the respondent turned 18 and the year when he/she turned 25.

²⁷ The country-specific linear trend is defined as follows.

$$\sum_{p=1}^{34} \theta_{cy} * 1[p = c] * birth\ year_i$$

²⁸ In this case, the "born in transition" indicator is replaced with another indicator which takes a value of 1 if the individual was aged between 18 and 25 during that period. The same specification is used for the analysis using the continuous measures of reform.

Box 2.2. Analysis of the impact of transition on well-being in Russian panel data

The results derived from the *Life in Transition Survey* can be validated by another household survey – the Russian Longitudinal Monitoring Survey (RLMS) conducted by the Higher School of Economics in Moscow. Although the RLMS covers only one country, it has two unique advantages. Its panel dataset consists of various survey rounds from 1994 to 2014, including both adult and child respondents from individual households, which means that the impact that transition has had on children's heights can be measured while controlling for the height of parents.²⁹ It also allows within-family analysis, making it possible to see the effect of being born during transition by comparing a child with a sibling who was born before or after transition took place.

As Table 2.2.1 shows, the results derived from the RLMS are generally consistent with those obtained for post-communist countries as a whole. As the first two columns show, people born in the transition year are, on average, around 1.4 cm shorter than would be expected on the basis of historical trends, while those born in the transition year or the previous year are an average of around 1.5 cm shorter. Given that the RLMS started in 1994, it is possible to estimate the impact that the transition process had on the heights of individuals born during this period while they were still children. Columns 3 and 4 of Table 2.2.1 show the coefficients estimated for height-for-age z-scores for the children's sample, which imply a significant reduction – around 1.5 cm – in implied adult height after controlling for the mother's height and level of education.

The validity of these results could be open to question if the parents of children born during the transition process were fundamentally different from those of children born before or after transition. In that case, there could therefore be a risk of mistakenly ascribing findings that might reflect such systematic differences (such as differences in the age or level of education of childbearing parents) to the effects of having been born during transition. RLMS data do show that mothers

and fathers whose children were born in the transition year or the previous year were, on average, one year younger than those whose children were born before or after that period. The estimates in Table 2.2.1 partially address these concerns regarding endogenous childbirth choices, as the analysis controls for parents' level of education and height. Two additional exercises confirm the robustness of the findings. First, columns 5 and 6 present the results of a comparison looking at differences in height between siblings in the same family when one of them was born during transition. The implied impact of being born during transition in terms of differences in adult height between siblings is in the order of 3–4 cm – even larger than in the cross-section. Second, a propensity score matching methodology allows the selection of a sample of individuals who are similar to those born during transition in terms of observable parental characteristics (level of education, employment sector, religion and so on), whether the respondent was born in an urban location, gender and the age at which the mother gave birth. A comparison with this sample suggests that the average effect of being born during transition is larger than that shown in columns 3 and 4 and closer to those derived from the within-family models.

Are Russians who were born during transition more or less satisfied with their lives than their peers? RLMS data on life satisfaction show that average satisfaction levels among Russians increased sharply between 1994 and 2014. A model that controls for the age of the respondent and the year in which the survey was conducted shows no significant difference between people born during transition and other respondents in terms of life satisfaction. When the sample is restricted to individuals who were observed as children under the RLMS, for whom it is possible to control for parental characteristics (level of education, height and so on), coefficients are positive and marginally significant. This is consistent with findings derived from LITS III for post-communist countries as a whole.

TABLE 2.2.1. Impact of transition on reported height in Russia, 1994-2014

	Adults (cm)		Children (height-for-age z-scores)		Children – within-family (height-for-age z-scores) ³⁰	
	(1)	(2)	(3)	(4)	(5)	(6)
	Born in transition year	Born or one year old in transition year	Born in transition year	Born or one year old in transition year	Born in transition year	Born or one year old in transition year
Born in transition	-1.392*** (0.382)	-1.514*** (0.286)	-0.216** (0.100)	-0.221*** (0.080)	-0.545** (0.257)	-0.449** (0.191)
Implied change in adult height – girls (cm)			-1.47	-1.50	-3.71	-3.05
Implied change in adult height – boys (cm)			-1.56	-1.59	-3.92	-3.23
No. of observations	39,736	39,736	10,552	10,552	3,106	3,106
R²	0.514	0.514	0.154	0.155	0.571	0.571

Source: RLMS, EBRD transition indicators, and authors' calculations.

Note: Standard errors are shown in parentheses. *, **, and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for the respondent's gender and whether he/she is resident in an urban location, as well as regional linear trends and region fixed effects. Specifications 3 and 4 also control for the mother's level of education and height, while specifications 5 and 6 control for family fixed effects. In specifications 1 to 4, standard errors are clustered by region. Within-family estimates (specifications 5 and 6) only include data derived from surveys between 1994 and 2008 in the interests of consistency regarding family identifiers. Children's heights are converted into height-for-age z-scores after subtracting the average and dividing by the standard deviation of the heights of US children of the same age in the WHO Global Database based on US population data.

²⁹ Considering that around 80 per cent of height is genetically determined, controlling for parents' height provides a more precise estimate of the impact of other factors affecting height (Steckel, 1995).

³⁰ Z-scores – a measure of the number of standard deviations below or above the reference mean – make it possible to compare estimates across individuals of different ages who have not yet reached full adult height.

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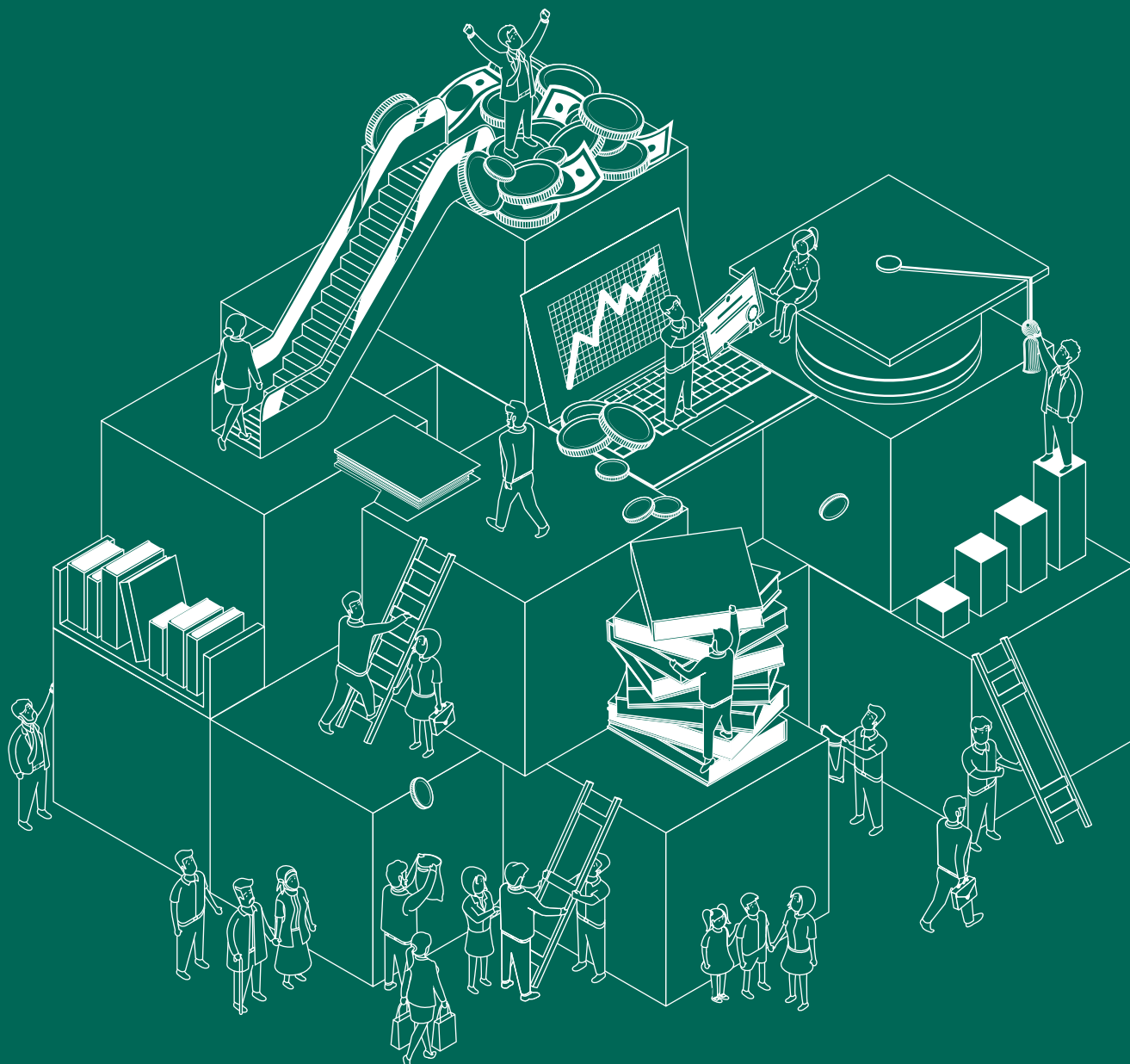
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INEQUALITY OF OPPORTUNITY



31%

AVERAGE EARNINGS PREMIUM FOR PEOPLE IN THE REGION WITH UNIVERSITY DEGREES

68%

OF INEQUALITY OF OPPORTUNITY IN POLAND IS DUE TO PARENTAL BACKGROUND

IN EBRD RECIPIENT COUNTRIES

16%

OF INEQUALITY OF OPPORTUNITY IS DUE TO PLACE OF BIRTH

AROUND

60%

OF JOBS IN THE REGION CAN BE CLASSIFIED AS "GOOD JOBS"

In a well-functioning market economy, opportunities to receive an education, have a good job and earn sufficient income should not be limited on the basis of a person's gender, race, place of birth or parental background. Inequality of opportunity in the EBRD region in terms of education, jobs and income remains higher than in western Europe, but is lower than in Brazil, India and the United States of America. Parental background is the most important determinant of inequality of opportunity across the region, followed by gender. Meanwhile, inequality of opportunity is higher in terms of getting a good job than it is in terms of getting a job in general. And in countries where inequality of opportunity is high, people express less support for market economics and democracy.

Introduction

Inequality of opportunity lies at the very heart of discussions about inequality and social welfare. It occurs when people living in the same society do not have access to the same opportunities. High levels of inequality of opportunity mean that people's circumstances at birth – their gender, the place where they were born, their ethnicity or their parental background – determine to a significant degree the educational qualifications they obtain, the type of job they get and, ultimately, their level of earnings. Inequality of opportunity is thus widely regarded as the unfair part of inequality. Equality of opportunity does not mean eliminating all differences in terms of educational qualifications or levels of income; rather, it means that such differential achievements reflect people's differing levels of effort, as well as choices freely made by individuals at different stages of their lives.¹

Inequality of opportunity is inefficient, because it prevents people from making the best use of their skills or realising their entrepreneurial ideas. This may negatively affect economic growth in the long term and trap a country on a path of increasing income and wealth inequality.² The adverse impact of inequality of opportunity may be even greater where, in times of fast technological change, whole sections of the population are

unable to acquire the new skills needed for – and share the benefits associated with – technological innovation.³

Unequal access to opportunities may also lead to a loss of confidence in the key economic and political institutions that underpin society and the market-based economic system as a whole. This, in turn, can result in the reversal of reforms and significant economic costs. More broadly, the concept of equality of opportunity is rooted in a Rawlsian philosophical tradition whereby people are expected to construct society in such a way that they would be happy for their place in society to be determined by a random draw.⁴

This chapter estimates inequality of opportunity in the EBRD region in terms of people's incomes, their jobs, the quality of their jobs and their level of educational attainment. This analysis is based on the third round of the *Life in Transition Survey* (LiTS III), which was conducted by the World Bank and the EBRD in the second half of 2015 and the first half of 2016. These estimates complement the results presented in the *Transition Report 2013*, which were based on LiTS II (which was conducted in 2010).

LiTS III data show that inequality of opportunity remains higher in the EBRD region than it is in western European comparator countries such as Germany. Parental background is the key circumstance influencing inequality of opportunity, followed by gender and place of birth. Inequality of opportunity is also strongly correlated with inequality of observed incomes: in all countries with high levels of inequality of opportunity, income inequality is also high. Inequality of opportunity is substantially higher in terms of getting a good job that provides financial security than it is in terms of getting a job in general. Moreover, inequality of opportunity with respect to tertiary education is higher among younger people (those who started school after 1989) than it is among older people (those who started school before the fall of the Berlin Wall).

Importantly, high levels of inequality of opportunity in society are associated with lower levels of support for the market economy and democracy. This remains true even when income inequality is taken into account.

The rest of the chapter is structured as follows. It begins by looking at inequality of opportunity across the EBRD region and key components such as gender and place of birth. It then turns its attention to inequality of opportunity at key junctures in a career, looking at the point at which a person obtains a university degree or gets a job. Lastly, it considers the impact that inequality of opportunity and people's perceptions of their own relative income have on support for market economics and democracy.

Inequality of opportunity in terms of income

An individual's income is determined by a number of factors: their level of effort, circumstances such as their gender or place of birth, and perhaps an element of luck. This section uses the LiTS III dataset to look at the relative importance of individual circumstances in terms of determining wages in the EBRD region. This analysis is based on individuals' self-reported incomes over

¹ See Roemer (1998), Fleurbaey (2008) and Ferreira and Peragine (2016).

² See Marrero and Rodríguez (2013) and Ferreira et al. (2014).

³ See Murphy and Topel (2016).

⁴ See Rawls (1971) and Dworkin (1981).

the last 12 months, which come from a variety of different types of employment – both formal and informal, and both permanent and seasonal. The average respondent is 42 years old and was born in an urban area. Fifty per cent of the sample are female, and 35 per cent have at least some tertiary education. Around a third of survey respondents (approximately 15,000 in total) answered the question about income, which represents three-quarters of those who reported having a job (see Chart 3.1).

Income inequality is typically measured using a Gini coefficient. This ranges from 0 (where income levels are the same for everyone) to 1 (where all the income goes to one person). There is a strong, statistically significant correlation between the Gini coefficients computed for each country on the basis of responses in LiTS III and those derived from official sources (with a correlation coefficient of around 0.7 being observed when comparing LiTS III responses with data from the World Bank's World Development Indicators). Income distributions in the LiTS III data are also representative of society-wide income differences (as can be seen by comparing income distributions derived from LiTS III and official sources).

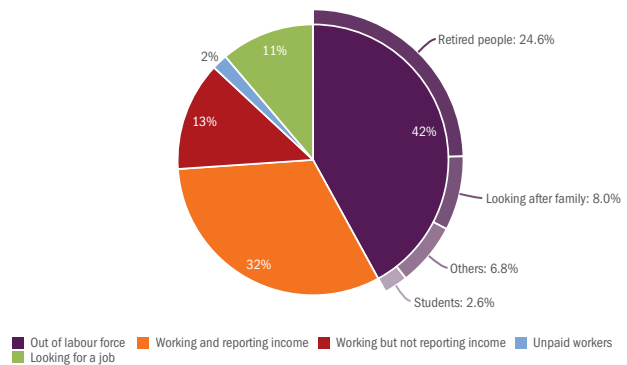
Gini coefficients can also be used to measure inequality of opportunity. First, regression analysis is used to explain individual incomes in each country on the basis of a number of individual circumstances at birth: gender, rural or urban place of birth, ethnicity, mother's and father's level of education, and parents' membership of the communist party. Predicted incomes based solely on these characteristics are then used to calculate a Gini coefficient. This coefficient captures the inequality of income that can be attributed to differences in circumstances at birth and thus measures inequality of opportunity (see Box 3.1 for details). This is always lower than the Gini coefficient for overall income inequality, since only part of income (and thus only part of income inequality) is explained by individual circumstances. The rest is explained by individual "efforts" – all the factors that lie within the sphere of individual responsibility – as well as circumstances that are not captured in this analysis.

Differences across the region

On average, inequality of opportunity in the EBRD region is higher than in western Europe (see left-hand axis of Chart 3.2), but much lower than in other emerging economies or the USA.⁵ In the USA, inequality of opportunity in terms of income is nearly twice the size of the average for the EBRD region; in India, it is more than three times the size of that average; and in Brazil, it is almost ten times the size.

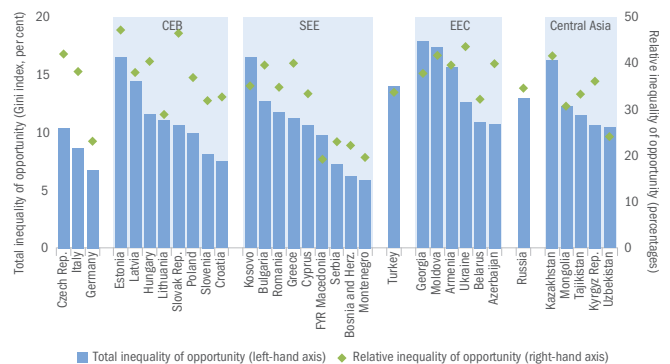
Inequality of opportunity also varies substantially across the EBRD region, often varying between neighbouring countries. Notably, inequality of opportunity is relatively high in several EU countries, which also have better developed economic and political institutions. The largest variation can be observed in south-eastern Europe (SEE), where Bosnia and Herzegovina, Montenegro and Serbia display some of the lowest levels (comparable to those seen in Germany), while inequality of opportunity in Bulgaria, Kosovo and Romania is estimated to be above the median for the EBRD region as a whole. Eastern

CHART 3.1. LiTS III respondents' labour force participation



Source: LiTS III.

CHART 3.2. Total inequality of opportunity in terms of income and relative inequality of opportunity



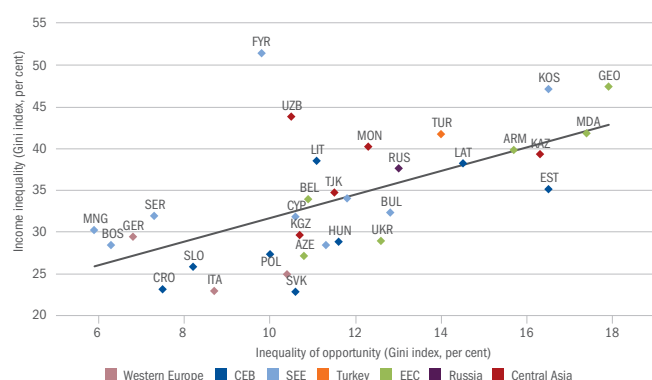
Source: LiTS III and authors' calculations.

33%
OF INCOME INEQUALITY IN TURKEY IS ESTIMATED TO BE DUE TO CHARACTERISTICS SUCH AS PARENTS' LEVEL OF EDUCATION, PLACE OF BIRTH OR GENDER

⁵ Data for the USA, India and Brazil are taken from studies that use an alternative measure of inequality of opportunity – the mean log deviation (MLD). Use of the MLD does not entail changes to the way in which inequality of opportunity is interpreted, but results are on a different scale. The MLD takes a value of 0 where everyone has the same income and larger values as incomes become more unequal. The average MLD for the EBRD region is 0.024, compared with 0.04, 0.082 and 0.22 for the USA, India and Brazil respectively.

INEQUALITY OF OPPORTUNITY

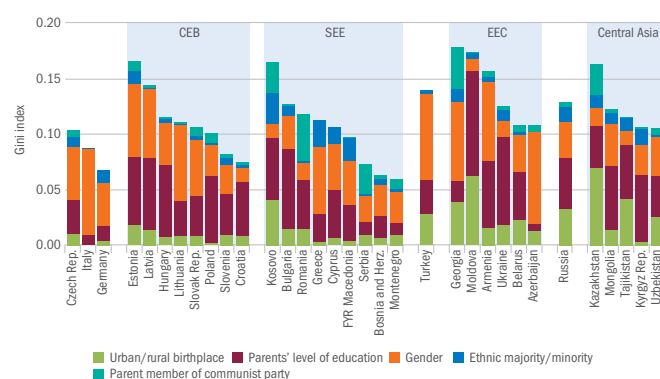
CHART 3.3. Inequality of opportunity and income inequality



Source: LITS III and authors' calculations.

Note: Gini coefficients have been calculated on the basis of winsorised income distributions (with the top and bottom 0.5 per cent being adjusted).

CHART 3.4. Shapley decompositions of total inequality of opportunity in terms of income



Source: LITS III and authors' calculations.

Note: This chart indicates the percentage of the variation in income in each country that is explained by five individual circumstances. The relative contributions of these five circumstances are calculated using Shapley decompositions.

Europe and the Caucasus (EEC) and Central Asia display more uniform regional trends, with relatively high levels of inequality of opportunity.

Inequality of opportunity in the EBRD region is also substantially higher than in Germany when expressed in relative terms (see right-hand axis of Chart 3.2). Relative inequality of opportunity represents the ratio of inequality of opportunity to total income inequality. For example, Turkey's Gini coefficient for income inequality is 0.42, while its Gini coefficient for the predicted income distribution based on individual circumstances

at birth is 0.14. This means that a third of total income inequality in Turkey is due to individual circumstances. In comparison, Germany's Gini coefficient for income inequality is 0.29, and its Gini coefficient for inequality of opportunity is 0.07, resulting in relative inequality of opportunity of 23 per cent – 10 percentage points less than in Turkey. In Italy and the Czech Republic, the two other comparator countries, relative inequality of opportunity is high at around 40 per cent. In Estonia, inequality of opportunity explains almost half of observed income inequality.

Inequality of opportunity and income inequality

Countries with high levels of inequality of opportunity also tend to have high levels of income inequality (see Chart 3.3). This relationship is stronger among countries with greater inequality and weaker for countries with less inequality. In particular, in Germany and several SEE countries, estimated inequality of opportunity is low relative to the Gini coefficient for income inequality.

Remarkably, there are no cases where a country with high levels of inequality of opportunity enjoys moderate or low levels of income inequality. In contrast, there are a few rare instances (FYR Macedonia, for example) where inequality of opportunity is relatively low, but income inequality is still high. This suggests that inequality of opportunity establishes a floor – but not necessarily a ceiling – for income inequality.

Which circumstances matter?

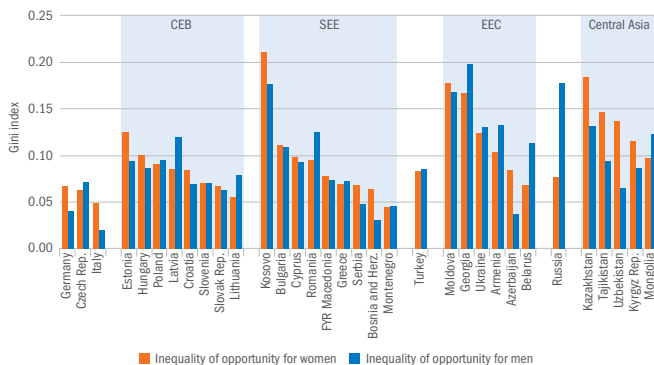
The relative contributions that specific circumstances such as gender or place of birth make to overall inequality of opportunity also vary greatly across regions and countries. The bars in Chart 3.4 show total inequality of opportunity, as in Chart 3.2, while the different colours correspond to the contributions made by each circumstance. In Poland, for example, parental background (parents' level of education and membership of the communist party) is responsible for 68 per cent of total inequality of opportunity, gender accounts for a further 27 per cent, and place of birth and ethnicity account for 3 and 2 per cent respectively.

A large percentage of inequality of opportunity can be traced back to a person's parental background. This accounts for more than 50 per cent of overall inequality of opportunity in a third of the countries where the EBRD invests and is important in almost all other countries.

Gender tends to be the second most important factor, explaining between a quarter and half of overall inequality of opportunity in most countries. Inequality of opportunity also plays an important role in income inequality among women in the southern and eastern Mediterranean (SEMED; see Box 3.2).

A person's birthplace accounts for an average of 16 per cent of inequality of opportunity, and its impact is not always consistent. In Kosovo and Moldova, for instance, being born in a rural area is associated with a reduction in income of between 25 and 35 per cent. In Poland and the Kyrgyz Republic, meanwhile, the impact of a rural place of birth is negligible. In Poland, this may reflect good connectivity and labour mobility. And in the Kyrgyz Republic, it may be because urban areas do not offer the additional earning

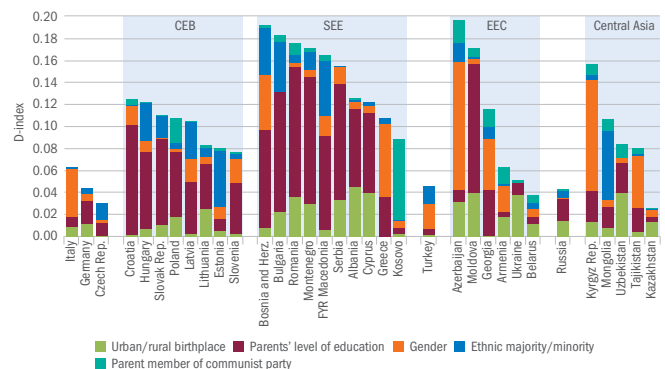
CHART 3.5. Inequality of opportunity among men and women



Source: LiTS III and authors' calculations.

Note: This chart indicates the percentage of the variation in men's and women's incomes in each country that is explained by individual circumstances.

CHART 3.6. Inequality of opportunity in terms of getting any kind of job



Source: LiTS III and authors' calculations.

Note: Inequality of opportunity is calculated as a D-index, based on a probit regression of the binary employment variable on individual circumstances.

opportunities that rural areas do. Lastly, being part of an ethnic minority accounts for an average of only 7 per cent of total inequality of opportunity. That said, certain minorities (such as the Roma) may be particularly disadvantaged (see Box 3.3).

Inequality of opportunity among men and women

While men earn more on average, inequality of opportunity is at least as high among men as it is among women. Indeed, in the EEC region and Russia in particular, it tends to be higher for men than for women (see Chart 3.5). The estimates in Chart 3.5 were obtained by running separate income regressions for men and women in each country. In these regressions, place of birth in particular tends to be more important for men. These results may, in part, reflect greater variation in income and job opportunities for men relative to women.

Education and jobs

In order to better understand the drivers of unequal opportunities to earn income, it is useful to explore inequality of opportunity at key junctures in a person's career, such as the point at which a person obtains a tertiary degree, gets a job or gets a good job. At each of those points, individual circumstances may affect the opportunities available, and thus the choices made by individuals.

Getting a good job

Most survey respondents who want to work have a job. However, the quality of available jobs varies.⁶ On the basis of the LiTS III survey, a "good job" can be defined as one that provides a predictable income stream of sufficient size. Specifically, people with good jobs have a contract and indicate that their income is

sufficient to cover unexpected expenses in the order of US\$ 10 a day. Around 60 per cent of jobs in the LiTS III survey qualify as good jobs, while the remaining 40 per cent fail to provide adequate financial security. Predictably, the "good job" variable is strongly correlated with income and is thus an important measure of a successful career.

On average, inequality of opportunity is 50 per cent higher in terms of getting a good job than it is in terms of getting a job in general (see Charts 3.6 and 3.7) on the basis of the D-index measure (see Box 3.1 for a definition). In both cases, inequality of opportunity tends to be lower in countries with lower unemployment rates. Where unemployment is high, workers who are unjustly discriminated against do not have any leverage to make demands of employers, because it is relatively easy for employers to replace them. A decline in unemployment may therefore contribute to improvements in equality of opportunity.

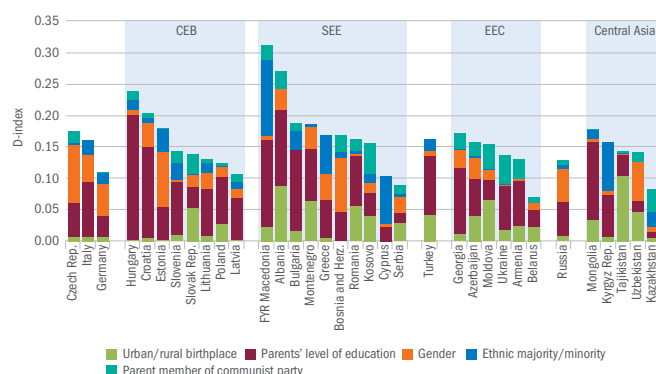
Furthermore, high levels of inequality of opportunity in terms of getting a good job (as opposed to getting a job in general) are linked to greater differences between male and female labour force participation rates. This suggests that women are less likely to participate in the labour force in countries where access to good jobs is constrained by individual circumstances. Women who bear the burden of caring for children and sick relatives may require jobs with greater security and flexible working hours and may opt out of the labour force if such jobs are hard to obtain.⁷ This may also result in the role played by gender as a factor in inequality of opportunity being understated when measured among those men and women who do choose to be part of the labour force. Conversely, male labour force participation rates are lower in countries with higher levels of inequality of

⁶ Respondents are considered to be employed if they report having worked for money in the last 12 months. They are considered to be unemployed if they have not worked in the last 12 months but would like to work.

⁷ See Bender et al. (2005) and Neyer (2006).

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CHART 3.7. Inequality of opportunity in terms of getting a good job



Source: LITS III and authors' calculations.

Note: Inequality of opportunity is calculated as a D-index, based on a probit regression of the binary employment variable on individual circumstances.

opportunity in terms of getting a job in general, which suggests that men are more likely to drop out of the labour force when it is hard to get any kind of job.

Parental background remains the most important factor determining the probability of having a good job – indeed, any kind of job. In almost all countries in the sample, parents' membership of the communist party is much more important for good jobs than it is for jobs in general, suggesting the persistence of networks dating back to pre-transition times. In western European comparator countries, this effect is predictably absent.

Education

Inequality in access to tertiary education is often seen as the first hurdle that countries must overcome in order to reduce inequality of opportunity. Returns to tertiary education are high in most countries, both within the EBRD region and globally. However, if access to education is limited or unfair, educational attainment can itself contribute substantially to overall income inequality. For example, since 1980, income gains in the USA have accrued almost exclusively to those with tertiary education. Meanwhile, lower-skilled workers in the USA have not seen real wage increases since 2003.⁸

In the EBRD region, the incomes of people with a tertiary degree are an average of 31 per cent higher than those of people who have completed only secondary education, according to the regression analysis reported in column 1 of Table 3.1. This is comparable to estimates for some western European countries, such as the Netherlands or Spain, but lower than the returns to education seen in the region in the early years of the transition process.⁹ These returns remain high, despite the fact that the percentage of people gaining tertiary degrees in the EBRD region

TABLE 3.1. Returns to tertiary education

Dependent variable: log of income	(1)	(2)
Respondent has completed tertiary education	0.309*** (0.017)	0.271*** (0.018)
Female	-0.249*** (0.013)	-0.253*** (0.013)
Age	0.037*** (0.003)	0.036*** (0.003)
Age squared	-0.000*** (0.000)	-0.000*** (0.000)
Tertiary education completed before 1989	0.050* (0.027)	0.056** (0.028)
Born in urban area		0.097*** (0.015)
Father has tertiary degree		0.075*** (0.020)
Parent was member of communist party		0.075*** (0.020)
Constant	10.232*** (0.067)	10.184*** (0.069)
Country fixed effects?	Yes	Yes
No. of observations	15,350	14,753

Source: LITS III and authors' calculations.

Note: Estimated using ordinary least squares. Standard errors are reported in parentheses. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

has risen since 1989, and despite persistent skills mismatches (see Box 3.4).¹⁰ Moreover, tertiary degrees obtained prior to 1989 do not appear to have a lower value. Women's pay is an average of around 25 per cent lower than men's. Similar results are observed when individual circumstances are taken into account (see column 2 of Table 3.2). The coefficient for tertiary education declines by only 4 percentage points, showing that most of the returns stem from having the degree itself, rather than circumstances that make completion of university education more likely.

⁸ See Goldin and Katz (2007) and Acemoglu and Autor (2011).

⁹ See Badescu et al. (2011) and Bartolj et al. (2013).

¹⁰ See Barro and Lee (2013).

Market liberalisation has had a profound impact on the education systems of former communist countries. First of all, tertiary education has gone from being universally free to often entailing a significant cost. Even where education remains nominally free, scholarships covering the cost of living, which were generous prior to the transition process, have effectively been phased out, resulting in large increases in the opportunity cost of being a student. Second, what was previously a strong and closely controlled link between tertiary education and jobs has effectively disappeared. Third, the transition process has placed a premium on new skills.

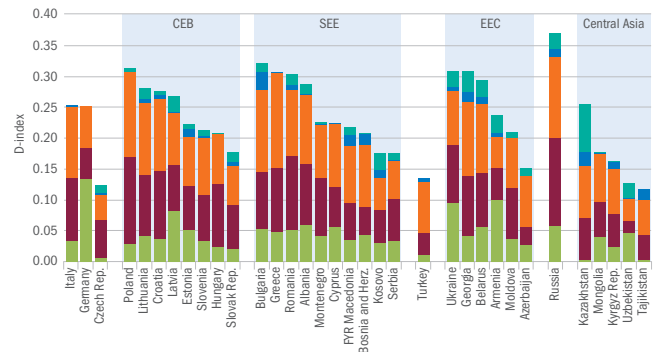
Consequently, when studying inequality of opportunity with respect to education, it is interesting to distinguish between younger cohorts – those whose education began after 1989 – and older cohorts. Those younger cohorts would have had the option to embark on tertiary education in the early 2000s, by which point those education systems had largely been reformed and many SEE countries and central European and Baltic (CEB) countries had stronger prospects of EU membership.¹¹

Again, the majority of inequality of opportunity in terms of education is attributable to a person's parental background (see Chart 3.8). The father's level of education typically explains up to two-thirds of all inequality in educational attainment. Being born in a rural area is also an important factor in educational attainment, accounting for an average of nearly 20 per cent of estimated inequality of opportunity. Meanwhile, parents' membership of the communist party plays a small but meaningful role across countries.

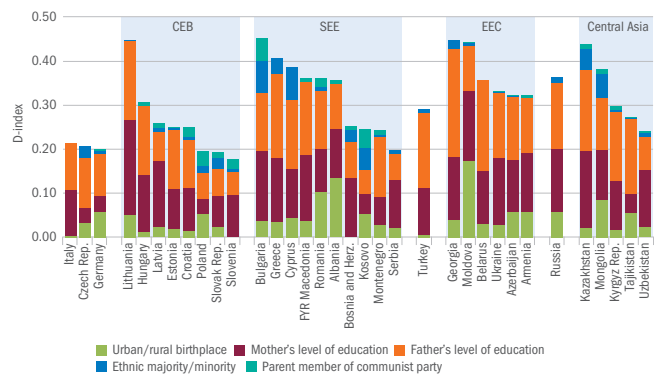
Importantly, individual circumstances matter more for younger cohorts than they do for older cohorts. Of particular note is the increased role of parental background for younger cohorts. This increased dependence on parents' level of education can be explained by the fact that parents with tertiary education gained more from the transition process than other people, as manufacturing jobs not requiring a university degree had a relatively high status prior to transition.¹² Those highly educated parents were then in a better position to send their children to university and cover the associated costs (in terms of university fees and/or paying for children's living expenses). In contrast, the importance of parents' communist party membership has halved. Lastly, it should be noted that the importance of the father's level of education has not increased for younger cohorts in Greece, Italy and Turkey, which have not undergone the same kind of transformation.

CHART 3.8. Inequality of opportunity in terms of tertiary education: breakdown by age

Panel A: Older cohorts



Panel B: Younger cohorts



Source: LITS III and authors' calculations.

Note: These charts show a D-index of inequality of opportunity, based on a probit regression of the variable indicating the completion of some form of tertiary education on individual characteristics.

IN
25
OUT OF 34 COUNTRIES
YOUNG WOMEN ARE MORE
LIKELY TO HAVE A UNIVERSITY
DEGREE THAN YOUNG MEN

¹¹ See Guriev and Zhuravskaya (2009) and Brunello et al. (2010) for a discussion of this issue.

¹² See Münich et al. (2005), Brunello et al. (2010) and Chase (1998) for a more detailed description of the impact that the transition process has on returns to education.

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In contrast with the situation observed for income and jobs, women are more likely to obtain tertiary degrees than men. Moreover, this “reverse gender gap” is more prevalent in younger cohorts (where it is observed in 25 of the 34 countries under examination). This may reflect women’s intrinsic preference for studying, or it may be a result of inequality of opportunity in the labour market that leads women to select jobs that require higher levels of education. Women may also have fewer good job opportunities if they lack a university degree. Between 1979 and 2007, women in the USA who had not obtained a university degree experienced dramatic declines in their employment rates for middle-skill occupations. In contrast, their male counterparts experienced much smaller declines.¹³ Thus, underlying inequalities in the labour market could partly explain why women are more likely to embark on tertiary education.

The overall results for inequality of opportunity across its various dimensions are summarised in Table 3.2. They show that parents’ level of education is consistently the key driver of inequality of opportunity in the region.

Individual perceptions

One potentially important consequence of high levels of inequality of opportunity is a reduction in support for market-oriented reforms and democracy. Inequality of opportunity can have a direct impact on policy preferences, as people have a preference for fair processes when it comes to income. In particular, people tend to be more accepting of differences in outcomes if the procedure that determines the outcome is either unbiased (as in the case of a coin toss) or reflects effort.¹⁴ Likewise, people will reduce their support for policies that are viewed as unfair. For example, some people tend to express dissatisfaction with the results of privatisation because they think it was done in an unfair manner, not necessarily because they have an inherent dislike of private ownership.¹⁵ Perceptions of fairness were also correlated with inequality of opportunity in terms of employment and wealth in LiTS I and II.¹⁶

Inequality of opportunity can also influence policy preferences indirectly, through its impact on the way people perceive their own well-being relative to that of their peers. People who perceive themselves to be the losers of the reform process judge their success against the perceived winners and may not be able to estimate the extent of their losses objectively.¹⁷ In fact, it is people’s perception of their own economic situation that matters most when it comes to support for government policies, and this perception may, to a significant extent, be influenced by people’s views of opportunities open to them – more so than by average measures of economic performance such as output or unemployment.

LiTS III can shed light on these direct and indirect channels, as the survey includes several questions about individuals’ support for the market economy and democracy. Respondents are also asked where they think they sit on their country’s “income ladder” – whether they think their household is in the poorest decile,

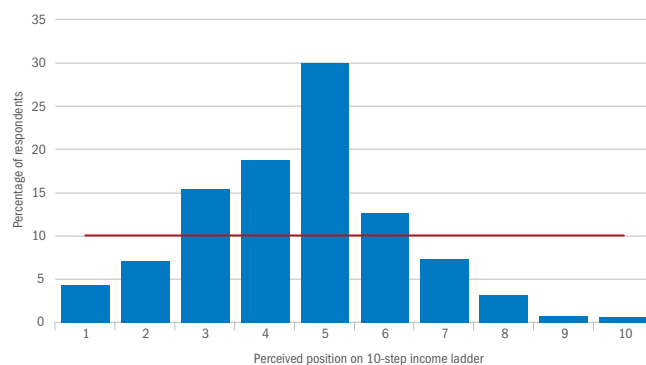
TABLE 3.2. Average estimates of inequality of opportunity and the role of individual circumstances

	Tertiary education	Job of any kind	Good job	Income
Overall inequality of opportunity	0.25	0.11	0.16	0.12
Average share of inequality of opportunity explained by each circumstance				
Parents’ level of education	0.74	0.40	0.43	0.37
Urban/rural birthplace	0.18	0.18	0.18	0.16
Gender	N/A	0.20	0.16	0.33
Ethnic majority/minority	0.03	0.14	0.12	0.06
Parent member of communist party	0.05	0.08	0.12	0.08

Source: LiTS III and authors’ calculations.

Note: Averages across the EBRD region. Inequality of opportunity in terms of tertiary education, jobs of any kind and good jobs is calculated using a D-index. Inequality of opportunity in terms of income is calculated as a Gini coefficient.

CHART 3.9. Respondents’ perception of their own position in the income distribution



Source: LiTS III.

¹³ See Autor (2010).

¹⁴ See Bolton et al. (2005) and Saito (2013).

¹⁵ See Denisova et al. (2007).

¹⁶ See Abras et al. (2013) and Brock (2016).

¹⁷ See Bloom and Price (1975) and Tversky and Kahneman (1991).

the second-poorest decile, and so on. If people perceive their relative incomes accurately, the distribution of responses across deciles will be roughly uniform.

In reality, respondents have a disproportionate tendency to place their households among the poorer deciles (see Chart 3.9), and the distribution is far from uniform. (A uniform distribution would correspond to the horizontal line in the chart.)¹⁸ The bias towards the middle of the ladder seen in the histogram may be a result of limited information about the income distribution and mistaken beliefs about being average. The bias towards the middle is greater for the right-hand tail, indicating that people are more likely to underestimate – rather than overestimate – their relative position on the income ladder. This propensity to place oneself among the poorer deciles is also more pronounced in countries with higher levels of inequality of opportunity, meaning that inequality of opportunity has a negative impact on people's perception of their relative income.

People's perceptions of their own relative income and society-wide inequality of opportunity both affect support for the market economy (see Table 3.3, where the dependent variables take a value of 1 if the respondent believes that the market economy (or democracy) is always preferable to alternative systems and a value of 0 otherwise). Inequality of opportunity with respect to income, jobs and education has an additional negative impact on support for democracy. In other words, where the prevailing political regime fails to provide sufficiently equal access to education and jobs, people have less faith in political institutions.

Remarkably, the results hold even when inequality of income (measured by the Gini coefficient) is taken into account. In fact, the Gini coefficient for income inequality is positive. This suggests that, provided that increases in income inequality can be attributed to individual efforts, and not to differences in individual circumstances (which are taken into account separately in the same regression), support for the market economy and democracy may actually improve.

Lastly, people who place themselves higher up on the income ladder are more supportive of market economies. To some extent, this is to be expected, as these people are the relative winners in the transition process. However, this result holds when respondents' income, level of education and self-reported level of satisfaction with life are controlled for. In other words, people's perception of relative income has an additional impact on their support for the market economy that has contributed to their success. In contrast, individuals who believe their relative income to be lower than it actually is are less likely to support the market economy. This may be an additional indirect channel through which inequality of opportunity affects support for reforms, as inequality of opportunity is linked to individuals underestimating their relative position on the income ladder.¹⁹

TABLE 3.3. Inequality of opportunity and support for the market economy and democracy

	Support for the market economy		Support for democracy	
	(1)	(2)	(3)	(4)
Direct channels				
Inequality of opportunity: income	-7.553*** (2.767)	-7.277*** (2.738)	-7.441** (2.947)	-7.287** (2.925)
Inequality of opportunity: any kind of job	-3.702 (2.697)	-3.971 (2.633)	-7.834*** (2.490)	-7.928*** (2.486)
Inequality of opportunity: education	-2.144 (1.864)	-2.150 (1.843)	-4.733** (2.002)	-4.761** (1.985)
Indirect channel				
Perception of relative economic well-being		0.076*** (0.022)		0.034 (0.023)
Controls				
Income decile	0.042*** (0.011)	0.034*** (0.011)	0.041*** (0.011)	0.038*** (0.011)
Gini coefficient of income inequality	0.049* (0.025)	0.050** (0.025)	0.103*** (0.027)	0.103*** (0.027)
Unemployment (five-year average)	-0.034** (0.016)	-0.037** (0.015)	-0.029 (0.018)	-0.030* (0.017)
GDP growth (five-year average)	0.099* (0.052)	0.102* (0.053)	0.007 (0.049)	0.010 (0.049)
Level of democracy (Polity II)	0.065*** (0.022)	0.068*** (0.022)	0.076*** (0.021)	0.077*** (0.021)
Additional individual, region and country-level controls?	Yes	Yes	Yes	Yes
No. of observations	12,258	12,185	12,514	12,433

Source: LITS III, World Economic Outlook, World Development Indicators and authors' calculations.

Note: Estimated using a logistic model with fixed effects. The "perception of relative economic well-being" is the income decile where the respondent sees his/her household (with 1 corresponding to the poorest decile). Additional controls include gender, level of education, age, satisfaction with life, region dummies, country-level inflation and country-level GDP per capita. Income inequality relates to the latest available year. Standard errors are clustered at the country level and are shown in parentheses. *, ** and *** indicate statistical significance at the 10, 5 and 1 per cent levels respectively.

Conclusion

The transition to market economies was accompanied by expectations of greater and fairly distributed opportunities for all. These expectations have been only partially met. Levels of inequality of opportunity in the EBRD region are moderate on average. They are much lower than in other emerging economies and the USA, but they are still higher than in western Europe. Differences in circumstances at birth – such as parental background, gender, place of birth or ethnicity – account for between 20 and 50 per cent of income inequality in many countries in the region. Moreover, countries with higher levels of inequality of opportunity also have high levels of income inequality.

Modest levels of inequality of opportunity among wage earners may conceal high barriers preventing entry to formal employment for certain groups of people. In fact, inequality

¹⁸ Kolmogorov-Smirnov tests confirm a lack of uniformity in all countries.

¹⁹ The results hold if each correlation is considered in a separate regression, though the statistical significance of the coefficients is lower in some specifications.

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of opportunity in terms of getting a job in the EBRD region is higher than in western Europe – and similar to the inequality of opportunity observed in terms of income. This means that, from the perspective of an unemployed person, inequality of opportunity in terms of income looms much larger owing to the limited opportunities to overcome that first obstacle and get a job. Furthermore, inequality of opportunity in terms of getting a good job – one which results in financial security – is significantly higher than inequality of opportunity in terms of getting a job in general (and the two are positively correlated). Policies that engage with people at various stages in their careers may be successful in limiting this gap. Firms can also contribute by advertising job openings widely, encouraging network-building among employees and providing clear paths for promotion.

Of the various circumstances that explain inequality of opportunity in the EBRD region, parental background is the strongest driver. Parents' level of education plays a particularly important role in determining children's level of education. This, in turn, affects labour market outcomes and income levels. Inequality of opportunity in terms of obtaining a university degree has risen among younger cohorts, which means that the link between parents' and children's education is of fundamental concern as regards reducing inequality of opportunity for future generations. Improving access to tertiary education through targeted scholarship programmes and working to improve public primary and secondary education are two ways of doing this.

Parents' communist party membership is still a factor in labour market outcomes, perhaps reflecting the strength and persistence of elite networks. However, in contrast to the effect of parent's level of education, the impact of communist party membership may be gradually decreasing, with a smaller effect being observed among younger cohorts. The waning influence of the communist party on individual outcomes is promising, but does not preclude the rise of new elites. And since the impact of moving in elite circles can last for decades, policy-makers must work to prevent elite groups from dominating access to high-quality education and jobs. For example, strengthening links between secondary education and formal-sector employment can reduce inequality based on parental background.

Gender is also an important source of inequality of opportunity, especially in terms of income, as a substantial gender gap continues to be observed in wages. Moreover, women participate less in the labour force in the presence of higher levels of inequality of opportunity in terms of good jobs. Commitments to providing equal pay for equal work are critical in this regard. While such policies work best as part of a formal legal framework, they can also be accommodated in the private sector. For example, companies can adjust compensation schemes to reduce the wage differential that women face as a result of interruptions to their careers (on account of maternity leave, for instance). Paternity leave policies can also help to reduce inequality of opportunity in terms of income. Lastly, offering subsidised childcare and flexible working patterns can help to boost equality of opportunity for women.

Being born in a rural area has a smaller impact than parental background and gender, typically accounting for an average of between 15 and 20 per cent of total inequality of opportunity in the EBRD region. Better links – both physical and technological – between urban and rural areas can help to ensure that there is no “wrong place” to be born.

Inequality of opportunity also has implications for people's support for market reforms and democracy. The analysis in this chapter shows that inequality of opportunity can erode support for core economic and political reforms. However, inequality does not always hinder support for reforms. Indeed, it may actually strengthen it, provided that differences in income arise as a result of differences in effort, rather than individual circumstances such as gender or place of birth. This highlights the importance of implementing reforms, be it privatisation or an overhaul of the tax system, in ways that are perceived to be fair and do not serve special interests. Public policies may need to specifically target access to education and employment by the most disadvantaged groups, helping to create a more inclusive society.

It is important to note that these results represent a lower bound for inequality of opportunity, for two main reasons. First, not all circumstances at birth that could be considered important for inequality have been included in this analysis, owing to data limitations. For instance, the question of whether someone is an immigrant or comes from a region with low-quality public goods may also matter when it comes to education and job-related opportunities. Second, estimates based on income may underestimate true differences in opportunities because people who are out of the labour force are not included in the analysis. It may be that some people who are out of the labour force actually want to work, but are discouraged from looking for jobs by the low expected returns to job search efforts. This may be the case for women with children if they expect wages that are insufficient to cover the cost of childcare (especially where they have more than one child) or lower than their husbands' earnings (where their husbands would otherwise be willing to opt out of the labour force instead). People may also weigh the loss of social security benefits (such as subsidised rent or childcare) that may be associated with returning to work against the income that will be earned. Policies aimed at improving labour force participation should thus be aligned with any benefit programmes that could interfere with employment choices.

Box 3.1. Estimating inequality of opportunity

The canonical model used here to measure inequality of opportunity follows the conceptual framework whereby a distinction is drawn between a person's circumstances and his/her efforts.²⁰ Consider income distribution x at country level, which is determined by a set of circumstances beyond individual control (such as ethnicity or parents' level of education) and individuals' efforts. In this framework, all individuals who have the same characteristics and apply the same level of effort obtain identical incomes.

An econometric model is then estimated in order to establish the extent to which circumstances at birth contribute to the variation observed in income (or other outcomes, such as employment or level of education). The coefficients for circumstances capture both the direct and the indirect effects that these circumstances have on economic outcomes. For example, parents' level of education may influence an individual's skill and effort, which will affect his/her income directly. But it may also influence future earnings for given levels of skill and effort through, for instance, social connections or inherited assets.

On the basis of that model, predicted incomes explained purely by circumstances at birth are constructed for each individual. A Gini coefficient for the distribution of predicted incomes can then be used to assess the extent of the inequality of opportunity – that is to say, inequality that is due to differences in circumstances.

A different measure is required where the outcome of interest is binary – as in the question, for example, of whether an individual is employed or has a university degree. A commonly used measure is a “dissimilarity index” (D-index) – broadly speaking, the average distance between predicted outcomes and the actual mean of outcomes.

Higher predicted outcomes, based on favourable circumstances, will lead to a higher D-index, as will lower predicted outcomes due to unfavourable circumstances. A modified version of the D-index is used here, where y is the economic outcome of interest and N is the number of people in the sample:²¹

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

The estimates derived from the regressions may be biased owing to characteristics missing from the analysis (such as people's mother tongues). Because the aim is not to interpret the coefficients for individual characteristics, but rather to see how well a certain set of characteristics can explain the outcomes observed, such biases matter less, as long as omitted characteristics have similar effects across countries or are unrelated to the circumstances included.

In order to assess the contributions that specific circumstances such as ethnicity or gender make to overall inequality of opportunity, this chapter employs Shapley decompositions. This approach, which is adapted from cooperative game theory, breaks an outcome down into shares attributable to each type of circumstance, with these shares adding up to one.²²

Ideally, the analysis of inequality of opportunity would be run for each age cohort separately. Unfortunately, however, the limited sample sizes in most cases preclude this approach. As a robustness check, age and age squared have been added to the regressions as controls. While these controls tend to be significant, they do not explain much additional variation in outcomes, and the inequality indices remain essentially unchanged.

²⁰ There are a variety of different methods and approaches that can be used to measure inequality of opportunity. See Roemer and Trannoy (2015) for a review. The methodology described in this box draws on Bourguignon et al. (2007), Barros et al. (2009) and Ferreira and Gignoux (2011).

²¹ See Chávez-Juárez and Soloaga (2015).

²² See Shorrocks (2013).

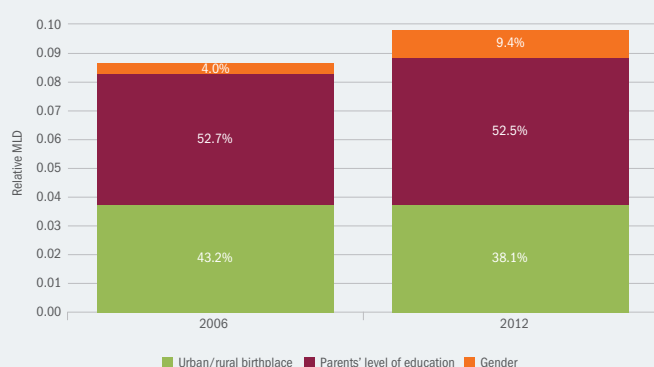
Box 3.2. Inequality of opportunity in terms of income in Egypt

After a long period of economic and political stagnation, people in North Africa and the Middle East took to the streets in 2011 demanding freedom, social justice and dignity. The protests started in Tunisia, but soon spread to the rest of the region, including Egypt. Analysts sought to explain the underlying causes of these uprisings, which included dissatisfaction among young people, rising inequality, persistent authoritarianism and political Islam. This box provides evidence on the extent and determinants of inequality of opportunity in terms of income in Egypt, looking at the situation before and after the uprising. It also discusses policy implications with a view to establishing a more equal society in Egypt in terms of opportunities.

This analysis is based on data from the nationally representative Egypt Labour Market Panel Surveys (ELMPS) for 2006 and 2012.²³ The sample comprises all wage earners between the ages of 15 and 64 in both the formal and informal sectors. The survey includes information on a number of individual circumstances, including parents' level of education, region of birth (urban/rural) and gender.

On the basis of these data, inequality of opportunity accounts for 10 per cent of overall income inequality, and the contribution that this "unfair" inequality makes to total inequality increased by around 1.1 percentage points between 2006 and 2012 (see Chart 3.2.1). A large percentage of this inequality of opportunity (more than 50 per cent; see chart) can be traced back to a person's parental background, while his/her place of birth accounts for around 40 per cent of the total. Gender plays a smaller role, although its relative importance in explaining inequality of opportunity has risen over time. This may be due to very low female labour force participation rates.

CHART 3.2.1. Inequality of opportunity in terms of income in Egypt



Source: ELMPS and authors' calculations.

Note: This chart shows the percentage of total income inequality that is due to inequality of opportunity in Egypt (relative MLD). By way of comparison, average relative MLD for the EBRD region as a whole stands at 0.106, very close to the level observed in Egypt. The percentages indicate the contribution that each circumstance makes to total inequality of opportunity.

Inequality of opportunity in terms of income in Egypt is comparable to that seen in other parts of the EBRD region. Results for Egypt and the EBRD region as a whole can be compared on the basis of an alternative measure of inequality – the mean log deviation (MLD). The MLD has a value of 0 when everyone has the same level of income and rises as income becomes more unequally distributed. In the EBRD region, average inequality of opportunity calculated using the MLD is 0.024, while in Egypt it was 0.020 in 2012. As in the EBRD region as a whole, parental background is the most important circumstance determining inequality of opportunity. In contrast with the data for the region as a whole, however, place of birth is more important than gender in Egypt.

Further analysis by subgroup reveals additional insights. In particular, income in Egypt is more closely linked to individual circumstances for young people in urban areas and women. These groups suffer for a number of reasons. Public-sector employment, which previously absorbed large percentages of young graduates, declined between 2006 and 2012, and the private sector was not able to compensate for this trend. This was partly due to the global financial crisis and the uprisings seen in the country, as well as systemic challenges in the Egyptian economy.

A caveat

The analysis in this box shows that "unfair" inequality (that is to say, inequality that is due to conditions at birth) accounts for around 10 per cent of total income inequality in Egypt. This could be misleadingly portrayed as a small amount – especially when compared with estimates for the USA, where in the early 2000s inequality of opportunity made up almost 20 per cent of total income inequality.²⁴ It is important to emphasise that, because of omitted variables, these results represent a lower bound. Including other characteristics (whether an individual has links to the elite, for example) would result in inequality of opportunity accounting for more of income inequality.

Moreover, the dependent variable in this study, wages, represents only part of overall income. Inequality of opportunity is estimated to account for around 30 per cent of inequality in asset ownership in Egypt, much higher than the level observed for income.²⁵ This is probably due to the fact that assets reflect the accumulation of income from a wide range of sources, not just earnings, as well as accumulation over a number of generations.

Policy implications

The most important contributors to inequality of opportunity in Egypt are parental background and geographical disparities between urban and rural areas. Only those who come from privileged backgrounds are able to undertake tertiary education.²⁶ In addition, public expenditure tends to be disproportionately allocated to tertiary education, thus further favouring the better-off. Overall, these findings suggest that public expenditure should focus on improving the quality of public primary and secondary schools, where wealthier

(Continued on page 56)

²³ See Assaad and Krafft (2013). These surveys were conducted by the Economic Research Forum (ERF) and the Central Agency for Public Mobilization and Statistics (CAPMAS).

²⁴ See Pistolesi (2009).

²⁵ See El Enbaby and Galal (2015).

²⁶ See Assaad (2010).

(Continued from page 55)

parents are able to compensate for the low quality of teaching with supplementary tutoring, while more disadvantaged groups cannot afford to do so.

Turning to geography, the pattern of public investment reflects a bias against rural areas. As public investment is highly centralised, rural areas, where poverty is concentrated, receive significantly smaller shares of public investment than wealthier urban areas.²⁷ Government policies need to take account of this imbalance.

Particular attention should be paid to improving access to jobs for vulnerable groups, namely the young and women. Young people suffer from skills mismatches in the labour market, which result in extended progression gaps between school and work. Policy responses should focus on improving the quality and relevance of secondary and tertiary education by involving the private sector in the development of skills standards as part of Egypt's nascent National Qualification Framework. Also important are the expansion of learning models based on dual principles and the development of a national labour market information system. Lastly, the provision of career advice and guidance is of particular relevance for the educational choices of young women, who remain under-represented in STEM subjects (which tend to lead to higher-income jobs). Some of the most significant obstacles to women's employment are poor working conditions, inflexible working hours, a lack of childcare for working mothers, and a lack of safe and reliable transport to and from work.

Box 3.3. Inclusion of the Roma people in the EBRD region

The Roma are a diverse population group with different languages, traditions and histories. Unlike other minority groups, they have no historical homeland. They are present in most countries in Europe and Central Asia, with an estimated 10 to 12 million living in Europe and an estimated 6 million living in the EU.²⁸

The transition from planned to market economies has had a disproportionate impact on the Roma in terms of falling living standards, increasing unemployment, and reduced access to housing, health care and education. While the transition process has resulted in increased opportunities for many people the Roma have generally been unable to avail themselves of these opportunities. This reflects their low levels of education, weak and sometimes antagonistic relationships with mainstream society and national governments, a lack of personal and property-related documentation and a tendency to be subjected to cultural separation and discrimination. Between 70 and 90 per cent of the Roma living in EU countries currently live in conditions of severe material deprivation.²⁹ They often have no running water, sanitation or electricity. They often live in segregated areas, where property ownership is unclear, and lack the documentation required to access social assistance, health care and/or education.

A large percentage of the Roma do not complete secondary education.³⁰ For example, less than 36 per cent of the Roma population in Hungary and just 7 per cent in Montenegro finish secondary school. Cultural and social factors both affect access to educational services. This partly reflects language barriers, but also the persistence of stereotypes among both Roma and non-Roma populations, which further increases prejudice and mistrust. Low levels of parental education and high levels of household poverty also have a negative effect on educational outcomes for many Roma children,³¹ thus reducing equality of opportunity for future generations.

Partly as a result of their lower levels of education, Roma populations have much higher unemployment rates. For the same reason, they are also over-represented in lower-skilled jobs and in the informal sector. In most countries in central and south-eastern Europe, the Roma are twice as likely to be unemployed as their non-Roma neighbours,³² and in some countries this gap is even larger. These differentials are even more pronounced when comparing Roma

²⁷ See Al-Shawarby et al. (2012).

²⁸ http://ec.europa.eu/justice/discrimination/roma/index_en.htm (last accessed 18 October 2016).

²⁹ UNDP/World Bank/European Commission Regional Roma Survey (2011).

³⁰ This is significant, since LiTS III data indicate that the incomes of those who complete secondary education (but not tertiary education) are 24 per cent higher than the incomes of those who do not.

³¹ See Kertesi and Kézdi (2012).

³² Ibid.

and non-Roma women.

Data from LiTS III suggest that the attitudes of the Roma are slightly different from those of non-Roma populations. For instance, while the survey respondents from both Roma and non-Roma populations believe that the main reason people are in need in their respective countries is injustice in society, the Roma tend to place more emphasis on the role of bad luck, while non-Roma populations tend to point to laziness or a lack of willpower. Another difference is the higher levels of distrust towards the police among the Roma. Attitudes concerning the role of women in the household differ too. Roma women are more likely than their non-Roma counterparts to believe that it is women's responsibility to do most of the domestic chores. Moreover, Roma men are more than three times as likely to hold this view as non-Roma men. In many other areas, there are similarities between the views and attitudes of Roma and non-Roma populations, for example as regards general levels of trust towards political parties and belief in the importance of law and order.

The question of how to address the exclusion of the Roma and improve their economic opportunities and living conditions on a sustainable basis represents an important policy issue. Key priorities in this regard include the provision of identity documents, adequate housing and access to health care and education. Approaches need to be multipronged and take account of the tension between the desire to maintain the Roma culture and the desire to better integrate the Roma into society.

Legislation alone is unlikely to improve the living conditions of the Roma. Prejudice needs to be addressed, together with the feelings of defeatism and exclusion that are felt by many Roma, which prompt behaviour that can impede access to opportunities. Further developing Roma community-based organisations' capacity to participate in policy-making is crucial. One successful example of this is the role that civil society groups have played in Bulgaria in increasing access to social insurance.³³

Children need to feel welcome at school and be encouraged to continue their education. Moreover, support needs to be given to Roma applying for work in the formal sector, with incentives and targets given to employers in order to encourage them to employ Roma men and women. While some Roma may well prefer to keep their own culture, many Roma men and women would like to be able to make that decision as to how they and their children live.

Box 3.4. Skills mismatches

Mismatches between the skills needed by employers and those acquired by individuals represent a key challenge for policy-makers trying to resolve inequality of opportunity in the EBRD region. Large skills mismatches impose significant costs on all layers of the economy, limiting the productivity of businesses and negatively impacting the current and future welfare of young people. For example, a recent study of 19 OECD countries (four of which are in the EBRD region) highlighted the fact that larger skills mismatches are associated with lower levels of labour productivity.³⁴

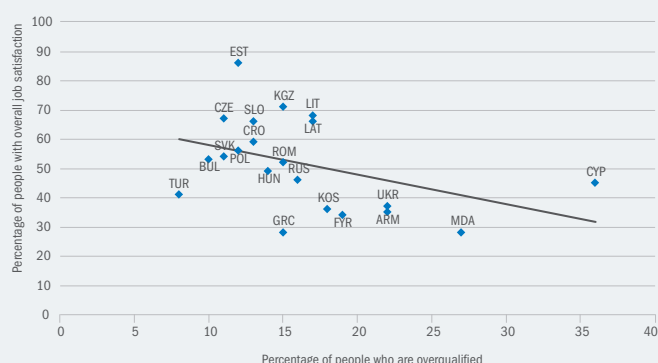
In most countries in the EBRD region for which data are available, a third of people under the age of 30 are either over- or underqualified for the job they hold. The worst examples of this phenomenon can be seen in Cyprus, Romania and Turkey, where such mismatches between job requirements and qualifications negatively affect the employment opportunities of every second young person. Moreover, the average percentage of young people in the region who are overqualified for their job has steadily increased over the last decade, rising from 12.5 per cent to 15.1 per cent.

One of the adverse effects of skills mismatches is a reduction in productivity owing to low levels of job satisfaction. A key indicator of job quality, job satisfaction is central to a person's well-being and can have positive returns for firms, as workers reciprocate through increased effort, longer retention periods and more proactive engagement.³⁵ Being overqualified, however, is associated with significantly lower levels of job satisfaction among young people in the EBRD region (see Chart 3.4.1).

Both generic and country-specific factors determine the prevalence of skills mismatches. Most of the economies in the region face similar challenges: education curricula that are of limited relevance to the modern workplace (especially when it comes to technical and vocational programmes); lack of standardisation across degree programmes; the obsolescence of work experience acquired prior to 1989; and limited on-the-job learning opportunities.

(Continued on page 58)

CHART 3.4.1. Overqualification and job satisfaction among 15 to 29 year olds



Source: ILO KILM 2015 and LiTS III.

³³ See www.amalipe.com.

³⁴ See McGowan and Andrews (2015).

³⁵ Clark (2015) and Edmans (2012).

(Continued from page 57)

Other challenges are country-specific. In Kazakhstan, for instance, low levels of labour mobility (with two-thirds of the population still living in their place of birth) limit individuals' access to a broader range of educational choices and employment opportunities.³⁶ Another example is Turkish women's self-segregation in less marketable university courses, such as two-year and/or distance-learning programmes in subjects that are less relevant to private-sector employers. This leads to gender gaps in terms of both the scale of skills mismatches and, in turn, employment opportunities for young people entering the labour market.

Involving the private sector in the development and implementation of education and skills policies can be an effective response to a growing skills mismatch. This is particularly relevant in the presence of swift technological changes. The bridging of gaps between the supply of and demand for skills requires an in-depth understanding of the dynamics of labour markets, as well as the ability to identify fast-changing qualification needs in an economy.

The involvement of the private sector in the establishment of occupational standards and qualification frameworks that meet employers' needs and the introduction of dual learning models that offer work-based and work-relevant experience are critical in this context. Sector-level skills councils can act as important catalysts in this process. Through its private-sector mandate, the EBRD contributes directly to the establishment and enhancement of such public-private cooperation schemes by working with its clients across a wide range of sectors, including manufacturing, property, tourism, power and energy.

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³⁶ See ILO (2015).

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OF PEOPLE WITHOUT
A BANK ACCOUNT DO NOT
TRUST BANKS

An inclusive financial system can reduce both inequality of opportunity and, ultimately, inequality of outcomes. While access to financial services is reasonably high in richer parts of the EBRD region, it is not so good in less developed economies. In these poorer countries, financial access is also distributed unevenly. In particular, many women, young people and rural populations remain disconnected from the financial system. The reasons for such exclusion vary depending on the circumstances of the household or individual, with many young people being discouraged by onerous documentation requirements, while older people are often deterred by long distances to the nearest bank branch. While foreign banks' entry into local markets has improved competition – and with it, access to financial services – in many countries, evidence suggests that these gains have been uneven, with less educated and lower-income households continuing to have less access to such services.

Introduction

Countries with larger and better developed financial systems tend to grow faster. Not only do banks and other financial intermediaries provide more services to households and firms as their financial needs grow, better access to finance also causes firms and countries to grow faster, as a large body of evidence shows.¹ The ability to hold accounts with trustworthy banks increases savings, which the banks can then intermediate into business loans. The resulting increase in investment boosts growth.² Even within individual countries, the expansion of banks' branch networks can foster investment and growth, reducing poverty in areas that have previously suffered from financial exclusion.³

Access to bank accounts also allows households to save for a rainy day, thus reducing their vulnerability to a temporary loss of income or assets. Formal insurance mechanisms fulfil a similar role. Savings instruments also help households – especially those without access to credit from the formal banking system – to accrue the funds needed to buy investment goods that require a lump sum payment up front. Thus, access to bank accounts and other formal savings services may stimulate small-scale entrepreneurship and allow some households to escape poverty.⁴

In other words, when large parts, or specific subsets, of a country's population are denied access to financial services, their ability to insure themselves against shocks or save for educational, entrepreneurial or retirement purposes may be inhibited. Exclusion from the financial system may therefore exacerbate the economic vulnerability of particular segments of society: those living in poverty, women, rural communities and those without a stable and well-paid job in the formal sector.⁵ This may, in turn, perpetuate inequality of opportunity and, ultimately, poverty and inequality of outcomes.⁶ In contrast, access to finance can boost bottom-up competition and allow start-up firms to compete with incumbents by entering new markets or introducing new technologies, spreading economic growth more evenly.⁷

The mechanisms that drive exclusion from financial services can be complex. Households may not visit banks because they are too far away (a supply-side factor) or because the household does not want their services at that particular moment in time (a demand-side factor).⁸ Of course, there are also very simple reasons why households might not be showing interest in a bank's products; for example, they could just be unaware of them, or the products could be poorly designed and fail to meet their needs. Such misalignment can lead to suboptimal social outcomes, thus creating room for policy intervention.

This chapter comprises three main sections. First of all, it maps both cross-country and intra-country variation in the use of financial services in the region where the EBRD operates. That analysis is based on household data from two sources: the third round of the *Life in Transition Survey* (LiTS III), which was conducted by the World Bank and the EBRD in 2015 and

¹ See, for instance, King and Levine (1993) and Rajan and Zingales (1998).

² Banks may also intermediate these savings into mortgages and consumer credit, the long-term growth effects of which tend to be less positive. Moreover, while lending to firms is associated with reductions in income inequality, this does not hold true for household credit (see Beck et al. (2012)).

³ See Burgess and Pande (2005), Bruhn and Love (2014) and Young (2016).

⁴ See Banerjee and Newman (1994) for a discussion of credit market imperfections and poverty traps, and see Dupas and Robinson (2013) for empirical evidence on the impact that access to bank accounts has on entrepreneurship.

⁵ The Consultative Group to Assist the Poor defines financial inclusion as follows: "Financial inclusion means that households and businesses have access [to] and can effectively use appropriate financial services. Such services must be provided responsibly and sustainably, in a well regulated environment."

⁶ See Beck et al. (2007).

⁷ See Rajan and Zingales (2003).

⁸ Households may also have less demand for formal banking products because they are already being served by the informal sector. While the use of informal services generally comes at a cost, such issues fall outside the scope of this chapter, which focuses solely on the formal financial system.

2016, and the 2014 Global Findex database. Global Findex is a comprehensive survey conducted by the World Bank that provides data on how individuals save, borrow, make payments and manage risks. This analysis will show that, in richer EBRD countries, both the gender gap and the urban-rural gap have now been closed in terms of access to financial services, with the exception of the oldest sections of the population. In poorer countries, however, gender gaps are still present across all age groups. In these countries, there is also still a substantial urban-rural gap as regards access to bank accounts. Rural women are by far the worst connected to the financial system in these countries.

The chapter then looks more closely at the role that local (town/city-level) banking markets play in facilitating or hindering access to bank accounts for various sections of the population, before turning its attention to the Euro Survey conducted by Austria's central bank (the Oesterreichische Nationalbank; OeNB) in 10 countries in central and south-eastern Europe in autumn 2015. That survey provides detailed data on households' loan application behaviour, allowing more detailed analysis of the demand and supply-side factors that drive some of the results reported earlier in the chapter. This chapter then ends with a number of evidence-based policy recommendations.

Financial inequality across countries

Bank accounts – which can be used to save money, as well as to make and receive payments – are often a first step towards the use of a more diverse set of financial services, such as credit and insurance products. Unlike credit, saving and payment-related services are wanted by almost everybody, even the poorest in society,⁹ so cross-country and intra-country variation in their use is likely to reflect supply-side constraints.

In western European countries, bank accounts' reach is nearly universal (with the exception of Italy and Portugal). In the east and south of the EBRD region, in contrast, usage levels are substantially lower, particularly in eastern Europe and the Caucasus (EEC), Central Asia and the southern and eastern Mediterranean (SEMED). Chart 4.1 shows the cross-country variation in people's access to basic bank accounts. For instance, more than 97 per cent of people in Slovenia and Estonia have a bank account, compared with 53, 14 and 12 per cent in Ukraine, Egypt and Tajikistan, respectively.

One notable exception is Mongolia, where an impressive 92 per cent of the population have a bank account. This reflects not only the extensive branch networks of banks such as Khanbank and XacBank in what is a sparsely populated country, but also the effect of government policies. For example, having a bank account is a prerequisite for the receipt of various government transfers, such as payments from the country's Human Development Fund, which was set up in 2009 to reduce inequality by distributing the benefits of the mining boom. Around half of all Mongolian bank accounts are mainly used to receive government transfers. In short, there is immense variation across the EBRD region in terms of the percentage of people who are connected to

the formal financial system in the most basic way – by having a bank account.

Use of bank accounts

Do people with bank accounts actually use them? Dormant and underutilised accounts waste any fixed costs associated with opening them. Perhaps more importantly, they also signal the possible existence of barriers impeding their use. Data on the use of bank accounts, which again reveal significant cross-country variation, show high usage rates in countries with both very high and very low levels of access to bank accounts. For instance, 91 per cent of Slovenian account holders and 99 per cent of Estonian account holders have used their accounts to make a deposit in the last 12 months. In countries with relatively low levels of bank account penetration, people do seem to use their accounts: 93, 85 and 62 per cent of account holders in Tajikistan, Ukraine and Egypt respectively have made deposits in the last 12 months. Countries with moderate account coverage show lower usage rates. Similar figures can be observed for withdrawals. Thus, where bank accounts are relatively scarce, people who have made the effort to open them do make use of them.

In Mongolia, where accounts are mainly used to receive government transfers, the percentage of people making withdrawals is significantly higher than the percentage of people making deposits. Even so, with 64 per cent of the total population having made a deposit in the last year, Mongolia still ranks higher than most of its neighbours. This suggests that supply-side approaches to introducing bank accounts might be effective – albeit potentially costly – ways of increasing financial inclusion.

Access to debit and credit cards

As bank accounts represent the gateway to broader interaction with the financial system, one would expect access to other, more sophisticated financial products (such as debit or credit cards) to be lower on average. People's lack of access to such instruments is less innocuous than it may appear at first glance. Indeed, for many people, a credit card is more than just a convenient method of payment. For instance, households may use credit cards to overcome temporary income shocks. Evidence suggests that newly unemployed people use their credit cards as a source of “bridge financing”,¹⁰ allowing them to extend their job search in order to procure a better set of job offers.

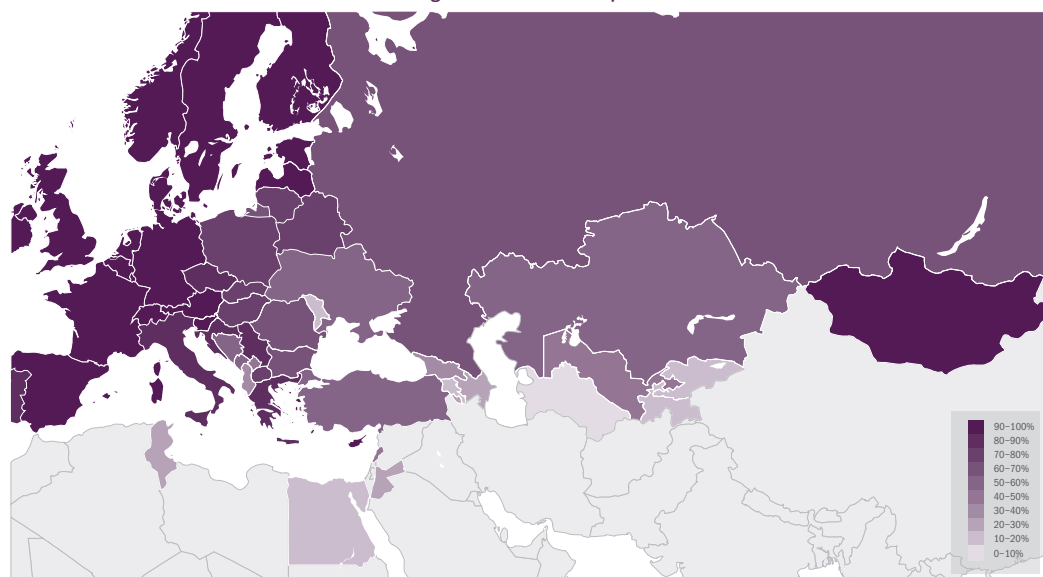
Credit cards can also help to foster entrepreneurship among sections of the population – such as ethnic minorities and women – that have more problems accessing formal forms of business credit.¹¹ Background market research conducted in 2013 for the EBRD's Women in Business programmes revealed that two-thirds of female entrepreneurs in Turkey were using personal credit cards for professional purposes, with almost 10 per cent of them relying exclusively on this expensive form of financing to fund working capital. Credit cards were the most common type of banking product used by these entrepreneurs (after the basic bank account and debit cards), and they are the easiest way for many women to access credit, as they require no

⁹ See Collins et al. (2009).

¹⁰ See Sullivan (2008).

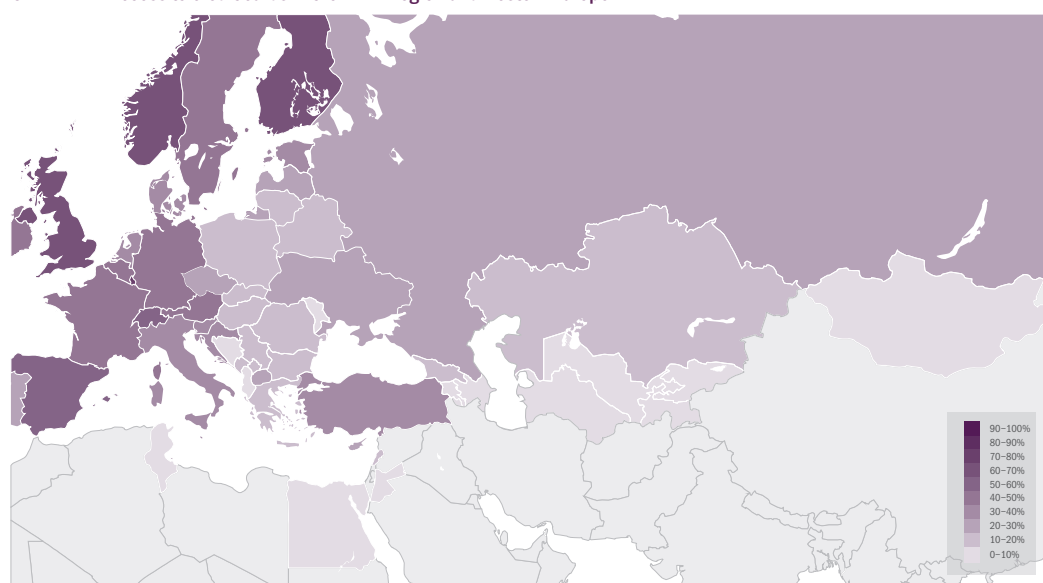
¹¹ See Chatterji and Seamans (2012).

CHART 4.1. Access to bank accounts in the EBRD region and western Europe



Source: Global Findex database (2014).
Note: This chart shows the percentage of respondents who own a bank account. Darker colours indicate higher levels of account ownership. Morocco was not included in the 2014 Global Findex survey. Lebanon is shown as a comparator country.

CHART 4.2. Access to credit cards in the EBRD region and western Europe



Source: Global Findex database (2014).
Note: This chart shows the percentage of respondents who own a credit card. Darker colours indicate higher levels of card ownership. Morocco was not included in the 2014 Global Findex survey. Lebanon is shown as a comparator country.

collateral and involve minimal financial disclosure. They typically remain, however, the most expensive form of bank finance.

As Chart 4.2 shows, people do indeed typically have less access to credit cards than they do to bank accounts (with the same applying to debit cards, albeit to a lesser extent). Coverage also remains far from uniform in western Europe, ranging from a low of 29 per cent in Portugal to a high of 70 per cent in Luxembourg. Equivalent figures for the EBRD region are much lower, ranging from close to zero in Egypt, Jordan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan and Uzbekistan to 35 per cent in Slovenia and 39 per cent in Croatia.

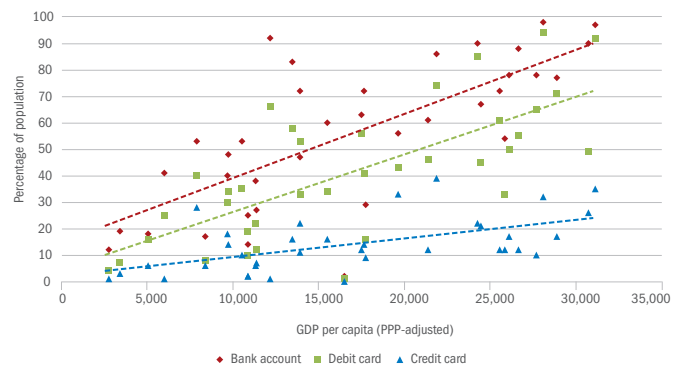
LESS THAN
15%
OF PEOPLE IN EGYPT
AND TAJIKISTAN HAVE
A BANK ACCOUNT,
COMPARED WITH MORE
THAN 97% IN SLOVENIA

As Chart 4.3 shows, there is a strong positive correlation in the EBRD region between a country's level of economic development and the percentage of the population who have access to bank accounts, debit cards and, to a lesser extent, credit cards. Further analysis indicates that levels of bank account penetration are higher not only in richer countries, but also in countries where fewer wages are paid in cash and countries where more people receive government transfers (such as Mongolia).

Financial inequality within countries

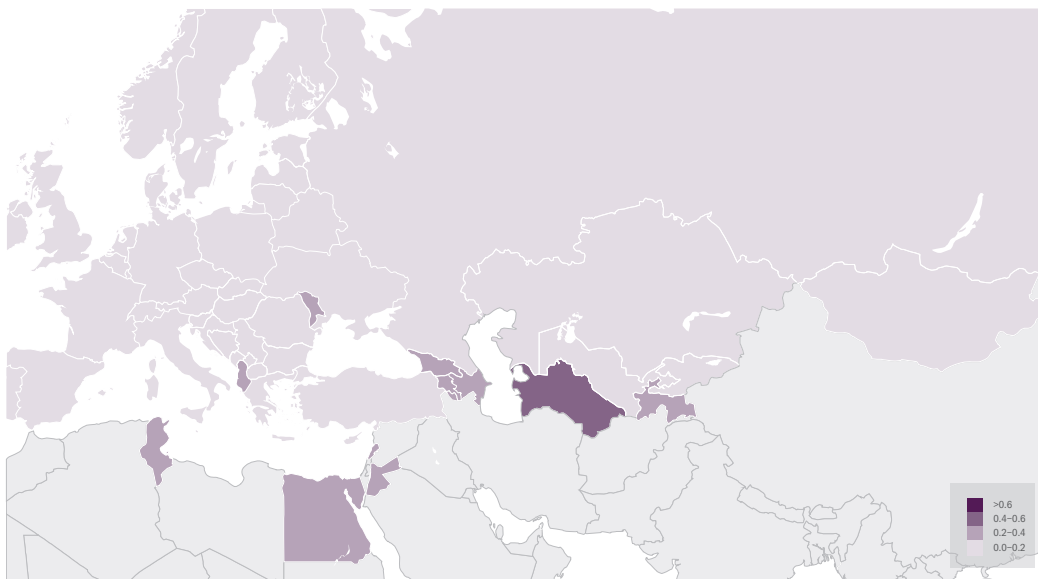
The ability to access and use financial services does not just differ from region to region and from country to country; it can also vary substantially within an individual country. This section provides systematic analysis of such intra-country variation in access to bank accounts and other financial services. That analysis is based on the estimation of a logistic model, which explains the use of a financial service by an individual on the basis of personal characteristics that are expected to determine access to that service, namely the individual's income, level of education, gender and age. The estimated coefficients are then used to calculate the probability of access to the financial service for each individual in the sample on the basis of their characteristics. In each case, this probability can be compared with the average probability of access in the country where the person resides. On the basis of this comparison, a dissimilarity index is constructed. That index is simply a weighted measure of the difference between the probability of access predicted on the basis of individuals' characteristics and the average probability of access for the country sample. In countries with a dissimilarity index of 0, everyone has the same probability of accessing a financial service, while in countries with a dissimilarity index of 1,

CHART 4.3. Economic development and financial inclusion in the EBRD region



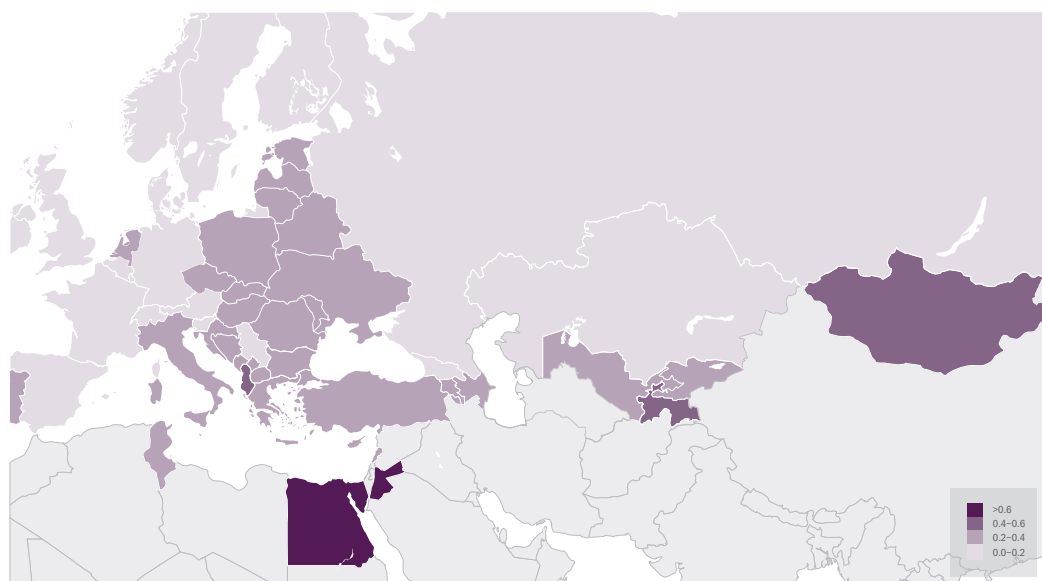
Source: Global Findex database (2014), World Development Indicators (2015) and authors' calculations.
Note: This chart shows each country's level of economic development as measured by GDP per capita at purchasing power parity (PPP) on the horizontal axis and the percentage of people who own bank accounts, debit cards and credit cards on the vertical axis. The three dotted lines indicate the lines of best fit for those three banking products.

CHART 4.4. Inequality of access to bank accounts in the EBRD region and western Europe



Source: Global Findex database (2014) and authors' calculations.
Note: Inequality is measured using a dissimilarity index that ranges from 0 to 1. Darker colours indicate that access to bank accounts varies more across the country's population on the basis of income, education, gender and age. Morocco was not included in the 2014 Global Findex survey. Lebanon is shown as a comparator country.

CHART 4.5. Inequality of access to credit cards in the EBRD region and western Europe



Source: Global Findex database (2014) and authors' calculations.

Note: Inequality is measured using a dissimilarity index that ranges from 0 to 1. Darker colours indicate that access to credit cards varies more across the country's population on the basis of income, education, gender and age. Morocco was not included in the 2014 Global Findex survey. Lebanon is shown as a comparator country.

individual characteristics, such as gender and age, can perfectly predict who uses a financial service and who does not.

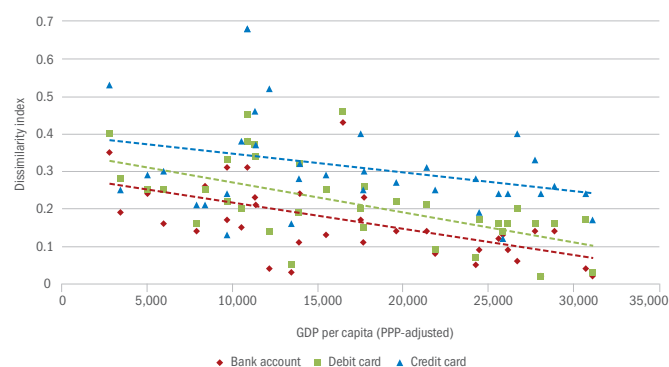
Chart 4.4 shows the resulting dissimilarity index for access to bank accounts. Darker colours indicate more unequal access to bank accounts across a country's population. In western Europe, access to bank accounts is very equal (resulting in very low index scores), but access is less equal in a number of countries where the EBRD invests, especially in Central Asia and the SEMED region. Access to bank accounts is relatively unequal in Bosnia and Herzegovina, Moldova, the Caucasus, Turkmenistan, Tajikistan and the SEMED countries. This pattern of unequal access is even more pronounced for credit cards (see Chart 4.5).

In economically more developed countries, access to financial services tends not only to be higher on average (as Chart 4.3 showed), but also to be distributed much more equally across the population (see Chart 4.6).

Determinants of unequal access to financial services

What underlying factors – income, education, gender and/or age – are driving unequal access to bank accounts in the EBRD region?¹² And to what extent do these factors differ from country to country? In order to look into this question, Shapley decompositions are used to estimate the relative importance of various population characteristics that determine a country's dissimilarity index.¹³ Chart 4.7 shows the 14 countries in the EBRD region with the most unequal access to bank accounts, plus Lebanon (which is ranked seventh in terms of inequality) as a comparator country. The countries are arranged in decreasing order of inequality, meaning that access to bank accounts is most unequal in Turkmenistan, slightly less so in Egypt, and so on.

CHART 4.6. Economic development and inequality of access to financial services in the EBRD region



Source: Global Findex database (2014), World Development Indicators (2015) and authors' calculations.

Note: Inequality is measured using a dissimilarity index that ranges from 0 to 1.

¹² Note that income may itself be dependent on access to finance and may be correlated with other potential determinants, such as education. It is nevertheless included here, given that household income is likely to be a strong determinant of a person's need for financial services.

¹³ A Shapley decomposition takes the total explained variation in a particular variable of interest (in this case, access to a financial service) and breaks it down into the variation explained by various explanatory variables.

We can clearly see that the least inclusive financial systems are found in the SEMED region, Central Asia, the Caucasus and parts of the Western Balkans. Each bar in Chart 4.7 also indicates the relative importance of the various drivers of exclusion, showing that unequal access is driven mainly by income and age. That is to say, in these 15 countries, poorer people (and, by association, less educated people) and the young (but less so the elderly) are disproportionately excluded from the financial system. A person's gender plays a somewhat smaller role, although women are more disadvantaged in some countries, such as Jordan, Kosovo, Lebanon and Tunisia. Gender plays the strongest role in Turkey, but this country is not shown in Chart 4.7, as it is not among the 15 countries with the least inclusive financial systems (on the basis of Global Findex data). See also Boxes 4.1 and 4.2 for a discussion regarding female entrepreneurs' access to finance.

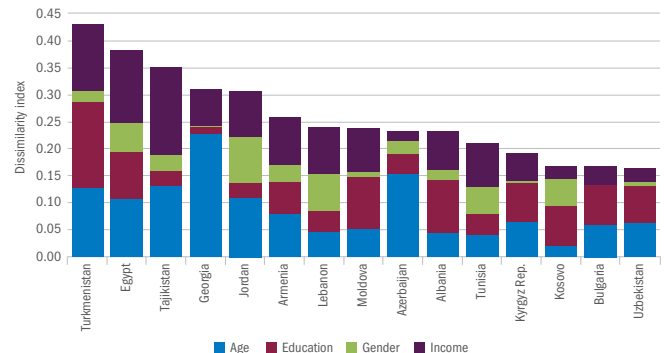
In many countries, financial inclusion varies between urban and rural areas. In order to investigate this variation, the analysis of unequal access to bank accounts is repeated using data from LITS III, which covers more than 51,000 households across the EBRD region and several comparator countries. Chart 4.8 shows the Shapley decompositions resulting from that analysis. These data have the advantage of allowing the rural/urban nature of a respondent's place of residence to be included as an additional explanatory factor, but they do not cover the SEMED countries or Turkmenistan. Reassuringly, the most unequal countries on the basis of this alternative dataset are very similar to those in Chart 4.7. The data show that there is a clear urban-rural divide in many countries in terms of access to bank accounts, particularly in countries with higher levels of inequality. In Albania, for instance, the rural/urban nature of a person's place of residence is more important than his/her income, gender and level of education combined.

Variation in the use of bank accounts

Supply-side interventions and cultural norms resulting in high levels of bank account ownership can sometimes mask inequality in the utilisation of those accounts across sections of the population. Chart 4.9 presents Shapley decompositions that explain variation between account holders who report having deposited money in an account in the last 12 months. We can see from the changes to the order of the countries that this is a very different question. Turkmenistan, which exhibited very high levels of inequality in terms of access to accounts, is only moderately unequal in terms of the use of accounts to make deposits. The Kyrgyz Republic, where only 47 per cent of account holders have made a deposit in the last year, also stands out for its high degree of inequality in account usage, as do Kosovo and Albania.

Intra-country variation in account usage may indicate that certain segments of society face prohibitively high variable costs (either pecuniary or social) that prevent them from making greater use of their accounts. Furthermore, the factors that prevent people from using an account are different from those that prevent people from having an account in the first place.

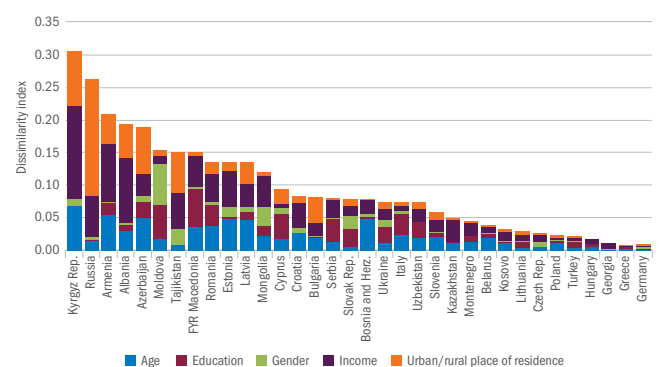
CHART 4.7. Shapley decompositions of unequal access to bank accounts in the least equal EBRD recipient countries



Source: Global Findex database (2014) and authors' calculations.

Note: This chart shows the 14 EBRD recipient countries with the most unequal access to bank accounts, listed in decreasing order of inequality. The height of the bar indicates the dissimilarity index score, which ranges from 0 to 1. The relative importance of each factor in terms of explaining the degree of dissimilarity is presented within each bar. Lebanon is shown as a comparator country.

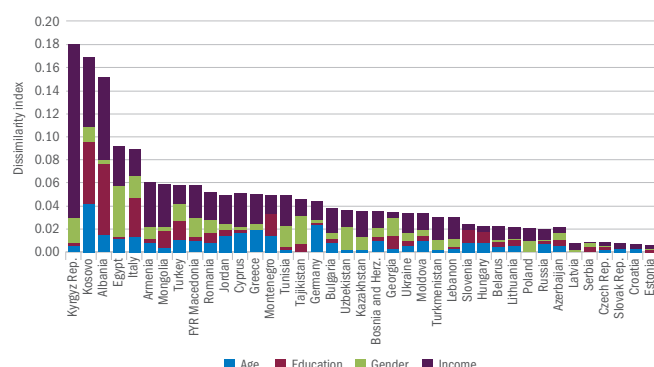
CHART 4.8. Shapley decompositions of unequal access to bank accounts using LITS III data



Source: LITS III and authors' calculations.

Note: The height of the bar indicates the dissimilarity index score, which ranges from 0 to 1. The relative importance of each factor in terms of explaining the degree of dissimilarity is presented within each bar. The Czech Republic, Germany and Italy are shown as comparator countries.

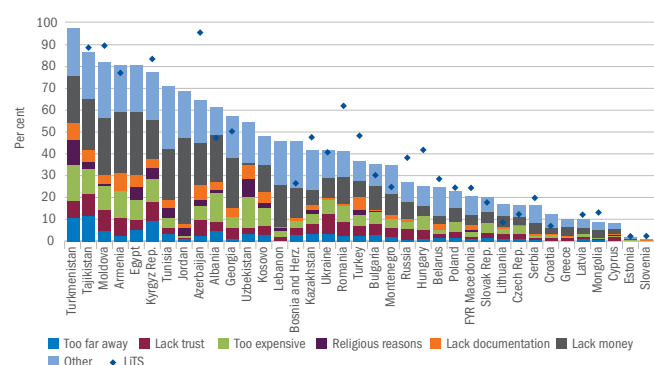
CHART 4.9. Shapley decompositions of unequal deposit-making behaviour



Source: Global Findex database (2014) and authors' calculations.

Note: The height of the bar indicates the dissimilarity index score, which ranges from 0 to 1. The relative importance of each factor in terms of explaining the degree of dissimilarity is presented within each bar. The Czech Republic, Germany, Italy and Lebanon are shown as comparator countries.

CHART 4.10. Reasons for not having a bank account: cross-country variation



Source: Global Findex database (2014; bars), LITS III (blue diamonds) and authors' calculations.

Note: The height of the bar indicates the percentage of respondents in each country who do not have a bank account. The segments within each bar indicate the relative breakdown of the reasons given in that country for not having an account (with respondents able to cite multiple reasons). The Czech Republic and Lebanon are shown as comparator countries.

Thus, certain sections of the population may face higher costs than others. For instance, gender plays a prominent role in explaining intra-country variation in deposit-making in Egypt, Georgia, Poland, Tajikistan, Tunisia and Uzbekistan. However, gender explains less of Egypt's variation in the use of accounts for withdrawals. This discrepancy could be attributable to various factors, including lower levels of female employment. In the other countries listed above, women have both lower withdrawal rates and lower deposit rates, suggesting that women generally face higher costs when interacting with the financial system. Unsurprisingly, income plays an important role in most – but not all – countries.

Reasons for not having a bank account

Detailed data are also available on the reasons people report for not having bank accounts. Chart 4.10 shows, for each country, the percentage of respondents in the Global Findex survey who do not have a bank account, which is indicated by the height of the relevant bar. Each bar also indicates the relative breakdown of the reasons cited for not having an account.¹⁴ Many people (60 per cent of those without an account) reported that they did not have enough money to open an account, while only a small number (8 per cent) indicated that they did not want one for religious reasons.¹⁵ Many respondents also pointed to supply-side factors, reporting that accounts were too expensive (26 per cent), banks were not trustworthy (21 per cent), the nearest bank branch was too far away (14 per cent) or they lacked the required documentation (14 per cent).¹⁶

Different segments of the population may experience different barriers to participation in the financial sector. Chart 4.11 looks in more detail at the reasons why people do not have bank accounts, indicating that different social groups are excluded from formal finance for different reasons. A lack of documentation is mainly an issue for the young (defined as people under the age of 25), and much less so for the elderly (defined as people aged 65 and over) and the highly educated (see top-left panel). A total of 21.7 per cent of young people without a bank account report that this is due to a lack of documentation, compared with only 6.7 per cent for the elderly. These findings suggest that banks can expand their customer base by making it easier for people – particularly the young and the less educated – to open an account. Documentation requirements may have a particular impact on workers in the informal sector and the self-employed, as they may be more likely to lack wage slips or proof of domicile.¹⁷

21.7%
OF YOUNG PEOPLE WITHOUT
A BANK ACCOUNT DO NOT
HAVE ONE BECAUSE OF A
LACK OF DOCUMENTATION

¹⁴ Respondents were allowed to cite multiple reasons.

¹⁵ For example, some respondents might not have wanted a bank account that did not comply with the principles of Islamic law.

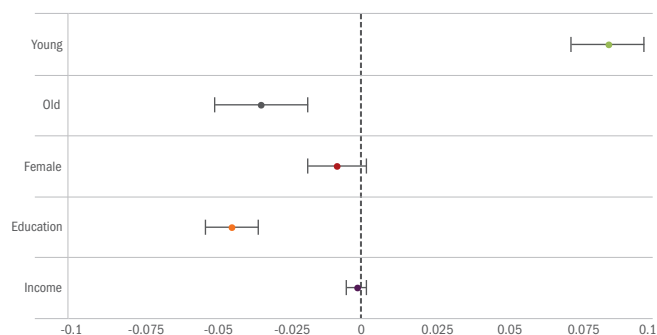
¹⁶ Estimates of bank account penetration derived from LITS III and the Global Findex survey are more or less consistent with one another, although LITS III points to significantly higher levels of financial exclusion in Azerbaijan and Romania and substantially lower levels in Bosnia and Herzegovina and Lithuania (see the

blue diamonds in Chart 4.10, which show the percentage of the population that is without a bank account according to LITS III data).

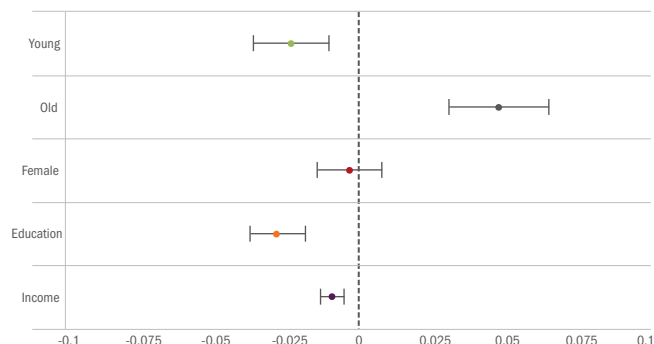
¹⁷ Documentation requirements imposed as part of banks' 'know-your-customer' procedures may include proof of identity by means of a government-issued piece of ID, proof of nationality or right of residence in the country, proof of address, proof of income and proof of employment.

CHART 4.11. Reasons for not having a bank account: intra-country variation

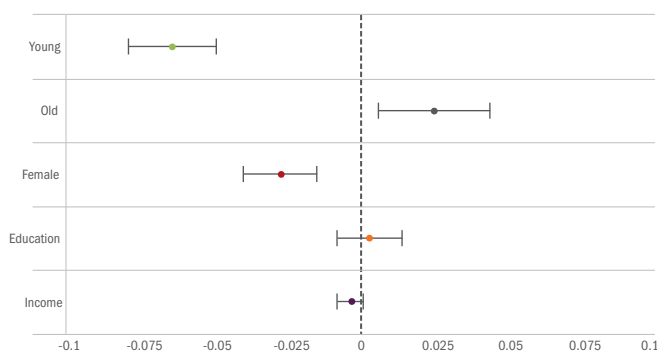
Lack of documentation



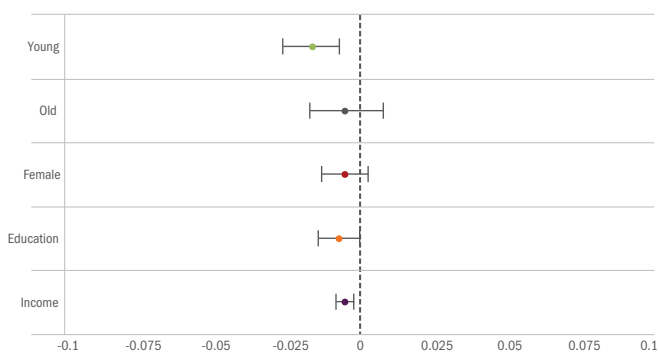
Bank too far away



Lack of trust in banking system



Religious reasons



Source: Global Findex database (2014) and authors' calculations.

Note: Each panel presents the results of a series of linear probability regressions that explain the likelihood of someone not having a bank account for a particular reason (looking only at those who do not own an account). These regressions include country fixed effects, which means that they focus on intra-country variation, while keeping all country-level characteristics (such as GDP per capita) constant. Either side of each coefficient is a horizontal line indicating the 95 per cent confidence interval. Where this interval does not cross the vertical zero line, the coefficient is statistically significant at the 5 per cent level at least.

In sharp contrast, the elderly are the group most likely to lack access to a bank account owing to geographical constraints, with 18.1 per cent of elderly people without an account saying that this is due to the nearest branch being too far away, compared with only 11.8 per cent of (more mobile) young people (see top-right panel). As expected, better educated and richer people are also less likely to face such constraints. The elderly are also more likely not to have an account because of a lack of trust in the banking system (see bottom-left panel). They are, after all, more likely to have experienced banking crises than younger sections of the population. A total of 27.1 per cent of older people without accounts report that this is due to a lack of trust in banks, compared with only 14.6 per cent of young people. Trust in the banking system is particularly low in Ukraine, where 62.7

per cent of the population do not trust banks, compared with an average of 20.0 per cent (which is still high) in the rest of the EBRD region.

Lastly, religious reasons do not seem to play a major role in terms of deterring people from interacting with banks, at least as far as opening bank accounts is concerned, despite the fact that accounts may pay interest (see bottom-right panel). This holds across the board, with the young being less influenced by religion than older generations. It even holds in the SEMED region and Central Asia, where religion tends to play a more important role in day-to-day life. In these regions, however, the percentage of people who do not have a bank account for religious reasons is higher at 14.2 per cent, compared with just 3.9 per cent in the rest of the EBRD region.

Unequal access to financial services in lower-income countries

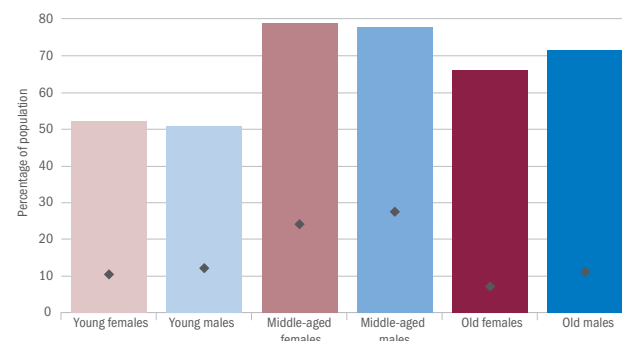
In order to gain greater insight into how gender and age interact in determining access to financial services at different stages of economic development, Chart 4.12 provides a breakdown of access by age and gender for both richer and poorer countries. The upper panel shows the EBRD countries with GDP per capita (in PPP terms) above the median level; the lower panel shows the countries below that level.

Levels of bank account ownership are significantly higher in richer countries. Moreover, in higher-income countries, there is no gender gap in the young and middle-aged segments of the population in terms of access to bank accounts. (Indeed, in Croatia, 70.5 per cent of young women have a bank account, which is higher than the 62.5 per cent recorded for young men.) A gender gap can be observed for the older generation, although it is less pronounced than the one seen in poorer countries. In those countries, too, the gender gap is largest among the older generation. In Armenia, for instance, only 6.1 per cent of older women own a bank account, compared with 13.3 per cent of older men. A similar pattern can be observed for ownership of credit cards (see diamonds in Chart 4.12), albeit at a much lower level. For this more sophisticated financial product, a gender gap exists even among young people in richer countries.

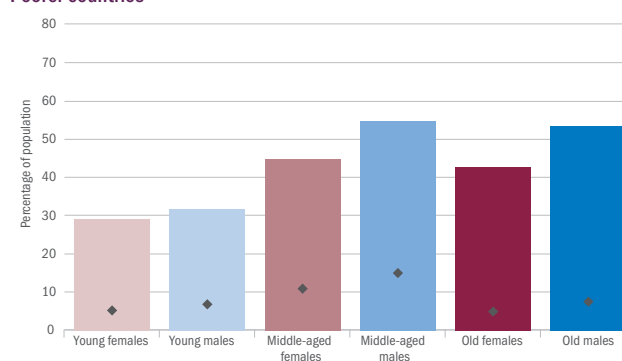
In addition to gender and age gaps, some countries display large differences between urban and rural areas in terms of inclusion. Chart 4.13 shows a similar breakdown based on LiTS III data, which allow a distinction to be drawn between people in rural and urban areas. In higher-income countries, there is almost no difference between people living in urban and rural areas in terms of their access to bank accounts, with large sections of these countries' populations being served by the formal banking system. Only among older respondents does a residual urban-rural gap appear to persist. In contrast, a substantial urban-rural gap can be observed for poorer countries in terms of access to bank accounts. Moreover, the magnitude of this effect is gender-specific: rural women are by far the worst connected to the financial system in these countries in each age group, followed by rural men (especially young rural men), urban women and, to a lesser extent, urban middle-aged men. The urban-rural gap for middle-aged women in poorer countries is a huge 21 percentage points, while the equivalent gap in richer countries is 2 percentage points in the opposite direction. Somewhat surprisingly, there is no urban-rural gap for older men in poorer countries, the only demographic for whom that is true in those countries. Thus, access to affordable finance remains a challenge for rural populations in various parts of the EBRD region. Their exclusion from financial services may, among other things, limit the productivity of smallholders' food production.¹⁸

CHART 4.12. Access to bank accounts broken down by GDP per capita, age and gender

Richer countries



Poorer countries



Source: Global Findex database (2014) and authors' calculations.

Note: Richer (poorer) countries are EBRD countries with GDP per capita in PPP terms above (below) the median level in the EBRD region. Diamonds show the corresponding percentages for credit card ownership. The young are defined as people under the age of 25; the middle-aged are defined as people between the ages of 25 and 64; and the old are defined as people aged 65 and over.

The role of local bank ownership and competition

Evidence from around the world shows that documentation requirements are more likely to be reported as a barrier to bank account ownership in countries with a smaller percentage of government-owned banks and a larger percentage of foreign-owned banks.¹⁹ This suggests that foreign banks may apply more stringent documentation requirements – which, according to Chart 4.11, have a particularly strong impact on the young and the less educated. In order to analyse this issue in more detail, this section combines data from LiTS III with information on intra-country variation in the presence of foreign banks at a local level. More specifically, each location (referred to as a “primary sampling unit” or “PSU”) where households were interviewed as part of LiTS III can be characterised by the percentage of all branches that are owned by foreign banks. This information is taken from data collected as part of the EBRD's second *Banking Environment and Performance Survey* (BEPS II), which was conducted in 2010.

¹⁸ See Young (2016).

¹⁹ See Allen et al. (2016).

In order to examine the extent to which various customer-level characteristics influence the likelihood of someone having a bank account, and look at whether these characteristics are more or less influential in determining access to accounts in locations (towns and cities) that are dominated by foreign banks (as opposed to domestic financial institutions), a regression analysis has been conducted. The results of that analysis are presented in Table 4.1. Each regression includes PSU fixed effects, such that the analysis focuses solely on variation in household outcomes and characteristics within each PSU. The upper part of the table shows that, as expected, levels of financial inclusion are higher for richer households (as captured by their expenses, whether they are in formal employment and whether they own a car). Highly educated people – those with a university degree – are also significantly more likely to have a bank account. The young and the elderly are less likely to have an account than middle-aged people.

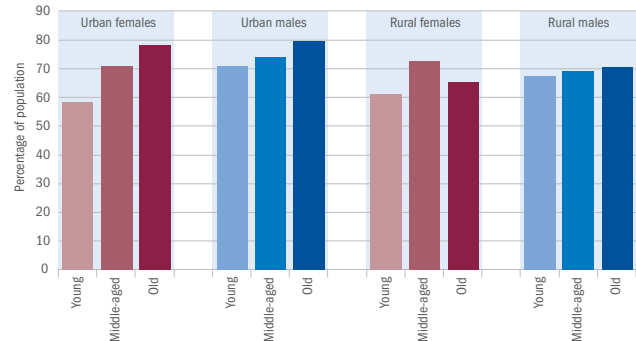
The bottom part of the table shows interaction terms between these characteristics and the presence of foreign banks in the local area (in the form of the percentage of local branches that are owned by foreign banks). These results indicate that in locations with higher levels of foreign bank ownership, people's wealth and formal employment become even more important predictors of bank account ownership. Moreover, foreign banks also tend to favour middle-aged clients (that is to say, people of working age) over younger and older clients. Overall, this suggests that foreign banks have a narrower customer profile than domestic banks, favouring middle-aged, highly educated, richer people who are in stable employment.²⁰

In the table, the estimated direct effect corresponds to the impact that a given characteristic (such as age) has on the likelihood of a household having an account in a market served exclusively by domestic banks. The sum of the estimated coefficients for the direct effect and the interaction term denotes the estimated impact that the relevant characteristic has in markets served exclusively by foreign banks. (These are both extreme cases; in reality, most locations are served by a mixture of domestic and foreign banks.) The estimates imply that, while having higher expenses (a proxy for higher levels of income) and owning a car (which probably captures several characteristics, including household wealth) increase the likelihood of having an account in a market served mainly by domestic banks, these effects are approximately three and four times larger, respectively, in a market served mostly by foreign banks. Similarly, being in formal employment is a relatively important factor in a purely domestic market, but its effect essentially doubles in size in a market served exclusively by foreign banks.

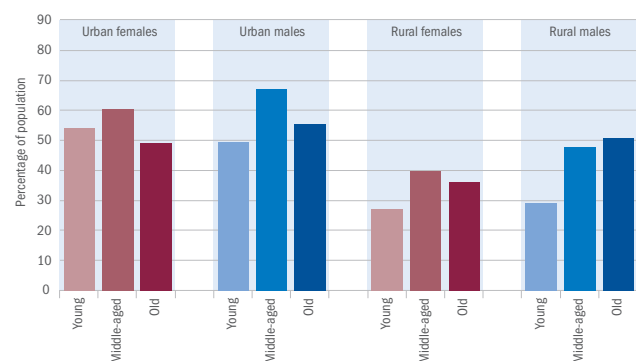
These findings are in line with existing evidence²¹ – for the same region, but using older data – showing that in countries with more foreign banks, banks focus disproportionately on “easy clients”: white-collar workers with a stable job and a decent salary. Other groups benefit less from the presence of foreign banks.²² This is in line with a strand of academic literature that describes foreign banks as “cherry pickers” or “cream skimmers”.²³ This also means that other types of institutions may

CHART 4.13. Access to bank accounts broken down by GDP per capita, age, gender and place of residence

Richer countries



Poorer countries



Source: LITS III and authors' calculations.

Note: Richer (poorer) countries are EBRD countries with GDP per capita in PPP terms above (below) the median level in the EBRD region. Percentages for young rural males and females are based on 170 and 234 observations respectively. All other percentages are based on at least 370 observations.

²⁰ At the same time, foreign banks may potentially be more likely to establish branches in towns and cities where people with higher levels of income, greater assets and higher levels of education are already using more financial services. In order to account for this potential endogeneity, the analysis in this section adopts an instrumental variables approach, using the distance between the PSU and Frankfurt am Main, Germany, as an instrument. The presence of foreign banks in eastern European markets has been shown to depend on the distance to the western European markets where many of those foreign banks have

their headquarters. While the distance to western Europe is negatively correlated with the presence of foreign banks, owing to travel costs and historical factors, demand for loans on the part of certain types of household in local markets is regarded as exogenous to this distance.

²¹ See Beck and Brown (2015) for a similar analysis at the country level.

²² The entry of foreign banks can, however, increase competition, enhance financial efficiency and improve financial stability. See De Haas (2014) and Claessens (2016).

be able to pick up those clients that are left behind by foreign banks. Evidence from microfinance institutions (MFIs) suggests that MFIs may pick up some clients who are not served by formal bank competitors. Indeed, a recent study of the geographic expansion of an MFI operating in the Western Balkans shows that it tended to open new branches in locations with a large percentage of low-income households.²⁴ The percentage of households with bank accounts then increased more in those locations than it did in the locations where the MFI had not opened a new branch.

Lastly, the impact that such new branches had on the use of bank accounts was stronger among low and middle-income households than it was among high-income households. Those branches also had a stronger impact among older households. The study demonstrates that, even in areas where a number of foreign banks are already competing with each other, some household segments may still remain underserved because they do not meet the strict requirements imposed by those foreign institutions. In such circumstances, the entry of other types of financial service provider can serve as a useful complement from a financial inclusion perspective.

Household loan application strategies and access to bank credit

The final piece of analysis in this chapter examines micro-level data in order to better understand the mechanisms that drive the variation observed in financial inclusion. Analysis of interactions between households and banks sheds light on how households with different socioeconomic backgrounds make different decisions when considering applying for a loan and how banks' responses to those applications reaffirm general trends in terms of households' access to finance.

Interaction between households and banks can be complex in nature. Households that need credit must choose whether or not to apply for a loan, which banks to apply to, and which loan offers to accept (if any) where offers are forthcoming from one or more banks. Conversely, banks must decide which markets to operate in, which potential clients to market their products to, and which loan applications to grant and on what terms.

The annual Euro Survey conducted by the OeNB in autumn 2015 provides detailed information on the strategies that households adopt when applying for retail loans, thus shedding light on the nature of such interaction. The 2015 survey consisted of face-to-face interviews with 10,325 households across 10 countries in central and south-eastern Europe,²⁵ with approximately 1,000 interviews being carried out in each country. The survey provides data on all of those households' attempts to borrow money from banks since 2000, including information on the year the loan was sought, the purpose of the loan, which banks the household contacted, whether each application resulted in a loan being offered, and whether the household ended up taking out the loan.²⁶

These data make it possible to identify households that have made at least one loan application since 2000. All regressions

TABLE 4.1. Presence of foreign banks in the local area and access to bank accounts

Dependent variable	Indicator variable that takes a value of 1 if the respondent has a bank account				
Expenses	0.048*** (0.013)				
Formal employment		0.089*** (0.019)			
Car			0.041*** (0.011)		
University degree				0.114*** (0.015)	
Middle-aged					0.010 (0.016)
Foreign banks ×					
Expenses	0.158*** (0.027)				
Formal employment		0.080** (0.035)			
Car			0.167*** (0.022)		
University degree				0.005 (0.025)	
Middle-aged					0.139*** (0.029)
Method	IV	IV	IV	IV	IV
Clustering	PSU	PSU	PSU	PSU	PSU
Fixed effects	PSU	PSU	PSU	PSU	PSU
No. of observations	30,562	31,381	36,914	36,914	36,910
R ²	0.456	0.443	0.455	0.449	0.447

Source: LITS III and authors' calculations.

Note: Estimated using an instrumental variables model. Standard errors are clustered at the PSU level and reported in parentheses. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control for household size, gender, a religion variable, and whether the language in the household is an official language of the country.

include country fixed effects, such that they only use intra-country variation in outcomes and explanatory factors. The regressions control separately for the log of the number of foreign and domestic bank branches in the area, the log of the size of the local population, and respondents' age and age squared. More explanatory variables and additional controls are included in individual specifications.

The first analysis looks at whether certain household-level characteristics suggest a greater likelihood of exclusion in terms of access to bank loans. The regression results presented in column 1 of Table 4.2 are fairly intuitive. Less educated households (where the respondent has completed only primary or lower-secondary education) are less likely to approach banks. Being employed greatly increases the likelihood of a household contacting a bank, while a low level of income reduces that likelihood by a similar amount, relative to that of a middle-income household.²⁷ Highly educated households (where the respondent has completed the first or second stage of tertiary education) are

²³ See Detragiache et al. (2008).

²⁴ See Brown et al. (2016).

²⁵ The survey covers Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic (which serves as a comparator), FYR Macedonia, Hungary, Poland, Romania and Serbia.

²⁶ The data capture instances where households contacted banks to apply for a loan, but were discouraged from submitting their application. For the purposes of this analysis, these events are regarded as applications that result in no offer being made.

²⁷ Employment status and income are important factors determining whether households approach banks for a loan. The fact that an educational status coefficient loses its statistical significance when controlling for details of employment suggests that the importance of educational status may be as an indicator of employment potential.

TABLE 4.2. Which households successfully interact with banks?

Dependent variable	Any application		Number of applications		All banks Ratio of offers to applications		Foreign banks Ratio of offers to applications	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Low level of education	-0.031*	-0.022	-0.024	-0.017	-0.069***	-0.058***	-0.070***	-0.048**
	(0.016)	(0.017)	(0.042)	(0.056)	(0.016)	(0.017)	(0.020)	(0.022)
High level of education	0.020	0.006	0.125**	0.148**	0.010	0.008	0.013	0.009
	(0.016)	(0.015)	(0.056)	(0.063)	(0.022)	(0.021)	(0.030)	(0.028)
Employed	0.074***	0.069***	-0.037	-0.050	0.008	0.019	0.050**	0.061**
	(0.011)	(0.015)	(0.040)	(0.041)	(0.019)	(0.021)	(0.024)	(0.027)
Low level of income	-0.072***		0.037		-0.061**		-0.064**	
	(0.014)		(0.067)		(0.025)		(0.031)	
High level of income	0.008		-0.115*		0.040***		0.023	
	(0.013)		(0.060)		(0.015)		(0.018)	
Blue-collar worker		-0.032**		0.143*		-0.020		-0.019
		(0.013)		(0.081)		(0.022)		(0.034)
Other worker		-0.063***		-0.010		-0.054**		-0.056*
		(0.013)		(0.080)		(0.025)		(0.032)
Self-employed		-0.057***		-0.029		0.003		0.006
		(0.019)		(0.088)		(0.022)		(0.028)
Student		-0.052*						
		-0.026						
Additional controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	NUTS 2	NUTS 2	NUTS 2	NUTS 2	NUTS 2	NUTS 2	NUTS 2	NUTS 2
Fixed effects	Country	Country	Country-Year	Country-Year	Country-Year	Country-Year	Country-Year	Country-Year
No. of observations	9,194	8,314	1,929	1,853	1,907	1,831	1,365	1,305
R ²	0.111	0.105	0.163	0.163	0.068	0.056	0.165	0.159

Source: Euro Survey (2015) and authors' calculations.

Note: Estimated using a linear probability model. Standard errors are clustered at the Nomenclature of Territorial Units for Statistics 2 (NUTS 2) level and are reported in parentheses. *, ** and *** denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. All specifications control separately for the log of the number of foreign and domestic bank branches in the area, the log of the size of the local population, and respondents' age and age squared. In addition, specifications in columns 3 to 8 control for loan purpose fixed effects, as well as individual fixed effects for the country and the year in which the loan was sought.

more likely to approach a bank for a loan, although this estimate loses its statistical significance when other explanatory variables are included. Having a high level of income does not appear to increase the likelihood of contacting a bank over and above that of middle-income earners.

The analysis in column 2 provides a different insight into the role of employment, replacing the income indicators with indicators for different types of worker. Blue-collar workers, the self-employed (including farmers), students and all "other workers" who do not fall into one of the other categories – are less likely to approach banks for loans than white-collar workers (which represent the excluded category in the regression).

After deciding to seek a loan, households must choose whether to apply to a single bank or multiple banks, and which ones to approach. These decisions are probably dependent on characteristics of the households themselves, as well as those of the bank branches in their vicinity. Applying to multiple banks may increase the probability of the household securing at least one offer. "Shopping around" in this way might also help households to secure a loan with better terms. However, applying for loans can be costly in terms of both time and energy, so additional

applications can reduce the overall benefit derived from a loan.

Looking solely at the set of households that have applied to at least one bank for a loan since 2000, the analysis next considers the question of how households with various characteristics differ in their loan application strategies. Column 3 presents the results derived from regressing the number of banks contacted during a household's search for their first loan in the period since 2000 on the set of explanatory variables used in specification 1. Loan purpose fixed effects are now included, as well as country-year effects, which flexibly accounts for macroeconomic conditions. The evidence shows that having a higher level of education increases the number of banks that the household approaches when seeking a loan, while having a higher level of income reduces the number of banks approached. In column 4, where income indicators are replaced with indicators for different types of worker, the highly educated are still shown to approach more banks, while blue-collar workers also approach more banks.

These findings regarding application strategies reflect the relative payoffs and costs anticipated by each household on the basis of their circumstances. Highly educated households may be more financially literate, resulting in them contacting more

banks in order to improve their chances of receiving better offers and obtaining a loan. The paperwork involved in loan applications may also be less onerous for these households, reducing the cost of submitting additional applications. In fact, 25 per cent of highly educated households in the sample of loan seekers approach multiple banks, compared with just under 19 per cent of households with average and lower levels of education. High-income households that apply to fewer banks, may be more confident in their chances of receiving offers. The opportunity cost of the time they devote to searching is higher, and the marginal benefit of the money saved from receiving better terms may be lower owing to their greater earnings. Thus, they may decide to apply to fewer banks, since the cost of additional applications exceeds the increased benefit. Lastly, blue-collar workers may apply to more banks if they think they are less likely to receive an offer or if they are less wealthy and value the savings derived from better terms more than their white-collar counterparts.

There is an inherent difficulty in properly interpreting the causal mechanisms that lie behind differences in application rates across households. Less educated and unemployed people may have less need of loans – or they may need a loan, but not one with the size or terms on offer in their market. Alternatively, banks might not serve particular segments of the market for a variety of reasons. The analysis of application-to-offer ratios in columns 5 and 6 attempts to address this issue, using the set of variables employed in specifications 3 and 4.

Analysis shows that the percentage of successful loan applications is lower among those with lower levels of education and income (see column 5). These results, which are closely aligned with the initial analysis looking at which households contact banks in the first place (see columns 1 and 2), suggest that poorer households may anticipate the likely negative outcome of their application and choose instead to refrain from applying, thereby avoiding any associated costs.

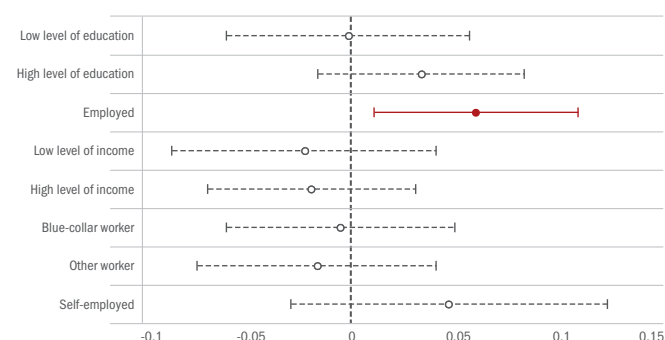
Households with average and high levels of income appear to be equally optimistic in terms of seeking out loans, but having a high level of income is shown to increase the chances of loan applications being successful. Specifically, while households with average and high levels of income are just as likely to approach banks (see column 1), high-income households receive a significantly larger number of offers from their set of applications than households with average incomes, as column 5 shows. The impact of being employed has a small and statistically insignificant impact on the outcome of loan applications, whereas it is an important determinant of the decision to apply for a loan.

Interaction with foreign banks

Next, the analysis looks at the question of how households interact with foreign banks in their local market. The forces identified earlier in this chapter, which result in a narrower customer profile for foreign banks, may also affect the application strategies adopted by households when approaching such banks.

The share of foreign banks in total applications made by a household increases significantly when the applicant is in

CHART 4.14. Which households are more likely to apply to foreign banks?



Source: Euro Survey (2015) and authors' calculations.

Note: Estimated using a linear probability model. The dependent variable is the share of foreign banks in total applications made by households. Standard errors are clustered at the NUTS 2 level. The chart shows coefficient estimates and 95% confidence intervals. Specifications also control, separately, for the log of the number of foreign and domestic bank branches in the area, as well as the log of the size of the local population, and respondents' age and age squared. Country-year fixed effects are also included, as are loan purpose fixed effects, as well as separate fixed effects for the country and the year in which the loan was sought.

employment. (Note that these estimates control for the number of domestic and foreign bank branches in a location, so we are comparing households that face a similar set of local banks.) Chart 4.14 shows the coefficient estimates and 95% confidence intervals derived from regressing the share of foreign banks in total applications made by households on the full set of explanatory variables. Only the coefficient for employment status is statistically significant, and it has the largest impact. This suggests that employed applicants are submitting significantly more of their applications to foreign banks than unemployed applicants. Thus, some self-selection on the part of unemployed applicants appears to be resulting in them being excluded from the potential gains that could be derived from the increased presence of foreign banks in the local retail loan market.

As regards the percentage of applications made to foreign banks that result in loan offers, the results shown in columns 7 and 8 of Table 4.2 are nearly identical to those in columns 5 and 6, with the notable exception of employment. Employed applicants receive offers from a higher percentage of the foreign banks to which they submit applications than unemployed applicants, and that difference is statistically significant. This contrasts with the small and statistically insignificant effect of employment that was found when considering the full set of banks (that is to say, both foreign and domestic banks).

Taken together, evidence from micro-level data on the interaction between households and banks suggests that markets operate in an equilibrium in which applying for a loan is not without costs and households are aware of the likelihood of being made a loan offer by a bank on the basis of their profile. Households with a low probability of being made an offer by banks submit fewer applications to those banks, and those that do apply receive fewer offers.

Conclusion

Levels of financial inclusion remain lower in the EBRD region than they are in western Europe, with negative implications for private-sector development and broad-based economic growth. Moreover, households' ability to access financial services varies both between countries and across different households within countries. While the gender gap in terms of ownership of bank accounts is in the process of closing for younger generations at the level of the EBRD region as a whole, a significant gender gap continues to be observed in the region's poorer countries, particularly in rural areas and among older generations. In these countries, there remains a substantial urban-rural gap in terms of access to accounts, especially for women. Moreover, in the SEMED region, many young people continue to be denied access to bank accounts. Indeed, only 18 per cent of young people in this region own an account, which is less than half of the equivalent figures for middle-aged and elderly people. Bridging these age and gender gaps constitutes a key priority.

The promotion of financial inclusion will be most successful if a multipronged approach is adopted, as inclusion is itself a multidimensional issue. Account ownership can, for instance, be fostered through the introduction of digital payments. Countries that disburse government transfers and pay government wages through banks can increase the number of accounts owned by their citizens, as exemplified by Mongolia. Evidence shows that such approaches can be particularly effective in narrowing urban-rural account coverage gaps.²⁸

However, supply-side approaches such as these may need to be accompanied by financial literacy programmes, a consumer protection framework, adequate regulation of payment systems and robust infrastructure to support electronic payments, online banking and other means by which customers interact with their banks.²⁹ The introduction of electronic systems for payments such as utilities or retail purchases can also encourage participation in the financial sector. To promote the efficient development of payment services, regulators must ensure that providers have equal access to the infrastructure necessary to operate. In addition to technology such as telecommunications systems, infrastructure also includes things like the interoperability of card readers.³⁰

Introducing basic “no-frills” accounts with little or nothing in the way of balance requirements, transaction charges and annual fees may also encourage the ownership and utilisation of accounts. Simplifying application procedures and tailoring documentation requirements to the realities of currently excluded groups (who may not have easy access to all the documentation available to older and richer customers) may also have a positive impact on financial inclusion. In order to ease documentation requirements affecting the young and the poor, regulators could create a class of current accounts with limitations on balances and pass-through amounts. Such accounts would avoid major risk factors and thus require less scrutiny. Financial institutions might find it expedient to design their basic “no-frills” accounts in such a way that they fell into this class of account. Finding

ways to build trust in the formal banking system (for instance, by introducing credible deposit insurance schemes) will also help to reduce some of the barriers that hinder account ownership in the EBRD region.

Increasing the number of bank branches in underserved areas is also likely to promote inclusion in the formal banking sector. Fostering a diverse financial system consisting of a variety of banks and other types of financial intermediary may also help to ensure broad-based access to financial services. For many households, the local branch remains their point of entry into the financial system, so the expansion of branch networks may help to increase access to credit for previously excluded households. Placing reduced (though still sufficient) licensing requirements on entities offering limited financial services, such as payment transfers, or only allowing the acceptance of deposits that are fully backed by government securities or other safe assets – thus avoiding the risk factors associated with full banks – can encourage entry and greater competition. Evidence shows that improving competition in local banking markets can lower the cost of opening and maintaining accounts.³¹ In the loan market, competition may have less of an impact in terms of reducing interest rates for the most vulnerable segments of society, but policies encouraging households to shop around can help to leverage what competition exists.³²

A combined approach aimed at reducing search costs and encouraging households and businesses to shop around for the best deal can benefit the most financially vulnerable segments of the population. Government authorities and commercial data aggregators can reduce search costs by collecting and distributing information on variation in interest rates for broad categories of loans offered by banks, preferably at a local market level. For instance, providing key statistics through an official comparison website can benefit less financially literate households that may have weaker bargaining power and negotiation skills. Advertising campaigns that promote financial literacy, explain the importance of shopping around for loan offers and advocate the use of comparison websites can help to reduce inequality in terms of households' access to financial services and support competition between banks (see also Annex 4.1, which discusses the rolling-out of broadband internet and its benefits).

Policies promoting financial inclusion should be designed and advocated by means of a context-specific approach and tailored to the obstacles facing specific markets. In many cases, removing information barriers between banks and borrowers will benefit excluded sections of the population. Introducing national ID numbers/cards with universal coverage would alleviate the documentation restrictions that currently prevent many young and poor people from opening bank accounts, particularly if such measures involved a biometric component. Establishing credit bureaus and credit registries, which national ID numbers would make possible, can also promote competition between banks through the sharing of borrower histories, which can benefit creditworthy clients.

²⁸ See Allen et al. (2016).

²⁹ See Demirgüç-Kunt et al. (2015).

³⁰ See Claessens and Rojas-Suarez (2016).

³¹ See Brown et al. (2016).

³² See Allen et al. (2014).

Introducing financial products aimed at meeting the needs of poorer households (which typically differ from those of more affluent customers) will foster demand where access to the financial system exists but is underutilised. Loans for which smaller and more mobile assets (as well as traditional wealth-storage mediums such as livestock or gold) are accepted as collateral are better able to meet the needs of borrowers who traditionally use informal systems of finance. Governments can assist in the development of new products – for example, by putting in place the legal and fiscal framework that is necessary in order to use leasing arrangements to expand the potential customer base.³³

Increases in financial inclusion will hopefully improve households' ability to weather unexpected declines in income and manage consumption over time. They should also help small businesses and aspiring entrepreneurs to accrue the savings required to fund investment or take out loans on affordable terms with a view to entering new markets, increasing competitiveness and otherwise growing their businesses. As previously excluded sections of the population gain access to the financial system, greater equality of opportunity should contribute to stronger and more stable economic growth across the region.

Box 4.1. Improving access to credit for women-led SMEs

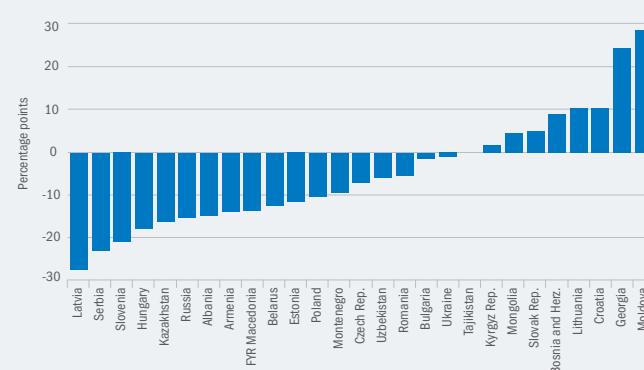
Many women-led businesses in the transition region – defined here as businesses where a woman has overall managerial responsibility for the company – continue to experience gender-specific barriers. As a result, these businesses exhibit weaker growth, remain smaller and are less productive than other firms.³⁴ This is a costly state of affairs: if women and men participated equally as entrepreneurs, global GDP could increase by around 2 per cent or US\$ 1.5 trillion.³⁵ Unlocking the economic potential of small and medium-sized enterprises (SMEs) led by women means tackling the challenges they face, notably as regards access to finance. Three issues stand out in this regard:

- First, customs and inheritance laws in many countries limit women's ownership of property, and thus their access to collateral. Moreover, many women-led SMEs are in the service, clothing and retail sectors, which tend to have fewer assets that can be collateralised.
- Second, in order to sustain and build a business, entrepreneurs need access not only to financial capital, but also to human and social capital. Female entrepreneurs continue to have inferior access to professional networks, mentors, and information on subjects such as financial management, marketing and the adoption of technology.³⁶
- Third, banks may have more trouble evaluating women's business proposals, as they fit less well with some traditional credit-scoring models and some male loan officers may be less able to properly evaluate women's business proposals.³⁷ This may result in more loan applications being rejected or women paying higher interest rates than men.

Overall, the impact of these barriers on the development of women-led businesses is acute. The International Finance Corporation estimates that as many as 70 per cent of women-owned SMEs in the formal sectors of developing economies are unserved or underserved by financial institutions, leaving a financing gap of more than US\$ 285 billion.³⁸ Chart 4.1.1. shows, for countries where at least 10 per cent of all SMEs are run by women, the difference between the percentages of male and female-led SMEs that report credit constraints (that is to say, SMEs that need credit, but are unable to get it). In the majority of countries, it is clearly substantially more difficult for women-led SMEs to access credit.

Addressing this challenge requires a model that both boosts access to finance and improves female entrepreneurs' access to know-how. The EBRD's Women in Business programmes are one example of such an approach. Currently active in 16 countries, these programmes offer a whole range of complementary services to women-led SMEs. Access to credit through local financial institutions is combined with technical assistance to help those institutions to provide lending solutions that are tailored to the needs of women-led businesses. Credit enhancement and risk-sharing mechanisms also enable local partner institutions to feel more comfortable lending to this "riskier" segment. The hope is that once the differential between perceived and real risk is documented, women-led firms will no longer face unjustified higher financing costs. In addition, the programmes provide female-led SMEs with access to business advisory services, mentoring, training in key entrepreneurial skills, online business diagnostics and networking opportunities.

CHART 4.1.1. Differences in credit constraints between male and female-led SMEs



Source: BEEPS V and authors' calculations.

Note: This chart shows the difference between the percentage of female-led SMEs that report being credit-constrained and the percentage of male-led SMEs reporting that they are credit-constrained. Negative figures indicate that the former exceeds the latter, which can be interpreted as meaning that female-led SMEs have greater difficulty accessing finance. The Czech Republic is shown as a comparator country.

³³ See World Bank (2008).

³⁴ See Goldman Sachs Global Markets Institute (2014).

³⁵ See Boston Consulting Group (2014).

³⁶ Ibid.

³⁷ See Beck et al. (2014).

³⁸ See International Finance Corporation (2011).

Box 4.2. Women and entrepreneurship

Entrepreneurship is an essential driver of private-sector development and the transition process more generally. For this reason, policy-makers and higher education institutions across the EBRD region began in the early 1990s to develop programmes to help foster entrepreneurship. A salient feature common to many EBRD countries of operations has been a level of entrepreneurial activity among women that is lower than the equivalent for men, in terms of both establishing businesses in the formal economy and the size and scale to which businesses grow. While this entrepreneurship gap has narrowed substantially over the last decade, it has not yet fully closed (see Chart 4.2.1).

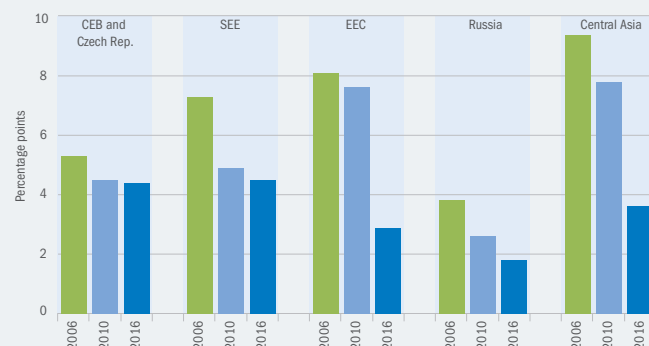
There is an ongoing debate as to the best way to stimulate entrepreneurship among women. Most support for female entrepreneurs targets existing start-ups, either through general programmes or through specific programmes directed only at women. For instance, the EBRD's Women in Business programmes are implemented in 16 different countries and deliver €500 million of EBRD funding to more than 20 partner financial institutions and 10,000 women-led SMEs (see Box 4.1). Data collected in the course of these programmes suggest that women are less likely than men to engage in entrepreneurial activity, acquire enough financial resources to support the growth of their business, and implement effective strategic, organisational and managerial practices. Moreover, women are also more likely than men to adopt beliefs and behaviours that reduce their financial risks (for example, by borrowing less money than they are able to) and are more likely to engage in behaviours that are linked to the welfare of their family (such as investing profits in the health of their family, rather than putting the money back into the business).

The above diagnostic narrative tends to portray entrepreneurship as an inherently masculine endeavour, whereas if more women are to become entrepreneurs, the prevailing institutional environment must become more gender-neutral, and women need to overcome their limitations by training or educating themselves better, developing the right networks and mentoring relationships, and reassigning domestic work.

Paradoxically, such narratives may feed into common gender-specific expectations and stereotypes and help explain the tendency for women to evaluate business opportunities less favourably, possess lower levels of entrepreneurial self-belief, express less desire to become an entrepreneur, or self-select out of the credit market.³⁹ Moreover, by placing excessive emphasis on gender-based patterns of behaviour, such stereotypes may distract from broader issues relating to the entrepreneurial environment, such as the lack of access to markets and/or essential business support services.

Recent experience with the expansion of the EBRD's Women in Business programmes across Central Asia suggests that barriers to female entrepreneurship go beyond issues relating to access to finance and know-how. For instance, women may not register businesses in the first place on account of sexual harassment being a "feature of tax inspections", or because women feel they are "regularly belittled by fiscal authorities". Likewise, EBRD research looking at Egypt's railways found that 70 per cent of the women interviewed avoided using the

CHART 4.2.1. Differences between self-employment rates for men and women, 2006-16



Source: LITS I, II and III, and authors' calculations.

Note: This chart shows the difference in percentage points between self-employment rates for men and women, whereby self-employment rates represent the percentage of respondents aged between 18 and 65 who report being self-employed.

train to commute to work because of safety concerns. Women's fear of harassment restricts their movement outside their homes and limits their use of public spaces. As a result, women's ability to undertake entrepreneurial activity is limited, regardless of their ambitions.

Even with dedicated support for women in business, female entrepreneurial activity will remain constrained if policies do not address entrenched forms of exclusion in society. There are a number of surveys available that can help policy-makers to improve their understanding of such exclusion and find ways of remedying it, including the *Life in Transition Surveys* conducted by the EBRD and the World Bank and the Gallup World Poll. These surveys shed light on women's and men's comparative levels of satisfaction with public transport services and other public infrastructure, their relative confidence in local police and the judicial system, and their perceived ability to move around freely and safely in public spaces.

³⁹ Ongena and Popov (2016) show that in transition countries with higher generalised levels of gender bias, female entrepreneurs are more likely to opt out of the loan application process even when banks do not appear to actively discriminate against women when they apply for credit.

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Annex 4.1. ICT and the knowledge economy

The knowledge economy can be broadly defined as an economy that is able to grow through innovation. The knowledge economy commonly makes up a large percentage of all economic activity in developed economies, driving productivity, investment, the upgrading of skills and, ultimately, economic growth.

Information and communication technology (ICT) and the knowledge economy can also foster equality of opportunity, as the EU's "Digital Agenda" recognises.¹ This can be achieved, for instance, by delivering better public services, helping to reduce individuals' energy consumption and revolutionising health care. Moreover, digital financial services allow people to send and receive money to/from distant relatives and friends, enabling them and their businesses to better withstand economic shocks. In addition, eGovernment services and payments – such as social security payments made via mobile phones – can significantly reduce travel and waiting times, especially in remote rural areas, thus allowing people to spend more time earning a living.² Such services can also drastically reduce corruption and the associated costs to society. Rural areas may benefit particularly strongly from access to ICT, as improved availability of information will allow farmers to manage agricultural risks more effectively and increase productivity.³

Against that background, this annex assesses ICT infrastructure in 20 countries where the EBRD operates.⁴ It finds that significant progress has been made with the adoption and implementation of best practices in terms of policies, legislation and regulation, as demonstrated by the growth seen in ICT services (notably as regards access to broadband, eGovernment, eCommerce and digital broadcasting).

Notwithstanding that overall progress, market conditions continue to vary widely when it comes to investment in broadband infrastructure, resulting in significant variation from country to country in terms of broadband take-up, internet usage, eGovernment services and use of eCommerce. This annex focuses on ICT infrastructure that enables consumers, organisations and businesses to participate fully in the knowledge economy – looking, for example, at electronic communications networks providing access through high-speed broadband services, as well as the market for digital services. The digital services that are most relevant to the knowledge economy include high-speed internet, eGovernment, eCommerce and digital broadcasting.

The Digital Agenda

The EU's Digital Agenda employs a number of key policy and regulatory enablers for the ICT sector. For instance, there are clear policy objectives aimed at providing all EU citizens with access to high-speed broadband. In addition, the EU framework encourages investment and provides effective safeguards for consumers and investors by fostering competitive markets. Public funding is made available with a view to achieving universal high-speed broadband access in areas of market failure (primarily more remote rural areas, as discussed below).

Although the governments of the countries under assessment recognise the importance of investing in ICT infrastructure and services, additional commitment, investment and innovation are required in many of those countries in order to further develop knowledge economies. Furthermore, a number of key policy and regulatory enablers still need to be put in place. This assessment examines the enablers that are already in place in the countries in question and the results that have been achieved to date. It then compares them with the policies, regulatory enablers and results observed under the EU's current regulatory framework. The EU model has been chosen because it represents an achievable set of practices that have already been implemented in the ICT markets of a wide range of countries.

Regulation of ICT infrastructure

Legal and regulatory frameworks governing ICT infrastructure markets have undergone significant changes since the latter part of the 20th century, driven by the rapid development of digital technologies and the internet. Traditional telecommunications and broadcast media services markets have been transformed by these technological developments. In particular, the traditional model involving a state-owned monopoly on telecommunications and broadcasting has been largely replaced by a more liberalised competitive supply of fixed and mobile services, in order to meet the more sophisticated demands of consumers wanting higher-quality services, greater mobility and high-speed access to a full range of internet and media services.

The pace of the ICT market's transformation has varied from country to country. One of the main determinants of the speed of the transition from monopolistic to competitive markets has been the progress made by each country's policy-makers in terms of adopting legal and regulatory frameworks that facilitate such developments. Putting in place modern digital network infrastructure with competitive service delivery requires an effective and supportive institutional framework in which all investors – whether existing operators or new market entrants – have confidence.

Following the wave of privatisations seen in the electronic communications sector since the 1980s, most investment in that sector is now carried out by private companies. In recent years, however, a parallel role for public investment has been found in the form of subsidies, subject to clear rules on state aid. Such subsidies have primarily been used to accelerate private

¹ See European Commission (2014).

² See Aker et al. (2016).

³ See World Bank (2015).

⁴ Namely, the four southern and eastern Mediterranean (SEMED) countries (Egypt, Jordan, Morocco and Tunisia), seven south-eastern European (SEE) countries (Albania, Bosnia and Herzegovina, Cyprus, FYR Macedonia, Greece, Montenegro and Serbia) and the six Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine), plus Croatia, Kazakhstan and Turkey.

investment in more remote regions, where lower commercial returns on investment would otherwise result in some citizens remaining without access to the full range of public and commercial ICT services.

Assessment objectives

This assessment aims to support the EBRD's analysis of enablers of and impediments to investment in the ICT sector. This will lay the foundations for the development of specific programmes tailored to each individual country, which will help with the formulation of policies, the modernisation of legislation, the strengthening of the institutional base and the fostering of better conditions for investment. The emphasis here is on practical support for the modernisation of countries' regulatory frameworks, focusing on the rolling out of high-speed broadband and the attendant development of the ICT sector.

Assessment methodology: investors' perspective

This annex examines the development of countries' ICT sectors, the legal and regulatory conditions prevailing in those countries and the penetration of broadband services, comparing them with what investors would generally consider to be good practices – namely, the average situation in an EU country. The assessment looks at the various countries' positions in the UN's world rankings on the development of eGovernment, eParticipation and eCommerce, as well as examining information published by the International Telecommunication Union (ITU) on ICT development, broadband penetration, internet usage and the affordability of ICT services.

Taken together, the various components of this comparative

analysis provide an overall assessment of the investment potential in each country. On the basis of the current gaps in ICT services, the cost of giving everyone in these 20 countries access to high-speed broadband would be in the region of €100-200 billion.⁵

Table A.4.1.1 describes the nine key benchmarks used in this assessment. For those benchmarks where statistical data are readily available, comparative scores are calculated using the methodology detailed in Table A.4.1.2 (where Croatia is used as an example). For the remaining benchmarks, where comparable statistical measures are not available, each country is given a score based on the conditions prevailing in that country, as summarised in Table A.4.1.3.

Summary of results

Overall, the results show that the countries under assessment generally lag behind in terms of the development of ICT and the use of broadband services by citizens and businesses. One of the main reasons for this is the existence of a very large gap between the penetration of broadband in those countries and the average levels seen in the EU. On average, there are only 66 broadband subscriptions per 100 residents in the countries assessed, compared with 108 per 100 residents in the EU. There are also clear differences between the two in terms of the development of online services, the level of broadband infrastructure (especially in rural areas), internet usage levels and the affordability of ICT services.

At the same time, demand for broadband services remains extremely high. Total (fixed plus mobile) broadband penetration has grown at an average annual compound rate of 44 per cent since the EBRD's last assessment in 2012.⁶ Broadband users are

TABLE A.4.1.1. Benchmarks and weights

Benchmark	Description	Weight
Clarity of policy	A clearly defined policy on the ICT sector and the knowledge economy involving clear targets for ICT infrastructure and broadband access (as contained in the EU's Digital Agenda, for example), with the full commitment of stakeholders	10%
eGovernment	Average world ranking of all EU countries in the UN's E-Government Development Index, which is a composite measure combining three aspects of eGovernment: the provision of online services, telecommunications connectivity and human capacity	10%
eCommerce	Average world ranking of all EU countries in UNCTAD's B2C E-commerce Index, which is a composite measure combining four indicators: internet usage, secure servers, credit card penetration and postal delivery services	10%
Implementation of an enabling legal and regulatory framework for electronic communications	The EU's legal and regulatory framework for electronic communications, which focuses on specific measures bringing about more effective competitive markets for consumers and investors. These include regulatory measures that contribute to consumer choice in the area of services (particularly broadband services) and competitive market safeguards for operators. The regulatory process uses a modern <i>ex ante</i> market analysis framework. The individual benchmarks used in the assessment are: ease of market entry; carrier selection/pre-selection; portability of landline and mobile numbers; liberalised international traffic; liberalised spectrum; fixed wireless services; virtual mobile services; local loop unbundling; wholesale broadband access; and the use of a competitive market analysis procedure by the regulator.	20%
Digital broadcasting	Liberalised market, with full switchover from analogue to digital terrestrial broadcasting completed	10%
Fixed broadband take-up	Average penetration rate for fixed broadband in the EU	10%
Mobile broadband take-up	Average penetration rate for mobile broadband in the EU	10%
Internet usage	Average percentage of the population using the internet in the EU	10%
Affordability	Average affordability in the EU on the basis of the ITU's ICT Price Basket Index, which is a composite measure combining three service baskets: landline services, mobile services and fixed broadband. Affordability is expressed as the cost of ICT services to end-users as a percentage of gross national income (GNI) per capita.	10%

Source: EBRD ICT sector assessment (forthcoming).

⁵ The estimate depends on the desired broadband penetration (of between 50 and 100 per cent) and assumes an average capital investment cost of €1,000 per internet connection.

⁶ See EBRD (2012).

TABLE A.4.1.2. Assessment methodology for benchmarks using statistical data

Benchmark	Method of calculation	Example for Croatia
eGovernment world ranking using the UN's E-Government Development Index for 2014	Average world ranking for the EU-28 divided by the country's world ranking	Average world ranking for 28 EU countries = 29.2 Croatia's world ranking = 37 Croatia's eGovernment score: $29.2/37 = 7.89/10$
eCommerce world ranking using UNCTAD's B2C E-commerce Index for 2014	Average world ranking for the EU-28 divided by the country's world ranking	Average world ranking for 28 EU countries = 27.5 Croatia's world ranking = 30 Croatia's eCommerce score: $27.5/30 = 9.17/10$
Fixed broadband take-up using ITU data on penetration per 100 residents	Penetration of fixed broadband in the country divided by average penetration in the EU-28	Fixed broadband penetration in Croatia = 23.2/100 Average fixed broadband penetration in the EU = 31.9/100 Croatia's fixed broadband take-up score: $23.2/31.9 = 7.27/10$
Mobile broadband take-up using ITU data on penetration per 100 residents	Penetration of mobile broadband in the country divided by average penetration in the EU-28	Mobile broadband penetration in Croatia = 75.4/100 Average mobile broadband penetration in the EU = 75.7/100 Croatia's mobile broadband take-up score: $75.4/75.7 = 9.96/10$
Internet usage based on ITU data on the percentage of the population who use the internet	Internet usage in the country divided by average internet usage in the EU-28	Internet usage in Croatia = 69.8% Average internet usage in the EU = 79.6% Croatia's internet usage score: $69.8/79.6 = 8.77/10$
Affordability using ITU data on the cost of ICT services to end-users as a percentage of GNI per capita	Average cost in the EU-28 divided by the cost in the country	Average cost in EU countries = 1.7% of GNI per capita Cost in Croatia: 1.5% of GNI per capita Croatia's affordability score: $1.1/1.7 = 6.47/10$

Source: EBRD ICT sector assessment (forthcoming).

TABLE A.4.1.3. Assessment methodology for benchmarks not using statistical data

Benchmark	Criteria	Method of calculation
Clarity of policy	- Existence of a clearly defined and published policy for the ICT sector and the knowledge economy - Stakeholders fully consulted and committed - Clear targets for ICT infrastructure and broadband access	Score awarded out of 10
Implementation of an enabling legal and regulatory framework for electronic communications	- Implementation of a legal framework for electronic communications that is in line with the standards applied by the EU - Full ex ante competitive market analysis - Ease of market entry - Carrier selection/pre-selection available - Landline numbers portable - Mobile numbers portable - Full infrastructure-sharing mandatory - Permits and rights of way easy to grant - International traffic liberalised - Spectrum liberalisation, including usage neutrality - Availability of fixed wireless access - Virtual mobile services available - Local loop unbundling available - Wireless broadband access available	Score awarded out of 20
Digital broadcasting	- Commencement of digital terrestrial broadcasts - Analogue switch-off completed	Score awarded out of 10

Source: EBRD ICT sector assessment (forthcoming).

also demanding higher speeds and improvements in quality as ICT markets develop.

All of the countries under assessment are developing eGovernment as a means of improving access to public services and increasing the efficiency of their delivery. Meanwhile, businesses in those countries are increasingly adopting online eCommerce models in the interests of efficiency and competitiveness. However, on the basis of their world rankings for eGovernment and eCommerce, those countries continue to lag behind their neighbours in the EU. In the area of eCommerce, there is a need for legal safeguards to ensure privacy and online security, with greater involvement in online payments on the part of the banking sector, in order to foster greater confidence among users and encourage participation. There is also a general need to improve the scope and efficiency of eGovernment services and promote their use.

The most important step now is to reduce the “broadband gap” between the countries under assessment and EU averages. The EU has been successful in terms of achieving high levels of broadband penetration. Fixed and mobile broadband services are already available to 97 per cent of EU citizens and premises, and one aim of the Digital Agenda initiative is for all citizens to have access to high-speed broadband (with speeds in excess of 30 Mbps) by 2020. The countries of the EU have also implemented a common legal and regulatory framework that promotes effective competitive markets. Finally, the EU uses innovative implementation and funding models that boost infrastructure investment in its more remote rural areas. EU countries have plenty of experience of using cost-efficient rural investment models and innovative public-private funding models.

In the EBRD region, although demand is generally being met in urban areas in increasingly competitive conditions,

the investment required to extend high-speed broadband infrastructure into less profitable rural areas is not yet being provided. Effective access to ICT markets requires high-speed broadband infrastructure based on next-generation technologies (mainly fibre backbone networks with fibre/VDSL or 4G/LTE⁷ for customer access). All countries need to invest more in high-speed broadband infrastructure, yet many countries still lack a number of key enablers.

In this regard, the main broad recommendations of this assessment are as follows:

1. National policies for the ICT sector should continue to emphasise the importance of a knowledge-based economy for the achievement of sustainable growth and benefits to society. Legal and regulatory frameworks should foster the development of ICT, establishing conditions that will allow all citizens and businesses to be given online access to public services and commercial markets via competitive modern broadband services.
2. The development of eGovernment services should be continued, with a particular focus on promoting the full use of online public services by consumers and businesses. Progression from simple accessing of information to interactive use will lead to significant efficiencies in the delivery of public services. Similarly, all enablers required to foster confidence in eCommerce should be put in place. These include the protection of users' data, in preparation for the significant increase in eCommerce that can be expected as a result of increasing credit card ownership and improvements in postal delivery services. Specific assistance should be given to small and medium-sized enterprises when it comes to adopting ICT services and acquiring digital skills.
3. All enablers fostering investment in essential ICT infrastructure should be put in place with a view to achieving universal access to high-speed broadband. The key enablers are as follows:
 - a) A clear broadband policy, with clearly defined targets (such as universal access to high-speed broadband).
 - b) A clear national broadband plan which sets out specific legal and regulatory enablers, implementation measures and timetables for efficient investment, making full use of competitive markets. That plan should also specify the public and private stakeholder participation that is required to meet the universal targets set out in the relevant broadband policy.
 - c) Specific broadband infrastructure projects in rural areas, with full stakeholder participation, with a view to bringing modern competitive broadband services to citizens and businesses in more remote areas.

Detailed recommendations for each country are contained in a forthcoming assessment report. Table A.4.1.4 summarises the priority areas for the various countries.

TABLE A.4.1.4. Priority areas for individual countries

	Clear policy and targets	National broadband plan with specific enablers fostering investment in infrastructure	Projects serving rural areas
Egypt	Medium	High	High
Jordan	High	Medium	High
Morocco	Medium	Medium	High
Tunisia	High	Medium	High
Albania	Medium	High	High
Bosnia and Herz.	High	High	High
Cyprus	Low	Low	Medium
FYR Macedonia	High	Medium	High
Greece	Low	Low	Medium
Montenegro	Low	Medium	High
Serbia	Low	High	High
Armenia	High	High	High
Azerbaijan	High	High	High
Belarus	Medium	High	High
Georgia	Medium	Medium	High
Moldova	Medium	Medium	High
Ukraine	High	High	High
Croatia	Low	Low	Medium
Kazakhstan	High	High	High
Turkey	High	Medium	High

Source: EBRD ICT sector assessment (forthcoming).

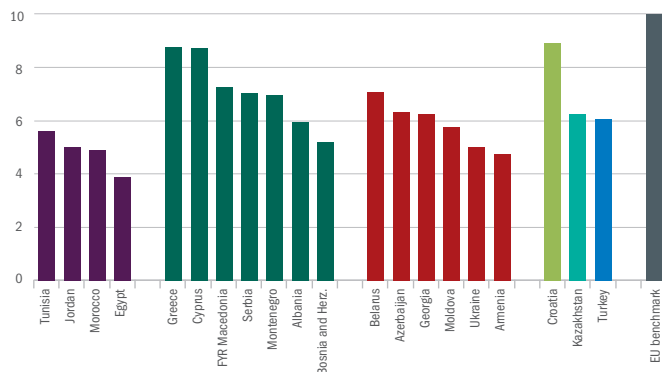
Country scores

Chart A.4.1.1 presents the countries' overall ICT scores, using the average level of development in the EU (which corresponds to a score of 10) as a benchmark. The overall assessment score represents a combination of a number of components, as outlined in Tables A.4.1.2 and A.4.1.3 (namely a clear policy framework, eGovernment, eCommerce, the legal and regulatory framework, digital broadcasting, fixed broadband, mobile broadband, internet usage and affordability).

Croatia, Cyprus and Greece, as EU countries, have the requisite legal and regulatory framework, which is the factor with the most weight in terms of the calculation of the overall ICT score (accounting for 20 per cent of the total). In addition, Albania, FYR Macedonia and Montenegro have also managed to align their regulatory frameworks for electronic communications fairly well with the standards applied in the EU. Bosnia and Herzegovina and Serbia have implemented the EU's 2003 framework, but have yet to fully adopt its 2009 framework. Meanwhile, Georgia, Moldova and Turkey have already implemented many of the features of the 2009 framework, and Armenia, Jordan, Morocco and Tunisia are broadly in line with the 2003 framework. The legal frameworks of Azerbaijan, Belarus, Egypt, Kazakhstan and

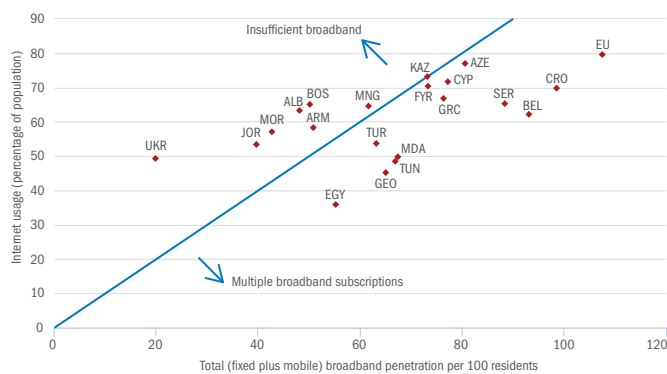
⁷ VDSL: very-high-bit-rate digital subscriber line. LTE: long-term evolution.

CHART A.4.1.1. ICT sector assessment scores



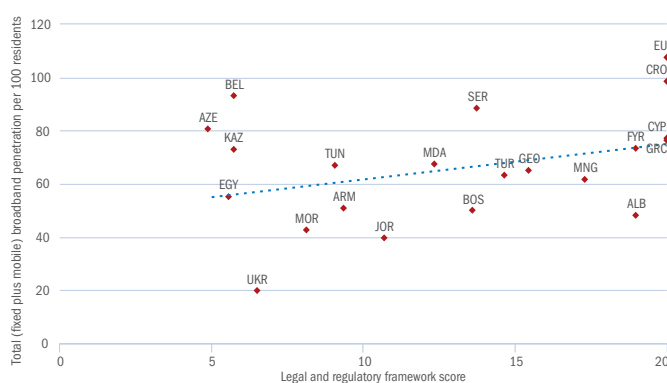
Source: EBRD ICT sector assessment (forthcoming).

CHART A.4.1.2. Broadband penetration and internet usage



Source: EBRD ICT sector assessment (forthcoming).

CHART A.4.1.3. Legal framework for ICT and broadband penetration rates



Source: EBRD ICT sector assessment (forthcoming).

Ukraine, on the other hand, differ significantly from that of the EU.

In the area of eGovernment, there is a wide range of scores, reflecting the differing levels of development in the various countries. Tunisia is ranked 72nd in the world, ahead of Albania (82nd), Morocco (85th), Armenia (87th), Jordan (91st), Bosnia and Herzegovina (92nd) and Egypt (108th). Azerbaijan, Georgia, Ukraine, Cyprus, Moldova, Turkey and FYR Macedonia are ranked between 56th and 69th, while Kazakhstan, Croatia, Serbia, Greece, Belarus and Montenegro are ranked between 33rd and 44th. The average ranking for EU countries is 29th.

When it comes to eCommerce, the non-EU countries are generally not so well developed. The four SEMED countries, plus Montenegro, Bosnia and Herzegovina, Georgia, Armenia and Kazakhstan are ranked between 73rd and 88th in the world. Serbia, Ukraine, Moldova, Albania, Azerbaijan and Belarus are ranked between 52nd and 62nd, while Croatia, Cyprus, FYR Macedonia, Greece and Turkey are all ranked in the top 50 in the world. Croatia, at 30th, sits just below the EU average of 27th. Countries with lower rankings for eGovernment and eCommerce (such as the SEMED countries) tend to also have lower levels of broadband penetration. Besides limitations on access, lower levels of eCommerce activity and eParticipation are also linked to a relative lack of confidence in online transactions, lower levels of participation in online payments on the part of banks and generally inferior digital skills among businesses and citizens.

All of the countries under assessment have internet usage levels that are lower than the EU average (which stands at around 80 per cent). All of the SEE countries have internet usage levels in excess of 60 per cent, as do Croatia and Kazakhstan. Egypt, Georgia, Moldova, Tunisia and Ukraine all have usage levels of less than 50 per cent.

Although broadband markets (both fixed and mobile) are growing fast in all countries, broadband penetration varies widely from country to country, with levels generally lower than those observed in the EU. Albania, Armenia, Bosnia and Herzegovina, Jordan, Morocco and Ukraine have the lowest levels of broadband penetration at less than half of the EU average. Only Belarus, Croatia and Serbia have levels approaching the EU average. In the remaining countries, broadband penetration rates are between 50 and 80 per cent of the EU figure.

Internet usage tends to be higher where broadband penetration is higher (see Chart A.4.1.2). In a number of countries (Albania, Bosnia and Herzegovina, Jordan, Morocco and Ukraine) internet usage significantly exceeds broadband penetration (see the dots above the line), whereas the opposite is true in the EU. This indicates that existing broadband infrastructure and services are not sufficient to serve all internet users individually, with the result that multiple users share broadband subscriptions. In contrast, other countries (notably Belarus, Croatia, Egypt, Georgia, Moldova, Serbia and Tunisia) have broadband penetration that significantly exceeds internet usage, indicating that internet users are taking out more than one broadband subscription.

Countries with more supportive legal frameworks tend to have higher broadband penetration rates (see Chart A.4.1.3), although

some countries (notably Azerbaijan, Belarus and Kazakhstan) have achieved relatively high levels of broadband penetration by means of state-led, more monopolistic approaches to infrastructure investment, with subsidies used to keep retail prices relatively low. In contrast, other countries (notably Albania and Montenegro) have adopted legal and regulatory frameworks that foster competition and investment, but not yet achieved good levels of broadband penetration. In these countries, the prices of ICT services are still relatively high.

Only Cyprus, Greece, Kazakhstan and Turkey have fixed broadband service prices that are as affordable as in the EU, where average fixed broadband penetration (32 connections per 100 residents) is achieved at a relatively low cost to users (around 1.1 per cent of GNI per capita). Some of the assessed countries with relatively low fixed broadband prices (such as Belarus, Croatia, Cyprus and Greece) have high levels of fixed broadband penetration (see Chart A.4.1.4). In contrast, Moldova has achieved good levels of fixed broadband penetration (16 connections per 100 residents), but at a relatively high cost to users (around 6 per cent of GNI per capita). Ukraine has low levels of fixed broadband penetration (fewer than 12 connections per 100 residents), despite relatively low prices (less than 2 per cent of GNI) being charged to users.

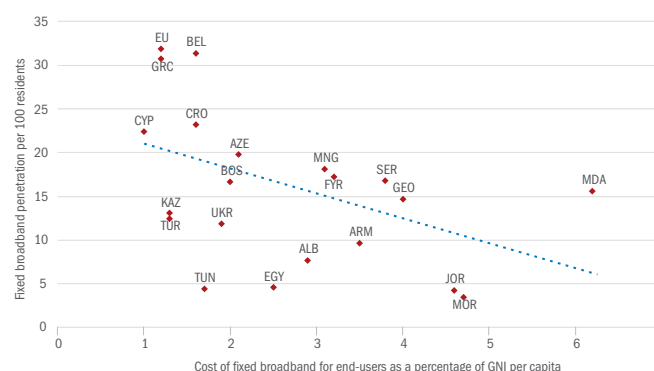
Conclusion

The 20 countries under assessment vary widely in terms of access to ICT services. Broadband penetration levels range from 20 to 98 per cent of the population. In terms of the development of ICT services, those countries' world rankings for eGovernment and eCommerce range from 30th to 108th. Internet usage ranges from 36 to 77 per cent of the population, while the cost of fixed broadband services varies widely, ranging from around 1.1 to around 6 per cent of GNI per capita.

The relative positions of the various countries are summarised in Chart A.4.1.5. The countries in the central white area have an average level of broadband services and an average level of ICT development, while Belarus, Croatia, Cyprus, Greece and Serbia in the top right-hand corner have high levels of broadband penetration and ICT development. In contrast, Albania, Egypt, Jordan, Morocco and Ukraine in particular are under-achieving in terms of both broadband penetration and ICT development.

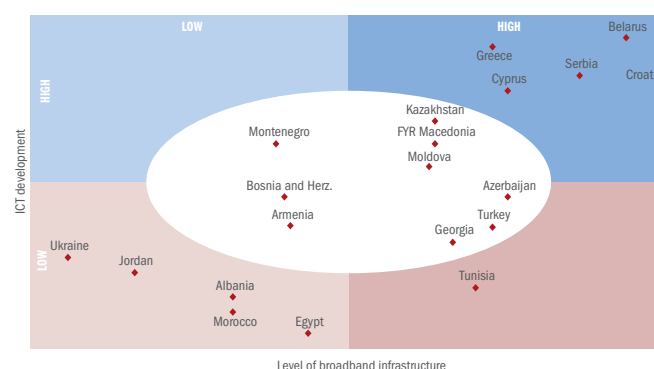
The relationships between the development of ICT, broadband penetration, the affordability of ICT services and internet usage are complex, and there is no single determinant of the effectiveness of ICT markets. The key enablers appear to be broadband infrastructure (as reflected in the penetration rates for fixed and mobile broadband) and the competitiveness of the market (underpinned by a sound legal and regulatory framework). Countries that score highly in terms of these key enablers appear to enjoy higher levels of ICT development and provide more affordable internet services covering more of the population. Other factors also play a role, including the development of eGovernment and eCommerce – which are, in turn, linked to the level of broadband penetration.

CHART A.4.1.4. Fixed broadband prices and penetration rates



Source: EBRD ICT sector assessment (forthcoming).

CHART A.4.1.5. Broadband infrastructure and ICT development



Source: EBRD ICT sector assessment (forthcoming).

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MACROECONOMIC OVERVIEW



5

CONSECUTIVE YEARS OF
ECONOMIC SLOWDOWN IN
THE EBRD REGION

0.5%

AVERAGE ANNUAL GROWTH
RATE IN THE EBRD REGION
IN 2015, DOWN FROM
1.9% IN 2014

AROUND

0.1%

OF GDP: VALUE OF
NET CAPITAL INFLOWS
IN THE CEB AND SEE
REGIONS IN 2015

AROUND

30%

DECLINE IN REMITTANCES
FROM RUSSIA TO CENTRAL
ASIA, THE CAUCASUS
AND MOLDOVA IN LOCAL
CURRENCY TERMS IN 2015

Following four consecutive years of deceleration, the average annual growth rate in the region where the EBRD invests fell further to stand at 0.5 per cent in 2015. It is expected to pick up modestly in 2016 and 2017. Low commodity prices and the continued recession in Russia are weighing on the economic performance of both Central Asia and eastern Europe and the Caucasus. At the same time, decreases in the cost of energy imports are benefiting the economies of central and south-eastern Europe as well as Turkey, where growth momentum has been sustained. Those economies have also benefited from accommodative policies in the eurozone, although expectations of monetary tightening in the United States of America have led to a decline in capital flows to the EBRD region.

Introduction

The average annual growth rate in the region where the EBRD invests declined sharply in 2015, falling to just 0.5 per cent, down from 1.9 per cent in 2014. This deceleration is broadly in line with the projections made last year and reflects divergent growth trends within the EBRD region.

In Russia, Central Asia, and eastern Europe and the Caucasus (EEC), the economic outlook has remained weak. Commodity exporters have been negatively affected by the low oil prices, while other economies in the region have been suffering because of the recession in Russia, which is a major source of remittances and an important trading partner. In terms of the combined economic significance of trade, investment and remittances, Russia remains the main economic partner for most economies in the EEC region and Central Asia, followed by the eurozone. That said, China is rapidly gaining in importance as an economic partner (see the discussion in the May 2016 *Regional Economic Prospects in EBRD Countries of Operations*).¹

In contrast, countries in central Europe, south-eastern Europe (SEE) and the southern and eastern Mediterranean (SEMED) have continued to benefit from low commodity prices and an accommodative monetary policy in the eurozone, as has Turkey.

These economies have generally been less affected by the reversal of capital flows to emerging markets, as they benefited less from the previous upturn in flows than economies in Asia and Latin America. Turkey, which is a notable exception in this regard, has benefited from decreases in the cost of fuel imports, which have partially offset the impact that reduced capital flows have had on its external position.

Global economic environment

The last year has been characterised by moderate growth in advanced economies and a slight deceleration in China and other emerging markets, in combination with declines in commodity prices and subdued growth in international trade. In addition, global financial markets have experienced bouts of volatility, partly reflecting developments in China and the United Kingdom (UK).

The price of Brent crude oil fell from around US\$ 50 per barrel in September 2015 to US\$ 28 per barrel in January 2016, before recovering to stand at around US\$ 45-55 per barrel in August 2016. The lows observed in January reflected the further weakening of global growth and strong production in countries such as Saudi Arabia and other members of the Organization of the Petroleum Exporting Countries (OPEC), as well as expectations of increased oil production in Iran (which had previously been subject to sanctions). Since then, expectations of a further decline in oil production in the United States of America (USA) and greater confidence in China's economic prospects have led to gradual increases in oil prices.

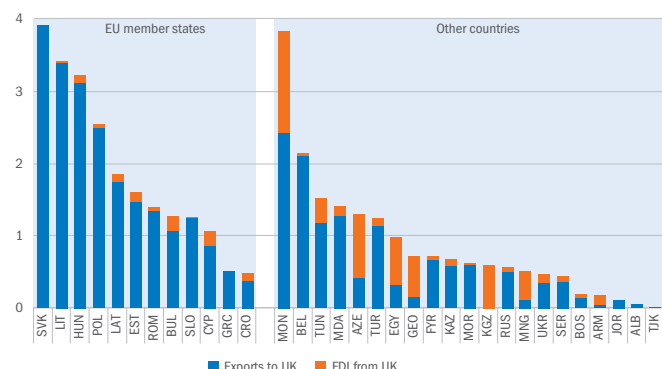
Volatility in global financial markets increased substantially in the first few months of 2016, with the global VIX index – a measure of volatility based on option prices – spiking almost threefold to stand at levels last seen during the eurozone debt crisis in 2011. A fresh downward correction in China's equity markets at the start of the year sparked a reassessment of global prospects among investors. Bank shares came under strong pressure, particularly in Europe, with investors taking account of the impact of new regulations on the bailing-in of creditors in bank resolutions, as well as high (and, in some countries, rising) non-performing loan (NPL) ratios. Global equity markets have largely recovered the losses recorded at the start of the year.

Volatility in European and global financial markets also increased in response to the UK's referendum on 23 June 2016 on whether or not to stay in the European Union, in which 52 per cent of voters favoured leaving. The terms and timing of the UK's departure from the EU are uncertain and will be the subject of complex negotiations. The direct impact on the region where the EBRD invests is expected to be limited, as the UK accounts for a relatively small percentage of trade and investment flows to/from those countries (see Chart M.1). The high levels of UK foreign direct investment (FDI) seen in Mongolia and Azerbaijan are concentrated in the natural resources sector.

Emigrants from EU countries who reside in the UK represent significant percentages of the populations of their countries of origin (more than 5 per cent in the case of Latvia and Lithuania; see Chart M.2). Depending on the nature and timing of the UK's

¹ See also Levitin et al. (2016).

CHART M.1. Export and investment links with the UK as a percentage of GDP



Source: Bank for International Settlements (BIS), International Monetary Fund (IMF), United Nations Conference on Trade and Development (UNCTAD), national authorities and authors' calculations.

exit from the EU, some of these migrants may relocate elsewhere in the EU or return to their home countries. This has the potential to boost the pool of skilled labour and entrepreneurial capital in the recipient economies, while also causing short-term pressures on domestic labour markets.

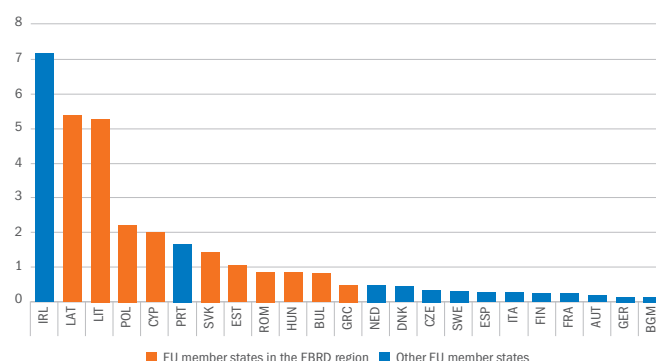
The UK's exit from the EU could end up having a greater impact through adverse effects on other EU economies (see Box M.1), which will depend, in turn, on the impact that the UK referendum has on political developments in individual member states. In the longer term, a reduction in the EU budget following the UK's departure may result in declines in the EU structural funds available to EU member states in the SEE region and central Europe and the Baltic states (CEB).

The US Federal Reserve raised its funding rate by 0.25 percentage point in December 2015, the first rate increase since the financial crisis of 2008-09. Markets expect the Federal Reserve to raise that rate further in 2016-17, but only gradually, given the relative weakness of the global economy and concerns about the UK's eventual departure from the EU.

Capital flows to emerging markets are expected to decline, with monetary policy in the USA expected to gradually tighten. The Institute of International Finance (IIF) estimates that net portfolio capital flows to emerging markets totalled around US\$ 20 billion in 2015, which represents a decline of approximately 80 per cent relative to the average figure for 2013-14 and the lowest reading since 2008. Portfolio flows appear to have picked up slightly in the first half of 2016. China has experienced significant capital outflows in both 2015 and 2016, partly reflecting the refinancing of external debt using domestic sources.

In contrast, the European Central Bank (ECB) expanded its quantitative easing programme in March 2016. Monthly asset purchases have increased to €80 billion and now cover selected corporate bonds. The deposit rate has moved further into negative territory, and banks are now able to receive long-term funding at negative interest rates in the ECB's targeted longer-term refinancing operations (TLTRO II). At the same time, banks' capital constraints and the fact that companies already have

CHART M.2. Emigrants from EU countries who now reside in the UK as a percentage of the population of their country of origin



Source: UK Office of National Statistics, IMF and authors' calculations.
Note: Data relate to 2014.

large cash holdings (relative to the levels seen in the USA) are reducing the effectiveness of those measures.

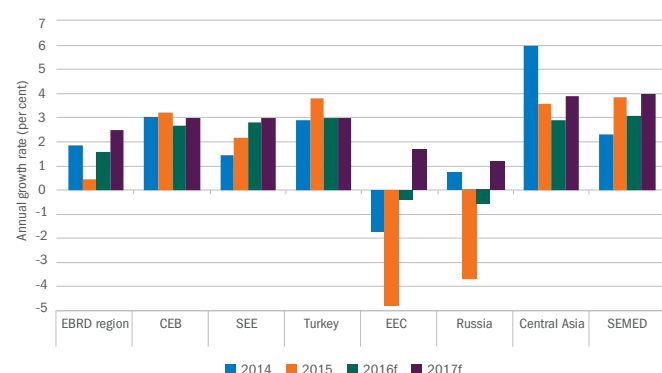
Growth in global trade has remained subdued in 2015 and 2016. This reflects a weakening of demand in advanced economies and major commodity exporters, the fact that services are gradually making a larger contribution to China's economy while the contribution of manufacturing is declining, and reductions in investment activity (reflected in reduced shipments of capital goods). In volume terms, global trade grew at an annual rate of just 2.8 per cent in 2015, compared with an annual average of 5 per cent over the last two decades.

Geopolitical tensions remain a major source of risk for the global economy. Countries across the region where the EBRD operates continue to be affected by the refugee crisis, with Jordan and Turkey affected the most. In addition, geopolitical tensions and terrorism have had a significant negative impact on income from tourism in Egypt and Tunisia – and, to a lesser extent, Greece and Turkey. On the other hand, countries such as Croatia and Montenegro may have benefited from tourists seeking alternative destinations during the summer season.

Economic growth in the region

The annual growth rate in the CEB region averaged around 3 per cent in 2015, virtually unchanged from 2014 (see Chart M.3). In most cases, this was supported by a combination of strong private consumption, a recovery in investment activity (helped by the accelerated utilisation of EU structural funds) and reductions in the cost of fuel imports. Croatia's economy grew for the first time in seven years on the back of a good tourist season, a strengthening of external demand and reductions in oil prices. The annual growth rate in the SEE region averaged in excess of 2 per cent, up from 1.5 per cent in 2014, despite a slow-down in Greece. The economic situation in Greece remains very tough, with GDP falling by 1.4 per cent year on year in the first quarter of 2016. Nevertheless, Greece has made progress with a number of important reforms, enabling the disbursement of further financial support from the European Stability Mechanism

CHART M.3. Economic growth



Source: National authorities, IMF and EBRD projections.

Note: In the key, f = forecast.

in June 2016 under its current adjustment programme.

In Russia, output contracted by 3.7 per cent in 2015, with consumption and investment remaining weak and government spending declining in real (inflation-adjusted) terms. The economy remained in recession in the first half of 2016. A sharp decline in imports owing to the weakness of the rouble, on the other hand, made a positive contribution to overall growth. Ukraine's economy contracted by almost 10 per cent in 2015, but the recession bottomed out in the second half of the year. In fact, annual growth slowed in all EEC economies in 2015, also turning negative in Belarus and Moldova. The average annual growth rate in Central Asia likewise declined markedly, falling from 6 per cent in 2014 to less than 4 per cent in 2015, reflecting the region's strong dependence on Russia and commodity exports.

Turkey's economy grew by 4 per cent in 2015, with consumers increasing their purchases of durable goods against the backdrop of the weakening of the lira. A large influx of refugees and a supportive fiscal stance also played an important role in propping up consumption. That strong growth momentum was sustained at the start of 2016, although economic uncertainty has since risen following the attempted coup d'état in July.

Resilient consumption and a rebound in investment in Egypt, along with higher agricultural output in Morocco, supported economic activity in the SEMED region, where growth accelerated to almost 4 per cent in 2015 from 2.3 per cent in 2014. At the same time, growth slowed in Jordan and Tunisia, reflecting deteriorating security conditions both domestically and across the region as a whole.

Trade

Growth in the volume of exports emanating from the region where the EBRD invests has slowed in recent years, in line with global trends. Export growth has been slower in the east of the EBRD region (namely, in the EEC region, Central Asia and Russia; see Chart M.4). In fact, exports from Russia, the EEC region and Central Asia grew more slowly than their respective economies between the mid-2000s and 2014. In contrast, while global

CHART M.4. Annual growth in export volumes



Source: IMF, World Trade Organization (WTO) and authors' calculations.

Note: "EBRD East" comprises the EEC region, Central Asia and Russia. "EBRD West" comprises Turkey and the CEB, SEE and SEMED regions. "World" represents an estimate based on WTO data.

growth in export volumes has lagged behind economic growth since 2011, reversing a long-term trend, exports from Turkey and the CEB, SEE and SEMED regions have continued to grow faster than output. This reflects, in part, the lower levels of economic growth seen in the region in recent years.

Capital flows

Net capital flows to the region declined in 2015, mirroring broader trends in emerging markets. In the CEB and SEE regions, balance of payments data indicate net capital inflows totalling around 0.1 per cent of GDP in 2015, compared with 1.1 per cent of GDP in 2014 (see Chart M.5). Net private capital outflows from Russia moderated further in 2015, with a significant percentage of the external debt owed by banks and companies having been repaid in previous quarters.

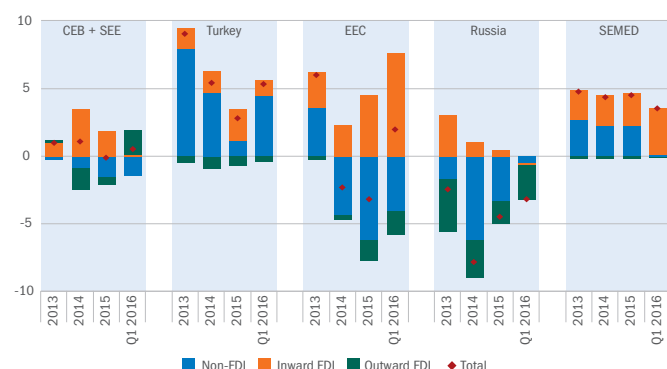
The up-and-down pattern of capital flows, which reflects changing expectations regarding the Federal Reserve's monetary policy stance, has been less pronounced in the EBRD region than it has been in emerging Asia and Latin America. During the period of loose monetary policy in advanced economies and quantitative easing in the USA, capital flows to emerging Asia and Latin America averaged around 5 per cent of GDP (see Chart M.5), approximately 1.5 percentage points of GDP more than before the 2008-09 financial crisis. Capital flows then declined markedly in 2015.

In contrast, emerging Europe has, on average, experienced a steady reduction in capital inflows in recent years. When measured relative to recipient countries' GDP, those net inflows have been similar in size to those observed in other emerging markets. At the same time, in the case of emerging Europe, current levels represent around half of those experienced during the pre-crisis boom of the 2000s (when inflows were, to a significant extent, driven by cross-border bank lending).

Unlike non-FDI flows,² FDI flows to emerging markets increased by 1.5 per cent in 2015, according to preliminary estimates by the United Nations Conference on Trade and Development (UNCTAD). At the same time, FDI flows to

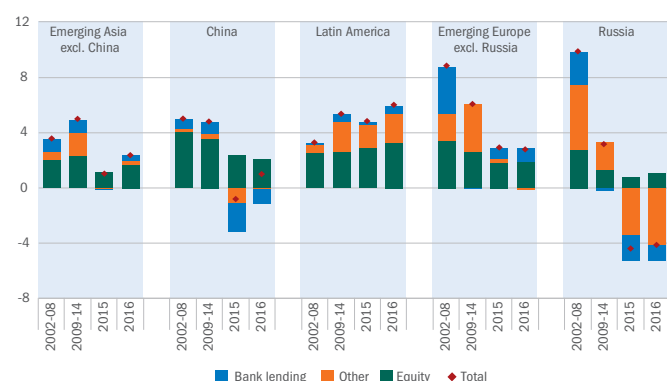
² Non-FDI flows include portfolio investment and debt flows except shareholder loans.

CHART M.5. Capital flows to/from the EBRD region as a percentage of GDP



Source: National authorities via CEIC Data and authors' calculations.

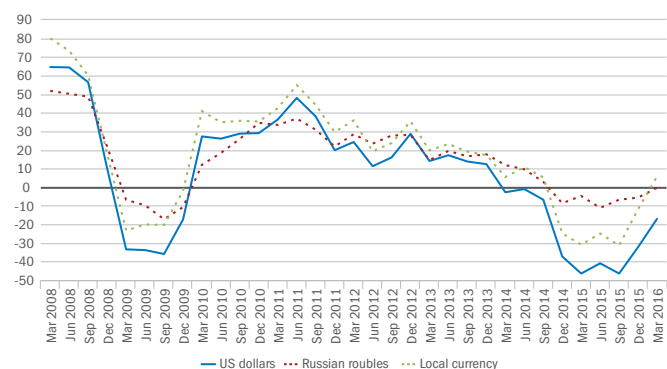
CHART M.6. Average net non-resident private capital flows as a percentage of GDP



Source: IIF and authors' calculations.

Note: Values for 2016 are IIF forecasts based on trends observed in the first half of the year.

CHART M.7. Year-on-year percentage changes in remittances from Russia



Source: Central Bank of Russia, Bloomberg and authors' calculations.

Note: Based on data on remittances to Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, the Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

commodity-dependent economies declined significantly, both globally and in the region where the EBRD invests, as major projects were put on hold and investors reassessed the medium-term prospects of those economies. In contrast, FDI flows to Turkey increased, partly offsetting the reduction in non-FDI flows, while in Mongolia the economy was supported by the prospect of the second phase of the Oyu Tolgoi project – a major copper and gold mining initiative – being implemented.

Capital flows to emerging markets recovered somewhat in the first half of 2016, and they are expected to pick up further on the back of a search for yield, against the backdrop of low rates in advanced markets and reduced concerns about the slow-down in China. What is more, increases in commodity prices support capital flows to commodity-exporting countries. At the same time, the pick-up in capital inflows in emerging Europe is expected to be weaker than those observed in other regions, partly owing to higher levels of perceived geopolitical risk.

Remittances

Remittances from Russia to Central Asia and the EEC region fell by around 40 per cent in 2015 in US dollar terms and continued declining in the first quarter of 2016. However, when expressed in rouble terms, remittances decreased by less than 10 per cent, which suggests that the fall was largely attributable to exchange rate movements (see Chart M.7).

When expressed in the currencies of the individual recipient countries, remittances declined by an average of around 30 per cent in 2015, as most national currencies weakened against the US dollar but strengthened against the Russian rouble. This suggests that decreases in remittances may exert further pressure on the external balances of these economies.³

Currency movements

The region's currencies have weakened further against the US dollar, mirroring broader trends in emerging markets and reflecting reduced inflows of capital and subdued demand for emerging markets' exports (often commodities). The currencies of Russia, the EEC region and Central Asia have tended to weaken the most. The currencies of the region's major oil exporters (namely Azerbaijan, Kazakhstan and Russia) have adjusted in a way that has broadly maintained, or restored, the price of a barrel of oil in local currency terms (see Chart M.8), thus supporting budget revenues (in nominal terms) and helping to maintain the value of international reserves. In oil-importing countries, energy has become significantly cheaper in local currency terms.

Credit conditions

Recent surveys of lenders indicate that credit conditions in the region have eased slightly, albeit less so than in other emerging markets. At the same time, credit growth remains subdued in most countries in the CEB and SEE regions. In Turkey, Russia, the EEC region and Central Asia, credit growth has slowed markedly. Indeed, in many instances it has turned sharply negative in

³ Based on data from the Central Bank of Russia. Discrepancies between data reported by the Central Bank of Russia and figures provided by authorities in recipient countries have increased, possibly reflecting greater use of informal channels for sending money between countries.

inflation-adjusted terms, after years of rapid credit expansion.

As was highlighted in the *Transition Report 2015-16*, levels of NPLs in the region remain high by the standards of emerging markets globally and are continuing to limit banks' ability and willingness to provide fresh credit. Kazakhstan, Romania and a number of other countries made significant progress with the removal of NPLs from banks' balance sheets over the last year, although in some cases these assets may remain on the books of special vehicles that are fully owned by the originating banks.

A forthcoming EBRD paper finds that growth rates in countries with persistently high NPL ratios tend to be significantly lower (when controlling for various factors), as those high ratios place a considerable burden on banks and companies alike.⁴ Causality between NPLs and growth runs both ways: reducing NPL ratios boosts growth, while stronger growth helps to lower those ratios. Indeed, in some cases, ratios have eventually fallen on account of a favourable external environment and strong credit growth. As one would expect, growth levels in such instances tend to be significantly higher than they are in the presence of persistently high NPL ratios. However, countries can achieve similar growth dividends by actively seeking to reduce their stock of NPLs – thereby lowering their NPL ratios – from high to moderate levels. This results in gains of around 2 percentage points in terms of additional annual growth (see Chart M.9).⁵

These findings highlight the value of policies aimed at proactively reducing the stock of NPLs – for instance, policies that remove tax and regulatory disincentives to write off non-performing loans, tighten provisioning rules and/or establish specialist asset management companies to purchase and handle NPLs.

Inflation

The current period of low oil prices has contributed to disinflation in most commodity-importing countries. In several CEB and SEE countries, consumer prices have been declining, on average, since 2012. In contrast, countries whose currencies have weakened substantially have seen rising inflation, largely owing to increases in the prices of imported goods.

By mid-2016, 23 countries in the EBRD region had adopted some form of inflation target (with seven doing so by virtue of joining the eurozone). Of the remaining countries, around half currently peg their currencies to the euro or the US dollar.

In all but four of the countries with some form of inflation target, consumer price inflation rates were below target levels at the end of June 2016, with demand pressures remaining weak and economies having adjusted to lower commodity prices. Most of those countries' central banks have lowered their policy rates in the last 12 months (see Chart M.10). Meanwhile, where countries' inflation rates are above target levels, central banks have tended to tighten monetary policy, albeit with some notable exceptions. In Russia, for example, the central bank has begun loosening its policy stance, as annual inflation has been falling towards its indicative target of 4 per cent in 2017. Annual inflation in Russia stood at 7 per cent in July 2016, down from 15 per cent 12 months earlier, reflecting weak domestic demand (and the end

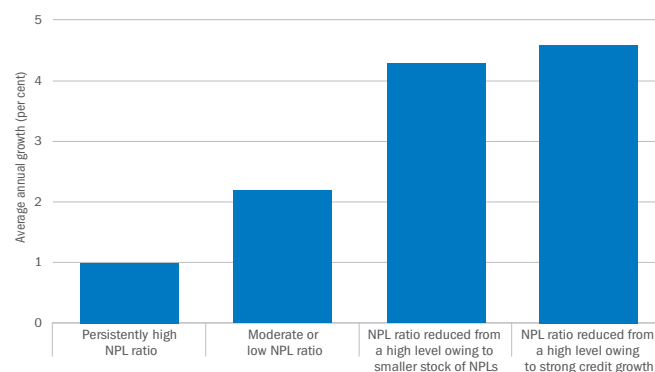
CHART M.8. Oil price and exchange rate developments



Source: Bloomberg.

Note: Upward movements denote appreciation against the US dollar.

CHART M.9. Average growth depending on the evolution of NPL ratios



Source: Balgova and Plekhanov (2016).

Note: Based on a broad sample of 100 developed and developing countries during the period 1998-2014. Definitions of NPLs may vary across countries. High NPL ratios are defined as those in excess of 8 per cent.

of base effects resulting from the sharp depreciation of the rouble and the ban on selected food imports). In Turkey, the impact of a weaker currency has outweighed the effect of declining commodity prices, with inflation remaining well above the central bank's target and the policy rate remaining unchanged.

Outlook and risks

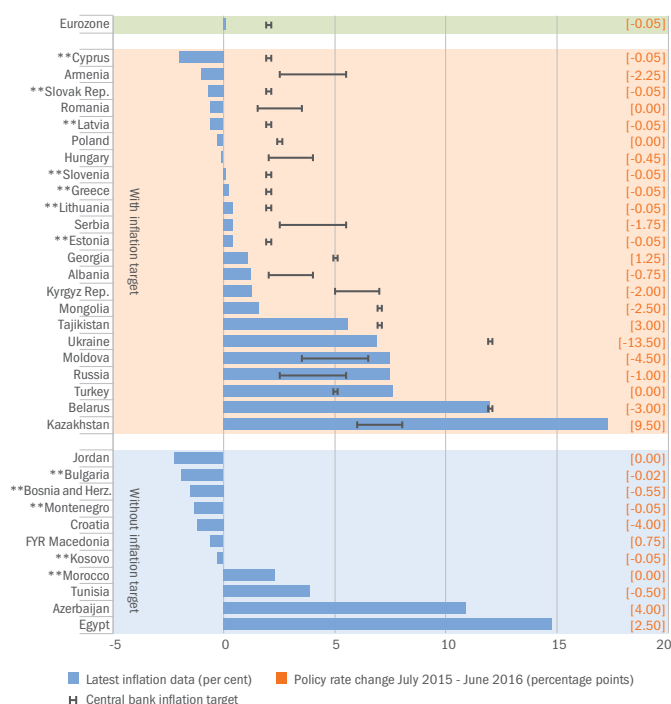
The average annual growth rate in the region where the EBRD invests is expected to rise from 0.5 per cent in 2015 to around 1.5 per cent in 2016. That modest recovery is then expected to continue in 2017, with an average annual growth rate of 2.5 per cent, as growth in Russia and a number of EEC economies returns to positive territory and economic growth in the SEMED region and Central Asia strengthens.

The economic outlook for the CEB region remains relatively strong, on the back of accommodative policies in the eurozone and sustained low commodity prices. Income convergence is set to continue, with average annual growth rates in the region close to 3 per cent in 2016 and 2017. Similarly, the average annual

⁴ See Damijan (2016) for evidence of how excessive debt affects the performance of companies in the EBRD region, with a negative impact on both supplier and customer firms.

⁵ See Balgova and Plekhanov (2016).

CHART M.10. Inflation rates and central bank targets



Source: National authorities via CEIC Data.

Note: The rates shown are year-on-year figures based on consumer price indices. ** denotes a country that uses the euro as legal tender or as an anchor for its exchange rate peg. Inflation targets include indicative targets for future time periods; 2016 targets are shown where available.

growth rate in the SEE region is expected to increase in 2016, before rising further to stand at around 3 per cent in 2017.

Russia's recession is expected to continue in 2016, reflecting low oil prices and reduced availability of investment funding, with modest levels of positive growth expected in 2017. The low commodity prices and the recession in Russia will continue to weigh on growth in the EEC region and Central Asia. Following a deep contraction in 2015, Ukraine's economy is on course to return to positive growth in 2016, supported by the implementation of its structural reform programme, although confidence among investors remains weak.

Following a strong economic performance in 2015, growth in Turkey is projected to moderate in 2016 and 2017, as the outlook for private investment appears to be weaker and figures for tourist arrivals are expected to recover only gradually. The short-term outlook for the SEMED region has also weakened, reflecting an expected decline in tourist numbers and a subdued demand for exports, but growth is expected to pick up again in 2017.

These projections are subject to risks, notably those related to geopolitical tensions in and around the region. The conflict in Syria and the threat posed by Islamic State risk exacerbating the refugee crisis. The economies of the SEMED region and Turkey have the potential to be particularly strongly affected by the instability in the Middle East. The situation in eastern Ukraine

also remains volatile. Moreover, a sharp deceleration in China's growth could further exacerbate investors' loss of confidence and amplify volatility in global markets, which could be compounded by concerns about the health and profitability of global banks in the current low interest-rate environment. Although growth in China has already slowed noticeably, China's contribution to global demand remains broadly unchanged compared with the mid-2000s, as the Chinese economy has become significantly larger in nominal US dollar terms. However, a "hard landing" in China could result in a marked decline in global demand. Prolonged weakness in commodity prices and any fresh declines in the price of oil could also exacerbate pressures on the economies of Russia and other commodity exporters, as well as countries in Central Asia and the EEC region with close economic ties to Russia.

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Box M.1. Potential spillovers from weaker growth in the UK, the eurozone, China and Russia

Following the UK referendum on EU membership, the UK's National Institute of Economic and Social Research (NIESR) cut its UK growth forecast for 2017 by 1.7 percentage points, pointing to the risk of a sharp slow-down in adverse scenarios (see also the July 2016 update to the IMF's World Economic Outlook).⁶ How will weaker growth in the UK affect the region where the EBRD invests? And how does this potential impact compare with the effects of other external shocks that the region has been exposed to in recent years, such as the weakening of growth in China, the subdued economic activity in the eurozone, or the recession in Russia (which has been aggravated by Western sanctions and declining oil prices)?

In answer, this box estimates the impact of growth shocks in the UK, the eurozone, China and Russia using a global vector autoregressive (GVAR) model. That model encompasses countries accounting for more than 90 per cent of global GDP and captures various channels for economic stress, modelling its transmission through the real economy (via international trade, for instance), financial markets (via interest rates and equity prices) and global commodity prices. It also captures the complex interlinkages that allow shocks to propagate through third parties (spreading, for example, from the UK to the eurozone and then from the eurozone to central Europe). For each country, the external variables in the estimation represent weighted averages of estimates of domestic variables for other countries.⁷

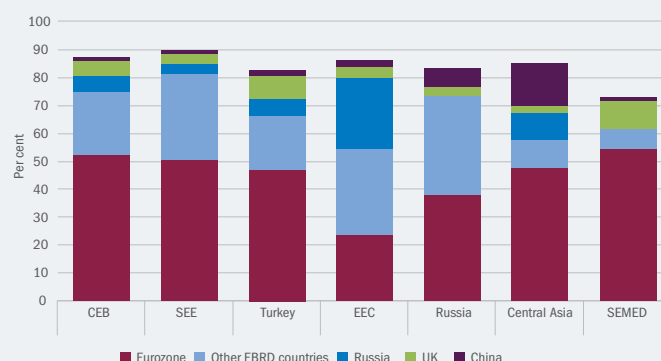
The weights are based on a combination of export revenues, remittances and investment, thus reflecting the fact that the various economic partners are important in a number of different respects (see Chart M.1.1). The eurozone is the main economic partner for most countries in the EBRD region. Direct economic links with the UK are relatively modest in scope, primarily reflecting trade and FDI flows. Most economies in the EEC region and Central Asia have close ties with Russia (as do the Baltic states) on account of trade and remittances. The strongest economic links with China can be found in Central Asia, primarily reflecting investment flows and exports.

A negative growth shock in the eurozone has the largest impact (see Table M.1.1). A 1 percentage point decrease in growth in the eurozone translates, on aggregate, into a 0.8 percentage point reduction in average growth in the EBRD region. The impact is strongest in Turkey, the CEB region (excluding Poland), the SEE region (excluding Greece), Russia and Ukraine. In contrast, Poland appears to be highly resilient to external shocks.

A 1 percentage point decline in UK growth is estimated to translate into a 0.4 percentage point reduction in average growth in the EBRD region. That impact stems largely from indirect channels, such as weaker growth in the eurozone and the tightening of financial conditions in the USA, the eurozone and globally. In contrast, the direct impact of a UK slow-down is limited to a 0.1 percentage point decline in the EBRD region's growth, with no strong impact on any of the individual regions.

In contrast, the impact of a recession in Russia stems mostly from direct channels. The overall impact is relatively modest, but concentrated in Ukraine, the Kyrgyz Republic and selected economies

CHART M.1.1. Relative importance of economic partners for various regions/countries



Source: BIS, IMF IFS, UNCTAD, World Bank, Comtrade and authors' calculations.

Note: Data are based on exports, remittances and FDI inflows. The residual percentages denote the rest of the world.

in the EEC region. A 1 percentage point decline in China's growth is estimated to have approximately half of the impact of a slow-down in the eurozone, with the largest impact being observed in the SEE region (excluding Greece), Russia and Ukraine, as well as certain economies in Central Asia.

Overall, these results suggest that while the projected recovery in the Russian economy is likely to have a positive effect on growth in the region, those benefits could be more than offset if risks to growth in the eurozone and China were to materialise. The UK's exit from the European Union could have a significant impact on the region to the extent that it could affect the economic outlook for the eurozone.

TABLE M.1.1. Estimated impact of a 1 percentage point decline in growth in the UK, the eurozone, China and Russia (average impact over one year; percentage points)

	UK		Eurozone		China	Russia
	Total	Direct	Total	Direct		
EBRD region	-0.4	-0.1	-0.8	-0.5	-0.4	-0.2
CEB excl. Poland	-0.2	0.0	-1.0	-1.0	-0.3	-0.2
Poland	0.1	0.0	0.1	0.1	0.0	-0.1
SEE excl. Greece	-0.4	0.1	-1.0	-0.6	-0.5	-0.3
Greece	-0.4	0.0	-0.4	0.6	-0.3	-0.1
EEC excl. Ukraine	-0.4	-0.1	-0.6	-0.7	-0.4	-0.2
Ukraine	-0.7	-0.2	-1.0	-0.8	-0.7	-0.9
Turkey	-0.2	-0.1	-1.2	-1.3	-0.4	-0.2
Russia	-0.6	-0.2	-1.0	-0.4	-0.6	
Central Asia	-0.4	0.0	-0.5	0.2	-0.3	-0.2
SEMED	-0.2	0.0	-0.5	-0.5	-0.3	0.1

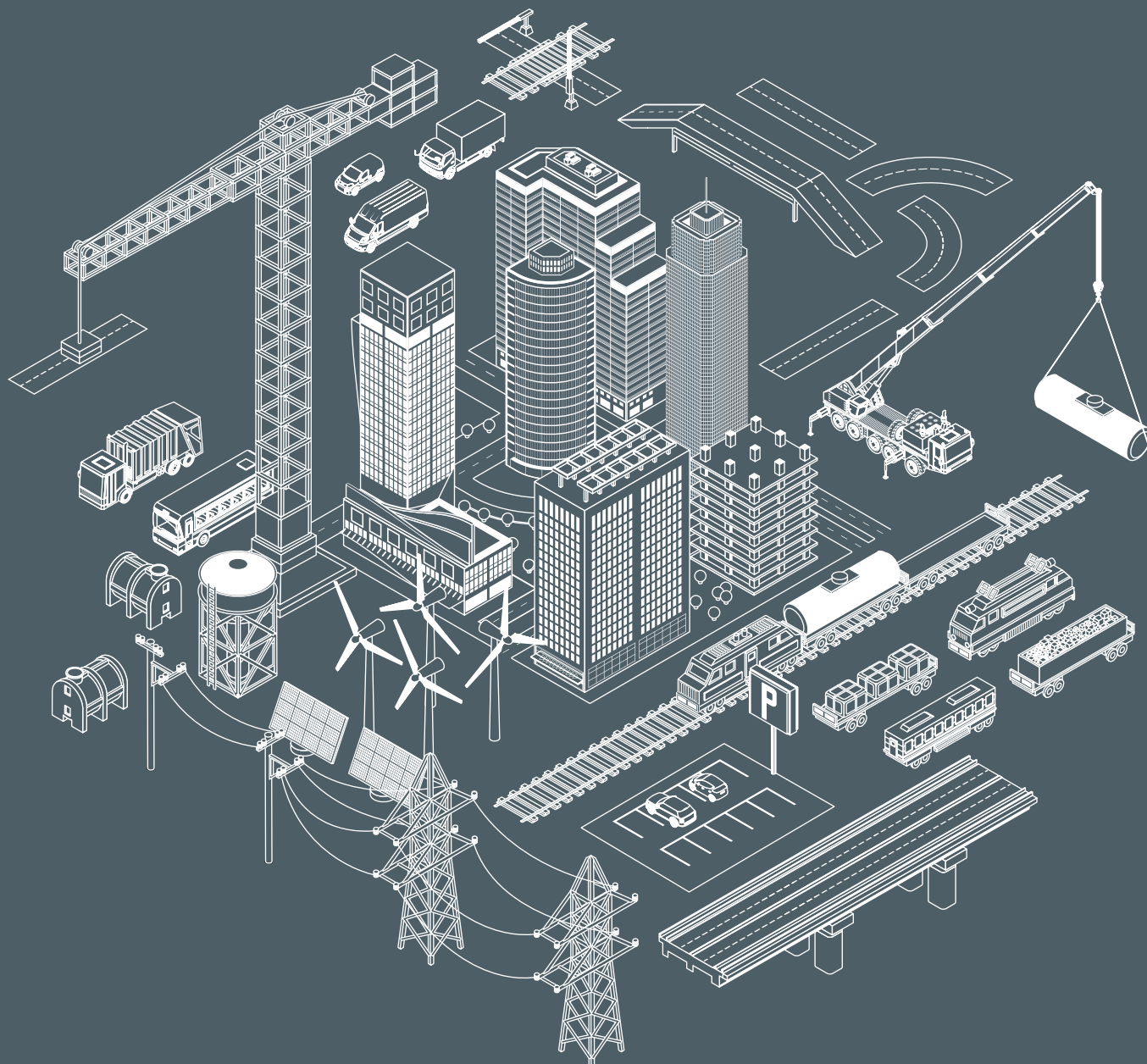
Source: Authors' calculations.

Note: The table shows point estimates derived from a GVAR model encompassing 35 different countries/regions and is based on quarterly data for 2001-15. Point estimates are average impulse responses over the first four quarters following a shock. The weights used to calculate regional aggregates are based on GDP at purchasing power parity.

⁶ See NIESR (2016) and IMF (2016).

⁷ The model follows Dées et al. (2007) in terms of the choice of domestic variables, incorporating GDP, inflation, exchange rates, equity market indices and both short and long-term interest rates, as well as including global variables such as the price of oil, metals and agricultural commodities. Data cover the period from 2001 to 2015.

STRUCTURAL REFORM



ASSESSMENT SCORES
PLACED ON POSITIVE
WATCH OR UPGRADED
OUTNUMBER THOSE PLACED
ON NEGATIVE WATCH OR
DOWNGRADED BY

15 TO 10

US\$ 50 MILLION
THE SIZE OF THE FIRST
INSTITUTIONAL-QUALITY
PRIVATE EQUITY FUND
IN BELARUS

29 OF 36

COUNTRIES IN THE EBRD
REGION ARE MEMBERS OF
THE WTO, WITH KAZAKHSTAN
THE LATEST TO JOIN IN
NOVEMBER 2015

42%

OF COUNTRIES IN THE
REGION THAT ARE
COVERED BY THE NEW
SME INDICATORS HAVE
LARGE GAPS IN TERMS
OF BUSINESS SKILLS
AND STANDARDS

Political and economic challenges persist across the region, and governments are continuing to respond with a variety of approaches. On balance, policy responses remain positive, with many countries pursuing ambitious reform objectives. New analysis focusing on the development of small and medium-sized enterprises shows that providing non-bank financing to such firms and helping them to acquire better business skills are particular hurdles for many countries in the EBRD region. Updates to regional inclusion gap scores point to some improvements in the area of inclusion, particularly in more advanced countries, but also some stagnation and backtracking. This highlights the remaining challenges of building more inclusive societies, especially in eastern and south-eastern Europe, Central Asia and the southern and eastern Mediterranean region.

Introduction

The last year has again seen significant variation across the EBRD region in terms of the measures adopted in response to new and continuing political and economic challenges. The financial sectors of many crisis-hit countries have shown further signs of stabilisation, continuing to recover strongly following the recapitalisation of banks and the restructuring of non-performing loans (NPLs). Other countries, meanwhile, have experienced severe solvency or liquidity crises as deteriorating external conditions have exposed vulnerabilities in their banking sectors or their economies as a whole. Differing policy measures appear to be having an equally divergent impact on the region's corporate sectors, with some governments implementing successful privatisation and liberalisation plans, while others have responded with increasingly burdensome tax regimes or trade restrictions. Recent developments in energy and infrastructure have generally been favourable, with the positive trend towards better frameworks for energy markets continuing and increases

in private-sector participation supporting improvements in the provision of transport and municipal services.

The EBRD has been systematically tracking the progress of transition and structural reforms since the first *Transition Report* was published in 1994. Since 2010, its focus has been on transition at the sectoral level, with 18 sectors being assessed in each country in terms of the progress made with the establishment of market structures and market-supporting institutions. The methodology underlying these sector-level scores is currently the subject of a thorough review and may be altered substantially in the coming years. As a result, the *Transition Report 2015-16* adopted a “light-touch” approach, which is repeated this year. Rather than carrying out a full update, this section reviews some of the main developments over the last year and flags major changes that could potentially – but will not necessarily – warrant the upgrading or downgrading of those sector-level scores in the future. In a small number of cases, scores have been updated, resulting in upgrades or downgrades, rather than merely being placed on watch. The watch list that has been compiled this year shows a mixed picture of progress and reversals which is discussed in more detail on a sectoral basis in the sections that follow. The online country assessments contain in-depth country-specific analysis of progress and reversals over the last year (see tr-ebd.com).

This year, Greece has been included in this analysis for the first time. In addition, a new set of transition indicators looking at the financing and development of small and medium-sized enterprises (SMEs) is presented. This assessment reflects the more comprehensive and integrated approach that the EBRD has adopted in recent years in support of SMEs. Rather than focusing purely on the financing of SMEs and supply-side issues, this new assessment also takes account of the role that skills and standards play for such firms, as well as important aspects of the business environment, where shortcomings can have a disproportionate effect on SMEs.

Lastly, this section updates the EBRD's inclusion scores. The availability of new survey data thanks to the third round of the *Life in Transition Survey* (LiTS III), which is analysed in detail elsewhere in this report, has resulted in a reassessment of regional inclusion gaps. The youth and gender inclusion scores have also been updated, but they have not changed significantly relative to last year's report.

Sector-level transition indicators

Table S.1 presents the current transition scores – which range, as usual, from 1 (denoting little or no progress with market-oriented reforms) to 4+ (denoting the standards of an advanced industrialised economy) – for 17 sectors¹ in 36 countries in the EBRD region. As explained above, the scores are mostly the same as those published in the *Transition Reports* of 2014 and 2015, since a full update has not been carried out. However, major reforms and other developments have taken place over the last year that may potentially entail changes to scores in the future. Consequently, a number of scores in the table are shaded in green, indicating that they have been put on “positive watch” (or, in a few cases, upgraded), while others are shaded in red, signalling that they have been put on “negative watch” (or, in a couple of cases, downgraded). Again, the former outnumber the latter – by 15 to 10 – although the margin has narrowed somewhat relative to last year. Some of the scores on last year’s watch list are still there, while others (which are shaded in beige) have been removed owing to anticipated developments stalling, being reversed or having an unexpectedly limited impact. In addition to one new upgrade that had not been flagged last year, three of the scores that were on positive watch last year have been turned into one-notch upgrades, whereas we have two downgrades this year. At a broad sectoral level, the largest number of new developments is in the financial sectors, with five scores placed on positive watch or upgraded and six placed on negative watch or downgraded. Positive developments outnumber negative developments in all of the other sectors, continuing the more positive outlook seen last year.

Infrastructure

The effects of developments in the infrastructure sector that were reported last year have become much clearer. This has led to some rating changes following countries being put on watch last year. However, it has also resulted in a number of countries being removed from the watch list where reforms have ended up advancing more slowly than expected or the effects of changes have been more limited than expected.

Two countries, for instance, that were put on positive watch last year in the roads sector have been upgraded. The first is Belarus, which has moved from 2 to 2+. A key factor in this upgrade is the introduction of an electronic toll system in 2013 and the fact that it has subsequently been extended to cover larger parts of the country’s road network. Similarly, the introduction of a new system for collecting tolls from heavy goods vehicles has resulted in Russia’s score being upgraded from 3- to 3. Slovenia has been put on positive watch in light of the country’s motorway management company Družba za Avtoceste v Republiki Sloveniji (DARS) having awarded a contract for a nationwide system of truck tolling to the consortium of Q-Free and Telekom Slovenije. Croatia, on the other hand, has been taken off positive watch because the privatisation of a major road construction and maintenance company has been delayed, while Poland and Kazakhstan have

been removed because delays are affecting the implementation of public-private partnership projects. Lastly, there is one new addition to the watch list for the roads sector, albeit a negative one. In Ukraine, road funding switched in 2015-16 from a dedicated fund to the general state budget. However, a law on the establishment of a new road fund has not yet passed through parliament.

In the railways sector, Croatia and the Slovak Republic have been taken off positive watch, as opening these markets up to the private sector has had only a limited impact on the market structure in the two countries, with the private sector’s market share remaining relatively small. Similarly, last year’s IPO and SPO for freight operator PKP Cargo in Poland represented an important development, but it was not significant enough to lead to an upgrade, given the maturity of the market. Ukraine, on the other hand, is a new addition to the positive watch list on account of its efforts to commercialise and modernise the national railway operator, Ukrzaliznytsia. Positive steps include the corporatisation of the organisation (which was previously an integral part of the Ukrainian Ministry of Transport), the approval of a comprehensive restructuring plan including the separation of cargo and passenger transport, and the appointment of an independent CEO (who is a former head of Polish railway company PKP Cargo).

There have only been a few significant developments in the area of municipal infrastructure. In the urban transport sector, the two countries that were on last year’s positive watch list have been removed. In Hungary, the number of new routes being served by private bus operators has ended up being smaller than expected. In Russia, meanwhile, the introduction of a new parking system in Moscow has not proved significant enough to warrant an upgrade. There are no other new developments to report for this sector.

There is, however, a new entry on the positive watch list for the water and wastewater sector. The introduction in 2015 of a tariff calculation methodology for Kazakhstan’s utilities sector which includes an element of profit represents a positive development. As a result, a number of water companies have secured six-year tariffs with approved annual tariff increases that are expected to cover operating and capital costs. In addition, Armenia has been taken off negative watch, as the envisaged privatisation of the country’s operating lease is designed to partly offset the drawbacks of the recentralisation seen in the sector last year. However, it remains to be seen whether consolidating water assets under a single operator will achieve its stated objectives of imposing greater spending discipline and curbing corruption.

¹ Details of the financing and development of SMEs are presented in Table S.2.

TABLES.1.1. Sector-level transition indicators in 2016: overall scores

	Corporate sectors				Energy		Sustainable Resources			Infrastructure			Financial sectors				
	Agribusiness	General Industry	Real estate	ICT	Natural resources	Electric Power	Sustainable energy	Materials efficiency	Water efficiency	Water and wastewater	Urban transport	Roads	Railways	Banking	Insurance and other financial services	Private equity	Capital markets
Central Europe and the Baltic states																	
Croatia	3	3+	3+	4	4-	3	3-	3	3	3+	3+	3+	3-	3+	3+	2+	3+
Estonia	3+	4+	4+	4	4	4+	3-	3+	3	4	3+	3	4	4-	3+	3-	3
Hungary	4	4-	4-	4-	4-	3	3	3+	3+	3+	3+	4-	3+	3	3	3	3+
Latvia	3	4-	4-	3+	4-	3+	3+	3	3+	3+	4-	3	4-	3+	3+	2+	3+
Lithuania	3+	4	4-	4-	4-	3+	3+	3+	3	3+	4-	3	3	3+	3+	2+	3
Poland	3+	4-	4-	4	3	3+	3	3	3	4-	4-	4-	4-	4-	3+	3+	4-
Slovak Republic	3+	4+	4	4†	4-	4	3	3+	3+	3+	3+	3+	3+	4-	3+	2+	3
Slovenia	4-	3+	4	3+	3+	3	3+	3	3	3+	3+	3	3	3	3+	3-	3+
South-eastern Europe																	
Albania	3-	2+	3-	3+	3-	2+	3+	2	2	2+	3-	3-	2	3-	2	1	2-
Bosnia and Herzegovina	3-	2	2-	2+	2	2+	2	2	2+	2	2+	3	3+	3-	2+	2-	2
Bulgaria	3	3+	3+	4-	3+	3	3-	3-	3-	3	3+	3-	3+	3	3+	3-	3-
Cyprus	3-	4+	3	4-	3-	3	3-	2+	3-	3+	3+	3	Not applicable	3†	3*	Not available	3+
FYR Macedonia	3-	3	3-	4-	2+	3	2+	2	2	2+	3-	3-	3-	3-	3-	1	2-
Greece	4+	4+	3+	4-	3-	3	4-	3-	3-	4-	4-	3+	3-	3+	3*	3*	3+*
Kosovo	2+	2-	2-	2+	2	2+	2-	2	2-	2+	2+	2+	3-	2+	2	1	1
Montenegro	2+	2+	2+	3+	3+	2+	2	2+	2+	2	3	2+	2+	3-	2+	1	2
Romania	3	3+	3+	3+	4-	3+	3+	3-	3-	4-	3+	3	3+	3	3+	3-	3-
Serbia	3-	3-	3-	3	2	2+	2+	2+	2	2+	3-	3-	3	3-	3	2	2
Turkey	3-	3	3+	3+	3+	3+	3	3-	2+	3-	3	3-	3-	3+	3	3-	4
Eastern Europe and the Caucasus																	
Armenia	3-	3	3-	3	2+	3+	3-	2-	2	3-	2+	3-	2+	2+	2	1	2
Azerbaijan	2+	2	2	2-	2+	2+	2+	2	2-	2-	2	2+	2+	2	2	1	2-
Belarus	2+	2	2	2	1	1	2	2+	2	2-	2	2+†	1	2	2	1	2-
Georgia	3-	3-	3-	3-	2	3+	3-	2-	2-	2	2+	2+	3	3-	2	1	2-
Moldova	3-	2-	2+	3	3	3	2+	2	2	2	3	3	2	2†	2†	2-	2
Ukraine	3-	2+	3-	3-	2-	3	2+	2	2	2+	3-	3-	2+	3-	2+	2	2
Russia	3-	3-	3-	3+	2	3+	2	3-	3-	3	3	3†	4-	3-	3-	2+	4-
Central Asia																	
Kazakhstan	3-	2	3	3	2-	3	2-	1	2	2+	2+	3-	3	2+	2+	2-	2
Kyrgyz Republic	2+	2	2+	3	2-	2+	2	1	2-	2	2	2-	1	2	2-	1	2-
Mongolia	3-	2+	2	3	2	2+	2	1	2+	2	2	2-	3-	2+	2	2-	2-
Tajikistan	2	2-	2-	2+	1	2	2+	1	1	2	2	2-	1	2	2-	1	1
Turkmenistan	1	1	1	2-	1	1	1	1	1	1	1	1	1	1	2-	1	1
Uzbekistan	2	1	2	2	1	2+	2-	1	2-	2-	2	1	3-	1	2	1	1
Southern and eastern Mediterranean																	
Egypt	2	2	2+	3	1	2+	2+	2-	2-	1	2	2+	2-	2+	2+	2	2+
Jordan	2	2+	3-	3+	2+	3	2+	2	2	2-	2+	3-	2	3	2+	2	2
Morocco	2+	3-	3-	3+	2-	2	3	2	2+	2+	3	3-	2	3	3-	2+	3
Tunisia	3-	3+	3-	3	2	2	3-	2+	2+	2	2+	2+	2+	2+	2+	2-	2+

Source: EBRD.

Note: The transition indicators range from 1 to 4+, with 1 representing little or no change relative to a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy. For a detailed breakdown of each of the areas of reform, see the methodological notes in the online version of this *Transition Report* (tr.ebrd.com). A colour code is used to indicate that a country/sector has been placed on positive/negative watch or upgraded/downgraded: green indicates positive developments over the last year, while red indicates negative developments. An upgrade or downgrade is denoted by an arrow next to a score. Watch list entries from last year that have been retained are denoted by a green or red frame, whereas removals from the watch list are shaded in beige. The SME finance indicator has also undergone an assessment of positive and negative developments, but is presented in Table S.2 with its new components. * denotes that overall score reflects market structure gap only.

Green shading denotes country/sector on positive watch.
 Red shading denotes country/sector on negative watch.
 Beige shading denotes removal of previous watch list flag.

Energy

There have been lots of reforms in the energy sector in recent years, and there seems to be a continued appetite for change in a number of countries. In Bulgaria, for example, the government has introduced a plan to tackle losses in the energy system. Against the backdrop of policy dialogue efforts by the EBRD and other international financial institutions, the new plan aims to strengthen the financial stability of the sector. It includes the refinancing of existing losses, the renegotiation of expensive power purchase agreements and increased payments for electricity. Furthermore, ongoing capacity-building on the part of the regulator should help to improve the regulation of the network. Similarly, the Serbian government's commitment to the reform of the power sector was demonstrated in the first phase of the corporate restructuring of state-owned public utility EPS in July 2015. In line with the reorganisation plan adopted in December 2014, EPS was separated into production, distribution and supply arms. The second phase involves transforming the firm into a joint-stock company. Following the restructuring of the company, the government intends to seek minority private equity participation in order to improve the sustainability of EPS operations and ensure professional management. In addition, the retail electricity market was fully opened up in January 2015, although households and smaller commercial consumers will retain the right to be supplied by EPS at regulated prices.

In the natural resources sector, one notable development in the last year is the strong start that the Ukrainian authorities have made with their tough reform programme, which includes measures to tackle inefficiencies in the governance of energy company Naftogaz. Furthermore, the Ukrainian Cabinet of Ministers approved Naftogaz's unbundling plan in July 2016.

Sustainable resources

In the context of the EBRD's Sustainable Resource Initiative, last year's *Transition Report* presented two new indicators measuring progress relating to sustainable use of water and materials. Given their newness, no updates are included for these two areas this year. However, the third indicator in this category, sustainable energy, has been reviewed. As a result, three countries have been taken off positive watch and one has been taken off negative watch.

Despite progress with the transposition of EU directives, little progress has been made with the implementation of a new supporting framework for renewable energy in Poland. That framework would have facilitated a move away from a green certificate system towards an auction-based system, which would have been in line with EU recommendations on support for renewable energy. Its absence could mean a decline in new investment in 2016 and beyond. In parallel, an environmental law focusing on social and grid stability concerns has significantly restricted the growth of onshore wind technology by imposing minimum distance requirements that rule out the majority of potential locations for future windfarm projects. As a result,

growth in the production of renewable electricity is expected to slow substantially, making it more difficult to achieve the country's renewable energy target for 2020.

In Kazakhstan, significant amendments to the country's Green Economy Law have failed to lead to increases in renewable energy and energy-efficiency projects owing to the persistence of other barriers (including low energy prices, which discourage investment in energy efficiency). Furthermore, this year the government has decided to suspend until 2018 the trading and penalties put in place under the Kazakhstan Emission Trading Scheme.

In FYR Macedonia, meanwhile, last year's positive developments relating to the government's new renewable energy strategy have not resulted in any significant structural changes. Despite the previous commitment shown by the country, its failure to adopt renewable action plans agreed with the Energy Community has resulted in it being taken off positive watch.

Albania, on the other hand, is no longer on negative watch, as some progress has been made with the approval and implementation of key legislation on renewable energy and energy efficiency.

The only country on the negative watch list in this area is Romania, where authorities have embarked on successive retrospective modifications to the support mechanisms for operational renewable energy installations, increasing uncertainty for many owners of renewable energy assets and potential investors.

Corporate sectors

Developments in corporate sectors have been mixed over the last year. In Albania, a moratorium on the issuance of building permits has created difficulties in the construction sector, resulting in the country being removed from the positive watch list for general industry. Egypt, meanwhile, has been taken off positive watch and put on negative watch owing to reductions in its openness to trade. To ease pressure on the currency, the government has rationed access to foreign exchange and restricted imports. In this context, tariffs have been increased for a range of products, and import barriers have been put in place. Likewise, the business environment in Tajikistan is also becoming increasingly difficult. Driven by mismatches between tax revenues and budgetary needs in a weak macroeconomic environment, the tax administration has become increasingly aggressive towards private sector companies. These challenges are being exacerbated by macroeconomic policies such as currency controls, which may weigh on new investment. Slovenia, on the other hand, has been put on positive watch in light of a new privatisation strategy approved in mid-2015. Under that new strategy, progress has been made with the privatisation of several companies, including Paloma, Unior, Cimos, Mariborska livarna Maribor and a number of other smaller companies. Kazakhstan, meanwhile, has been put on positive watch in the agribusiness sector. Kazakhstan officially joined the World Trade Organization

in 2015, and its most-favoured-nation tariffs for agricultural products have decreased on average since 2014. This is evidence of greater liberalisation in terms of prices and trade. The country has also seen improvements in agricultural productivity and hygiene standards.

In the ICT sector, the Slovak Republic, which was put on positive watch last year, has been upgraded from 4- to 4. The completion of the privatisation of Slovak Telekom addressed one of the key remaining transition challenges in this sector. Meanwhile, spectrum liberalisation in Albania has resulted in that country being put on positive watch. AKEP, which regulates the sector, has allocated spectrum licences to several companies for the provision of 2G, 3G and 4G services and lifted existing restrictions on the use of certain bandwidths.

Financial sectors

Many countries' financial sectors are still feeling the impact of the various crises that have hit the region in recent years. Efforts to clean up banking systems and increase resilience to future shocks are under way in many countries, but some countries are continuing to struggle with the effects of currency depreciation, non-performing loans and solvency issues.

Given the extent of the 2014 banking scandal in Moldova – which saw US\$ 1 billion in assets (around 13 per cent of the country's GDP) disappear from the banking system, reflecting low levels of corporate governance and transparency – and the fact that there have been limited signs of improvement, the country's banking sector, which was put on negative watch last year, has been downgraded from 2+ to 2. Given that these negative developments reach beyond the banking sector, the score for insurance and other financial services has also been downgraded from 2+ to 2.

Azerbaijan, meanwhile, is being put on negative watch in light of an increase in financial sector vulnerabilities. Two-step devaluations in 2015 led to balance sheet pressure in the banking sector and to increased dollarisation. Azerbaijan's Financial Markets Supervisory Authority, which was established in February 2016 to replace the central bank as the sector's regulator, has taken an active stance on restructuring in the banking sector. By mid-September 2016, 10 out of 43 banks had been closed and a number of remaining banks had been required to present recapitalisation or restructuring plans.

In Croatia, new legislation forcing banks to convert Swiss franc-denominated loans, which has resulted in large losses for banks and dented their willingness to lend, has led to the country being placed on negative watch.

Negative developments have also been seen in Poland, where regulatory and legal changes (including the introduction of a levy of 0.44 per cent, annualised, on banks' assets that coincided with a major programme of social spending) are threatening to reduce investors' desire to acquire senior and subordinated bonds, which could result in funding pressures. Nevertheless, the introduction of a new law on covered bonds is a positive step, as it should improve access to long-term funding for mortgage banks.

In Greece, the fact that the country's four main banks completed a market-led recapitalisation process in December 2015 was a positive development. However, levels of NPLs remain significant (accounting for around 35 per cent of all loans at end-2015), which continues to represent a major challenge. All banks are making efforts to address this issue, with the aid of internal and external initiatives, and supported by a new legal framework for non-performing loans.

The resolution of NPLs is also a challenge in Cyprus. However, the country's banking sector has shown positive momentum in other restructuring efforts, including the repayment of significant parts of the Emergency Liquidity Assistance (ELA) funding extended to the largest bank in Cyprus. This has led to an upgrade in the banking sector score from 3- to 3.

Georgia, meanwhile, has been taken off negative watch, as the implementation of its law on banking supervision was suspended in October 2015 by the country's constitutional court. The Georgian government has now decided not to proceed with these legislative changes, so the National Bank of Georgia will retain its supervisory function.

Developments in the private equity and capital markets sectors have been mostly positive in the last year. In Belarus, the country's first institutional-quality private equity fund, Zubr Capital I, was launched in June 2016, with a fund size of US\$ 50 million. Increased access to equity funding and management expertise is particularly welcome in Belarus, given its relatively small private sector. In Serbia, meanwhile, government bonds are now listed on the stock exchange, providing institutional investors with an observable pricing benchmark. A master repurchase agreement for government bonds has been implemented, and the first interbank transactions have been carried out. In addition, the Belgrade Stock Exchange and the Zagreb Stock Exchange have both joined the SEE Link platform, allowing improved access to Serbian and Croatian equity markets. This should broaden the countries' investor bases and improve the availability of funding. In Poland, on the other hand, the capital markets sector has been placed on negative watch. Covered bond issuance has increased, but senior bond issuance has declined for banks and other corporations. In particular, medium-sized and large bond issues still remain difficult to place. Furthermore, there is continued uncertainty surrounding the future of the Polish pension system, and this is affecting Poland's capital markets.

Financing and development of SMEs: a new approach to measurement

SMEs are important contributors to a dynamic and well-functioning market economy. They provide a significant number of jobs and can be more flexible than larger firms in responding to demand for specialist products and services. The legacy of planned economies, which emphasised the development of large state-owned enterprises and conglomerates, makes fostering a dynamic SME sector a key issue for transition countries. In addition, a small or unproductive SME population in a country can point to broader deficiencies within the structure and institutions of an economy. Given that they are smaller and have more limited reach and access than large companies, SMEs are more strongly affected by a difficult business environment, as they have fewer channels through which to circumvent or address existing problems. In order to better respond to the needs of the region's SMEs, the EBRD has recently launched its new Small Business Initiative. In the context of that initiative, the existing SME finance indicator has been reviewed and expanded in order to adopt a more holistic approach to SMEs' development. Rather than focusing exclusively on the supply side, the assessment has been broadened to encompass demand-side and structural factors. As a result, that assessment now covers the following aspects: bank financing, the legal framework for bank lending, non-bank financing, business skills and standards, and the overall business environment.

Bank financing is the most important source of external finance for SMEs. It used to be covered by the old SME finance indicator and remains an important element of the new assessment. Similarly, the methodology used to assess the legal framework for bank lending has remained largely the same. Non-bank financing instruments, on the other hand, feature more prominently in the new assessment. Non-bank financing can be an important source of funding for SMEs. Leasing and factoring, in particular, can help SMEs to overcome constraints in terms of capital expenditure and working capital. In more advanced markets, bonds or equity investments can provide additional financing or development opportunities.

Finally, two new components have been added: business skills and standards, and the business environment. Skills are very important on both the demand side and the supply side, in order to enable SMEs to access financing. While banks' skills in providing finance to SMEs were captured well under the old assessment, SMEs' skills were not taken into account, despite financial literacy and business planning being crucial in order to present bankable projects or grow a business. Furthermore, improvements in standards can help SMEs to access new markets, attract outside investors and become more efficient. SMEs also suffer disproportionately from red tape and excessive regulation, as well as low levels of competition and transparency. The new assessment tries to capture this by using selected key measures which exemplify the barriers that SMEs face. A more detailed list of components and indicators

can be found in the methodological notes in the online version of this *Transition Report* (tr-ebrd.com).

The results of this new assessment are presented in Table S.2. The picture is similar to those observed in other sectors, with central Europe and the Baltic states showing the highest levels of progress (with gaps generally small, and occasionally medium-sized). In contrast, many countries in eastern Europe, the Caucasus, Central Asia and the southern and eastern Mediterranean have large gaps.

It is noticeable that non-bank financing options are hugely underdeveloped across the EBRD region, with the exception of EU countries, Morocco, Russia, Tunisia and Turkey. This is partly due to the limited development of private equity and capital markets, which are difficult to access even for larger companies. Leasing and factoring are better developed, but uptake remains limited nevertheless. This is often due to legal frameworks failing to contain specific rules reducing uncertainty surrounding leasing or factoring transactions.

There are also a great many countries with large gaps when it comes to business skills and standards. These reflect relatively low levels of financial literacy, which we use as a proxy for the financial management skills of small firms, but also a lack of certification and limited desire to innovate, particularly in eastern Europe, the Caucasus, Central Asia and some parts of the Western Balkans.

In comparison, gaps are mostly small or medium-sized when it comes to the business environment, which may be surprising given the continued prevalence of informality and corruption, as well as the mixed track record in terms of the enforcement of competition policy. That relatively good performance may be a result of governments focusing more on streamlining administrative processes, for example with the help of one-stop shops or e-government measures, as well as efforts to improve headline indicators in the World Bank's *Doing Business* report.

TABLE S.2. SME finance and development gaps in 2016

	Bank financing	Legal framework (bank lending)	Non-bank financing	Business skills and standard	Business environment
Central Europe and the Baltic states					
Croatia	Medium	Medium	Medium	Small	Medium
Estonia	Small	Small	Small	Small	Small
Hungary	Small	Small	Small	Small	Small
Latvia	Medium	Small	Medium	Medium	Small
Lithuania	Small	Medium	Small	Medium	Medium
Poland	Small	Small	Small	Small	Small
Slovak Republic	Small	Small	Medium	Small	Small
Slovenia	Small	Medium	Medium	Small	Small
South-eastern Europe					
Albania	Medium	Medium	Large	Large	Medium
Bosnia and Herzegovina	Medium	Medium	Large	Large	Medium
Bulgaria	Small	Small	Medium	Medium	Medium
Cyprus	Small	Medium	Small	Medium	Small
FYR Macedonia	Medium	Medium	Large	Large	Medium
Greece	Small	Small	Small	Small	Small
Kosovo	Large	Medium	Large	Medium	Medium
Montenegro	Medium	Medium	Large	Medium	Medium
Romania	Medium	Small	Medium	Medium	Medium
Serbia	Medium	Medium	Large	Small	Medium
Turkey	Small	Small	Medium	Small	Medium
Eastern Europe and the Caucasus					
Armenia	Medium	Medium	Large	Large	Medium
Azerbaijan	Large	Large	Large	Large	Small
Belarus	Large	Medium	Large	Medium	Medium
Georgia	Medium	Small	Large	Large	Medium
Moldova	Medium	Large	Large	Large	Medium
Ukraine	Large	Medium	Large	Large	Medium
Russia	Medium	Medium	Medium	Medium	Medium
Central Asia					
Kazakhstan	Medium	Medium	Large	Large	Medium
Kyrgyz Republic	Large	Medium	Large	Large	Large
Mongolia	Medium	Large	Large	Medium	Small
Tajikistan	Medium	Medium	Large	Large	Medium
Turkmenistan	Large	Large	Large	Large	Large
Uzbekistan	Medium	Large	Large	Large	Medium
Southern and eastern Mediterranean					
Egypt	Large	Medium	Large	Large	Large
Jordan	Medium	Large	Large	Large	Medium
Morocco	Medium	Large	Small	Medium	Large
Tunisia	Medium	Large	Medium	Medium	Medium

Source: EBRD.

Note: For details of components and indicators, please refer to the methodological notes in the online version of this *Transition Report* (tr-ebrd.com).

Regional inclusion gaps

Following major updates to the EBRD's youth and gender inclusion gaps last year, this year's report focuses on regional inclusion gaps, using newly available data from the third round of the *Life in Transition Survey*, which was conducted in late 2015 and the first half of 2016. Updates were also conducted for the youth and gender inclusion gaps, but they revealed no substantial changes.

Regional inclusion gaps are clearly a major issue, given that, as discussed in the *Transition Report 2013* and Chapter 3 of this report, an individual's place of birth is a major driver of inequality of economic opportunity. The EBRD's analysis of regional inclusion gaps, which is based primarily on LiTS III data, aims to capture the extent to which institutions shape differences in economic opportunities across different regions within a country. The methodology compares mean performance levels across regions in four categories: the quality of local institutions; access to services (such as utilities or health care); labour markets; and education.

The assessment of regional inclusion gaps has been expanded this year to integrate new information, and its geographical coverage has been increased to include Greece. Indicators have been added in order to look in greater detail at regional disparities in labour markets, education and access to services.

The resulting regional inclusion gaps are shown in Table S.3. The most pronounced gaps can be observed in south-eastern Europe and Central Asia. Regional gaps in terms of the quality of local institutions remain large across most of south-eastern Europe, particularly in Albania, Bosnia and Herzegovina, Bulgaria, Kosovo and Romania. Belarus, Moldova and Turkey also display large regional gaps in this area.

Significant regional gaps in terms of access to services can be observed across all Central Asian countries, highlighting the challenges that these countries face – particularly as regards access to water and IT infrastructure. Medium-sized gaps can be seen in most of eastern and south-eastern Europe and the Caucasus, driven primarily by access to heating and gas. Gaps are small across most of central Europe and the Baltic states (with the exception of Croatia and the Slovak Republic, where they are medium-sized).

A similar picture emerges for labour markets, with Azerbaijan, the Kyrgyz Republic, Russia, the Slovak Republic, Tajikistan and Turkey displaying the largest regional disparities in terms of employment opportunities. This measure also takes account of informality and the extent of underemployment. For most of these countries, school-to-work transition is weak and vocational education and training do not provide adequate skills, which is one of the main barriers to regional development. Turkey has the highest regional variation in unemployment rates of all countries covered by Eurostat.

The most pronounced regional gaps in terms of education can be observed in the southern and eastern Mediterranean and in eastern and south-eastern Europe. These gaps measure differences in the number of years of education, the availability of training and the perceived quality of education (at both household and firm level).

TABLE S.3. Regional inclusion gaps in 2016

	Quality of institutions	Access to services	Labour markets	Education
Central Europe and the Baltic states				
Croatia	Medium	Medium	Small	Medium
Estonia	Negligible	Small	Small	Small
Hungary	Medium	Small	Medium	Small
Latvia	Negligible	Small	Negligible	Medium
Lithuania	Negligible	Small	Small	Small
Poland	Medium	Small	Small	Negligible
Slovak Republic	Small	Medium	Large	Small
Slovenia	Small	Small	Small	Small
South-eastern Europe				
Albania	Large	Medium	Medium	Small
Bosnia and Herzegovina	Large	Medium	Medium	Small
Bulgaria	Large	Medium	Small	Medium
Cyprus	Small	Negligible	Small	Large
FYR Macedonia	Medium	Medium	Medium	Medium
Greece	Medium	Medium	Small	Medium
Kosovo	Large	Medium	Medium	Medium
Montenegro	Small	Medium	Small	Negligible
Romania	Large	Large	Medium	Medium
Serbia	Medium	Medium	Medium	Medium
Turkey	Large	Medium	Large	Medium
Eastern Europe and the Caucasus				
Armenia	Small	Small	Medium	Medium
Azerbaijan	Medium	Medium	Large	Small
Belarus	Large	Medium	Small	Small
Georgia	Medium	Medium	Medium	Small
Moldova	Large	Medium	Medium	Medium
Ukraine	Medium	Medium	Medium	Medium
Russia	Small	Medium	Large	Large
Central Asia				
Kazakhstan	Large	Large	Small	Medium
Kyrgyz Republic	Medium	Large	Large	Small
Mongolia	Small	Large	Medium	Large
Tajikistan	Medium	Large	Large	Small
Turkmenistan	Not available	Not available	Not available	Not available
Uzbekistan	Small	Large	Small	Medium
Southern and eastern Mediterranean				
Egypt	Not available	Not available	Not available	Large
Jordan	Not available	Not available	Not available	Small
Morocco	Not available	Not available	Not available	Large
Tunisia	Not available	Not available	Not available	Not available

Source: EBRD.

Note: Methodological changes have been made for access to services, labour markets and education. Please refer to the methodological notes in the online version of this *Transition Report* (tr-ebrd.com) for more details.

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Reform overview

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Online country assessments

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