

World Economic and Financial Surveys

Regional Economic Outlook

Europe

Europe Hitting Its Stride



NOV 17

©2017 International Monetary Fund

Cataloging-in-Publication Data

Names: Decressin, Jörg. | International Monetary Fund. European Department. | International Monetary Fund.

Title: Europe : Europe hitting its stride.

Other titles: Europe hitting its stride. | Regional economic outlook. | World economic and financial surveys.

Description: [Washington, DC] : International Monetary Fund, 2017. | Regional economic issues | World economic and financial surveys | Nov 2017. | Prepared by the staff of the IMF's European Department under the general guidance of Jörg Decressin. | Includes bibliographical references.

Identifiers: ISBN 9781484319611 (paper)

Subjects: LCSH: Economic development—Europe. | Economic forecasting—Europe. | Judicial process—Europe. | Banks and banking—Europe.

Classification: LCC HC240.E87 2017

ISBN: 978-1-48431-961-1 (Paper)

ISBN: 978-1-48432-661-9 (Web PDF)

;

Please send orders to:
International Monetary Fund
Publication Services
P.O. Box 92780
Washington, DC 20090, U.S.A.
Tel.: (202) 623-7430 Fax: (202) 623-7201
publications@imf.org
www.bookstore.imf.org
www.elibrary.imf.org

Contents

Preface	ix
Abbreviations	xi
Europe: Country Groups	xv
Executive Summary	xvii
1. Europe’s Economy Hitting Its Stride	1
Growth Is Moving into a Higher Gear	1
Slack Is Disappearing	2
Inflationary Pressures Are Beginning to Pick Up	4
The Credit Recovery Is Catching Up with the Real Recovery	10
The European Recovery Is Spilling Over to the Rest of the World	13
External Conditions and Macroeconomic Policies Will Support Growth	16
Growth Is Projected to Stay Strong	19
Less Downside Risk in the Short Term, but Not in the Medium Term	21
Policy Priorities	22
Monetary Policy	22
Fiscal Policy	23
Financial Policy	23
Structural Policy and European Monetary Union Architecture	24
References	38
2. Reforming the Judiciary: Learning from the Experience of Central, Eastern, and Southeastern Europe	39
Why Focus on Judicial Reforms?	39
How to Analyze Institutional Quality: Conceptual Framework	41
Country Case Studies	43
Estonia	45
Poland	47
Romania	50
Croatia	53
Serbia	55
Bosnia and Herzegovina	57
Evolution of the Effectiveness of CESEE Justice Systems and Property Rights Protection	60
Main Findings	63

Conclusion	68
Annex 2.1. Institutions: Literature Review	78
Annex 2.2. Indicators and Sources	81
Annex 2.3. Econometric Analysis: Additional Results	85
References	89
3. Banking Challenges in the Western Balkans: Prospects and Challenges	97
The Boom and Bust	99
Looking Ahead	104
Policy Recommendations	114
Clean up Balance Sheets	114
Expand Funding Bases	115
Tackle Nonbank Structural Obstacles to Credit	115
Annex 3.1. Estimating Fundamentals-Consistent Levels of Credit	123
Annex 3.2. Impact of Global and Local Regulatory Changes	125
Annex 3.3. Contributions of Supply versus Demand Factors to Credit Growth	127
Annex 3.4. The Macroeconomic and Bank-Specific Determinants of Nonperforming Loans	129
References	132
Boxes	
1.1 What Is behind the Euro Appreciation against the US Dollar since Early 2017?	25
2.1 Institutions and Economic Outcomes	70
2.2 The Process of European Union Membership and the Rule of Law	72
2.3 Specific Reforms to the Rule of Law in IMF-Supported Programs: Kosovo and Ukraine	74
2.4 Econometric Analysis	76
3.1 Are Loan Loss Provisions Sufficient?	119
3.2 Spillovers from Parent Bank Stress	120
3.3 Lessons from Comprehensive Nonperforming Loan Strategies in Albania and Serbia	121
Figures	
1.1 Real GDP Growth	1
1.2 Economic Expansion Driven Mostly by Domestic Demand	2
1.3 High Frequency Indicators Suggest That Growth Will Continue	3
1.4 Output Gaps Estimates, 2017	3
1.5 Economic Slack during Recovery Was Frequently Underestimated	4
1.6 More Businesses Are Facing Equipment and Capacity Constraints	5
1.7 Growth Revisions in 2017 Are Driven by Both Structural and Cyclical Factors	6
1.8 Wage and Productivity Growth Have Diverged within Europe	6
1.9 Inflation Remains Generally Subdued across Europe	7

1.10	Inflation Expectations Are Increasing Gradually	8
1.11	Labor Market Slack Has Been Shrinking, but More Significantly in Emerging Europe	8
1.12	Wage Growth and Productivity Growth Vary Significantly across Sector and within Europe	9
1.13	Offsetting Forces: Lower Goods Inflation and Higher Services Inflation	10
1.14	Credit Is Recovering	11
1.15	Nonperforming Loans Have Declined, but Still High in Some Countries	12
1.16	Europe's Growth Stronger than Expected and Has Contributed More to Global Growth	13
1.17	Exchange Rate Movements	14
1.18	Current Accounts Have Improved but Competitiveness Gains Need to Be Preserved	15
1.19	Global Activity and Demand for Euro Area Manufacturing Goods Continue to Improve	16
1.20	Financial Conditions Have Remained Favorable	17
1.21	Monetary Policy Conditions and Expectations	18
1.22	Fiscal Stances Are Broadly Neutral or Expansionary	19
1.1.1	Counterfactual Euro/US Dollar Scenarios	25
2.1	CESEE: Estimated Efficiency Gains from Institutional Reforms	40
2.2	Factors Shaping Institutional Quality	42
2.3	CESEE: Initial Level of Fundamentals and Aspects of the Rule of Law	44
2.4	Estonia: Judicial Independence and Protection of Property Rights	45
2.5	Estonia: Factors Affecting Institutional Quality	46
2.6	Estonia: EU Accession Timeline	47
2.7	Poland: Factors Affecting Institutional Quality	48
2.8	Poland: Judicial Independence and Protection of Property Rights	48
2.9	Poland: EU Accession Timeline	49
2.10	Romania: Factors Affecting Institutional Quality	51
2.11	Romania: Judicial Independence and Protection of Property Rights	52
2.12	Romania: EU Accession Timeline	52
2.13	Croatia: Factors Affecting Institutional Quality	53
2.14	Croatia: EU Accession Timeline	54
2.15	Croatia: Judicial Independence and Protection of Property Rights	54
2.16	Serbia: Factors Affecting Institutional Quality	55
2.17	Serbia: Judicial Independence and Protection of Property Rights	56
2.18	Serbia: EU Accession Timeline	57
2.19	Bosnia and Herzegovina: Factors Affecting Institutional Quality	58
2.20	Bosnia and Herzegovina: Judicial Independence and Protection of Property Rights	58
2.21	Bosnia and Herzegovina: EU Accession Timeline	59
2.22	Consistency of Similar Indicators from Different Sources	60
2.23	CESEE: Case Resolution Rate and Disposition Time, 2014	61
2.24	Europe: The Rule of Law and Some of Its Components	62

2.25	Perceived Independence of Courts, 2017	63
2.26	CESEE: Evolution of the Elements of the Rule of Law	64
2.27	CESEE: Evolution of Institutions before and after 2007	65
2.2.1	CESEE: Timeline of European Union Accession	72
2.3.1	Kosovo: Court Backlog Clearance under USAID Program	75
3.1	GDP per Capita	97
3.2	Foreign Banks' Funding to All Sectors, to Peak	99
3.3	Leveraging Episodes	99
3.4	Foreign Bank Funding, Lead-up to Peak	100
3.5	Western Balkans Private Credit to GDP	100
3.6	Western Balkans: Bank Credit Growth by Ownership	100
3.7	Credit Growth by Sector	101
3.8	Real GDP Growth	101
3.9	Current Account	101
3.10	Foreign Banks' Funding to all Sectors, Postcrisis	102
3.11	Deleveraging Episodes	102
3.12	Real Credit to the Domestic Private Sector	102
3.13	Decline in Real Credit Growth to the Domestic Private Sector, 2007–08 to 2010–11	103
3.14	Western Balkans: Bank Credit Growth by Ownership	103
3.15	Nonperforming Loans: Trough-to-Peak Change	103
3.16	Return on Equity: 2007-to-Trough Change	104
3.17	Emerging Europe: Financial Depth	104
3.18	GDP per Capita and Credit Depth in 2016	105
3.19	Estimated Credit Gaps in 2016	105
3.20	Credit to GDP, Change from Trough to 2016	106
3.21	External Bank Claims on Western Balkans	106
3.22	Group-Level Response of Long-Term Strategies in CESEE	107
3.23	Change from Peak to Trough	108
3.24	Change in Credit to GDP, 2016–26	108
3.25	Gross National Savings, 2016	108
3.26	Overbanking in the Western Balkans	109
3.37	More Indicators of Overbanking	109
3.28	Nonperforming Loans: Peak-to-Latest Change	110
3.29	Return on Equity: Trough-to-2016 Change	110
3.30	Lending Standards Applied to Corporate Loans	110
3.31	Western Balkans: Demand versus Supply Determinants of Credit Growth	112
3.32	Kosovo: Court Backlog Clearance	113
3.2.1	Foreign Claims of BIS Banks	120

3.3.1	Albania: Nonperforming Loans	121
3.3.2	Serbia: Nonperforming Loans	121
	Annex Figure 3.2.1. Share of Banking Assets under ECB's Home Supervision	125

Tables

1.1	Real GDP Growth Projections	20
1.2	Inflation Projections	21
	Annex Table 1.1 GDP Growth	27
	Annex Table 1.2 Domestic Demand	28
	Annex Table 1.3 Gross Investment	29
	Annex Table 1.4 Inflation	30
	Annex Table 1.5 Unemployment Rate	31
	Annex Table 1.6 General Government Overall Balance	32
	Annex Table 1.7 General Government Gross Debt	33
	Annex Table 1.8 Current Account	34
	Annex Table 1.9 Net Financial Assets	35
	Annex Table 1.10 Growth Rate of GDP Per Capita	36
2.4.1	Factors Affecting Institutional Quality	77
	Annex Table 2.1.1 Summary of the Theoretical Literature on Institutions	78
	Annex Table 2.1.2 Summary of the Empirical Literature on Institutions	79
	Annex Table 2.1.3 Institutions and Economic Outcomes	80
	Annex Table 2.2.1 Description of Third-party Indicators	83
	Annex Table 2.3.1 Factors Affecting Institutional Quality: Dropping Variables	86
	Annex Table 2.3.2 Factors Affecting Institutional Quality: Adding Market Dominance	87
	Annex Table 2.3.3 Factors Affecting Institutional Quality: Endogeneity	88
3.1	Major Bank Ownership Transactions (2009–17)	109
3.2	GDP Growth Needed to Bring Nonperforming Loan Ratios to 2007 Levels	111
3.3	Summary of Key Policy Actions and Recommendations Fostering Bank Balance Sheet Repair	117
	Annex Table 3.1.1 Determinants of Real Per Capita Private Sector Debt in Europe	124
	Annex Table 3.3.1 Data Details	128
	Annex Table 3.3.2 Determinants of Credit Growth	128
	Annex Table 3.4.1 Determinants of Nonperforming Loans (Arellano-Bond Estimation)	131

Preface

The November 2017 *Regional Economic Outlook for Europe* was prepared by a staff of the IMF's European Department under the general guidance of Jörg Decressin. Chapter 1 was prepared by a staff team including Cristina Batog, Vizhdan Boranova, Raju Huidrom, Sylwia Nowak, Faezeh Raei, and Yan Sun, and was led by Emil Stavrev. Chapter 2 was prepared by a staff team including Vizhdan Boranova, Raju Huidrom, Mariusz Jarmuzek, Martin Petri, Faezeh Raei, Tiberiu Scutaru, Ara Stepanyan, and Svetlana Vtyurina, and was led by Laura Papi. Chapter 3 was prepared by a staff team consisting of Ezequiel Cabezon, Dilyana Dimova, Patrick Gitton, Haonan Qu, Alaina Rhee, Ruud Vermeulen, and Jason Weiss, and was led by Bas Bakker and Jacques Miniane. The European Department country teams provided useful feedback to the report.

In addition, Georgia Babici, Nadeem Ilahi, Ricardo Llaudes, Pamela Madrid Angers, Francisco Parodi, Brett Rayner, Jason Weiss, and Ruifeng Zhang provided inputs to Chapter 2. The chapter benefited from discussions during the Croatia National Bank-IMF co-sponsored conference on the *Role of Governance and Institutions* held in Dubrovnik, Croatia, in July 2017 and the exchange of views with the Central, Eastern, and Southeastern European authorities during the IMF/World Bank October 2017 Annual Meetings in Washington, DC and their subsequent comments. Many colleagues from the Council of Europe, the European Commission, the European Bank for Reconstruction and Development, the World Bank, and the Fund provided helpful comments and suggestions. Chapter 3 benefited from the data provided by non-EU Western Balkan country teams and discussions with the non-EU Western Balkan authorities during the 2017 Annual Meetings.

Administrative support was provided by Gilda Ordoñez-Baric. Colleagues of the Communications Department Marjorie Henriquez, Wiktor Krzyzanowski, David Pedroza, and Rhoda Weeks provided invaluable support, and Linda Long coordinated editing and production, with editing help from David Einhorn and Lucy Morales. Heidi Grauel performed layout services.

Abbreviations

The following abbreviations are used:

ALB	Albania
AUT	Austria
BGR	Bulgaria
BiH	Bosnia and Herzegovina
BIS	Bank for International Settlements
BLR	Belarus
CBK	Central Bank of Kosovo
CE	Central Europe
CEE	Central and Eastern Europe
CEPEJ	European Commission for the Efficiency of Justice
CESEE	Central, Eastern, and Southeastern Europe
CHE	Switzerland
CIS	Commonwealth of Independent States
CoE	Council of Europe
CSO	Civil society organization
CVM	Cooperation and Verification Mechanism
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DNK	Denmark
EA	Euro Area
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
EFF	Extended Fund Facility
EIB	European Investment Bank
EM	Emerging market
EMBIG	Emerging Markets Bond Index Global
EPFR	Emerging Portfolio Fund Research
ESP	Spain
EST	Estonia
EU	European Union
EU15	European Union-15

EMU	Economic and Monetary Union
FBiH	Federation of Bosnia and Herzegovina
FDI	Foreign direct investment
FIN	Finland
FRA	France
FSSA	Financial System Stability Assessment
FSI	Financial Soundness Indicators
FX	Foreign exchange
GBR	United Kingdom
GCI	Global Competitiveness Index
GDP	Gross domestic product
GFDD	Global Financial Development Database
GFSR	Global Financial Stability Report
GMM	Generalized Method of Moments
GRC	Greece
GRECO	Group of States against Corruption
HICP	Harmonized Index of Consumer Prices
HRV	Croatia
HUN	Hungary
ICRG	International Country Risk Guide
IFS	International Financial Statistics
IMF	International Monetary Fund
ISL	Iceland
ISR	Israel
IRL	Ireland
ITA	Italy
JSRS	Justice System Reform Strategy
Latam	Latin America
LTU	Lithuania
LVA	Latvia
LUX	Luxembourg
MDA	Moldova
MFS	Monetary and Financial Statistics
MKD	Former Yugoslav Republic of Macedonia
MLT	Malta
MNE	Montenegro
NABU	National Anti-corruption Bureau of Ukraine
NDL	Netherlands
NOR	Norway

NPL	Nonperforming loan
NSF	National Salvation Front
OECD	Organisation for Economic Co-operation and Development
OFC	Other financial corporations
OHR	Office of the High Representative
OSCE	Organization for Security and Co-operation in Europe
OSI	Open Society Institute
PEA	Private Enforcement Agent
PMI	Purchasing Managers Index
PPP	Purchasing power parity
POL	Poland
PRT	Portugal
REI	Regional Economic Issues
ROU	Romania
RS	Republika Srpska
RUS	Russia
SA	Seasonally adjusted
SAP	Stabilization and Association Process
SCM	Superior Council of the Magistracy
SJC	State Judicial Council
SEE	Southeastern Europe
SEE-EU	Southeastern European EU member states
SEE-non-EU	Southeastern European non-EU member states
SMR	San Marino
SOE	State-owned enterprise
SRB	Serbia
SVK	Slovak Republic
SVN	Slovenia
SWE	Sweden
TFP	Total factor productivity
TPI	Third-party indicators
TUR	Turkey
UKR	Ukraine
UVK	Kosovo
USAID	United States Agency for International Development
V-Dem	Varieties of Democracy Institute
WB	World Bank
WDI	World Development Indicators

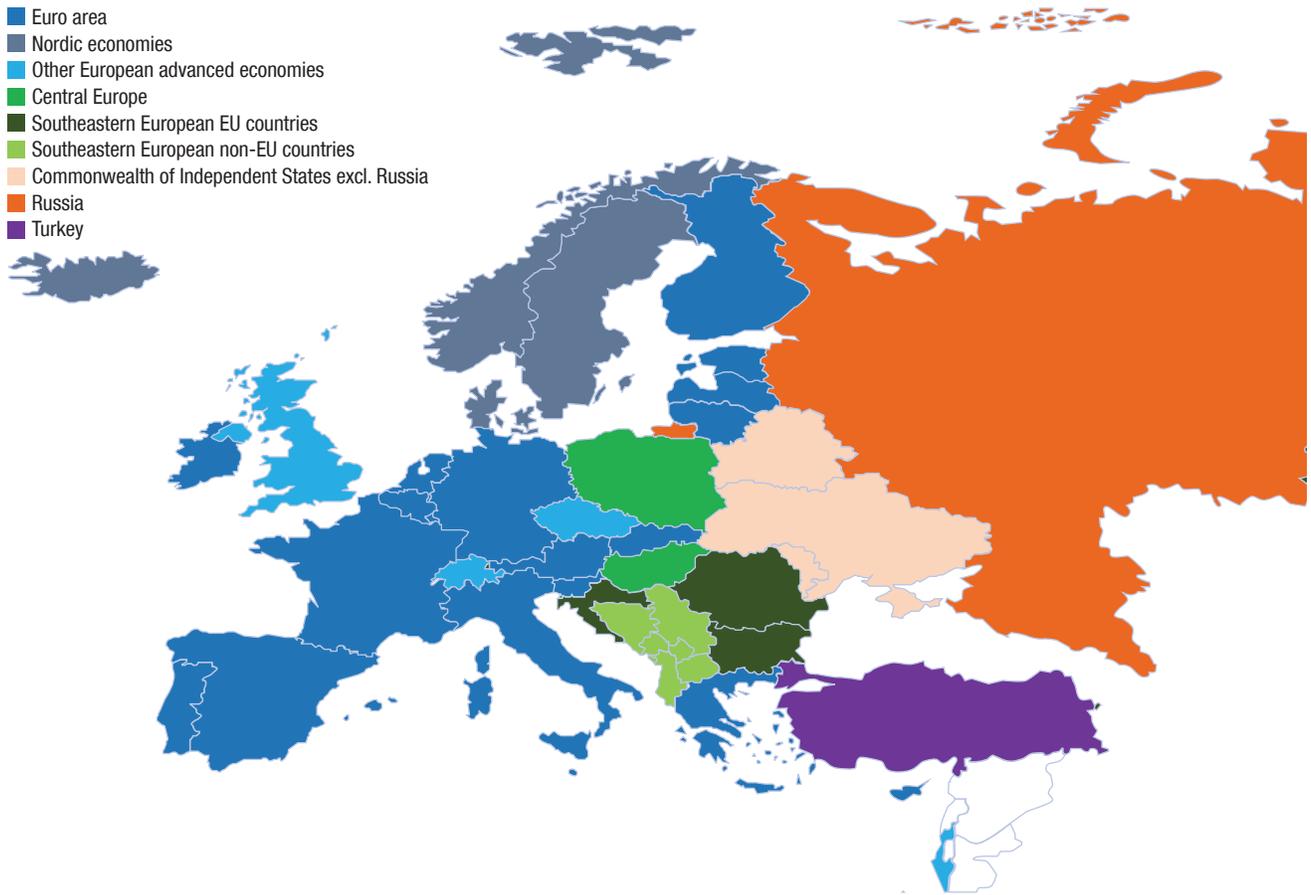
REGIONAL ECONOMIC OUTLOOK: EUROPE

- WDR World Development Report
- WEF World Economic Forum
- WEO World Economic Outlook
- WGI Worldwide Governance Indicators

Regional Economic Outlook

Europe: Country Groups

- Euro area
- Nordic economies
- Other European advanced economies
- Central Europe
- Southeastern European EU countries
- Southeastern European non-EU countries
- Commonwealth of Independent States excl. Russia
- Russia
- Turkey



Note: Country weights are based on 2016 GDP in purchasing-power-parity terms. The country groups are color coded, and the weights refer to the respective group. EU = European Union. The boundaries, colors, denominations, and any other information shown on the maps do not imply, on the part of the International Monetary Fund, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries. In this report, statistical data on Crimea and the City of Sevastopol are included as part of the data for Russia.

Europe: Country Groups and Weights (2016)

Group/Country	Abbreviation	Weights		
Europe				100.0
Advanced European economies	AEUR	100.0	100.0	69.0
Euro area	EA	100.0	73.5	50.7
Austria	AUT	3.0	2.2	1.5
Belgium	BEL	3.6	2.6	1.8
Cyprus	CYP	0.2	0.2	0.1
Estonia	EST	0.3	0.2	0.1
Finland	FIN	1.6	1.2	0.8
France	FRA	19.4	14.2	9.8
Germany	DEU	28.3	20.8	14.3
Greece	GRC	2.0	1.5	1.0
Ireland	IRL	2.3	1.7	1.2
Italy	ITA	15.8	11.6	8.0
Latvia	LVA	0.4	0.3	0.2
Lithuania	LTU	0.6	0.4	0.3
Luxembourg	LUX	0.4	0.3	0.2
Malta	MLT	0.1	0.1	0.1
Netherlands	NLD	6.2	4.5	3.1
Portugal	PRT	2.1	1.6	1.1
Slovak Republic	SVK	1.2	0.9	0.6
Slovenia	SVN	0.5	0.3	0.2
Spain	ESP	11.9	8.8	6.1
Nordic economies	NOR	100.0	6.0	4.1
Denmark	DNK	23.9	1.4	1.0
Iceland	ISL	1.4	0.1	0.1
Norway	NOR	31.6	1.9	1.3
Sweden	SWE	43.1	2.6	1.8
Other European advanced economies	IT4	100.0	20.5	14.2
Czech Republic	CZE	9.0	1.8	1.3
Israel	ISR	7.6	1.6	1.1
Switzerland	CHE	12.8	2.6	1.8
United Kingdom	GBR	70.6	14.5	10.0
Emerging European economies	EEUR		100.0	31.0
Central Europe	CE	100.0	15.3	4.7
Hungary	HUN	20.4	3.1	1.0
Poland	POL	79.6	12.2	3.8
Southeastern European EU member states	SEE EU	100.0	7.9	2.4
Bulgaria	BGR	21.2	1.7	0.5
Croatia	HRV	14.0	1.1	0.3
Romania	ROU	64.8	5.1	1.6
Southeastern European non-EU member states	SEE non-EU	100.0	2.7	0.9
Albania	ALB	14.4	0.4	0.1
Bosnia and Herzegovina	BIH	17.8	0.5	0.2
Kosovo	UVK	7.8	0.2	0.1
Macedonia, FYR	MKD	12.8	0.4	0.1
Montenegro	MNE	4.4	0.1	0.0
Serbia	SRB	43.0	1.2	0.4
Commonwealth of Independent States excl. Russia	CIS excl RUS	100.0	6.3	2.0
Belarus	BLR	31.6	2.0	0.6
Moldova	MDA	3.5	0.2	0.1
Ukraine	UKR	64.9	4.1	1.3
Russia	RUS	100.0	44.7	13.9
Turkey	TUR	100.0	23.1	7.2

Note: Country weights are based on 2016 GDP in purchasing-power-parity terms. The country groups are color coded, and the weights refer to the respective group.

Executive Summary

Europe's strengthening and broadening recovery . . .

. . . is contributing significantly to global growth.

Risks are more balanced now, but tilted to the downside in the medium term.

Policymakers should take advantage of the recovery.

Reduce fiscal deficits where debt is high and support long-term growth where fiscal positions are strong.

Keep monetary policy accommodative in most countries.

Advance structural reforms to raise productivity and deal with crisis legacies.

The European recovery is strengthening and broadening appreciably. Real GDP growth is projected at 2.4 percent in 2017, up from 1.7 percent in 2016, before easing to 2.1 percent in 2018. These are large upward revisions—0.5 and 0.2 percentage point for 2017 and 2018, respectively—relative to the April *World Economic Outlook*. The European recovery is spilling over to the rest of the world, contributing significantly to global growth. In a few advanced and many emerging economies, unemployment rates have returned to precrisis levels. Most emerging market European economies are now seeing robust wage growth. In many parts of Europe, however, wage growth is sluggish despite falling unemployment.

Risks appear more balanced over the near term, but are still tilted to the downside over the medium term. The recovery may be stronger than projected in the short run. But the sustainability of the rebound remains in question. Over the longer term, adverse demographic trends and subdued productivity are likely to hold back growth. The outlook is also subject to several important domestic and external downside risks.

Policymakers should take advantage of the improved prospects to rebuild fiscal buffers and enhance the economy's capacity to grow and absorb shocks. Many advanced and market emerging economies need to reduce still-elevated fiscal deficits in a growth-friendly way. This task is particularly important for those with high public debt, as interest rates will likely rise over time. For countries with stronger fiscal positions, available space should be used to lift growth potential and support structural reforms. For now, monetary policy can stay accommodative in most of Europe, given subdued inflation pressures. But where wages have accelerated, central banks should be ready to gradually withdraw stimulus to keep inflation expectations firmly anchored.

Structural policies need to reinvigorate convergence, which has slowed since the crisis, and increase growth potential. Priorities differ across countries.

For many advanced economies, faster progress on structural reforms is needed to raise productivity growth, for example, by making product markets more competitive and improving labor markets as well as education and training. Regarding crisis legacies, cleaning up the balance sheets of weak banks remains a priority.

More needs to be done to strengthen the European Union, notably the resilience of the euro area to shocks. This requires completing the banking and capital markets unions and building a euro area fiscal capacity to provide a macroeconomic stabilization mechanism. In parallel, action is needed to resolve banking sector legacies and strictly implement the common fiscal rules.

In emerging market economies, the business environment should be further improved. After a period of rapid catch-up, countries in the region have generally

seen a significant slowdown in convergence with their more advanced peers in Europe. To reaccelerate convergence, the focus should be on the next generation of reforms, especially reforms of institutions and governance.

Institutions and governance are key for productivity and inclusive growth.

Institutions are key for growth, and the legal framework is a critical institution and a vital element of the business environment. Strong institutions are conducive to a level playing field that promotes competition, help retain and attract skilled people, and ensure that growth is inclusive and sustainable. Based on the experience of Central, Eastern, and Southeastern Europe in the past 25 years, Chapter 2 offers some insights on how countries could improve the effectiveness of their judiciary. Much progress was achieved, but setbacks also happened. A more equal distribution of resources and opportunities, stronger state capacity, and greater transparency resulted in more independent, impartial, and efficient justice systems. The European Union and the Council of Europe helped catalyze reforms, but their durability depended more on domestic factors. Moving forward, reforms should focus on strong competition policies, lower trade and entry barriers, and redistributive fiscal policies that expand opportunities. Public officials need to be selected and promoted strictly on merit. Besides guaranteeing freedom of information, transparency can be enhanced by providing information on government performance, the use of public resources, financial interests, and ownership structures.

Improving resource distribution, state capacity, and transparency fosters more effective justice systems.

Reducing high NPLs via supervisory action, enhanced bankruptcy and insolvency regimes, and speeding up court procedures will help boost credit and growth in the Western Balkans.

Chapter 3 discusses the specific banking challenges facing the Western Balkan economies. In many ways, banks in this region are still reeling from the effects of a boom and bust credit cycle. This legacy is constraining credit growth at a time when it is most needed. In most countries in the region, credit-to-GDP ratios are still below their potential and show little sign of improvement. Policymakers should act on several fronts. Nonperforming loans can be reduced and profitability increased through asset quality reviews and supervisory action plans. Funding bases can be enhanced through better communication with parent banks and home supervisors and by diversifying funding sources. Addressing weak bankruptcy and insolvency regimes, improving cadastral systems, and speeding up slow court procedures should help ease the structural impediments to credit growth.

1. Europe's Economy Hitting Its Stride

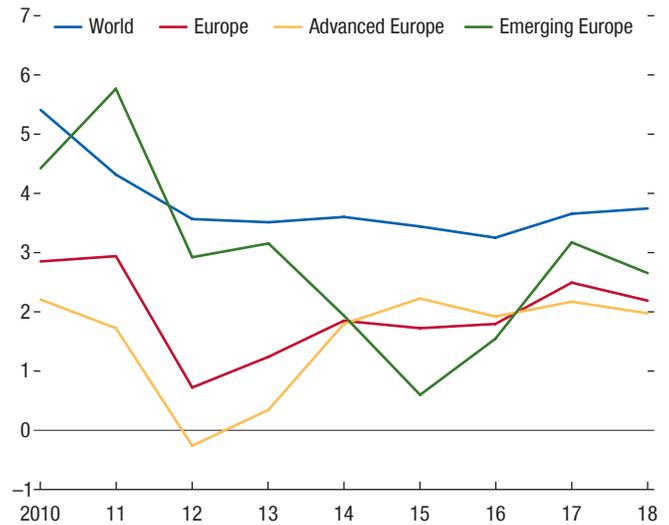
Growth Is Moving into a Higher Gear

Growth is strengthening and broadening across Europe, driven by buoyant domestic demand (Figure 1.1). Following a pickup in economic activity in the second half of 2016, the European economy accelerated further in the first half of 2017, with growth outcomes surprising on the upside in most countries.

- In *advanced Europe*, growth is running about 2 percent on average, with some economies seeing appreciably higher rates (Figure 1.2, panel 1). All *euro area* countries are growing, and the dispersion of growth rates is the lowest in nearly two decades. The *Nordic economies* (*Nordics*) and *other advanced European economies* are seeing similarly strong domestic demand. In *the United Kingdom*, weakness in the pound has led to a squeeze of real incomes and some slowdown in demand.
- In *emerging Europe*, growth increased to about 3 percent in the first half of 2017, up from 1.5 percent in 2016 (Figure 1.2, panel 2). This has been helped by a rebound from recession in *Russia* and a strong, policy-assisted pickup in activity in *Turkey*, following a dip related to the failed coup attempt. Several economies, especially those that are EU members, are seeing growth much faster than 3 percent. In these economies, private consumption is expanding rapidly, as low unemployment and labor shortages have pushed up wages and boosted household confidence. Concurrently, investment has strengthened, partly due to the growing absorption of EU structural

The chapter was prepared by a staff team comprising Cristina Batog, Vizhdan Boranova, Raju Huidrom, Sylwia Nowak, Faezeh Raei, and Yan Sun. The team was led by Emil Stavrev under the general guidance of Jörg Decressin. Gilda Ordoñez-Baric provided skillful administrative support. The chapter reflects data and developments as of October 17, 2017.

Figure 1.1. Real GDP Growth (Percent)

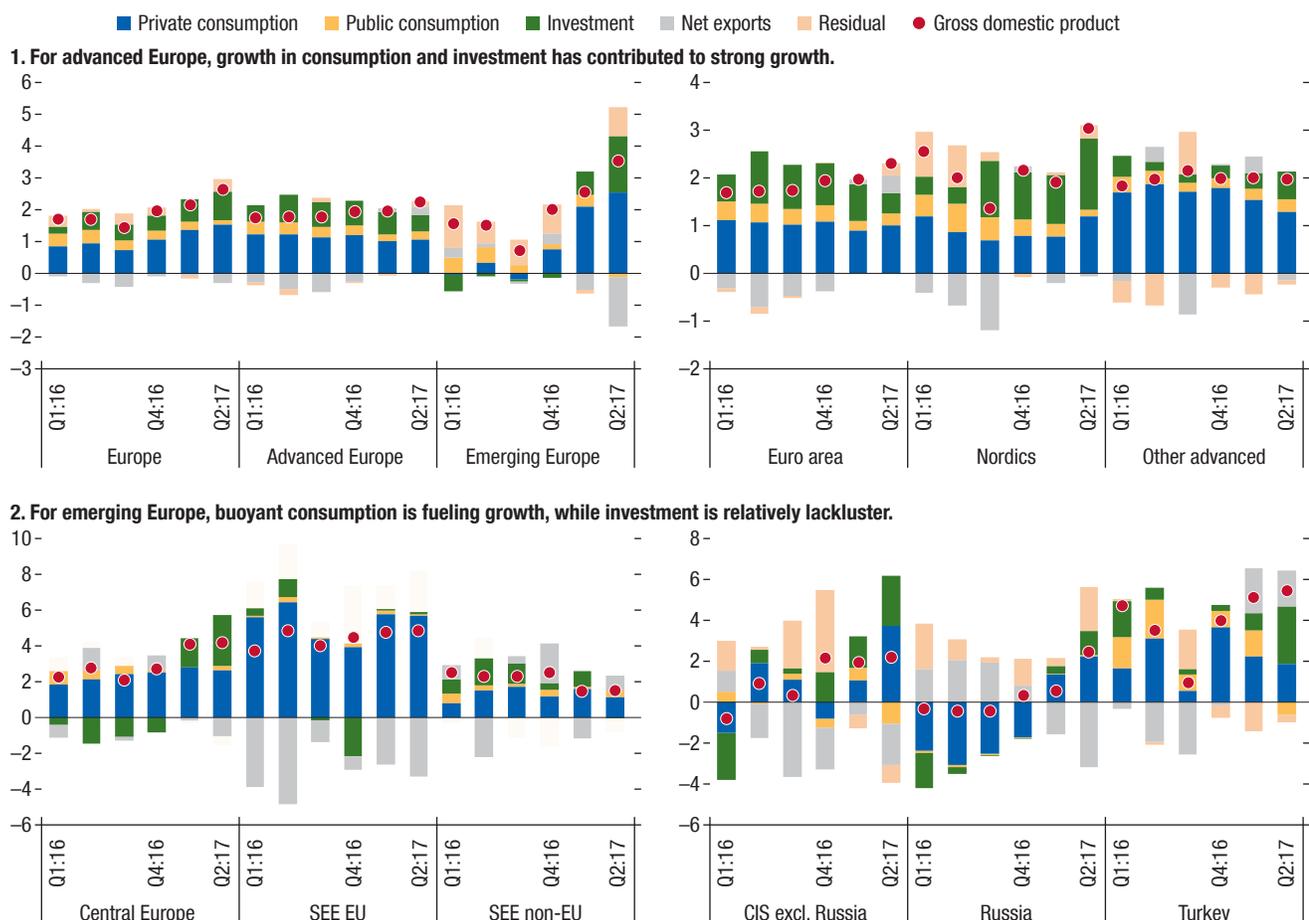


Source: IMF, *World Economic Outlook*.

funds from low levels in 2016. In *Poland* and *Romania*, expansion is also fueled by government spending programs (for example, child subsidies in *Poland*) or large value-added and excise tax cuts (in *Romania*).

Recent high frequency indicators suggest that the growth momentum has likely continued in the second half of 2017. Manufacturing Purchasing Managers Indices (PMIs) are strengthening further in *advanced Europe* and are firmly in expansionary territory in *emerging Europe* (Figure 1.3). Consumer confidence also gradually improved in 2017, with most households in both *advanced* and *emerging Europe* expressing optimism about their future economic prospects, suggesting sustained upward momentum in private spending. Specifically, economic sentiment (a survey-based measure of business and consumer confidence) in *the euro area* reached its highest level in more than a decade, led by rising confidence among industrial companies and in the services sector.

Figure 1.2. Economic Expansion Driven Mostly by Domestic Demand
 (Growth, year over year, percent; contributions in percentage points)



Sources: Haver Analytics; and IMF staff estimates.

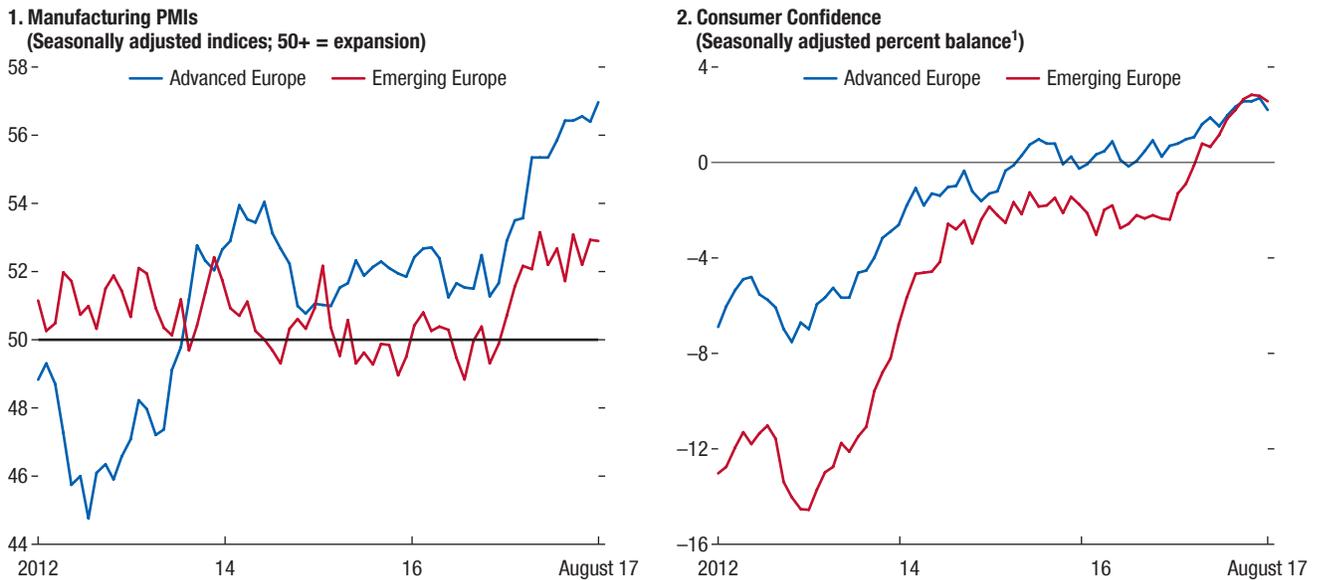
Note: Data for Bosnia and Herzegovina and Moldova are not available for 2016:Q1—2017:Q2. CIS = Commonwealth of Independent States; EU = European Union; SEE = Southeastern Europe.

Slack Is Disappearing

In *advanced Europe*, output gaps are closing, while in *emerging Europe*, the cyclical recovery appears largely complete (Figure 1.4). Except for *Greece*, in *advanced Europe*, output gaps are estimated to be relatively small, closed, or positive; the output gap in *the euro area* is expected to be closed in 2018. In *emerging Europe*, output gaps in many economies appear already small or closed, with several countries experiencing positive gaps for a while now (May 2017 and November 2016 *Regional Economic Issues: Central, Eastern, and Southeastern Europe*).

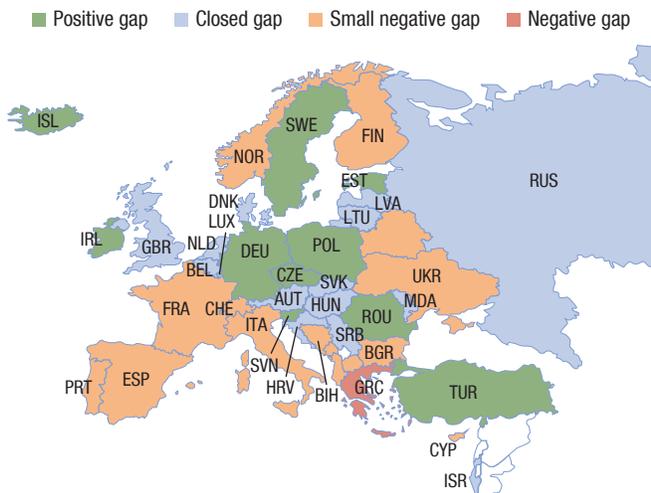
However, output gap estimates are uncertain. Indicators of economic slack are still inconclusive. On the one hand, subdued inflation suggests there is ample slack; on the other hand, indicators such as high capacity utilization and low unemployment rates point to limited remaining slack (see below). Measuring slack is complicated, and estimates are frequently revised over time (Grigoli and others 2015). An examination of past recoveries suggests that the extent of economic slack in the year that growth resumed has generally been underestimated (Figure 1.5, panel 1). Regarding revisions of slack after the global financial crisis, output gaps were initially underestimated (Figure 1.5, panel 2), particularly

Figure 1.3. High Frequency Indicators Suggest That Growth Will Continue



Sources: Haver Analytics; and IMF staff calculations.
¹Balances are constructed as the difference between the percentages of respondents giving positive and negative replies. EU = European Union; PMI = Purchasing Managers Index.

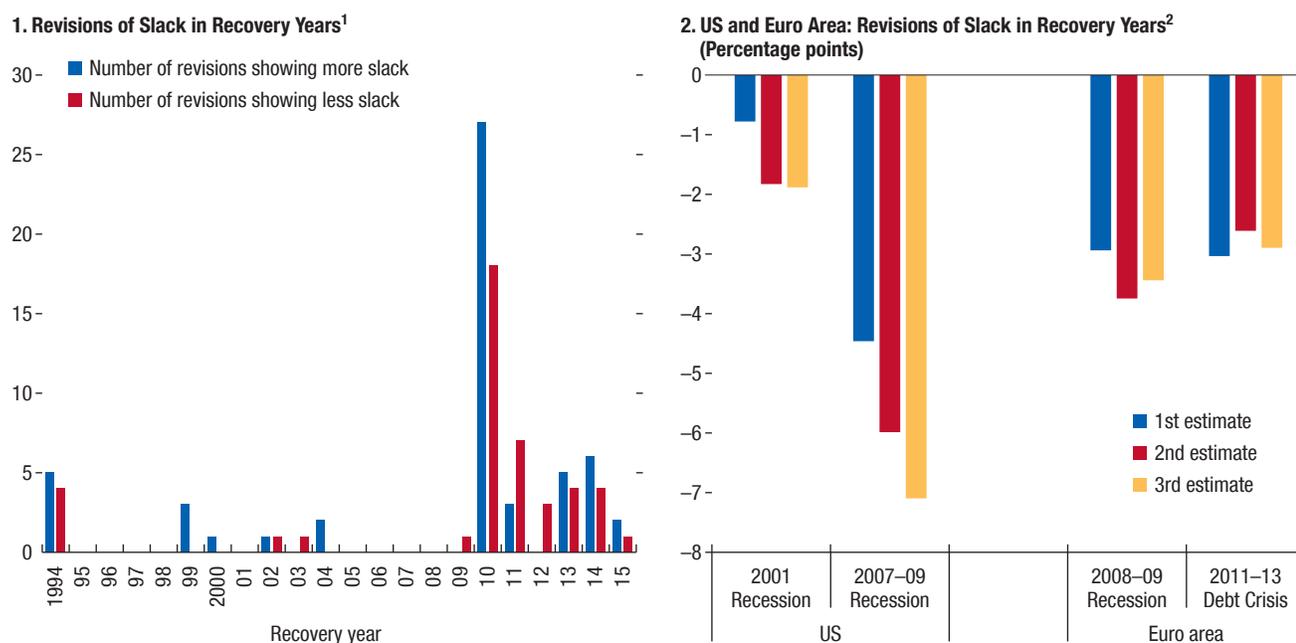
Figure 1.4. Output Gaps Estimates, 2017¹



Sources: IMF, *World Economic Outlook*; and IMF staff estimates.
¹Output gaps reflect IMF country desk estimates; Ranges are defined as (1) positive gap: greater than 0.5 percent; (2) closed gap: between -0.5 and 0.5 percent; (3) small negative gap: between -2 and -0.5 percent; (4) negative gap: smaller than -2 percent.

in the United States and to a lesser extent in the euro area (as a whole). In subsequent revisions, as the recovery strengthened, potential growth was gradually revised up. However, the current rebound of activity in Europe is not entirely comparable with past recoveries from recessions, so caution is warranted in drawing conclusions. The fundamental problem is that disentangling the cyclical and structural components of a growth rebound is complicated, particularly after prolonged periods of subdued growth.

Recent survey indicators suggest that the current recovery in Europe appears also driven by structural factors. Higher growth partly reflects a pickup in investment that, if sustained, could help improve potential growth. Surveys of firms in EU countries show an increasing number of them expect to face equipment shortage and capacity constraints in meeting demand (Figure 1.6). This suggests that the pickup in investment could continue across the region, adding to productive capital. In emerging market economies that are EU members, the increase in investment is also helped by the new cycle of EU Structural and Investment

Figure 1.5. Economic Slack during Recovery Was Frequently Underestimated

Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

¹For each country, the recovery year is defined as the first year of positive growth following a year of negative growth. The revisions reflect the revision of the output gap in the year of recovery, two years onward, as reflected in the corresponding IMF *World Economic Outlook* (WEO).

²For the United States and the euro area, the two most recent recessions are chosen based on the identification of recession dates by the National Bureau of Economic Research (for the United States) and the Center for Economic and Policy Research (for the euro area). The recession date for the euro area refers to the block as a whole; individual countries may have had different recovery years. The first estimate refers to the first estimate of the output gap in the recovery year taken from the October WEO in that year. Subsequent revisions refer to the estimate of the output gap for the recovery year in the next two October WEOs.

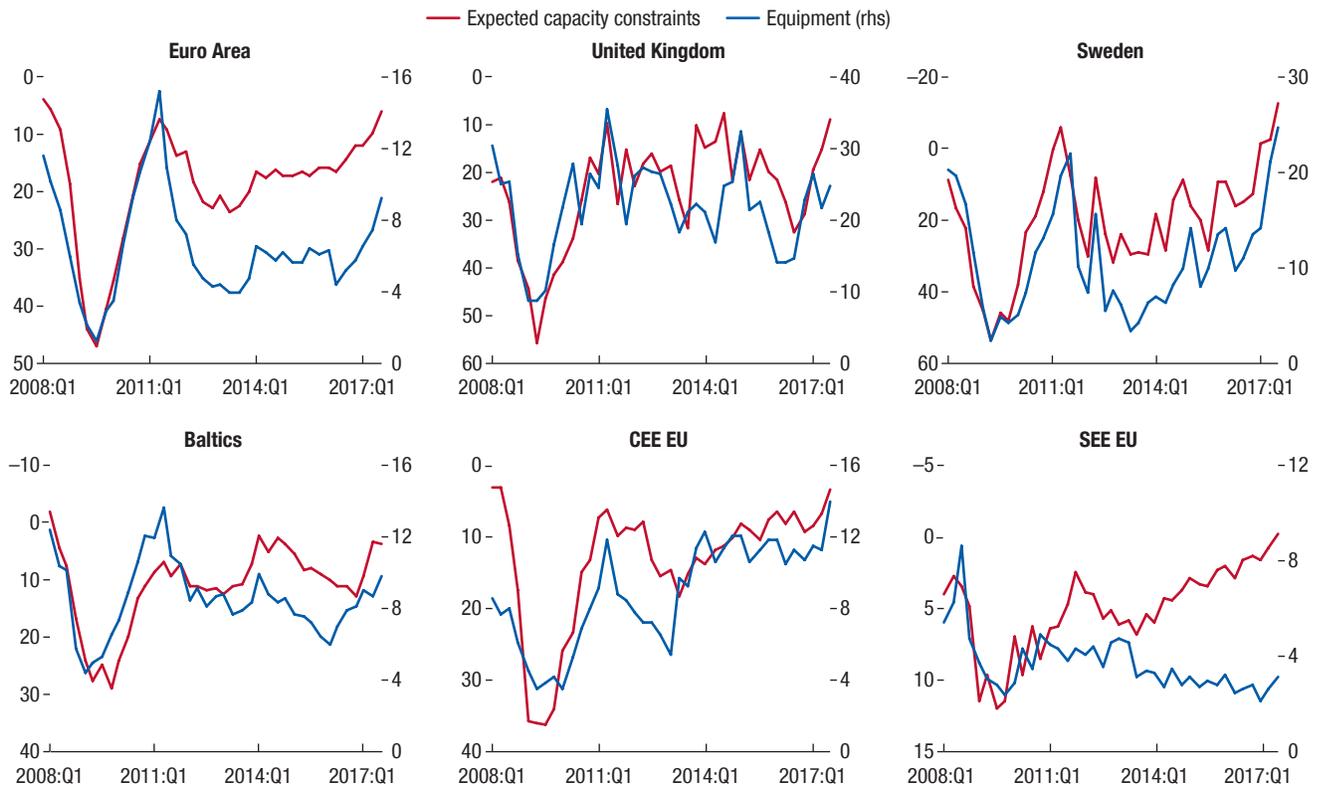
Funds. Still-subdued wage growth in *the euro area* and *other advanced economies* also supports the view that slack in the economy and potential output could be greater, although wage growth is increasingly robust in a few advanced and a growing number of emerging market economies (see below).

Accordingly, on the back of the firming recovery in 2017, potential growth in the near term has been revised up in many European countries (Figure 1.7, panel 1). Cyclical factors are also at play, particularly in countries where inflation is expected to be higher than previously estimated and output gaps are more positive (Figure 1.7, panel 2).

Inflationary Pressures Are Beginning to Pick Up

Greater inflationary pressures are visible mainly in wages in economies where unemployment rates have returned to precrisis levels, while productivity growth is weak. In most *advanced European economies*, wage growth has been subdued, reflecting anemic productivity growth and low inflation (Figure 1.8). In contrast, in a few *advanced European economies—the Baltics and the Czech Republic*—and *emerging market economies in Southeastern Europe*, wage growth has been strong for some time and has outpaced labor productivity growth since 2016. In *Ukraine*, nominal wage growth has averaged 35 percent in 2017—reflecting a doubling of the minimum wage and very strong growth in public sector wages, which has triggered large increases in unit labor costs and poses a risk of second-round effects on inflation.

Figure 1.6. More Businesses Are Facing Equipment and Capacity Constraints¹
 (Percent, net balance of positive and negative responses of firms surveyed)



Sources: European Commission; Haver Analytics; and IMF staff calculations.

¹Based on European Commission survey of firms on factors limiting production. CEE = Central and Eastern Europe; SEE = Southeastern Europe.

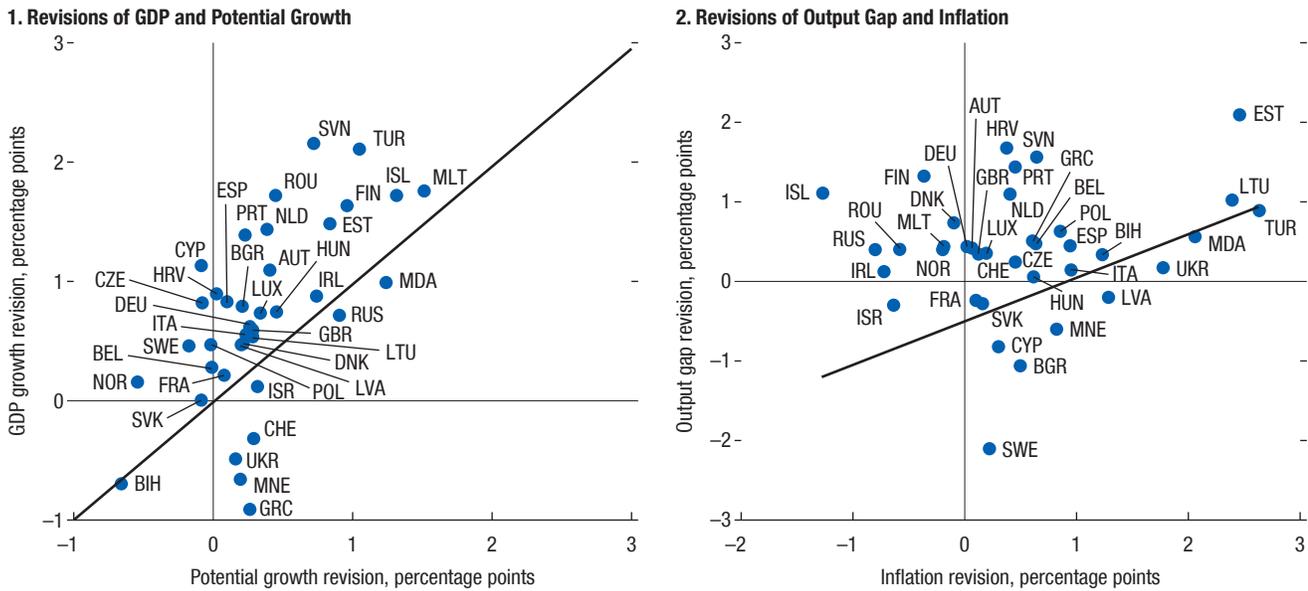
However, inflation, while rising, remains generally subdued across Europe.

- In many *advanced European economies*, inflation has picked up somewhat, but remains low (Figure 1.9, panel 1), in line with sluggish wage growth over the past several years. In *the euro area*, core inflation, while gradually increasing to 1.3 percent in August from 0.9 percent in January, remains subdued (Figure 1.9, panel 2). Inflation expectations have increased from a year ago, and deflation risk has receded, but expectations remain well below 2 percent (Figure 1.10). In *the United Kingdom*, inflation is running at a higher level owing to the pass-through of the pound's depreciation following the Brexit referendum.
- In other *advanced European economies*, particularly *the Czech Republic* and *the*

Baltics, inflation has picked up but is still relatively subdued, despite strong wage growth over the past several years. Most *emerging European economies* (notably, *Central Europe* and *Southeastern Europe*) have witnessed similar developments: somewhat higher but still-low inflation since early 2017, despite an acceleration in wage growth. In these economies, inflation expectations point to further increases in inflation.

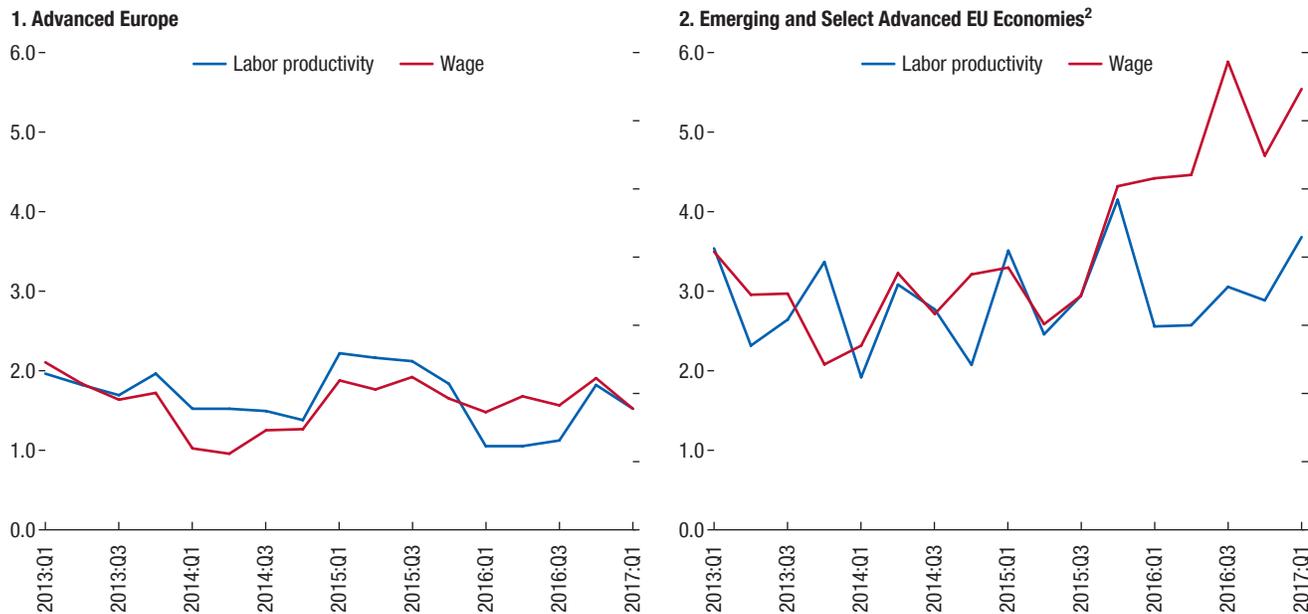
- In *Russia*, consumer price inflation hit a post-Soviet low of 3.3 percent in August, below the central bank's target of 4 percent, reflecting a small negative output gap, recent appreciation of the ruble, a one-off effect of declining food prices from a strong harvest, and a tight monetary policy stance. In contrast, aggregate headline inflation in

Figure 1.7. Growth Revisions in 2017 Are Driven by Both Structural and Cyclical Factors¹



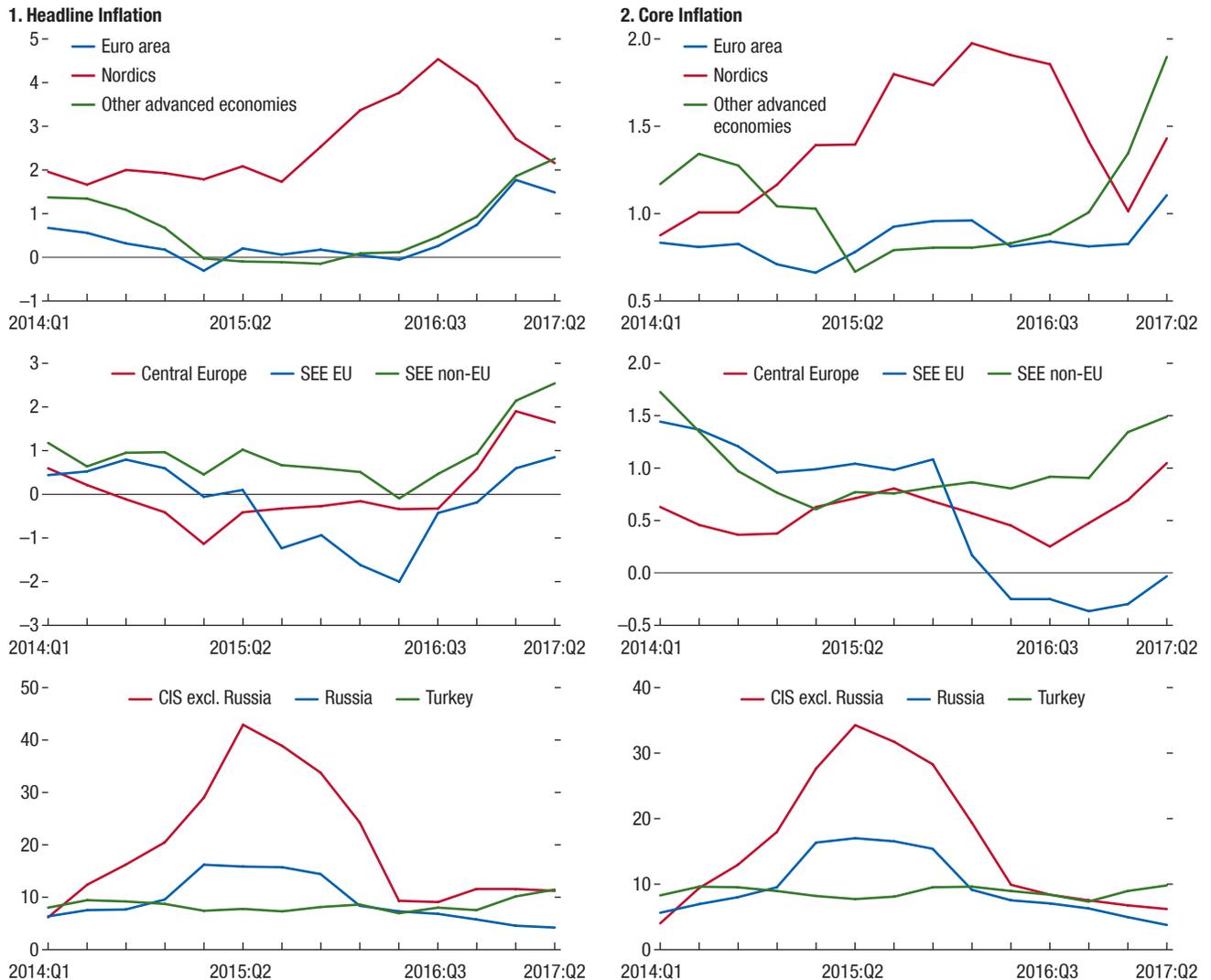
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
¹Potential growth revision for 2017 is the difference between estimates of potential growth in year 2017 as reported in the October 2017 and October 2016 WEOs. Revisions for other variables are defined similarly.

Figure 1.8. Wage and Productivity Growth Have Diverged within Europe
(Percent, year over year¹)



Sources: Eurostat; and IMF staff calculations.
¹Both wage and labor productivity growth are nominal. Labor productivity growth = real labor productivity growth plus growth in GDP deflator.
²Select advanced EU economies comprise the Baltics, the Czech Republic, the Slovak Republic, and Slovenia.

Figure 1.9. Inflation Remains Generally Subdued across Europe



Sources: Haver Analytics; and IMF staff estimates.

Note: CIS = Commonwealth of Independent States; EU = European Union; SEE = Southeastern Europe.

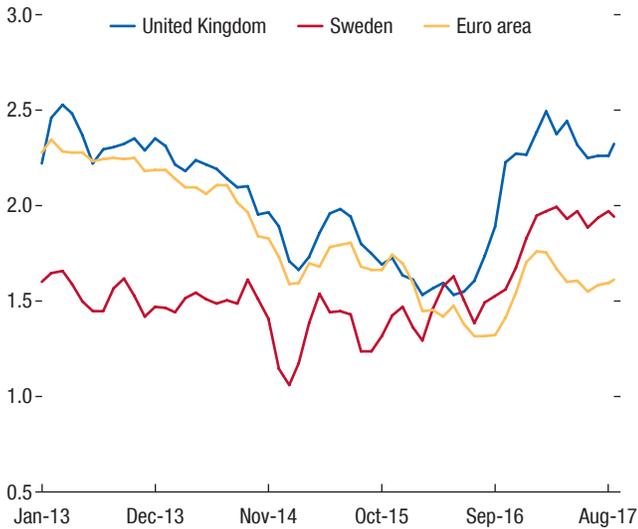
the other members of the *Commonwealth of Independent States (CIS)* has been hovering around 11.5 percent throughout 2017, driven by persistent double-digit inflation in *Ukraine*.

- *Turkey's* annual inflation rate rose to 10.7 percent in August 2017 from 9.2 percent in January, more than double the central bank's inflation target of 5 percent. Prices of food, nonfood goods, and fuels climbed at double-digit rates, and core inflation reached a three-year high, driven in part by oversimulative macroeconomic policies.

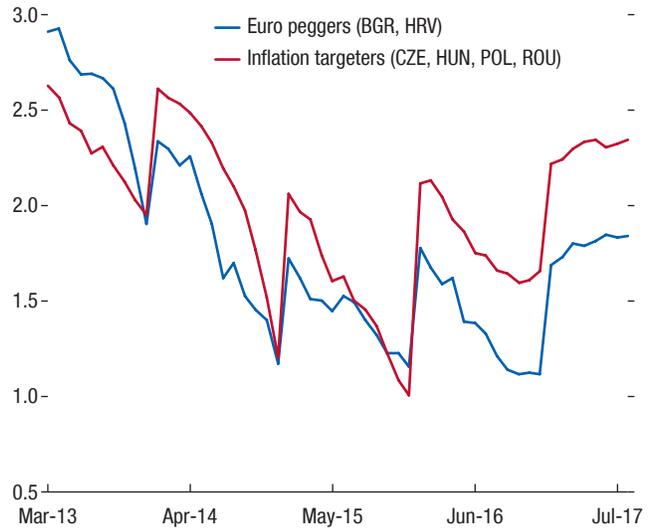
The divergent wage growth trends appear to reflect differences in the degree of slack in labor markets. While headline unemployment rates have trended down across Europe since early 2013, the decline in labor market slack in *the Baltics, Central Europe, and Southeastern Europe* has been much larger than in most *advanced European economies* (Figure 1.11). In particular, both unemployment and underemployment (which includes involuntary part-time workers) in *the Baltics, Central Europe, and Southeastern Europe* are now at the lowest level since 2008, and business survey data indicate that shortages of skilled labor are

Figure 1.10. Inflation Expectations Are Increasing Gradually
(Percent)

1. Break-even Inflation Rates—10 Year

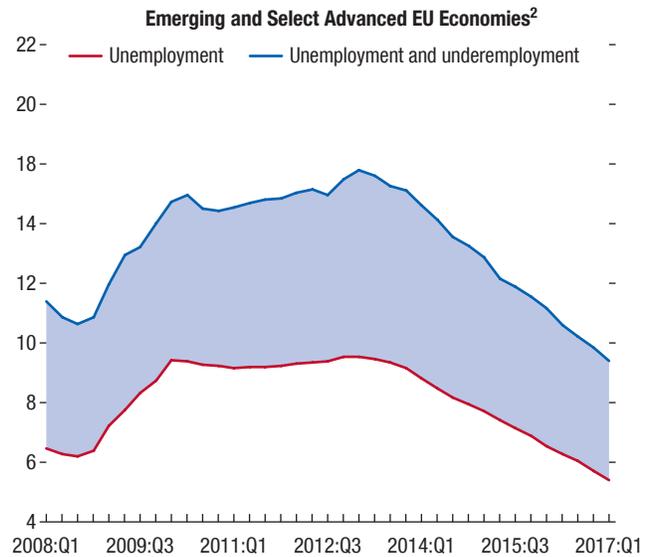
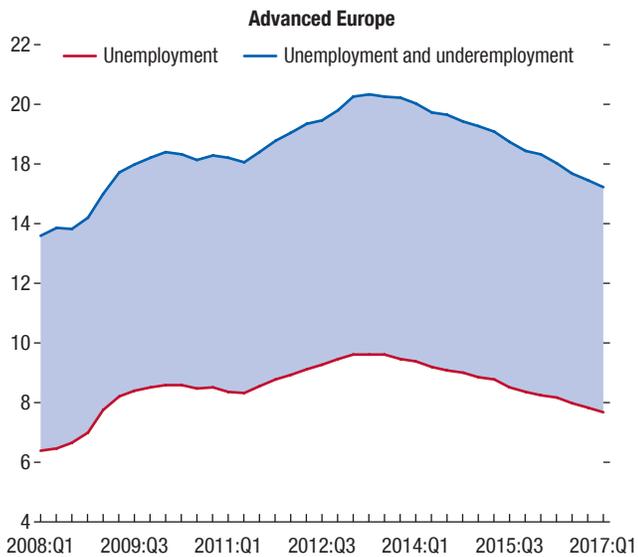


2. Consensus Forecast of Next Years' Inflation



Sources: Bloomberg Finance L.P.; Consensus Economics Forecasts; and IMF staff calculations.

Figure 1.11. Labor Market Slack Has Been Shrinking, but More Significantly in Emerging Europe
(Percent of active labor force¹)

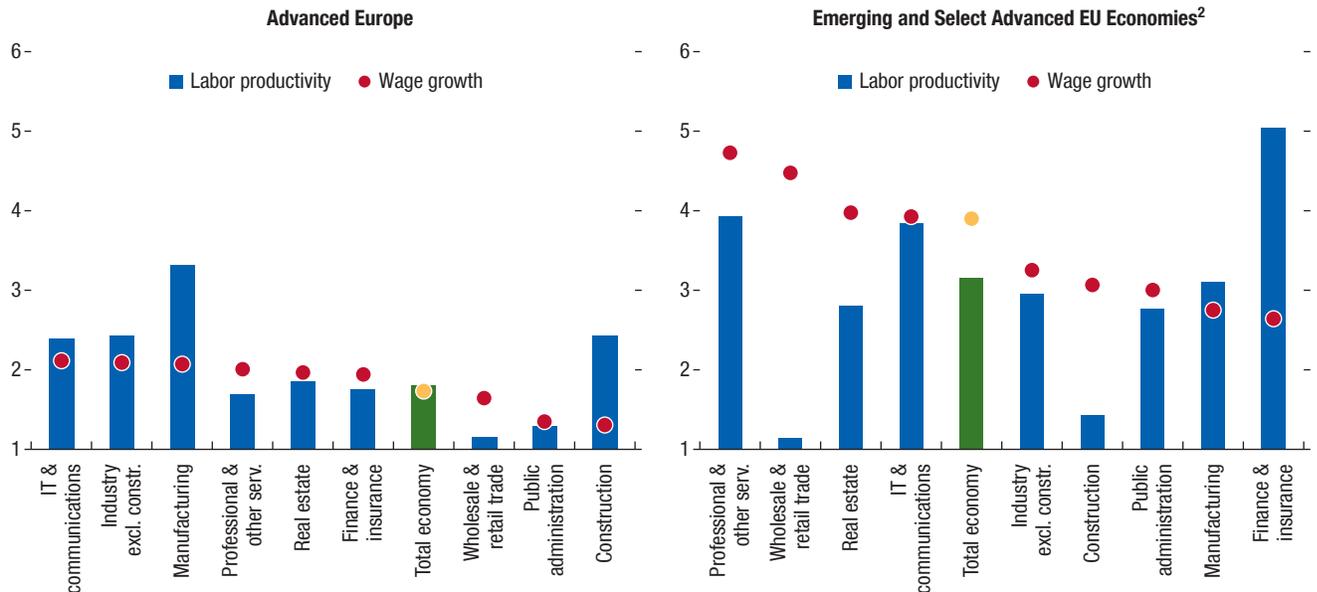


Sources: Eurostat; and IMF staff calculations.

¹Underemployment include persons available to work but not seeking, persons seeking work but not immediately available, and underemployed part-time workers.

²Select advanced EU economies comprise the Baltics, the Czech Republic, the Slovak Republic, and Slovenia.

Figure 1.12. Wage Growth and Productivity Growth Vary Significantly across Sector and within Europe
(Year over year percent change, average 2013:Q1–2017:Q2¹)



Sources: Eurostat; and IMF staff calculations.

¹Both wage and labor productivity growth are nominal. Labor productivity growth = growth in real labor productivity plus growth in the sector's deflator.

²Select advanced EU economies include the Baltics, and the Czech Republic, the Slovak Republic, and Slovenia.

seen as beginning to constrain the expansion (see the spring 2017 *Regional Economic Issues: Central, Eastern, and Southeastern Europe*). In contrast, there is still labor market slack in some *advanced economies* (see Chapter 2 of the October 2017 *World Economic Outlook*).

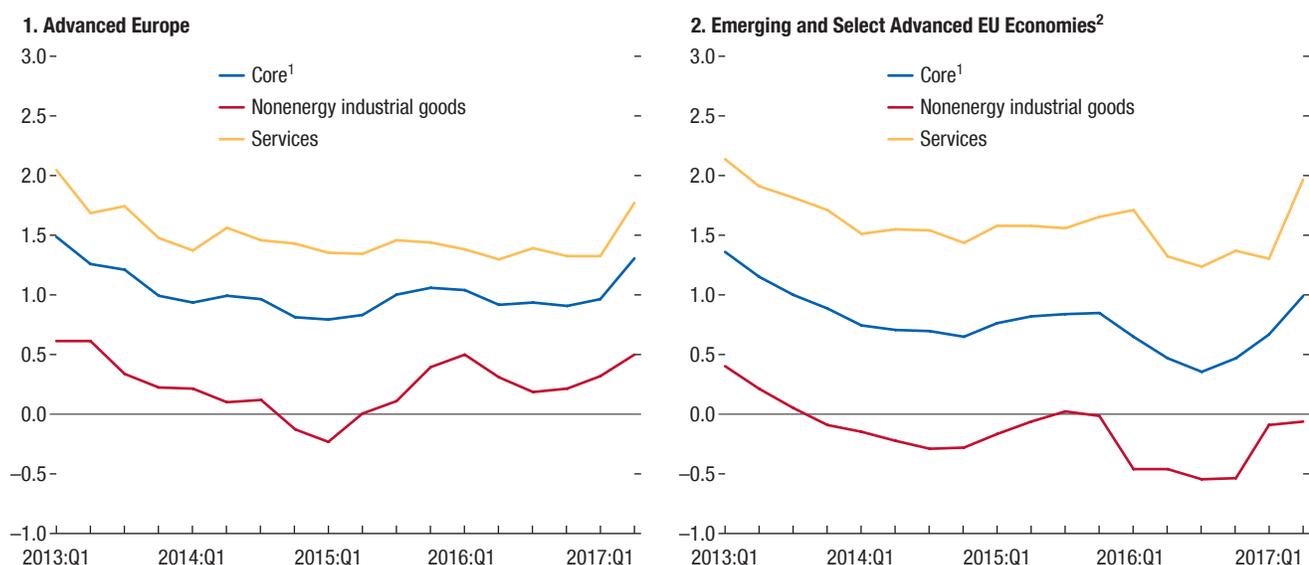
Exposure to external competition and technological progress is shaping wage growth patterns at sectoral levels (Figure 1.12). Exposure to external competition—particularly in sectors where companies can increasingly move production globally—may explain why, for many countries in *advanced Europe*, wage growth trails significantly behind productivity growth in the manufacturing sector. In addition, automation and technological progress may also dampen wage and employment growth for middle-skill jobs in manufacturing (see OECD 2017 and IMF 2017). This gap is much smaller in service sectors. In *the Baltics, Central Europe, and Southeastern Europe*, wage growth has been noticeably stronger in service sectors (including professional services, wholesale and retail trade, and real estate) relative

to industrial sectors, which are more exposed to external competition. Thus far, many economies where economy-wide wage growth is running high, have not experienced major reductions in export market shares, as wage growth in the manufacturing sector has been relatively weaker.¹

For *the Baltics, Central Europe, and Southeastern Europe*, higher wage growth in the service sectors will likely lead to higher domestic services inflation. In recent years, inflation in services has generally outpaced inflation in goods prices (Figure 1.13)—a phenomenon that is also observed globally outside Europe. Policymakers have shown more tolerance of higher services inflation as it is offset by low goods price inflation. Going forward, higher wage growth in the service sector could exert more pressure on headline

¹In the construction sector, sluggish wage growth compared with relatively strong productivity growth could reflect partly underrecorded informal migrant employment in that sector.

Figure 1.13. Offsetting Forces: Lower Goods Inflation and Higher Services Inflation
(Year over year percent change)



Sources: Eurostat; and IMF staff calculations.

¹Core inflation excludes energy, food, alcohol, and tobacco.

²Includes the Baltics, the Czech Republic, Slovak Republic, and Slovenia for this analysis.

inflation, especially if imported inflation also picks up some steam.²

The Credit Recovery Is Catching Up with the Real Recovery

Credit growth is picking up in many European countries, but continues to lag domestic demand and output. As investment continues to garner strength, credit growth should follow, with beneficial effects for bank profitability and balance sheets.

- In *advanced Europe* and *the euro area*, bank credit to the private sector is picking up (Figure 1.14, panel 1), mainly driven by credit to households (Figure 1.14, panel 2). Growth in credit to businesses remains uneven (Figure 1.14, panel 4) and is particularly weak in countries with high levels of nonperforming loans (NPLs). In *the Nordic economies*, credit

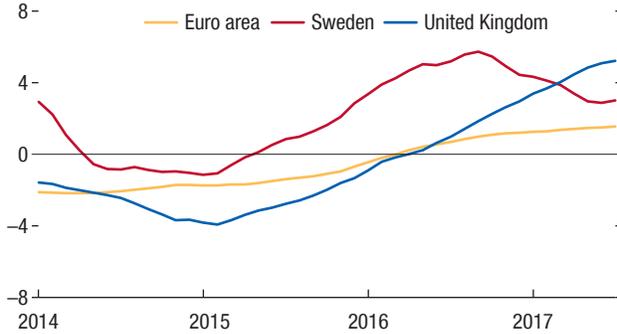
²As noted in the May 2017 *Regional Economic Issues: Central, Eastern, and Southeastern Europe*, the impact of wage growth on inflation is significant, but its impact is smaller than that of imported inflation—particularly for countries in the euro area.

to businesses is robust, in line with a pickup in investment and exports, while credit growth to households has slowed somewhat following the recent macroprudential measures aimed at containing the housing boom and elevated household debt levels.

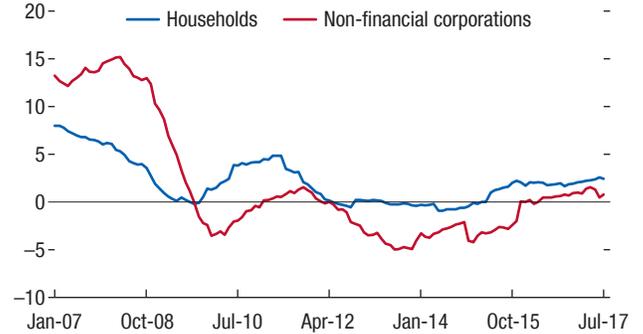
- In *emerging Europe*, outside *the CIS*, credit growth, both to nonfinancial corporations and households, is increasing, particularly in *Central Europe* and *Southeastern European EU member states* (SEE-EU), in line with continuing strong real GDP and investment growth (Figure 1.14, panel 3). On a transactional basis, credit growth may be higher in those countries where the cleaning of loan portfolios lowers credit stocks (for example in *Albania*, *Croatia*, and *Hungary*). In *Russia*, after a period of decline, credit is growing as the economy exits recession (Figure 1.14, panel 3). In the rest of *the CIS*, credit contraction has continued, albeit at a slower pace. In *Turkey*, credit initially slowed in 2016 in the aftermath of the failed coup attempt, but rebounded strongly to about 18 percent in July 2017, driven by

Figure 1.14. Credit Is Recovering

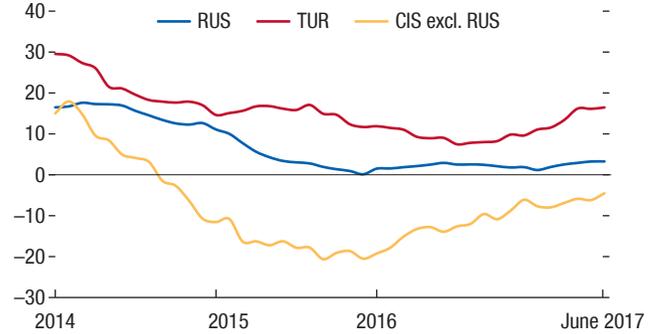
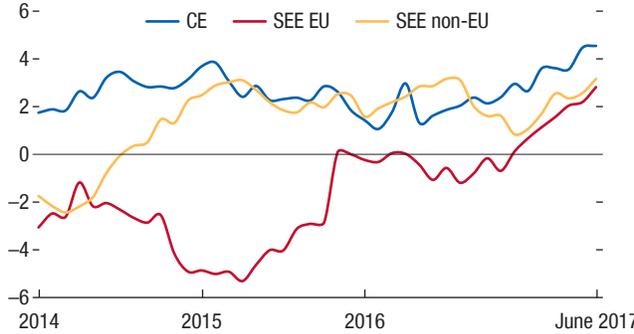
1. Advanced Europe: Credit Growth (Year over year, percent)



2. Euro Area: Credit to Households and Corporations (Year over year, percent)

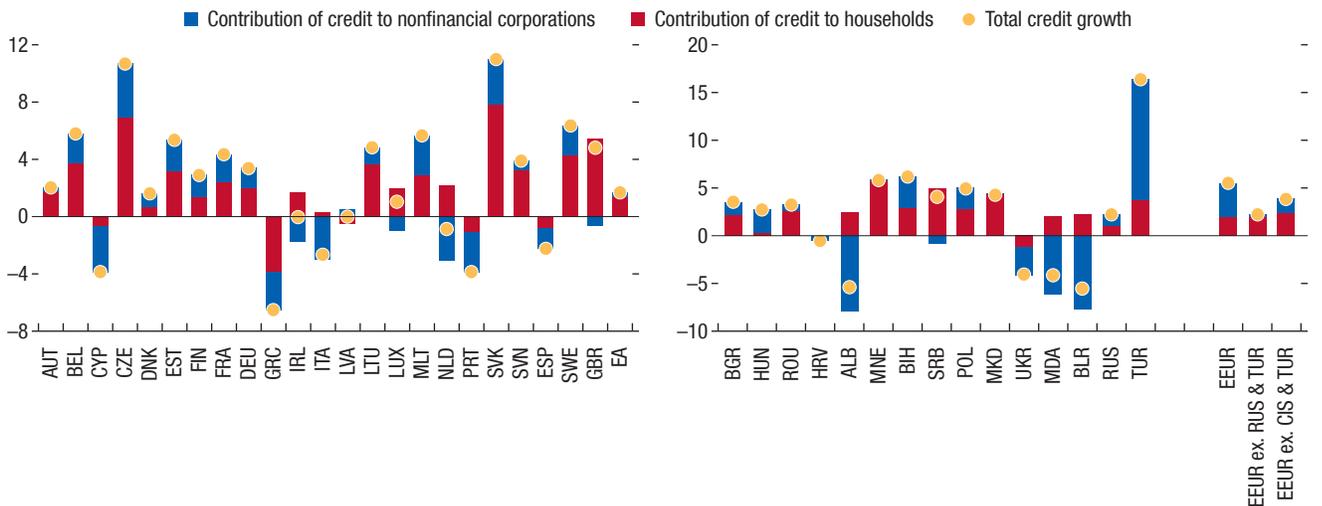


3. Emerging Europe: Credit Growth (Year over year, percent, net of foreign exchange valuation effect)



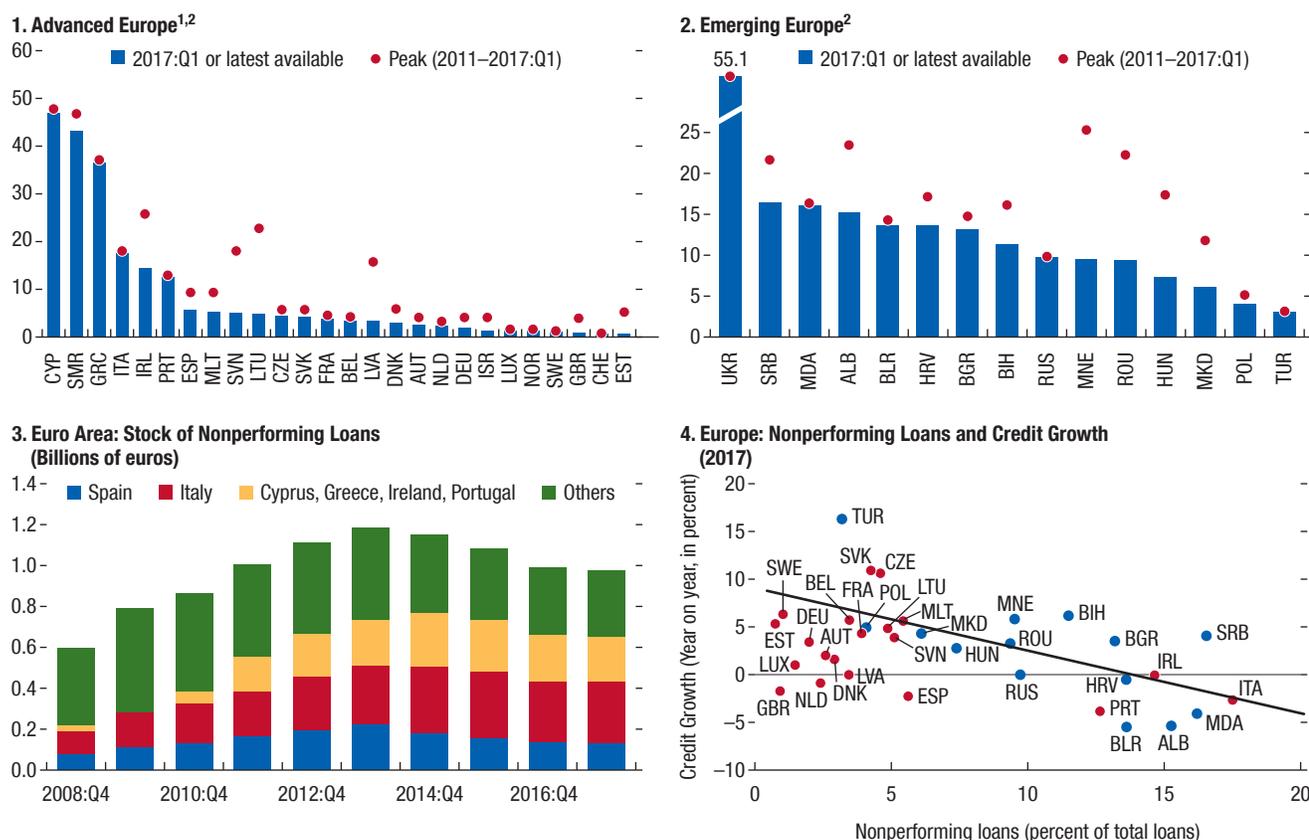
Sources: IMF, *World Economic Outlook*; and European Bank for Reconstruction and Development.
 Note: CE = Central Europe comprising Hungary and Poland; CIS = Commonwealth of Independent States; SEE = Southeastern Europe.

4. Contribution of Credit to Households and Nonfinancial Corporations to Total Credit (Year over year, percent; 2017:Q2)



Sources: IMF, *World Economic Outlook*; European Bank for Reconstruction and Development; IMF, Financial Soundness Indicators; European Central Bank, Consolidated Banking Statistics; Haver Analytics; and IMF staff calculations.

Figure 1.15. Nonperforming Loans Have Declined, but Still High in Some Countries
(Percent of total loans)



Sources: IMF, *World Economic Outlook*; European Bank for Reconstruction and Development; IMF, Financial Soundness Indicators; European Central Bank, Consolidated Banking Statistics; Haver Analytics; and IMF staff calculations.

¹For Greece, expanding the nonperforming loan (NPL) definition to include loans that are 90 days or more past due, unlikely to be repaid in full without realizing collateral, or impaired according to accounting rules, as well as loans that have been restructured for less than a year, would increase the NPL ratio to 49 percent.

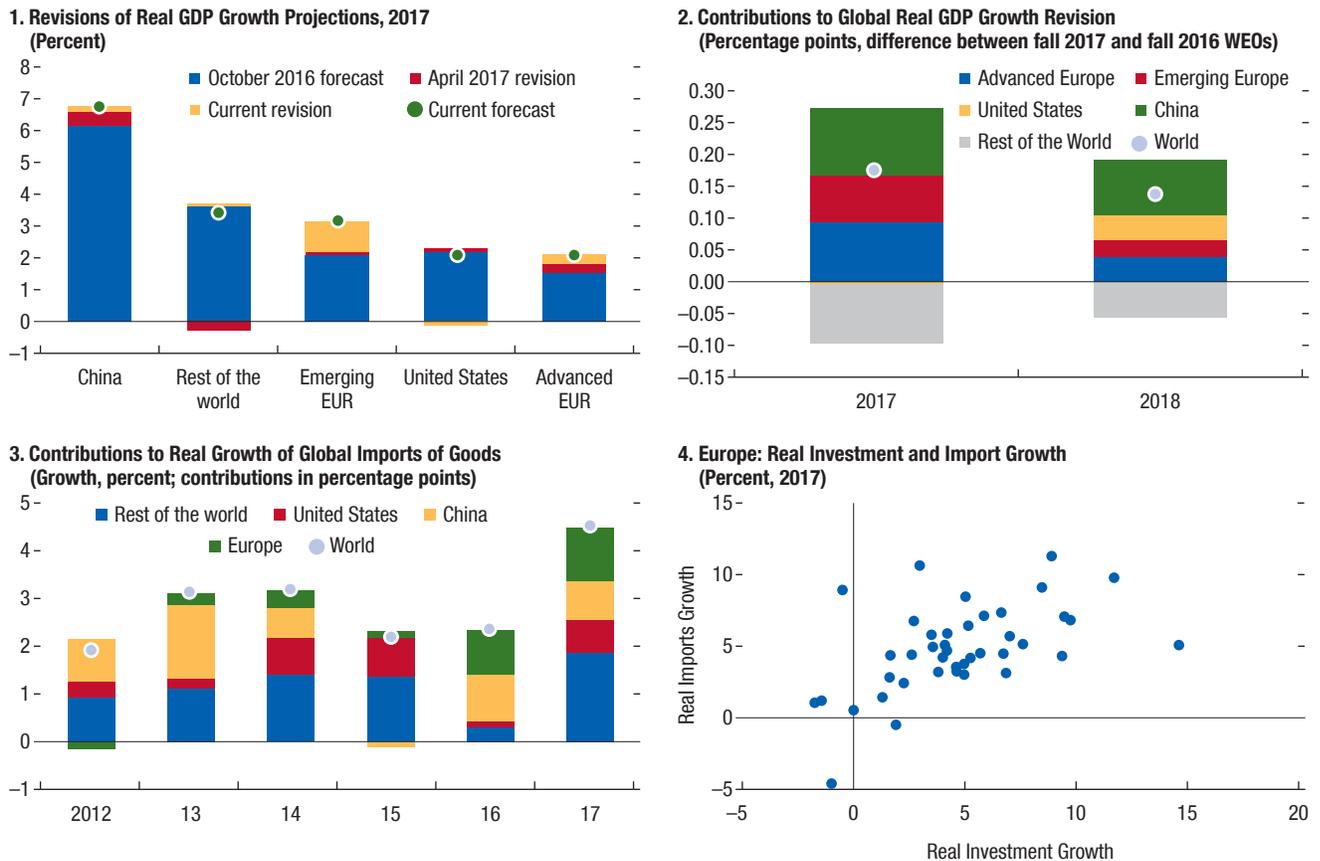
²The data for NPLs presented here could differ from the data from country authorities and other IMF publications due to differences in coverage and definition.

nonfinancial corporations (Figure 1.14, panel 4). This was also driven by various stimulus measures, notably a credit guarantee scheme for lending to businesses.

NPL levels have declined, but are still a drag on profitability and the credit supply in several countries (see Chapter 3). NPL ratios have declined across Europe from their postcrisis peaks (Figure 1.15, panels 1 and 2). In *advanced Europe*, NPLs in *the euro area* have been reduced by about €160 billion (predominantly in the household sector) since their peak in 2014, but the stock remains high at just below €1 trillion (Figure 1.15, panel 3). *Spain* and *Ireland* account for a large

portion of the reduction in NPLs. In *Italy*, the recent pickup in NPL sales is encouraging. Legacy assets together with cyclical and structural factors are a drag on profitability. For an appreciable part of the banking system, the return on equity is persistently below the cost of equity. The economic recovery may not be enough to boost returns to meet investor expectations; further consolidation and restructuring will be needed. NPL levels have been declining across *emerging market Europe* but remain higher than 10 percent in eight countries. While disentangling demand and supply effects is difficult, high NPL levels in several economies appear to be a factor that is hindering credit growth (Figure 1.15, panel 4). In this regard, more actions are needed to reduce legacy bad

Figure 1.16. Europe's Growth Stronger than Expected and Has Contributed More to Global Growth



Sources: IMF, *World Economic Outlook* (WEO); and IMF staff calculations.

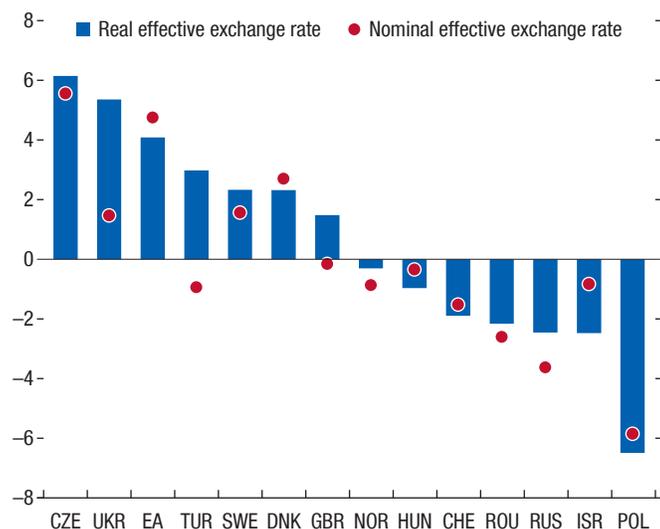
assets, repair bank balance sheets, and facilitate the necessary corporate restructuring (IMF 2015).

The European Recovery Is Spilling Over to the Rest of the World

Europe has finally become an engine for global trade. The improved prospects for Europe account for the bulk of the upward revision to global growth in 2017 from the April 2017 *World Economic Outlook* (Figure 1.16). Also, the strengthening domestic-demand-driven recovery in Europe has boosted global trade, with Europe's contribution to the growth of global merchandise imports in 2016–17 similar to that of *China* and *the United States* combined.

The improving fundamentals in Europe have been accompanied by appreciation of the real effective exchange rate of the euro and some other European currencies. Between March and September 2017, the euro appreciated by about 4 percent in real effective terms (Figure 1.17), largely due to the improved euro area growth prospects (Box 1.1). Another currency that appreciated about 6 percent is the Czech koruna. The appreciation of *Turkey's* lira, despite a large current account deficit, follows a more than 10 percent depreciation after the coup in the second half of 2016, as activity and confidence rebounded faster than expected. In *Russia*, the ruble has depreciated by about 5 percent since March, following a 25 percent appreciation from the trough reached in early 2016 that was driven by stronger oil prices and tight monetary policy

Figure 1.17. Exchange Rate Movements
(Percent; depreciation (-)/appreciation (+), March–September 2017)



Source: IMF staff calculations.

to reduce inflation. Meanwhile, in *the United Kingdom*, sterling has moved broadly sideways since the depreciation in 2016.

Despite the acceleration in imports and appreciation of the euro, current account surpluses remain noticeably larger than before the crisis in most countries. Net external debtor countries that had persistent and large current account deficits prior to the crisis have seen appreciable current account adjustments (Figures 1.18, panels 1 and 2), driven by both a permanent reduction in the level of demand and some labor cost reductions. At the same time, elevated external surpluses have persisted in *Germany, the Netherlands, and Switzerland*, as well as in *Sweden*.

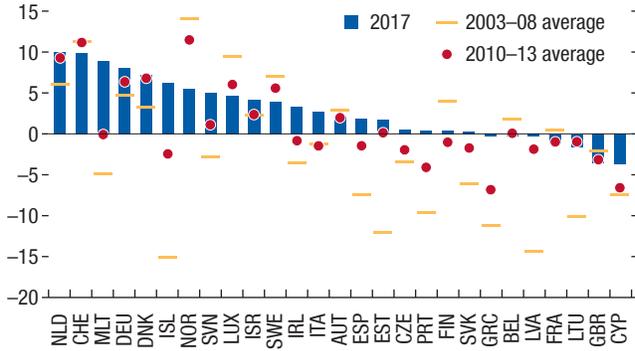
- In *advanced Europe, euro area members* that earlier had deficits have maintained surpluses (*Estonia, Portugal, Spain*) or reduced the deficits (*Greece, Latvia, Lithuania*) over the past several years (Figure 1.18, panel 1). This was partly driven by adjustments in unit labor costs (Figure 1.18, panel 4). However, this has led only to a gradual improvement in their net foreign asset positions (Figure 1.18, panel 3), and thus surpluses need to be maintained for some time. Recent indicators of

competitiveness, while not conclusive, suggest some erosion of competitiveness in *the Baltics*, where real effective exchange rate appreciation, fast wage growth, and modest productivity gains have led to a notable increase in unit labor costs, bringing them close to the precrisis peak (Figure 1.18, panel 5). Excess external surpluses have persisted in *Germany and the Netherlands*, indicating that automatic adjustment mechanisms are weak. That is, prices and saving and investment decisions are not adjusting fast enough to correct the imbalances, partly reflecting currency arrangements but also likely structural features (IMF 2017b).

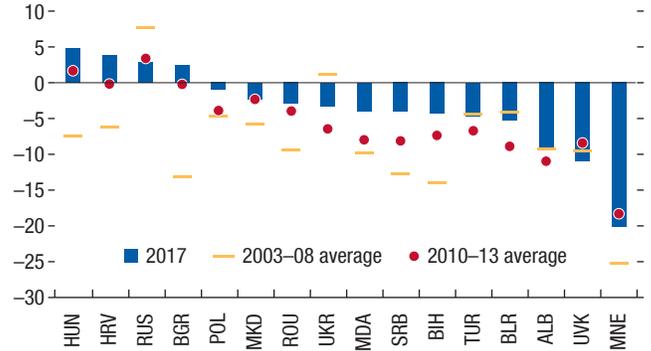
- In *emerging Europe*, there has been a significant improvement in current account balances since the global financial crisis, with some economies replacing large current account deficits with small surpluses, but here too net external liability positions remain elevated (Figure 1.18, panels 2 and 3). In *Central Europe and SEE-EU*, real effective exchange rates have edged up somewhat as wages grew faster than productivity in the past two years (Figure 1.18, panel 5). The level of economy-wide profit shares in these economies is higher than the EU average (Figure 1.18, panel 6), which suggests that companies have some room to absorb the higher labor costs. However, the impact of high wage growth on competitiveness needs to be monitored closely.
- In *Turkey*, strong domestic demand pressures and high inflation have contributed to a larger current account deficit since the crisis. Amid easy global financial conditions, *Turkey's* year-to-date current account deficit exceeded 5 percent of GDP. In *Russia*, the current account balance has been driven by oil prices and sanctions, although the effect of the latest sanctions is believed to be modest. Given current oil price projections, and with the recovery of domestic demand, *Russia's* current account is projected to be in a surplus of 3–4 percent of GDP in the near term.

Figure 1.18. Current Accounts Have Improved but Competitiveness Gains Need to Be Preserved

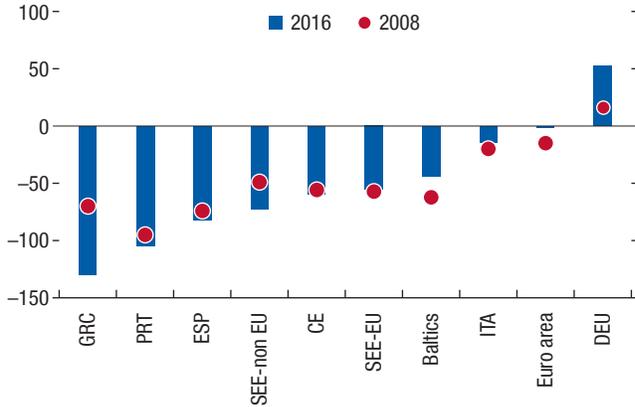
1. Advanced Europe: Current Account Balance (Percent of GDP)



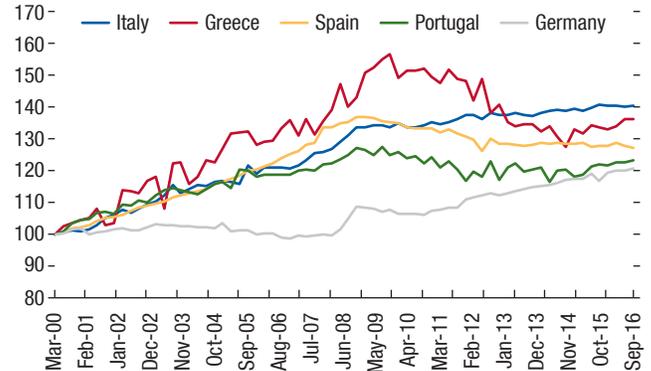
2. Emerging Europe: Current Account Balance (Percent of GDP)



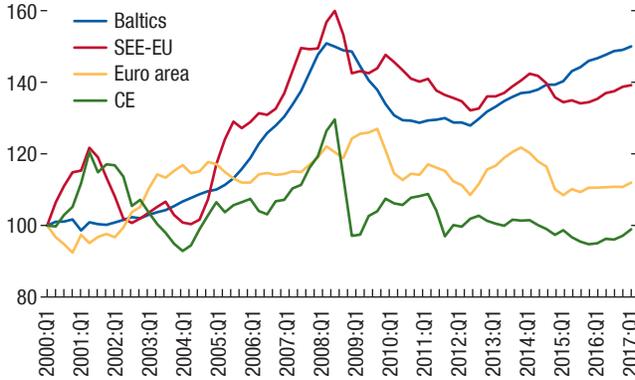
3. Net Financial Assets (Percent of GDP)



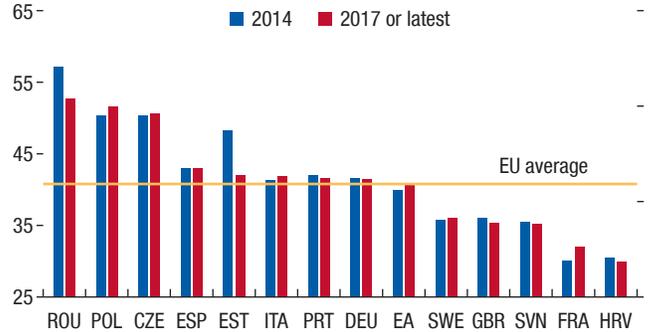
4. Unit Labor Costs (2000 = 100)



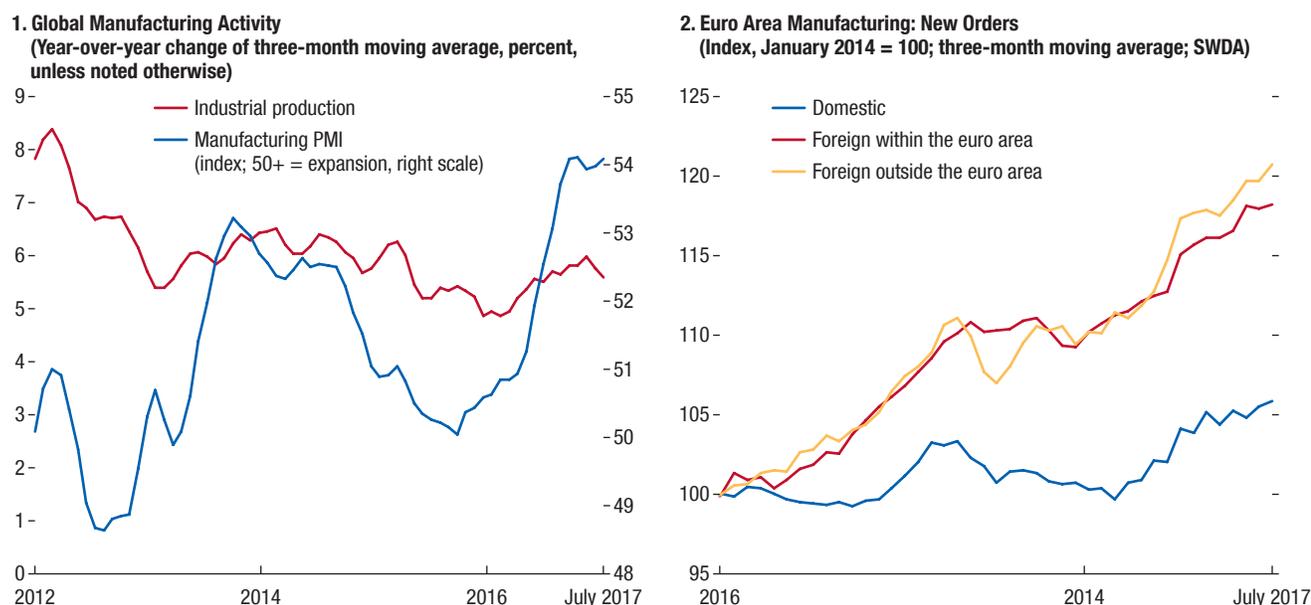
5. Selected Regions: Real Effective Exchange Rate (2000:Q1 = 100, based on manufacturing unit labor costs)



6. Profit Share of Nonfinancial Corporations (Percent)



Sources: IMF, *World Economic Outlook*; Eurostat; Haver Analytics; and IMF staff calculations.

Figure 1.19. Global Activity and Demand for Euro Area Manufacturing Goods Continue to Improve

External Conditions and Macroeconomic Policies Will Support Growth

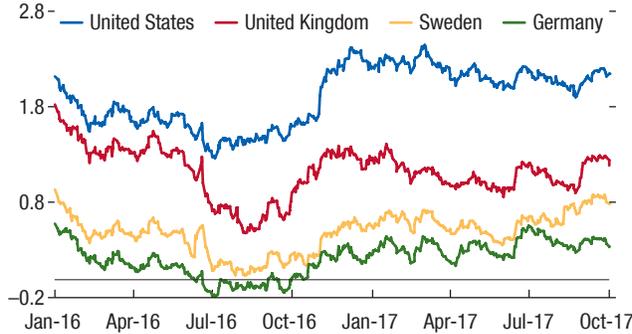
Looking ahead, external demand conditions remain favorable. The global expansion continues to strengthen and broaden. There has been an upturn in manufacturing and investment, and stronger trade growth. Expansionary PMIs, especially in advanced economies, point to continued strong global growth in the third quarter of 2017 (Figure 1.19, panel 1). New orders for euro area manufacturing goods, particularly from foreign markets, also continue to rise and are at levels not seen in recent years, which bodes well for further growth (Figure 1.19, panel 2). Accordingly, the October 2017 *World Economic Outlook* projects global growth to reach 3.6 percent and 3.7 percent in 2017 and 2018, respectively, up from 3.2 percent in 2016.

Financial conditions are very supportive of activity. As discussed in the October 2017 *Global Financial Stability Report*, the environment of benign macroeconomic conditions and continued

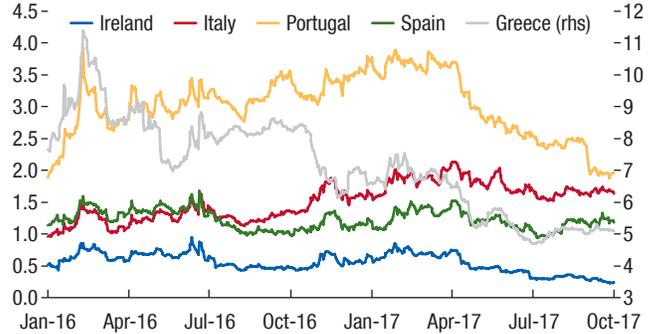
easy monetary and financial conditions with sluggish inflation is fueling a marked increase in risk appetite, broadening investors' search for yield. Policy rates, term premiums, and corporate spreads generally remain very low, while global stock markets have been posting strong gains for some time. On the back of positive economic news and expectations of some tapering of the Asset Purchasing Program of the European Central Bank (ECB), yields in *advanced Europe* have edged up since September 2016, but remain at low levels (Figure 1.20, panel 1). In *the euro area economies* with limited fiscal buffers, spreads relative to German bunds have declined since mid-2017 (Figure 1.20, panel 2). In *emerging Europe*, both local and foreign currency yields have gone up somewhat in some countries (Figures 1.20, panels 3 and 4), and spreads have declined for all countries since October 2016 on the back of an improved global environment and sentiment toward emerging market economies (Figure 1.20, panel 5). The declining spreads have been underpinned by continued strength in capital inflows to emerging market economies (Figure 1.20, panel 6).

Figure 1.20. Financial Conditions Have Remained Favorable

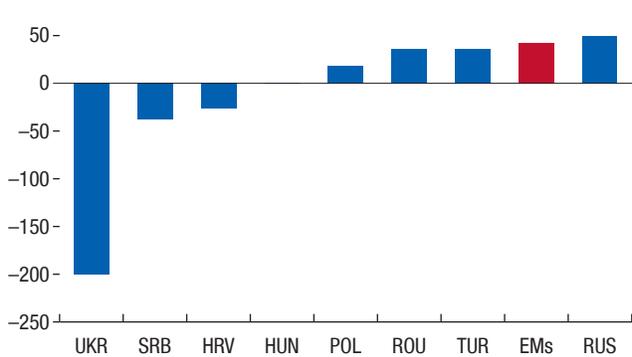
1. Ten-year Government Bond Yields (Percent)



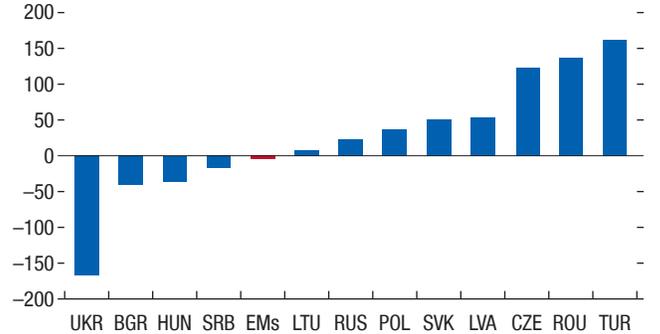
2. Ten-year Government Bond Spreads with Bund (Percent)



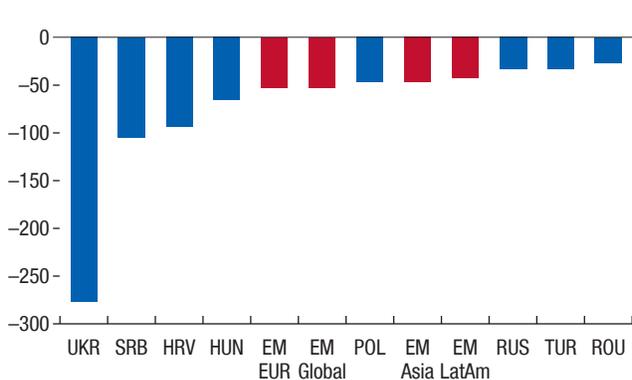
3. Change in Foreign Currency Sovereign Bond Yields since October 1, 2016 (Basis points)



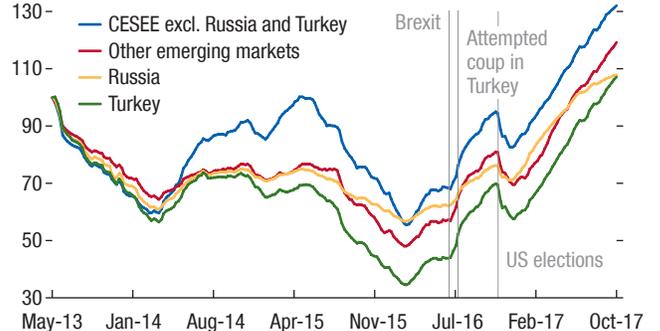
4. Change in 10-Year Local Currency Sovereign Bond Yields since October 1, 2016 (Basis points)



5. Change in EMBIG Spreads since October 1, 2016 (Basis points)



6. Cumulative Flows to Exchange-Traded and Mutual Funds Investing in Emerging Market Bonds (May 2013 = 100)

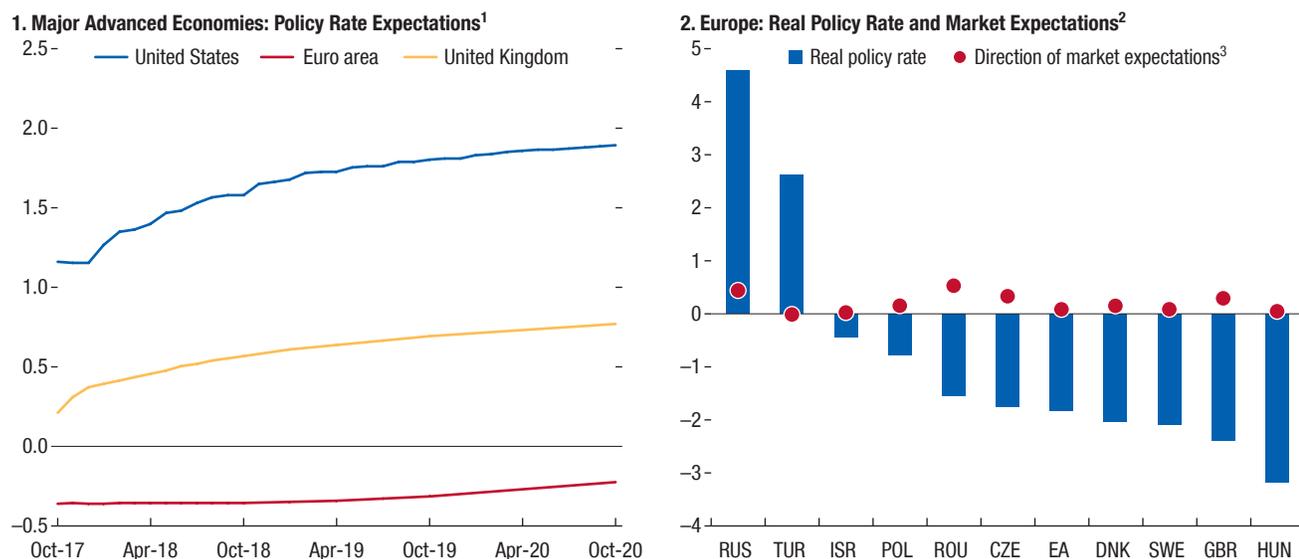


Sources: IMF, *World Economic Outlook*; Bloomberg Finance L.P.; Haver Analytics; and IMF staff calculations. Note: EM = emerging market economies; CESEE = Central, Eastern and Southeastern Europe.

In the near term, no significant tightening of conditions is expected. The normalization of monetary policy in *the United States* is expected to proceed smoothly and without large and protracted increases in financial market volatility. Monetary policy is expected to remain accommodative across most *European economies*.

- In *advanced Europe*, continued accommodative monetary policies are expected to keep policy rates low (Figure 1.21, panel 1). In *the euro area*, given subdued inflation, monetary policy is expected to remain accommodative for an extended period. In *the United Kingdom*, monetary

Figure 1.21. Monetary Policy Conditions and Expectations
(Percent)



Sources: Bloomberg Finance L.P.; Haver Analytics; and IMF staff calculations.

Note: EA = Euro area.

¹Based on federal funds rate futures for the United States; sterling overnight interbank average rate for the United Kingdom; and euro interbank offered forward rate for the euro area; updated October 17, 2017.

²Real policy rate is calculated as the difference between nominal policy rate and one-year-ahead inflation forecast.

³Market expectation of interest rate is calculated as the difference between one-year-ahead interest rate swap rate and three-month interbank rate. Positive values indicate expectation of monetary tightening.

policy is expected to tighten gradually from a very accommodative stance, given a relatively closed output gap and inflation close to target (Figure 1.21, panel 1). In the rest of *advanced Europe*, markets expect a tightening bias (for example, *the Czech Republic*), but monetary policy is expected to remain supportive, reflected in negative real policy rates across the region (Figure 1.21, panel 2).

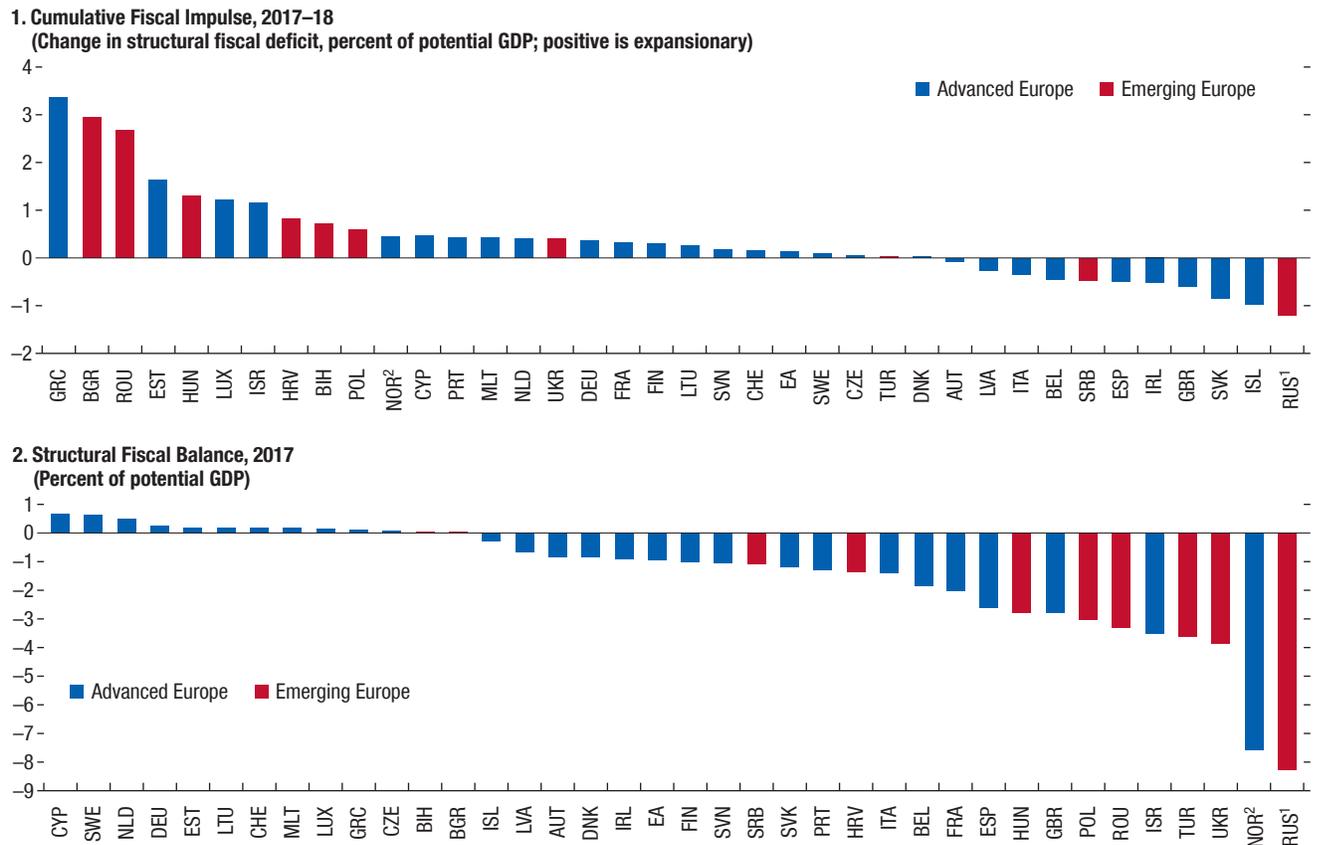
- *Emerging Europe* is also expected to experience generally accommodative financial conditions on the back of easy monetary policy and strong risk appetite, as signaled by lower sovereign bond spreads and higher equity prices. Market expectation is for some tightening in *Romania*, given the closing output gap and rising inflationary pressures (Figure 1.21, panel 2). In *Turkey*, after the increase in the average funding rates in early 2017, the market expects the rates to go modestly down, as inflationary pressures from

the depreciation of the Turkish lira subside.

In *Russia*, policy rates have been lowered since March, following the decline in inflation and inflation expectations, and the market expects further cuts over the next few quarters, though expectations a year ahead are more mixed.

Fiscal policy is not projected to change appreciably going forward, staying broadly neutral in *advanced Europe* and neutral to expansionary in *emerging Europe* (Figure 1.22). The cumulative fiscal impulse over 2017–18, defined as the change in the structural fiscal balance as a share of potential output between 2016 and 2018, is forecast to be slightly expansionary in some *advanced European* economies, including *Germany* and *the Netherlands* (Figure 1.22, panel 1). In most *advanced economies*, fiscal policy is neutral or slightly tighter (for example, *Spain*, and *the United Kingdom*). In *emerging Europe*, moderate fiscal easing is expected in most countries, with the notable exceptions of

Figure 1.22. Fiscal Stances Are Broadly Neutral or Expansionary



Source: IMF, *World Economic Outlook*.

¹General government non-oil primary structural balance.

²Structural non-oil balance (percent of mainland trend GDP).

Russia. However, structural fiscal balances remain negative for most countries in the region and are, in case of oil-dependent *Norway* and *Russia*, sizable (Figure 1.22, panel 2).

Growth Is Projected to Stay Strong

With improving external demand and accommodative macroeconomic policies and financial conditions, strong growth momentum will likely continue in the near term (Table 1.1):

- In *the euro area*, growth has been revised up to 2.1 percent (from 1.7 percent in the April projection) for 2017 and to 1.9 percent for 2018 (from 1.6 percent in April),

reflecting stronger-than-expected growth in the first half of this year and improved high frequency economic and confidence indicators. In addition to cyclical factors, the improved growth prospects also reflect higher estimates of potential growth on the back of stronger investment.

- The near-term outlook has also improved in the *Nordics* and *other advanced Europe*, except *the United Kingdom and Switzerland*. Growth in *the Nordics*, *the Czech Republic*, and *Israel* is revised up reflecting strong momentum so far. In contrast, growth in *the United Kingdom* is projected to slow to 1.7 percent in 2017 and 1.5 percent in 2018, as Brexit has started to weigh on growth.

Table 1.1. Real GDP Growth Projections
(Year-over-year percent change)

	October 2017 WEO				Difference from April 2017 WEO		
	2016	2017	2018	2019	2017	2018	2019
Europe	1.7	2.4	2.1	1.9	0.5	0.2	0.0
Advanced European economies	1.9	2.1	1.9	1.7	0.3	0.2	0.0
Euro area	1.8	2.1	1.9	1.7	0.5	0.3	0.1
France	1.2	1.6	1.8	1.9	0.2	0.1	0.1
Germany	1.9	2.0	1.8	1.5	0.4	0.3	0.0
Italy	0.9	1.5	1.1	0.9	0.7	0.3	0.1
Spain	3.2	3.1	2.5	2.0	0.5	0.4	0.0
Nordic economies	2.2	2.3	2.0	2.0	0.3	-0.1	-0.1
Other European advanced economies	2.0	1.8	1.7	1.7	-0.3	0.1	0.0
United Kingdom	1.8	1.7	1.5	1.6	-0.4	0.0	0.0
Emerging European economies	1.5	3.1	2.6	2.5	0.9	0.2	0.0
Central Europe	2.5	3.7	3.4	3.0	0.4	0.2	0.1
Poland	2.6	3.8	3.3	3.0	0.4	0.1	0.0
Southeastern European EU member states	4.3	4.7	3.9	3.4	1.0	0.8	0.4
Southeastern European non-EU member states	2.7	3.0	3.3	3.4	-0.2	-0.3	-0.3
Commonwealth of Independent States	-0.1	1.8	1.7	1.7	0.4	0.1	0.0
Russia	-0.2	1.8	1.6	1.5	0.4	0.2	0.0
Turkey	3.2	5.1	3.5	3.5	2.7	0.2	0.1
Memorandum							
European Union	2.0	2.3	2.1	1.8	0.4	0.3	0.1

Source: IMF, *World Economic Outlook* (WEO).

Note: Shading indicates a downward revision.

- In most of *emerging Europe*, growth forecasts have also been revised up reflecting stronger domestic demand and firming euro area activity. Outside *the CIS* and *Turkey*, growth is revised up in *the EU member countries*, partly due to higher absorption of EU funds, but the outlook is softer in the *Southeastern Europe non-EU countries*, partly due to ongoing fiscal consolidation. Economic activity in *Russia* is projected to expand by 1.8 percent in 2017 (0.4 of a percentage point up relative to April), helped by higher oil prices, easier financial conditions, and improved consumer confidence. The most notable revision is for *Turkey*, where growth in 2017 has been revised up by 2.7 percentage points to 5.1 percent reflecting a very strong outturn in the first quarter of the year. However, growth is projected to be more subdued in the second part of 2017 and in 2018, as the fiscal stimulus fades and monetary policy continues to cool demand.

Inflation is expected to remain subdued across most of the European economies (Table 1.2). In *advanced Europe*, inflation is projected to

increase, but by less than anticipated in the April 2017 *World Economic Outlook*, reflecting mainly downward revisions in *the euro area* (by 0.2 percentage point for 2017), as a stronger euro has dampened inflation pressure. Underlying inflation remains stubbornly low and wage growth subdued amid still-high unemployment in some countries. Headline inflation is projected to approach the ECB's medium-term objective of below but close to 2 percent gradually over the next few years. Inflation in the rest of *advanced Europe* is revised up slightly, reflecting mainly an upward revision in *the United Kingdom*, where headline inflation is projected to reach 2.6 percent this year and next, but gradually decline thereafter as the temporary effects of the pound's depreciation wane. In most countries of *emerging Europe*, inflation is revised down slightly relative to the April 2017 *World Economic Outlook* projections. But there are risks for higher inflation should high wage growth finally push up headline inflation as external disinflationary pressure wanes.

Looking further ahead, the question is how strong and sustainable the cyclical recovery can be. On the one hand, growth has surprised on the upside, and estimates of potential growth have

Table 1.2. Inflation Projections
(Year-over-year percent change)

	October 2017 WEO				Difference from April 2017 WEO		
	2016	2017	2018	2019	2017	2018	2019
Europe	2.0	2.8	2.7	2.8	-0.1	-0.1	0.1
Advanced European economies	0.4	1.6	1.6	1.8	-0.1	-0.1	0.0
Euro area	0.2	1.5	1.4	1.7	-0.2	0.0	0.1
France	0.3	1.2	1.3	1.6	-0.2	0.1	0.1
Germany	0.4	1.6	1.5	2.0	-0.5	-0.2	0.1
Italy	-0.1	1.4	1.2	1.4	0.2	-0.1	0.0
Spain	-0.2	2.0	1.5	1.7	-0.4	0.0	0.1
Nordic economies	1.7	1.6	1.7	1.9	0.0	-0.1	-0.1
Other European advanced economies	0.4	2.1	2.1	2.0	0.1	-0.1	0.0
United Kingdom	0.7	2.6	2.6	2.2	0.2	0.0	0.0
Emerging European economies	5.6	5.6	5.1	4.9	0.1	-0.1	0.1
Central Europe	-0.4	2.0	2.5	2.6	-0.3	-0.1	0.1
Poland	-0.6	1.9	2.3	2.5	-0.4	-0.1	0.1
Southeastern European EU member states	-1.4	1.1	2.6	2.6	-0.1	0.1	0.2
Southeastern European non-EU member states	0.5	2.3	2.5	2.5	0.3	0.0	0.0
Commonwealth of Independent States	7.8	5.1	4.5	4.4	-0.1	-0.3	0.0
Russia	7.0	4.2	3.9	4.0	-0.2	-0.3	0.0
Turkey	7.8	10.9	9.3	8.8	0.8	0.3	0.3
Memorandum							
European Union	0.2	1.7	1.7	1.9	-0.1	0.0	0.1

Source: IMF, *World Economic Outlook*.

Note: Shading indicates a downward revision.

been revised up. More upward revisions could follow in response to the cyclical rebound. On the other hand, the risks to global growth over the medium term appear mainly to the downside (see below), and Europe is swimming against a tide of still-weak productivity growth and adverse demographics. Accordingly, the projections are for more moderate growth over the medium term.

Less Downside Risk in the Short Term, but Not in the Medium Term

Risks to the outlook have been lowered by the strong recovery and supportive policies in the short term, but medium-term risks continue to be tilted to the downside.

- On the *upside*, a stronger-than-anticipated global recovery in the short run could facilitate countries' reform efforts, further boosting confidence and investment and sustaining the momentum in activity. In addition, there may still be more slack than estimated in various European economies, and the rebound in activity through 2018 could thus be stronger than projected.
- External *downside* risks facing the entire region include rising protectionism and policy changes in major economies that could weigh on the global economy and European economies through trade, financial, and investment channels. Geopolitical risks (for example, those associated with *North Korea*) are more of a concern than usual. In addition, the prolonged search for yield in financial markets has raised the sensitivity of the financial system to shocks as well as the system's susceptibility to reversals of investor sentiment. Adjustments could be disruptive if there are monetary policy surprises in major economies. Higher debt service and refinancing risks could stress leveraged firms, households, and vulnerable sovereigns. Finally, a downturn in *China* could significantly affect European exports.
- Domestic *downside* risks vary within the region with impact more tilted to the medium term.
 - In *the euro area*, high-debt countries may have difficulties coping with

- higher borrowing costs when monetary accommodation is reduced.
- Structural weaknesses in pockets of the European banking system in the form of weak profitability and high NPL levels could trigger financial distress.
 - For several *emerging European* countries, faster wage growth could result in higher inflation and adversely affect competitiveness. This could interact with a tightening of global financial conditions in response to shifts in investor sentiment and undercut capital inflows and growth.
 - The lack of real income convergence along with elevated unemployment in many *euro area* countries could challenge the cohesion of the Economic and Monetary Union.
 - The lower appetite for European integration could affect the reform efforts of non-EU members in the region aspiring to EU membership.
 - There could be protracted policy and economic uncertainty on a broad range of issues for both the European Union and *the United Kingdom*, because of the complex and drawn-out process and compressed timeframe for negotiations on the post-*Brexit* economic relationship. If *the United Kingdom* leaves the European Union without an agreement, there will be a notable increase in trade barriers, potentially accompanied by disruption of services in various sectors, with significant negative impact on economic activity. In addition, while political risks in Europe have receded somewhat, new risks are emerging, including from tensions and uncertainty related to the Catalan independence movement.

Policy Priorities

With relatively strong activity and upside risks in the short term, but downside risks over the

medium term, macroeconomic policies need to rebuild room for policy maneuver. The strength of cyclical growth has surprised on the positive side, but fiscal buffers are thin in several countries, prospects for productivity growth are weak (despite the modest recovery in investment), and crisis legacies are still unresolved. Accordingly, policy priorities for most of the region should be reducing fiscal deficits, while keeping monetary policies supportive where warranted to sustain an increase in inflation to targets. In addition, faster progress in structural reforms is needed to boost productivity and accelerate income convergence, which has stalled, including in *the euro area* (see IMF 2017a). Should downside risks materialize, further monetary accommodation would be appropriate, supported by a relaxation of fiscal policies where space is available. At the same time, relatively strong GDP and employment growth mean that this is a good time for structural reforms to boost an otherwise mediocre medium-term growth outlook.

Monetary Policy

- For *the euro area* and most of *advanced Europe*, subdued underlying inflation points to the need for monetary policy to remain accommodative for an extended period. Any further change in the forward guidance or policies should be underpinned by a clear shift in the path of actual inflation or a much stronger assessment of the inflation outlook. In particular, for the ECB to reach its medium-term inflation objective, it is inevitable that countries with the strongest cyclical position will have to accept inflation rates above this objective for some time. In *the United Kingdom*, a gradual tightening of monetary policy is warranted to help bring inflation back to target.
- In *Russia*, with inflation now below target, further monetary easing should continue at a gradual pace, given risks to the inflation outlook linked with the uncertain size of the

output gap and the potential reversal of the exchange-rate-driven disinflation.

- In *Turkey*, tighter monetary policy, within a simpler monetary framework, is needed to anchor expectations and reduce inflation.
- In the other *emerging market economies*, preparations should be made to gradually normalize monetary policy in order to keep inflation expectations anchored if underlying inflation rises persistently in response to growing wage pressure and/or higher external inflation.

Fiscal Policy

In *advanced Europe*, a number of countries have high public debt ratios and limited fiscal buffers, including *Belgium, France, Italy, Portugal, Spain, and the United Kingdom*. With growth picking up and output gaps closing, these countries should gradually consolidate to rebuild policy room and put debt on a downward path. In those economies with stronger fiscal positions, notably *Germany, the Netherlands, and Sweden*, the available space can be used to help lift potential growth, which will help healthy external rebalancing. This could include, for example, greater public investment in education and training (*Germany, the Netherlands*), digitalization, the integration of refugees, infrastructure (*Germany*), and housing (*Sweden*). Importantly, in all countries, fiscal policy could be made more growth and distribution friendly. Making public spending more efficient and growth oriented, while designing taxation to be more supportive of job creation and productivity growth, could further strengthen the foundations of the recovery and underpin the medium-term growth potential. As discussed in the October 2017 *Fiscal Monitor*, fiscal and redistributive objectives can be achieved through revenue-neutral increases in tax progressivity, spending reallocations, and improved spending efficiency.

In *emerging Europe*, many countries need to tighten fiscal policy, enhance the quality of

expenditure, and improve revenue composition. Despite a broadly complete cyclical recovery, the size of fiscal deficits is still relatively large in *Hungary, Poland, and Romania* as well as in a number of *Western Balkan* and *CIS economies*. Given the need to preserve competitiveness and build room for policy maneuver, more fiscal consolidation is appropriate in these economies. In *Russia*, fiscal adjustment should rely on better-targeted and more permanent reforms to the pension system, tax exemptions, and subsidies while protecting public and human capital investment. In addition, a credible fiscal rule is paramount to support medium-term sustainability and mitigate the effect of oil price volatility. In *Turkey*, given strong growth momentum, there is a need to reevaluate the degree of accommodation and to plan for credible medium-term consolidation.

Financial Policy

In *advanced Europe*, policymakers can take a number of actions to facilitate the repair of banks' balance sheets. The ECB's March 2017 guidance on NPL management and the most recent proposals that set supervisory expectations for provisioning new NPLs are positive steps. They need a strong follow-up. Countries should agree on ambitious reduction targets, with vigorous supervisory follow-up. Moreover, member states should apply the framework, with due proportionality, to smaller banks that are not covered by the ECB guidance. Legislative changes to harmonize corporate insolvency and foreclosure frameworks and improve judicial efficiency would help stimulate secondary markets. Banks' persistently low profitability points to a need for further consolidation and restructuring of the system. Consolidation is a private-sector-led process, but policymakers and supervisors can help incentivize banks' adjustment, including through supervisory pressure.

In *emerging Europe*, in many economies, resolving elevated NPLs requires a multipronged approach, as discussed in detail in Chapter 3 of this report.

In particular, comprehensive asset quality reviews on the scale of impaired assets and adequacy of provisioning, coupled with supervised and time-bound action plans, would help. There is also a need to improve the bankruptcy and insolvency regimes, speed up the slow court procedures, and improve land registries and cadastral systems to enhance collateralization.

Structural Policy and European Monetary Union Architecture

In *advanced Europe*, countries should take advantage of the recovery to push forward with structural reforms to lift potential growth, close competitiveness gaps, and enhance their resilience to shocks. For example, in *the euro area*, many countries need ambitious labor and product market reforms. At the EU level, stricter enforcement of the Macroeconomic Imbalance Procedure could be combined with incentives for structural reforms in the form of targeted support from central funds and outcome-based benchmarks.

In addition, *euro area* policymakers should seize the moment of steady recovery and a more favorable political environment to push ahead with architectural reforms to strengthen the Economic and Monetary Union. First, while much progress has been made since the crisis, further actions are needed to complete the Banking Union, including by establishing common deposit insurance and a common fiscal backstop. Second, with Europe's largest financial market leaving the single market, it is more urgent than ever to build the Capital Markets Union. Third, a central fiscal capacity would help improve *the euro area's* ability to offset shocks, by reducing fiscal space constraints at the national level. Such architectural reform needs simultaneous action on resolving banking sector legacies and stricter implementation of common fiscal rules and should be complemented by policy efforts at the national level. In some countries, reforms to improve public sector efficiency and to increase labor force participation through better active labor market policies are also important.

In *other advanced European economies* and *the Nordics*, reform priorities vary. For example, in *the United Kingdom*, reforms to boost potential growth could include increasing infrastructure spending, easing planning restrictions on housing, and reforming property taxes. In *Sweden*, reforms to improve the housing supply—including by streamlining building regulations, harmonizing planning and approval processes across municipalities, and promoting the efficient use of property by phasing out rent controls and shifting the composition of property taxes—could help housing market rebalancing.

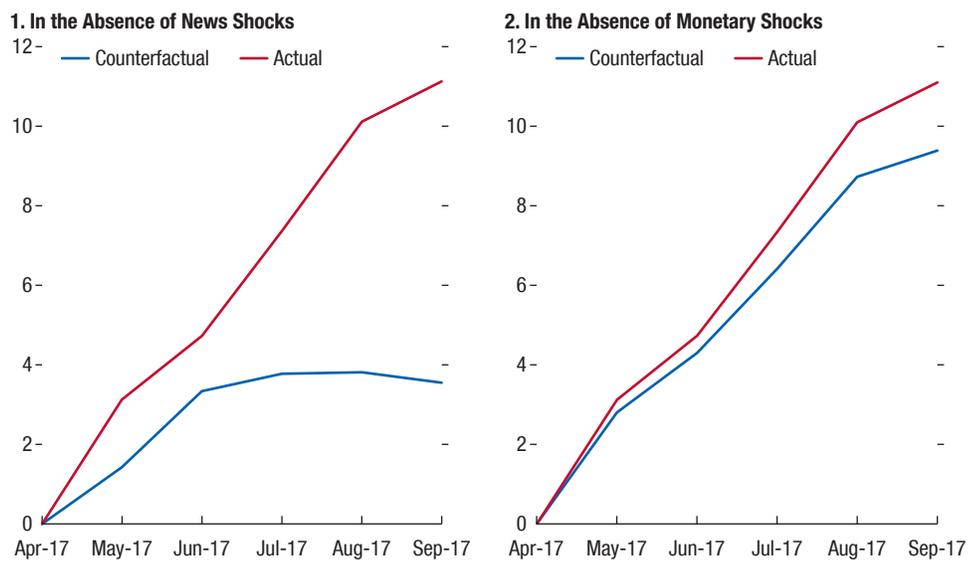
In *emerging Europe*, structural reforms should focus on strengthening institutions, particularly judicial independence (see Chapter 2), and improving public sector efficiency. This will also require restructuring state-owned enterprises and strengthening public sector investment management frameworks, for example, in project appraisal and management (see the November 2016 *Regional Economic Issues: Central, Eastern, and Southeastern Europe*). Other priorities include labor market reforms to boost labor force participation rates of women and reduce high youth unemployment rates, especially in *the Southeastern Europe non-EU* and several *CIS countries*, as well as institutional improvements to lift the investment climate (see Chapter 2). In *Russia*, improvements in the institutional and business environment are prerequisites to realizing dividends from investing in innovation and other reforms. In *Turkey*, the priorities include improving the business climate (especially institutional stability and quality), enhancing the quality of human capital, increasing domestic private savings, and addressing labor market rigidities to reduce informality and better integrate refugees.

Box 1.1. What Is behind the Euro Appreciation against the US Dollar since Early 2017?

The euro has appreciated considerably against the US dollar in the past few months (about 11 percent from April to September 30, 2017). From a policy standpoint, it is important to know the factors behind the euro rally. Conceptually, the euro-dollar exchange rate would appreciate because of favorable economic prospects or tight monetary policy that raises interest rates in the euro area relative to the United States. Discriminating between these two factors, that is, economic news and monetary policy, is important since they can have different implications for exchange rate dynamics. This box sheds light on these factors.

The empirical approach broadly follows Matheson and Stavrev 2014. It estimates economic news and monetary shocks for the euro area using a vector autoregression model. The model includes 10-year bond yields and stock prices for the euro area and for the United States and the euro-dollar bilateral exchange rate at monthly frequency. News shocks in the euro area are identified using economically meaningful sign restrictions as follows: stock prices and bond yields increase following favorable economic news in the euro area. Additional restrictions are imposed to estimate a favorable news shock in the euro area relative to the United States, namely, that stock prices and bond yields in the United States decline following such a shock. The latter set of sign restrictions ensures that the identified favorable news in the euro area is not related to favorable news in the United States. Adverse monetary shocks in the euro area are identified by imposing that stock prices decline and bond yields increase in the euro area, and as before, to isolate adverse euro area shocks versus the United States, it is assumed that stock prices increase and bond yields decline in the United States. Using the model, the effect of euro area news on the euro-dollar exchange rate since April 2017 is evaluated as follows: the estimated euro news shocks are set to zero, and the model is used to trace out the counterfactual

Figure 1.1.1. Counterfactual Euro/US Dollar Scenarios
(Cumulative growth since April 2017, percent)



Source: IMF staff estimates.

Prepared by Raju Huidrom and Emil Stavrev.

Box 1.1 *(continued)*

euro-dollar exchange rate. The simulation shows how the euro would have evolved relative to the dollar in the absence of the euro news shocks during that time. A similar counterfactual is constructed for monetary shocks in the euro area.

The estimation results suggest that ongoing improved economic prospects for the euro area vis-à-vis the United States were the main driver of the euro surge during April–September of this year. Market perceptions of monetary tightening have played a smaller but nontrivial role. In the absence of favorable economic news in the euro area (Box Figure 1.1.1, panel 1), the euro-dollar appreciation since April 2017 would have been about 7½ percentage points lower than the actual 11 percent, while absent the euro area monetary shocks it would have been only 1½ percentage points lower (Box Figure 1.1.1, panel 2).

Annex Table 1.1. GDP Growth
(Year-over-year percent change)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	1.7	2.4	2.1	1.9	1.9	1.9	1.9	0.5	0.2	0.0
Advanced European economies	1.9	2.1	1.9	1.7	1.8	1.7	1.7	0.3	0.2	0.0
Euro area	1.8	2.1	1.9	1.7	1.7	1.6	1.6	0.5	0.3	0.1
Austria	1.5	2.3	1.9	1.5	1.4	1.3	1.3	0.9	0.5	0.2
Belgium	1.2	1.6	1.6	1.5	1.6	1.5	1.5	0.0	0.1	0.0
Cyprus	2.8	3.4	2.6	2.4	2.5	2.3	2.2	0.8	0.3	0.2
Estonia	2.1	4.0	3.7	3.0	2.5	2.8	2.7	1.5	0.9	0.3
Finland	1.9	2.8	2.3	1.8	1.3	1.4	1.5	1.4	0.9	0.3
France	1.2	1.6	1.8	1.9	1.4	1.6	1.7	0.2	0.1	0.1
Germany	1.9	2.0	1.8	1.5	1.6	1.5	1.4	0.4	0.3	0.0
Greece	0.0	1.8	2.6	1.9	2.2	2.7	2.2	-0.4	-0.1	-0.3
Ireland	5.1	4.1	3.4	3.0	3.5	3.2	3.0	0.6	0.2	0.0
Italy	0.9	1.5	1.1	0.9	0.8	0.8	0.8	0.7	0.3	0.1
Latvia	2.0	3.8	3.9	3.5	3.0	3.3	3.6	0.9	0.6	-0.1
Lithuania	2.3	3.5	3.5	3.4	2.8	3.1	3.2	0.8	0.4	0.2
Luxembourg	4.2	3.9	3.6	3.3	3.7	3.5	3.3	0.1	0.1	0.0
Malta	5.5	5.1	4.4	3.8	4.1	3.5	3.2	1.1	0.9	0.6
Netherlands	2.2	3.1	2.6	1.9	2.1	1.8	1.7	0.9	0.7	0.1
Portugal	1.4	2.5	2.0	1.7	1.7	1.5	1.2	0.7	0.6	0.5
Slovak Republic	3.3	3.3	3.7	3.9	3.3	3.7	3.9	0.0	0.0	0.0
Slovenia	3.1	4.0	2.5	2.1	2.5	2.0	2.0	1.5	0.6	0.1
Spain	3.2	3.1	2.5	2.0	2.6	2.1	2.0	0.5	0.4	0.0
Nordic economies	2.2	2.3	2.0	2.0	2.0	2.1	2.1	0.3	-0.1	-0.1
Denmark	1.7	1.9	1.8	1.8	1.5	1.7	1.8	0.5	0.1	0.0
Iceland	7.2	5.5	3.3	3.1	5.7	3.6	3.2	-0.2	-0.4	-0.1
Norway	1.1	1.4	1.6	1.9	1.2	1.9	2.1	0.1	-0.3	-0.2
Sweden	3.2	3.1	2.4	2.1	2.7	2.4	2.2	0.4	0.0	-0.1
Other European advanced economies	2.0	1.8	1.7	1.7	2.1	1.7	1.8	-0.3	0.1	0.0
Czech Republic	2.6	3.5	2.6	2.3	2.8	2.2	2.3	0.7	0.4	0.0
Israel	4.0	3.1	3.4	3.0	2.9	3.0	3.0	0.2	0.4	0.1
Switzerland	1.4	1.0	1.3	1.6	1.4	1.6	1.6	-0.4	-0.3	0.0
United Kingdom	1.8	1.7	1.5	1.6	2.0	1.5	1.6	-0.4	0.0	0.0
Emerging European economies	1.5	3.1	2.6	2.5	2.2	2.4	2.4	0.9	0.2	0.0
Central Europe	2.5	3.7	3.4	3.0	3.3	3.2	2.9	0.4	0.2	0.1
Hungary	2.2	3.2	3.4	2.8	2.9	3.0	2.6	0.3	0.4	0.2
Poland	2.6	3.8	3.3	3.0	3.4	3.2	3.0	0.4	0.1	0.0
Southeastern European EU member states	4.3	4.7	3.9	3.4	3.7	3.1	3.0	1.0	0.8	0.4
Bulgaria	3.4	3.6	3.2	2.9	2.9	2.7	2.5	0.7	0.5	0.4
Croatia	3.0	2.9	2.7	2.5	2.9	2.6	2.5	0.0	0.1	0.0
Romania	4.8	5.5	4.4	3.8	4.2	3.4	3.3	1.3	1.0	0.5
Southeastern European non-EU member states	2.7	3.0	3.3	3.4	3.2	3.6	3.6	-0.2	-0.3	-0.3
Albania	3.4	3.7	3.7	3.8	3.7	4.1	4.1	0.0	-0.4	-0.4
Bosnia and Herzegovina	2.0	2.5	2.6	2.7	3.0	3.5	3.8	-0.5	-0.9	-1.1
Kosovo	3.4	3.5	3.5	3.6	3.5	3.6	3.6	0.0	-0.1	0.0
Macedonia, FYR	2.4	1.9	3.2	3.4	3.2	3.4	3.6	-1.3	-0.2	-0.2
Montenegro	2.5	3.0	2.8	2.7	3.3	3.4	2.7	-0.3	-0.6	-0.1
Serbia	2.8	3.0	3.5	3.5	3.0	3.5	3.5	0.0	0.0	0.0
Commonwealth of Independent States	-0.1	1.8	1.7	1.7	1.4	1.6	1.6	0.4	0.1	0.0
Belarus	-2.6	0.7	0.7	0.9	-0.8	0.6	0.8	1.5	0.0	0.1
Moldova	4.3	4.0	3.7	3.8	4.5	3.7	3.8	-0.5	0.0	0.0
Russia	-0.2	1.8	1.6	1.5	1.4	1.4	1.5	0.4	0.2	0.0
Ukraine	2.3	2.0	3.2	3.5	2.0	3.2	3.5	0.0	0.0	0.0
Turkey	3.2	5.1	3.5	3.5	2.5	3.3	3.4	2.7	0.2	0.1
Memorandum										
World	3.2	3.6	3.7	3.7	3.5	3.6	3.7	0.2	0.1	0.0
Advanced economies	1.7	2.2	2.0	1.8	2.0	2.0	1.9	0.2	0.1	-0.1
Emerging market and developing economies	4.3	4.6	4.9	5.0	4.5	4.8	4.9	0.2	0.1	0.1
European Union	2.0	2.3	2.1	1.8	2.0	1.8	1.8	0.4	0.3	0.1
United States	1.5	2.2	2.3	1.9	2.3	2.5	2.1	-0.1	-0.2	-0.2
China	6.7	6.8	6.5	6.3	6.6	6.2	6.0	0.2	0.3	0.3
Japan	1.0	1.5	0.7	0.8	1.2	0.6	0.8	0.3	0.1	0.0

Sources: IMF, *World Economic Outlook* (WEO); and IMF staff estimates and projections.

Annex Table 1.2. Domestic Demand*(Year-over-year percent change)*

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	1.8	2.4	2.1	1.9	1.9	1.9	1.8	0.6	0.2	0.1
Advanced European economies	2.3	2.1	1.9	1.7	1.8	1.6	1.7	0.3	0.2	0.1
Euro area	2.3	2.1	1.9	1.7	1.7	1.6	1.6	0.4	0.3	0.1
Austria	1.9	2.2	1.5	1.6	1.6	1.2	1.4	0.6	0.2	0.2
Belgium	1.2	1.7	1.7	1.5	1.5	1.6	1.5	0.3	0.1	0.1
Cyprus	3.9	1.9	2.1	2.7	1.8	2.3	2.3	0.0	-0.2	0.4
Estonia	3.2	3.7	4.8	4.1	3.2	3.7	3.6	0.5	1.0	0.5
Finland	2.5	2.3	2.2	1.8	1.4	1.4	1.4	0.9	0.8	0.3
France	1.9	1.9	1.7	1.8	1.7	1.6	1.7	0.2	0.0	0.2
Germany	2.4	2.1	2.0	1.7	1.5	1.6	1.6	0.6	0.4	0.1
Greece	0.58	0.6	2.4	1.9	2.0	2.3	2.1	-1.4	0.1	-0.2
Ireland	21.2	5.0	3.7	3.2	4.7	3.4	3.2	0.3	0.3	-0.1
Italy	1.0	1.6	1.1	0.8	1.0	0.8	0.7	0.6	0.4	0.0
Latvia	3.1	4.9	5.4	3.8	4.3	4.1	4.0	0.6	1.3	-0.1
Lithuania	2.7	4.4	3.6	3.7	3.0	3.6	3.9	1.4	0.1	-0.2
Luxembourg	1.04	3.9	3.1	2.5	4.5	3.7	3.1	-0.6	-0.6	-0.6
Malta	1.7	2.8	2.8	2.7	4.3	3.1	3.0	-1.5	-0.4	-0.3
Netherlands	1.8	2.4	2.2	1.9	2.0	1.8	1.8	0.4	0.4	0.2
Portugal	1.5	2.6	2.1	1.8	2.2	1.5	1.2	0.4	0.6	0.6
Slovak Republic	0.9	3.1	3.4	3.1	3.3	3.5	3.2	-0.2	-0.1	-0.1
Slovenia	2.9	4.4	2.7	2.8	3.0	2.5	2.6	1.4	0.2	0.2
Spain	2.9	2.6	2.2	1.9	2.3	2.0	1.9	0.2	0.3	0.0
Nordic economies	2.6	2.6	2.3	2.2	2.4	2.5	2.2	0.2	-0.2	0.0
Denmark	2.1	2.2	2.1	2.0	1.9	2.0	2.0	0.3	0.1	0.0
Iceland	8.1	6.3	3.0	4.2	6.2	3.3	3.9	0.1	-0.3	0.3
Norway	1.7	2.1	2.0	2.1	1.7	2.4	2.3	0.4	-0.3	-0.3
Sweden	3.3	3.1	2.5	2.4	3.1	2.8	2.2	-0.1	-0.3	0.2
Other European advanced economies	1.7	1.8	1.5	1.6	1.7	1.4	1.6	0.1	0.1	0.0
Czech Republic	1.5	3.5	3.0	2.7	2.7	2.5	2.7	0.8	0.5	0.0
Israel	6.0	2.8	4.3	2.7	2.7	2.9	2.9	0.1	1.4	-0.3
Switzerland	0.3	0.8	0.8	1.5	1.1	1.4	1.5	-0.4	-0.6	0.0
United Kingdom	1.5	1.6	1.2	1.4	1.5	1.1	1.4	0.1	0.1	0.0
Emerging European economies	0.9	3.1	2.8	2.4	2.0	2.5	2.3	1.1	0.3	0.2
Central Europe	2.3	3.6	3.7	3.2	3.6	3.5	3.1	0.0	0.2	0.1
Hungary	1.6	1.4	3.5	2.7	3.1	3.0	2.2	-1.7	0.5	0.4
Poland	2.5	4.1	3.8	3.3	3.7	3.7	3.3	0.5	0.1	0.0
Southeastern European EU member states	4.4	5.4	4.8	3.7	4.5	3.5	3.3	0.8	1.3	0.4
Bulgaria	1.6	4.7	3.8	3.0	3.1	2.8	2.5	1.6	1.0	0.5
Croatia	3.5	3.7	3.2	2.9	3.7	3.2	2.9	0.0	0.0	0.0
Romania	5.5	6.0	5.5	4.0	5.2	3.8	3.6	0.8	1.6	0.4
Southeastern European non-EU member states	1.7	2.5	2.8	2.9	2.8	3.1	3.0	-0.3	-0.3	-0.1
Albania	1.3	3.7	1.4	2.1	4.5	1.8	2.5	-0.8	-0.5	-0.5
Bosnia and Herzegovina	2.0	2.8	3.0	3.2	3.6	3.7	3.3	-0.9	-0.7	-0.1
Kosovo	...	...	...	...	...	...	...	...	...	...
Macedonia, FYR	1.5	1.6	2.6	2.7	2.2	2.8	2.9	-0.7	-0.1	-0.2
Montenegro	7.7	3.8	4.2	1.5	5.0	6.7	0.1	-1.1	-2.5	1.4
Serbia	1.1	2.2	3.0	3.2	1.9	3.0	3.3	0.3	0.0	-0.1
Commonwealth of Independent States	-1.7	2.4	1.9	1.5	1.2	1.8	1.3	1.1	0.1	0.2
Belarus	-6.1	0.2	0.4	0.4	-1.8	-1.6	-0.1	2.0	2.0	0.5
Moldova	2.4	-0.9	6.8	4.0	4.0	3.3	3.4	-4.9	3.5	0.6
Russia	-2.3	2.3	1.7	1.3	1.1	1.7	1.1	1.2	0.0	0.1
Ukraine	6.0	4.1	4.0	4.2	4.0	3.9	4.0	0.1	0.1	0.2
Turkey	4.4	3.6	3.5	3.5	1.8	3.0	3.3	1.8	0.5	0.2
Memorandum										
World	3.0	3.7	3.7	3.8	3.7	3.7	3.8	3.7	3.7	3.8
Advanced economies	1.7	2.3	2.1	1.9	2.3	2.1	1.9	2.3	2.1	1.9
Emerging market and developing economies	3.9	4.7	4.9	5.1	4.7	4.9	5.1	4.7	4.9	5.1
European Union	2.3	2.4	2.1	1.9	2.0	1.8	1.8	0.3	0.3	0.1
United States	1.7	2.3	2.5	2.0	2.8	3.0	2.4	-0.5	-0.5	-0.4
China	7.4	6.9	6.9	6.7	7.1	6.5	6.3	-0.1	0.4	0.5
Japan	0.4	1.1	0.7	1.0	0.9	0.7	1.0	0.2	0.1	0.0

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.3. Gross Investment
(Percent of GDP)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	23.2	22.6	23.2	23.3	22.0	22.5	22.7	0.6	0.6	0.6
Advanced European economies	22.6	23.0	23.1	23.3	22.7	22.7	23.0	0.4	0.4	0.3
Euro area	20.3	20.6	20.8	21.0	20.0	20.2	20.3	0.6	0.6	0.7
Austria	23.8	24.1	24.0	24.1	24.0	24.1	24.0	0.1	0.0	0.1
Belgium	22.7	23.5	23.9	24.1	23.3	23.8	24.0	0.2	0.1	0.1
Cyprus	15.5	15.7	15.7	16.3	15.5	16.0	16.3	0.2	-0.3	0.0
Estonia	24.2	25.3	27.2	28.5	24.5	25.2	25.6	0.8	2.0	2.9
Finland	21.8	22.3	22.9	23.0	22.3	22.8	23.1	0.0	0.2	-0.1
France	23.0	23.3	23.0	23.0	22.2	21.9	21.7	1.1	1.2	1.3
Germany	19.2	19.4	19.6	19.8	19.1	19.2	19.3	0.3	0.4	0.5
Greece	10.5	10.8	11.8	13.1	10.4	11.2	12.2	0.4	0.6	0.9
Ireland	32.4	33.7	34.1	34.4	30.9	31.3	31.7	2.8	2.8	2.7
Italy	17.0	16.9	17.3	17.5	17.3	17.6	17.9	-0.5	-0.3	-0.3
Latvia	19.9	21.2	22.6	22.9	20.7	21.3	21.7	0.5	1.4	1.2
Lithuania	16.4	17.6	17.6	17.7	16.6	16.7	16.9	0.9	0.9	0.9
Luxembourg	18.0	18.5	18.3	18.3	20.0	20.0	19.9	-1.5	-1.7	-1.6
Malta	23.7	22.1	21.3	20.9	22.9	22.8	22.7	-0.8	-1.5	-1.8
Netherlands	20.1	20.6	21.1	21.7	20.2	20.7	21.3	0.4	0.4	0.4
Portugal	14.9	16.5	17.4	18.0	16.3	16.6	17.0	0.2	0.8	0.9
Slovak Republic	21.5	22.5	23.0	23.6	22.5	23.2	23.4	0.0	-0.2	0.1
Slovenia	18.7	19.5	19.9	20.3	20.4	20.7	21.1	-0.9	-0.8	-0.7
Spain	20.4	20.6	20.8	20.8	20.5	20.6	20.7	0.1	0.1	0.1
Nordic economies	24.4	25.0	25.0	25.3	24.6	24.8	25.2	0.3	0.2	0.1
Denmark	20.3	20.6	20.9	21.1	20.4	20.6	20.8	0.2	0.3	0.3
Iceland	21.3	21.9	20.7	21.6	21.9	21.4	22.2	0.0	-0.7	-0.6
Norway	29.1	28.8	29.1	29.3	28.7	28.9	29.0	0.2	0.2	0.2
Sweden	24.7	26.0	26.4	26.6	25.3	25.7	26.2	0.7	0.6	0.4
Other European advanced economies	23.1	23.3	23.3	23.4	22.9	22.8	22.9	0.4	0.5	0.5
Czech Republic	26.3	26.6	26.5	26.6	26.2	26.1	26.2	0.4	0.4	0.4
Israel	20.5	20.1	20.9	20.7	19.7	19.7	19.7	0.4	1.3	1.0
Switzerland	23.1	23.7	23.6	23.6	23.4	23.5	23.4	0.2	0.1	0.2
United Kingdom	17.0	17.0	16.8	17.0	16.7	16.6	16.7	0.3	0.3	0.3
Emerging European economies	23.3	22.6	23.2	23.3	21.9	22.5	22.6	0.7	0.7	0.7
Central Europe	19.1	19.6	20.3	20.9	20.6	21.0	21.1	-0.9	-0.7	-0.2
Hungary	19.2	19.6	20.3	20.9	20.6	21.0	21.2	-1.0	-0.7	-0.3
Poland	19.6	20.0	20.3	20.7	20.0	20.3	20.5	0.0	0.1	0.2
Southeastern European EU member states	23.2	23.0	23.2	23.4	23.2	23.5	23.8	-0.2	-0.3	-0.4
Bulgaria	20.3	20.1	19.7	19.4	20.8	21.0	21.4	-0.7	-1.3	-2.1
Croatia	19.8	20.6	21.0	21.2	19.8	20.6	21.1	0.7	0.3	0.1
Romania	25.0	24.4	24.5	24.7	24.9	25.0	25.2	-0.6	-0.5	-0.5
Southeastern European non-EU member states	19.5	20.1	20.1	20.1	21.7	21.5	21.4	-1.5	-1.5	-1.2
Albania	23.5	24.8	24.5	24.4	28.7	27.5	26.6	-3.9	-3.0	-2.2
Bosnia and Herzegovina	16.4	17.2	17.2	17.7	17.5	18.7	19.6	-0.2	-1.5	-1.9
Kosovo	...	...	...	...	...	...	...	...	...	...
Macedonia, FYR	...	...	...	...	...	...	...	...	...	...
Montenegro	25.0	27.9	31.1	29.9	28.0	31.9	29.1	-0.1	-0.9	0.8
Serbia	18.1	18.5	18.5	18.7	19.2	19.4	19.4	-0.6	-0.8	-0.8
Commonwealth of Independent States	25.2	23.7	24.3	24.3	22.2	22.9	23.0	1.5	1.4	1.2
Belarus	25.3	24.7	24.5	24.2	26.8	25.6	25.2	-2.2	-1.1	-0.9
Moldova	22.4	22.7	22.6	22.6	19.0	19.4	20.0	3.8	3.2	2.6
Russia	25.3	23.8	24.4	24.2	22.2	22.9	22.9	1.5	1.5	1.3
Ukraine	21.5	21.0	23.2	25.1	21.7	24.7	26.6	-0.7	-1.5	-1.4
Turkey	28.2	29.6	30.0	29.8	29.5	29.6	29.4	0.1	0.4	0.4
Memorandum										
World	...	...	...	...	...	...	...	...	...	...
Advanced economies	...	...	...	...	...	...	...	...	...	...
Emerging and developing economies	...	...	...	...	...	...	...	...	...	...
European Union	20.3	20.8	21.3	21.7	21.2	21.5	21.7	-0.4	-0.2	0.0
United States	19.7	19.8	20.0	20.0	20.0	20.6	20.9	-0.3	-0.6	-0.9
China	44.2	44.0	43.3	42.8	44.0	43.3	42.7	0.1	0.0	0.1
Japan	23.3	23.4	23.5	23.7	23.5	23.7	23.9	-0.1	-0.2	-0.2

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.4. Inflation
(Year-over-year percent change)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	2.0	2.8	2.7	2.8	2.9	2.7	2.7	-0.1	-0.1	0.1
Advanced European economies	0.4	1.6	1.6	1.8	1.8	1.6	1.7	-0.1	-0.1	0.0
Euro area	0.2	1.5	1.4	1.7	1.7	1.5	1.7	-0.2	0.0	0.1
Austria	1.0	1.6	1.8	2.1	2.1	1.8	2.0	-0.5	0.1	0.1
Belgium	1.8	2.2	1.5	1.8	2.0	1.7	1.7	0.2	-0.3	0.0
Cyprus	-1.2	0.8	0.7	1.1	1.5	1.4	1.6	-0.7	-0.7	-0.5
Estonia	0.8	3.8	3.4	2.5	3.2	2.5	2.3	0.6	0.9	0.2
Finland	0.4	0.8	1.2	1.7	1.4	1.6	1.8	-0.6	-0.5	-0.1
France	0.3	1.2	1.3	1.6	1.4	1.2	1.5	-0.2	0.1	0.1
Germany	0.4	1.6	1.5	2.0	2.0	1.7	1.9	-0.5	-0.2	0.1
Greece	0.0	1.2	1.3	1.4	1.3	1.4	1.6	0.0	-0.1	-0.2
Ireland	-0.2	0.4	1.5	1.7	0.9	1.5	1.7	-0.4	-0.1	0.0
Italy	-0.1	1.4	1.2	1.4	1.3	1.3	1.4	0.2	-0.1	0.0
Latvia	0.1	3.0	3.0	2.5	2.8	2.5	2.4	0.2	0.5	0.1
Lithuania	0.7	3.5	2.0	2.1	2.8	2.0	2.2	0.7	0.0	0.0
Luxembourg	0.0	1.2	1.3	1.7	1.4	1.3	1.7	-0.2	-0.1	0.0
Malta	0.9	1.3	1.6	1.8	1.5	1.6	1.8	-0.2	0.0	0.0
Netherlands	0.1	1.3	1.4	1.5	0.9	1.4	1.5	0.3	0.0	0.0
Portugal	0.6	1.6	2.0	2.1	1.2	1.4	1.5	0.4	0.6	0.6
Slovak Republic	-0.5	1.2	1.4	1.7	1.2	1.5	1.8	-0.1	-0.2	-0.2
Slovenia	-0.1	1.6	1.8	2.0	1.5	2.0	2.0	0.1	-0.2	0.0
Spain	-0.2	2.0	1.5	1.7	2.4	1.4	1.5	-0.4	0.0	0.1
Nordic economies	1.7	1.6	1.7	1.9	1.6	1.8	2.0	0.0	-0.1	-0.1
Denmark	0.2	1.0	1.4	1.8	0.6	1.1	1.8	0.4	0.3	0.0
Iceland	1.7	1.8	2.6	2.8	2.2	2.6	2.8	-0.4	0.0	0.0
Norway	3.6	2.1	2.0	2.2	2.6	2.5	2.5	-0.5	-0.5	-0.3
Sweden	1.1	1.6	1.6	1.7	1.4	1.6	1.7	0.2	0.0	0.0
Other European advanced economies	0.4	2.1	2.1	2.0	2.1	2.2	2.0	0.1	-0.1	0.0
Czech Republic	0.7	2.3	1.8	2.0	2.3	1.8	2.0	0.0	0.0	0.0
Israel	-0.5	0.2	0.5	1.4	0.7	1.4	1.9	-0.6	-0.9	-0.5
Switzerland	-0.4	0.5	0.6	0.9	0.4	0.7	0.9	0.0	-0.1	0.0
United Kingdom	0.7	2.6	2.6	2.2	2.5	2.6	2.2	0.2	0.0	0.0
Emerging European economies	5.6	5.6	5.1	4.9	5.5	5.2	4.8	0.1	-0.1	0.1
Central Europe	-0.4	2.0	2.5	2.6	2.4	2.5	2.6	-0.3	-0.1	0.1
Hungary	0.4	2.5	3.2	3.0	2.5	3.3	3.0	0.0	-0.1	-0.1
Poland	-0.6	1.9	2.3	2.5	2.3	2.3	2.5	-0.4	-0.1	0.1
Southeastern European EU member states	-1.4	1.1	2.6	2.6	1.2	2.6	2.5	-0.1	0.1	0.2
Bulgaria	-1.3	1.1	1.4	1.7	1.0	1.8	1.9	0.1	-0.3	-0.2
Croatia	-1.1	1.1	1.2	1.5	1.1	1.1	1.4	0.1	0.1	0.1
Romania	-1.6	1.1	3.3	3.2	1.3	3.1	2.9	-0.2	0.2	0.3
Southeastern European non-EU member states	0.5	2.3	2.5	2.5	2.0	2.4	2.5	0.3	0.0	0.0
Albania	1.3	2.1	2.8	3.0	2.3	2.9	3.0	-0.2	-0.1	0.0
Bosnia and Herzegovina	-1.1	1.8	1.2	1.6	1.4	1.7	1.6	0.3	-0.6	0.0
Kosovo	0.3	1.4	1.4	1.9	0.9	1.8	1.9	0.5	-0.4	0.0
Macedonia, FYR	-0.2	0.3	2.6	1.9	0.6	1.7	2.0	-0.4	0.9	-0.1
Montenegro	-0.3	2.1	2.6	1.8	2.1	1.5	1.5	0.1	1.1	0.2
Serbia	1.1	3.4	3.0	3.0	2.6	3.0	3.0	0.7	0.0	0.0
Commonwealth of Independent States	7.8	5.1	4.5	4.4	5.2	4.8	4.4	-0.1	-0.3	0.0
Belarus	11.8	8.0	7.5	7.2	9.3	8.7	8.6	-1.3	-1.2	-1.3
Moldova	6.4	6.5	5.3	5.1	5.5	5.9	5.3	1.0	-0.6	-0.2
Russia	7.0	4.2	3.9	4.0	4.5	4.2	4.0	-0.2	-0.3	0.0
Ukraine	13.9	12.8	10.0	7.0	11.5	9.5	6.5	1.3	0.4	0.5
Turkey	7.8	10.9	9.3	8.8	10.1	9.1	8.5	0.8	0.3	0.3
Memorandum										
World	2.8	3.1	3.3	3.3	3.5	3.4	3.3	-0.4	-0.1	0.0
Advanced economies	0.8	1.7	1.7	2.0	2.0	1.9	2.1	-0.3	-0.2	0.0
Emerging market and developing economies	4.3	4.2	4.4	4.1	4.7	4.4	4.2	-0.4	0.0	0.0
European Union	0.2	1.7	1.7	1.9	1.8	1.7	1.8	-0.1	0.0	0.1
United States	1.3	2.1	2.1	2.6	2.7	2.4	2.6	-0.5	-0.3	0.0
China	2.0	1.8	2.4	2.5	2.4	2.3	2.6	-0.6	0.1	-0.1
Japan	-0.1	0.4	0.5	1.1	1.0	0.6	1.1	-0.6	-0.1	0.0

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.5. Unemployment Rate
(Percent)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	8.1	7.6	7.3	7.2	7.8	7.6	7.5	-0.2	-0.3	-0.3
Advanced European economies	8.6	7.9	7.5	7.3	8.2	8.0	7.8	-0.3	-0.5	-0.5
Euro area	10.0	9.2	8.7	8.3	9.4	9.1	8.8	-0.3	-0.4	-0.4
Austria	6.0	5.4	5.3	5.2	5.9	5.9	5.9	-0.6	-0.6	-0.7
Belgium	7.9	7.5	7.3	7.2	7.8	7.6	7.4	-0.2	-0.3	-0.3
Cyprus	13.0	11.8	10.7	9.9	11.3	10.2	9.2	0.5	0.4	0.7
Estonia	6.8	8.4	9.0	9.8	8.3	8.9	9.4	0.1	0.1	0.4
Finland	8.8	8.7	8.1	7.8	8.5	8.3	7.8	0.2	-0.2	0.0
France	10.0	9.5	9.0	8.7	9.6	9.3	9.0	-0.2	-0.2	-0.3
Germany	4.2	3.8	3.7	3.7	4.2	4.2	4.2	-0.4	-0.5	-0.5
Greece	23.6	22.3	20.7	19.5	21.9	21.0	20.2	0.4	-0.3	-0.7
Ireland	7.9	6.4	5.9	5.8	6.5	6.3	6.2	-0.1	-0.4	-0.4
Italy	11.7	11.4	11.0	10.6	11.4	11.0	10.6	0.0	0.0	0.0
Latvia	9.6	9.0	8.7	8.4	9.4	9.2	8.9	-0.4	-0.5	-0.5
Lithuania	7.9	7.0	6.5	6.0	7.4	7.2	7.0	-0.4	-0.7	-1.0
Luxembourg	6.4	5.9	5.5	5.3	5.9	5.7	5.6	0.0	-0.3	-0.3
Malta	4.7	4.4	4.5	4.7	4.7	4.7	4.8	-0.3	-0.2	-0.1
Netherlands	5.9	5.1	4.9	4.8	5.4	5.3	5.2	-0.3	-0.4	-0.4
Portugal	11.1	9.7	9.0	8.5	10.6	10.1	9.7	-0.9	-1.1	-1.1
Slovak Republic	9.6	8.1	7.5	7.4	7.9	7.4	7.2	0.2	0.2	0.2
Slovenia	8.0	6.8	6.4	6.3	7.0	6.6	6.2	-0.2	-0.1	0.1
Spain	19.6	17.1	15.6	15.0	17.7	16.6	15.8	-0.6	-1.0	-0.8
Nordic economies	6.2	5.7	5.6	5.5	5.9	5.8	5.7	-0.1	-0.2	-0.2
Denmark	6.2	5.8	5.8	5.8	5.8	5.8	5.8	0.0	0.0	0.0
Iceland	3.0	2.8	3.2	3.6	3.0	3.3	3.6	-0.2	-0.1	0.0
Norway	4.7	4.0	3.8	3.7	4.5	4.2	4.0	-0.5	-0.4	-0.3
Sweden	7.0	6.6	6.3	6.3	6.7	6.7	6.6	-0.1	-0.4	-0.3
Other European advanced economies	4.6	4.1	4.1	4.3	4.6	4.7	4.8	-0.5	-0.6	-0.6
Czech Republic	4.0	2.8	3.0	3.2	3.8	4.2	4.5	-1.0	-1.2	-1.3
Israel	4.8	4.3	4.5	4.5	4.8	4.8	4.8	-0.5	-0.4	-0.4
Switzerland	3.3	3.0	3.0	3.0	3.0	2.9	2.9	0.0	0.0	0.0
United Kingdom	4.9	4.4	4.4	4.6	4.9	5.1	5.2	-0.5	-0.6	-0.6
Emerging European economies	7.4	7.2	7.0	7.0	7.3	7.2	7.1	-0.1	-0.1	-0.2
Central Europe	5.9	4.7	4.1	4.0	5.3	5.1	5.0	-0.6	-1.0	-1.0
Hungary	5.1	4.4	4.3	4.3	4.4	4.3	4.3	0.0	0.0	0.0
Poland	6.2	4.8	4.0	3.9	5.5	5.3	5.2	-0.7	-1.2	-1.3
Southeastern European EU member states	7.4	6.6	6.5	6.7	6.8	6.6	6.9	-0.2	-0.1	-0.2
Bulgaria	7.7	6.6	6.4	6.3	7.1	6.9	6.7	-0.5	-0.5	-0.4
Croatia	15.0	13.9	13.5	13.2	13.9	13.5	13.2	0.0	0.0	0.0
Romania	5.9	5.3	5.2	5.7	5.4	5.2	5.8	-0.1	0.0	-0.1
Southeastern European non-EU member states	19.1	17.8	18.6	18.4	19.3	19.1	18.8	-1.6	-0.5	-0.5
Albania	15.2	14.0	13.8	13.5	15.9	15.6	15.4	-1.9	-1.9	-1.9
Bosnia and Herzegovina	25.4	20.5	25.1	25.0	25.2	25.1	25.0	-4.7	0.0	0.0
Kosovo	...	...	...	...	...	...	...	...	...	...
Macedonia, FYR	23.6	23.4	23.2	23.0	23.4	23.2	23.0	0.0	0.0	0.0
Montenegro	...	...	...	...	...	...	...	...	...	...
Serbia	15.9	16.0	15.6	15.3	16.0	15.6	15.3	0.0	0.0	0.0
Commonwealth of Independent States	6.0	6.0	6.0	5.9	5.9	5.9	5.8	0.1	0.1	0.1
Belarus	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0
Moldova	4.2	4.3	4.2	4.2	4.3	4.2	4.2	0.0	0.0	0.0
Russia	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0.0	0.0	0.0
Ukraine	9.3	9.5	9.3	8.8	9.0	8.7	8.4	0.4	0.6	0.4
Turkey	10.9	11.2	10.7	10.4	11.5	11.0	10.8	-0.3	-0.3	-0.4
Memorandum										
World	...	...	...	...	...	...	...	...	...	...
Advanced economies	6.2	5.7	5.4	5.4	6.0	5.8	5.7	-0.3	-0.4	-0.3
Emerging and developing economies	...	...	...	...	...	...	...	...	...	...
European Union	8.5	7.7	7.3	7.2	8.1	7.8	7.7	...	...	...
United States	4.9	4.4	4.1	4.2	4.7	4.6	4.4	-0.3	-0.5	-0.3
China	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Japan	3.1	2.9	2.9	2.9	3.1	3.1	3.1	-0.2	-0.2	-0.2

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.6. General Government Overall Balance*(Percent of GDP)*

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	-1.9	-1.7	-1.4	-1.0	-1.9	-1.5	-1.0	0.2	0.1	0.0
Advanced European economies	-1.5	-1.3	-1.0	-0.6	-1.5	-1.1	-0.7	0.2	0.1	0.1
Euro area	-1.5	-1.3	-1.0	-0.7	-1.5	-1.2	-0.8	0.2	0.2	0.1
Austria	-1.6	-0.9	-0.6	-0.4	-1.0	-0.7	-0.4	0.2	0.0	0.0
Belgium	-2.6	-1.8	-1.8	-1.9	-2.1	-2.2	-2.3	0.3	0.4	0.3
Cyprus	-0.3	0.9	0.3	0.5	-0.3	-0.5	-0.1	1.2	0.7	0.6
Estonia	0.3	0.0	-0.7	-0.6	0.3	-0.2	-0.3	-0.2	-0.4	-0.3
Finland	-1.9	-1.5	-1.2	-0.9	-2.1	-1.5	-0.9	0.6	0.3	0.0
France	-3.4	-3.0	-3.0	-3.2	-3.2	-2.8	-2.2	0.2	-0.2	-0.9
Germany	0.8	0.7	0.8	1.0	0.6	0.6	0.8	0.1	0.2	0.2
Greece	1.0	-1.7	-1.1	0.2	-1.5	-1.0	-1.5	-0.2	-0.1	1.6
Ireland	-0.7	-0.5	-0.2	-0.2	-0.5	-0.3	0.0	0.0	0.0	-0.3
Italy	-2.4	-2.2	-1.3	-0.3	-2.4	-1.4	-0.7	0.2	0.1	0.4
Latvia	-0.4	-0.7	0.0	-0.4	-1.2	-0.3	-0.4	0.4	0.3	-0.1
Lithuania	0.3	0.1	0.5	0.3	-0.6	-0.7	-0.5	0.6	1.2	0.8
Luxembourg	1.6	0.3	0.2	0.0	0.3	0.1	0.0	0.0	0.1	0.1
Malta	1.0	0.5	0.5	0.5	-0.6	-0.6	-0.6	1.1	1.0	1.0
Netherlands	0.4	0.6	0.9	1.2	0.0	0.1	0.2	0.6	0.8	1.0
Portugal	-2.0	-1.5	-1.4	-1.5	-1.9	-2.2	-2.2	0.4	0.8	0.7
Slovak Republic	-1.7	-1.2	-0.7	-0.1	-1.8	-1.1	-0.7	0.6	0.4	0.6
Slovenia	-1.8	-0.9	-0.9	-1.2	-1.5	-1.6	-1.8	0.7	0.7	0.6
Spain	-4.5	-3.2	-2.5	-2.1	-3.3	-2.7	-2.4	0.1	0.3	0.3
Nordic economies	1.4	1.5	1.8	2.0	0.8	1.0	1.2	0.7	0.8	0.8
Denmark	-0.6	-1.5	-0.6	-0.4	-1.1	-0.5	-0.1	-0.3	0.0	-0.3
Iceland	12.4	0.9	1.3	1.4	0.6	1.1	1.5	0.3	0.2	-0.1
Norway	3.1	4.5	4.6	5.4	3.6	3.8	3.8	0.9	0.8	1.6
Sweden	0.9	1.0	1.0	0.8	-0.3	-0.2	0.0	1.3	1.2	0.8
Other European advanced economies	-2.2	-2.2	-1.9	-1.2	-2.3	-1.7	-1.1	0.0	-0.1	-0.1
Czech Republic	0.6	0.5	0.6	0.7	-0.2	0.0	0.0	0.7	0.6	0.7
Israel	-2.5	-3.2	-3.7	-3.7	-3.3	-3.5	-3.7	0.1	-0.2	0.0
Switzerland	0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1
United Kingdom	-2.9	-2.9	-2.3	-1.4	-2.8	-2.1	-1.2	0.0	-0.3	-0.3
Emerging European economies	-2.8	-2.6	-2.1	-1.8	-2.9	-2.3	-1.5	0.3	0.1	-0.4
Central Europe	-2.3	-2.7	-2.6	-2.6	-2.9	-2.6	-2.5	0.2	-0.1	0.0
Hungary	-1.9	-2.6	-2.6	-2.3	-2.6	-2.5	-2.3	0.0	0.0	0.0
Poland	-2.4	-2.7	-2.7	-2.6	-2.9	-2.6	-2.6	0.2	-0.1	-0.1
Southeastern European EU member states	-1.3	-2.2	-3.2	-3.2	-2.9	-3.0	-2.8	0.7	-0.2	-0.3
Bulgaria	1.6	-0.4	-0.7	-0.3	-1.3	-1.0	-0.5	0.8	0.4	0.1
Croatia	-0.8	-1.3	-1.0	-0.7	-1.9	-1.8	-1.7	0.6	0.7	1.0
Romania	-2.4	-3.0	-4.4	-4.5	-3.7	-3.9	-3.8	0.7	-0.5	-0.7
Southeastern European non-EU member states	-1.4	-1.6	-1.6	-1.5	-1.7	-1.9	-1.7	0.1	0.3	0.2
Albania	-1.8	-1.2	-2.0	-2.3	-1.0	-2.1	-2.4	-0.2	0.1	0.1
Bosnia and Herzegovina	0.4	-0.4	0.0	0.0	-0.5	-0.6	-0.4	0.1	0.6	0.4
Kosovo	-1.4	-3.4	-3.7	-3.1	-2.5	-2.8	-2.1	-0.8	-0.9	-1.0
Macedonia, FYR	-2.6	-3.5	-3.6	-3.8	-3.3	-3.4	-3.4	-0.1	-0.3	-0.4
Montenegro	-6.0	-6.4	-5.6	-4.9	-7.5	-8.7	-6.7	1.0	3.1	1.9
Serbia	-1.2	-1.0	-0.7	-0.6	-1.3	-1.1	-0.9	0.3	0.5	0.3
Commonwealth of Independent States	-3.5	-2.3	-1.7	-1.2	-2.8	-2.2	-0.9	0.5	0.5	-0.3
Belarus	-3.4	-5.6	-3.8	-2.3	-8.2	-7.7	-7.5	2.5	4.0	5.2
Moldova	-2.1	-3.2	-3.0	-3.0	-3.7	-3.3	-2.9	0.5	0.3	-0.1
Russia	-3.7	-2.1	-1.5	-1.0	-2.6	-1.9	-0.5	0.5	0.4	-0.5
Ukraine	-2.2	-2.9	-2.5	-2.3	-3.0	-2.5	-2.3	0.1	0.0	0.0
Turkey	-2.3	-3.2	-2.4	-2.3	-3.0	-2.0	-1.4	-0.2	-0.4	-0.8
Memorandum										
World	-3.6	-3.4	-3.0	-2.9	-3.4	-3.1	-3.1	0.0	0.1	0.2
Advanced economies	-2.8	-2.7	-2.3	-2.1	-2.7	-2.7	-2.8	0.0	0.4	0.6
Emerging market and developing economies	-4.8	-4.4	-4.2	-4.0	-4.4	-3.9	-3.5	0.0	-0.3	-0.5
European Union	-1.7	-1.5	-1.2	-0.8	-1.7	-1.3	-0.9	0.2	0.1	0.1
United States	-4.4	-4.3	-3.7	-4.0	-4.0	-4.5	-5.3	-0.3	0.7	1.3
China	-3.7	-3.7	-3.7	-3.9	-3.7	-3.4	-3.4	0.0	-0.3	-0.5
Japan	-4.2	-4.1	-3.3	-2.9	-4.0	-3.3	-2.8	-0.2	-0.1	-0.1

Source: IMF, *World Economic Outlook* (WEO).

Note: Projections for Italy are based on fiscal targets as announced in April 2017.

Annex Table 1.7. General Government Gross Debt
(Percent of GDP)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	68.9	68.2	67.1	65.7	68.9	68.0	66.6	-0.7	-0.8	-0.8
Advanced European economies	85.6	84.3	82.8	81.0	84.7	83.5	81.8	-0.4	-0.7	-0.8
Euro area	89.0	87.4	85.6	83.5	90.1	88.6	86.6	-2.7	-3.1	-3.1
Austria	84.6	80.2	77.5	74.8	81.2	78.3	75.6	-1.0	-0.8	-0.8
Belgium	106.0	104.3	102.9	101.5	104.3	103.3	102.3	0.0	-0.4	-0.8
Cyprus	107.8	105.5	102.0	96.4	109.3	107.4	100.5	-3.7	-5.4	-4.1
Estonia	9.4	8.7	8.8	8.9	9.0	8.7	8.5	-0.3	0.1	0.4
Finland	63.1	63.3	62.6	61.8	64.4	64.4	63.8	-1.2	-1.9	-2.0
France	96.3	96.8	97.0	97.0	97.4	97.4	96.6	-0.6	-0.4	0.4
Germany	68.1	65.0	61.8	58.7	64.7	62.0	59.1	0.3	-0.1	-0.4
Greece	181.6	180.2	184.5	177.9	180.7	181.5	174.3	-0.5	3.0	3.6
Ireland	72.9	69.3	67.8	66.2	74.8	73.4	71.4	-5.5	-5.6	-5.2
Italy	132.6	133.0	131.4	128.8	132.8	131.6	129.4	0.3	-0.1	-0.6
Latvia	37.2	35.6	33.2	31.8	33.7	32.1	30.7	1.9	1.1	1.1
Lithuania	40.2	37.5	35.0	32.9	38.9	37.7	36.3	-1.4	-2.7	-3.4
Luxembourg	20.0	18.6	17.5	16.6	23.2	23.5	23.2	-4.6	-6.0	-6.7
Malta	58.0	55.9	53.6	50.3	58.0	55.3	53.8	-2.1	-1.7	-3.5
Netherlands	61.8	57.4	54.2	51.2	59.7	57.8	55.9	-2.3	-3.6	-4.7
Portugal	130.3	125.7	122.5	119.8	128.6	127.1	125.7	-2.9	-4.6	-5.9
Slovak Republic	51.9	50.9	49.7	47.8	51.9	50.9	49.2	-1.0	-1.2	-1.4
Slovenia	78.4	75.0	73.9	73.3	77.7	77.4	77.2	-2.7	-3.5	-4.0
Spain	99.4	98.7	97.2	95.8	98.5	97.9	96.8	0.1	-0.6	-1.0
Nordic economies	38.2	36.8	35.6	34.1	38.1	37.3	36.8	-1.3	-1.7	-2.7
Denmark	37.7	37.8	37.0	35.9	39.8	39.0	37.7	-2.0	-2.1	-1.7
Iceland	54.0	41.2	39.0	35.5	45.9	40.6	38.1	-4.6	-1.6	-2.5
Norway	33.1	33.1	33.1	33.1	33.2	33.2	33.2	-0.1	-0.1	-0.1
Sweden	41.6	38.8	36.5	33.8	40.4	39.3	38.9	-1.6	-2.8	-5.2
Other European advanced economies	76.6	76.5	76.4	75.5	76.6	76.2	75.2	-0.1	0.2	0.3
Czech Republic	36.8	34.5	32.5	30.4	36.0	34.6	33.2	-1.5	-2.1	-2.8
Israel	62.3	62.7	63.6	64.1	62.5	62.9	63.1	0.2	0.7	1.0
Switzerland	43.3	42.8	41.7	40.7	44.5	43.5	42.5	-1.8	-1.9	-1.8
United Kingdom	89.3	89.5	89.7	88.9	89.0	88.7	87.7	0.5	1.0	1.2
Emerging European economies	31.9	32.8	32.8	32.7	33.6	33.6	33.2	-0.8	-0.8	-0.5
Central Europe	58.4	58.0	57.4	56.9	58.4	57.7	57.1	-0.4	-0.3	-0.2
Hungary	73.9	72.9	71.3	70.2	73.3	71.9	70.9	-0.4	-0.6	-0.7
Poland	54.4	54.2	53.8	53.5	54.6	54.1	53.6	-0.4	-0.3	-0.1
Southeastern European EU member states	43.0	41.9	42.2	42.8	43.1	43.5	44.0	-1.2	-1.3	-1.1
Bulgaria	27.8	24.6	24.2	23.4	24.5	24.1	23.4	0.1	0.0	-0.1
Croatia	83.7	81.9	79.6	76.9	83.1	81.6	79.8	-1.2	-1.9	-2.9
Romania	39.1	38.9	40.2	42.0	40.6	41.7	43.0	-1.6	-1.6	-1.0
Southeastern European non-EU member states	59.9	58.2	56.8	54.8	58.6	57.0	54.9	-0.3	-0.2	-0.1
Albania	73.2	70.8	68.2	65.2	68.6	64.8	60.4	2.2	3.4	4.7
Bosnia and Herzegovina	44.7	42.3	40.9	39.4	42.5	41.1	39.6	-0.2	-0.2	-0.2
Kosovo	19.9	23.5	25.4	25.9	23.5	24.5	24.1	0.0	0.9	1.8
Macedonia, FYR	39.0	39.7	41.6	43.0	37.6	39.2	40.5	2.1	2.4	2.4
Montenegro	70.0	71.6	73.6	74.1	74.3	78.7	81.6	-2.8	-5.1	-7.5
Serbia	74.1	70.9	67.9	64.4	72.8	70.1	66.7	-1.9	-2.1	-2.3
Commonwealth of Independent States	22.5	24.6	24.6	24.7	24.7	24.8	24.8	-0.2	-0.2	-0.1
Belarus	53.9	58.8	56.8	56.7	58.0	63.1	65.6	0.7	-6.4	-8.9
Moldova	43.2	41.3	40.5	41.1	40.2	41.5	43.2	1.1	-1.0	-2.1
Russia	15.6	17.4	17.7	18.2	17.1	17.3	17.8	0.2	0.4	0.4
Ukraine	81.2	86.2	83.5	77.9	89.8	85.3	78.1	-3.7	-1.9	-0.2
Turkey	28.1	27.9	28.0	27.5	29.8	29.8	28.6	-1.9	-1.8	-1.1
Memorandum										
World	83.3	82.8	82.4	81.9	83.1	82.8	82.6	-0.3	-0.4	-0.7
Advanced economies	106.3	105.3	104.2	103.1	105.9	105.6	105.3	-0.7	-1.4	-2.1
Emerging market and developing economies	46.8	48.3	49.9	51.2	48.5	49.5	50.4	-0.2	0.3	0.8
European Union	85.7	84.2	82.6	80.7	84.7	83.4	81.7	-0.5	-0.8	-1.0
United States	107.1	108.1	107.8	107.9	108.3	108.9	110.6	-0.2	-1.1	-2.6
China	44.3	47.6	50.8	53.9	49.3	52.0	54.4	-1.7	-1.2	-0.5
Japan	239.3	240.3	240.0	238.5	239.2	239.4	237.7	1.1	0.6	0.8

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.8. Current Account
(Percent of GDP)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	2.2	2.4	2.3	2.3	2.4	2.4	2.5	0.0	-0.1	-0.1
Advanced European economies	2.7	2.9	2.9	2.8	2.9	2.9	3.0	0.0	-0.1	-0.1
Euro area	3.5	3.1	3.0	2.9	3.0	3.0	3.0	0.1	0.0	-0.1
Austria	1.7	2.1	2.2	2.3	2.4	2.2	2.2	-0.3	-0.1	0.1
Belgium	-0.4	-0.3	0.0	0.1	0.9	1.0	1.4	-1.2	-1.0	-1.3
Cyprus	-5.3	-3.8	-2.7	-2.8	-2.5	-2.5	-2.4	-1.3	-0.2	-0.4
Estonia	1.9	1.8	1.4	0.5	1.4	0.9	0.2	0.3	0.5	0.3
Finland	-1.1	0.4	0.4	0.5	-1.3	-1.2	-1.1	1.6	1.6	1.6
France	-1.0	-1.1	-0.8	-0.5	-0.9	-0.5	0.0	-0.2	-0.3	-0.4
Germany	8.3	8.1	7.7	7.5	8.2	8.0	7.8	-0.1	-0.2	-0.3
Greece	-0.6	-0.2	-0.1	-0.1	-0.3	0.0	0.0	0.0	0.0	-0.2
Ireland	3.3	3.4	3.5	3.6	4.7	4.7	4.6	-1.3	-1.3	-1.0
Italy	2.6	2.7	2.3	2.0	2.0	1.8	1.5	0.7	0.6	0.5
Latvia	1.5	-0.3	-1.5	-1.6	-1.1	-1.4	-1.8	0.8	-0.1	0.2
Lithuania	-0.9	-1.6	-1.4	-1.6	-1.6	-1.5	-1.8	0.0	0.1	0.2
Luxembourg	4.7	4.7	4.9	5.2	5.1	5.1	5.4	-0.4	-0.1	-0.2
Malta	7.9	8.9	8.8	8.4	5.5	5.3	5.1	3.5	3.5	3.3
Netherlands	8.5	10.0	10.0	9.6	9.2	9.1	9.1	0.8	0.9	0.6
Portugal	0.7	0.4	0.3	-0.1	-0.3	-0.4	-0.5	0.7	0.7	0.5
Slovak Republic	-0.7	0.3	0.2	0.5	0.3	0.2	0.6	0.0	0.0	-0.1
Slovenia	5.2	5.0	4.9	4.4	5.5	5.1	4.7	-0.5	-0.2	-0.4
Spain	1.9	1.9	2.0	2.0	1.5	1.6	1.6	0.3	0.4	0.3
Nordic economies	5.6	5.3	5.2	5.0	5.7	5.5	5.5	-0.4	-0.3	-0.4
Denmark	7.9	7.3	7.0	6.7	7.5	7.2	6.9	-0.2	-0.2	-0.2
Iceland	7.9	6.2	6.1	5.1	6.9	6.7	5.7	-0.7	-0.6	-0.6
Norway	5.0	5.5	5.7	5.9	5.7	5.7	6.4	-0.2	-0.1	-0.5
Sweden	4.5	3.9	3.7	3.5	4.6	4.2	3.9	-0.6	-0.4	-0.4
Other European advanced economies	-0.8	-0.2	-0.2	0.0	0.1	0.3	0.3	-0.3	-0.5	-0.4
Czech Republic	1.1	0.6	0.1	-0.2	1.2	0.7	0.4	-0.6	-0.6	-0.6
Israel	3.6	4.1	3.1	3.3	3.4	3.4	3.3	0.7	-0.2	0.0
Switzerland	10.5	9.9	9.4	9.2	10.8	10.5	9.8	-0.9	-1.0	-0.7
United Kingdom	-4.4	-3.6	-3.3	-2.9	-3.3	-2.9	-2.6	-0.3	-0.4	-0.4
Emerging European economies	-0.4	-0.3	-0.3	-0.1	-0.1	-0.1	0.1	-0.2	-0.2	-0.2
Central Europe	1.0	0.2	-0.1	-0.6	-0.6	-0.8	-1.1	0.8	0.7	0.5
Hungary	6.1	4.8	4.2	3.2	3.7	3.0	2.2	1.1	1.3	1.0
Poland	-0.2	-1.0	-1.2	-1.6	-1.7	-1.8	-2.0	0.7	0.6	0.4
Southeastern European EU member states	-0.3	-0.9	-1.1	-1.3	-0.9	-1.0	-1.2	0.1	-0.1	-0.2
Bulgaria	4.2	2.5	1.9	1.5	2.3	2.0	1.7	0.2	-0.1	-0.2
Croatia	2.6	3.8	3.0	2.0	2.8	1.8	1.0	1.0	1.2	1.0
Romania	-2.3	-3.0	-2.9	-2.9	-2.8	-2.5	-2.5	-0.2	-0.4	-0.4
Southeastern European non-EU member states	-5.6	-5.9	-5.7	-5.6	-6.9	-7.0	-6.6	1.0	1.2	1.0
Albania	-7.6	-9.2	-8.2	-7.7	-13.7	-13.0	-11.8	4.4	4.8	4.1
Bosnia and Herzegovina	-4.5	-4.3	-4.2	-4.3	-6.3	-6.3	-5.9	2.0	2.2	1.6
Kosovo	-9.8	-11.0	-11.3	-10.9	-10.8	-11.1	-10.6	-0.2	-0.3	-0.3
Macedonia, FYR	-2.7	-2.3	-2.5	-2.8	-1.8	-2.0	-2.3	-0.5	-0.5	-0.5
Montenegro	-19.0	-20.2	-21.2	-19.7	-22.0	-25.6	-22.4	1.8	4.4	2.7
Serbia	-4.0	-4.0	-3.9	-3.8	-4.0	-4.0	-3.9	0.0	0.1	0.1
Commonwealth of Independent States	1.4	2.1	2.5	3.0	2.6	2.8	3.1	-0.5	-0.3	-0.2
Belarus	-3.6	-5.3	-4.6	-4.0	-4.7	-5.0	-3.9	-0.6	0.4	-0.1
Moldova	-3.8	-4.0	-4.0	-4.8	-3.8	-4.0	-4.5	-0.2	-0.1	-0.4
Russia	2.0	2.8	3.2	3.6	3.3	3.5	3.8	-0.5	-0.3	-0.1
Ukraine	-4.1	-3.3	-3.0	-2.3	-3.6	-2.9	-2.3	0.3	-0.1	0.0
Turkey	-3.8	-4.6	-4.6	-4.4	-4.7	-4.6	-4.1	0.1	0.0	-0.3
Memorandum										
World	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.1
Advanced economies	0.8	0.8	0.7	0.7	0.7	0.4	0.3	0.1	0.3	0.3
Emerging market and developing economies	-0.3	-0.3	-0.4	-0.5	-0.3	-0.3	-0.3	0.0	-0.1	-0.2
European Union	2.2	2.4	2.4	2.3	2.3	2.3	2.3	0.1	0.0	-0.1
United States	-2.4	-2.4	-2.6	-2.7	-2.7	-3.3	-3.5	0.3	0.7	0.8
China	1.7	1.4	1.2	0.9	1.3	1.2	1.2	0.1	-0.1	-0.3
Japan	3.8	3.6	3.8	3.7	4.2	4.3	4.2	-0.6	-0.5	-0.5

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.9. Net Financial Assets
(Percent of GDP)

	October 2017 WEO				April 2017 WEO			Difference		
	2016	2017	2018	2019	2017	2018	2019	2017	2018	2019
Europe	7.1	7.2	9.1	11.1	10.1	12.3	14.4	-2.9	-3.2	-3.3
Advanced European economies	13.1	13.4	15.2	17.3	16.2	18.6	20.9	-2.8	-3.4	-3.6
Euro area	-1.2	-0.5	3.2	6.6	2.7	6.3	9.8	-3.3	-3.1	-3.1
Austria	7.1	12.1	13.2	14.9	5.3	7.3	9.1	6.8	5.9	5.8
Belgium	47.6	45.5	43.1	42.3	61.7	61.5	61.4	-16.2	-18.4	-19.1
Cyprus	-125.4	-121.3	-118.5	-116.8	-127.6	-124.8	-121.7	6.3	6.3	5.0
Estonia	-35.4	-33.5	-26.9	-23.0	-33.0	-29.5	-26.8	-0.4	2.5	3.8
Finland	7.1	7.3	7.5	7.8	-2.6	-3.8	-4.7	10.0	11.3	12.5
France	-15.3	-17.6	-17.2	-17.1	-17.2	-17.1	-16.6	-0.4	-0.1	-0.6
Germany	52.3	54.5	58.3	63.6	64.7	71.1	76.8	-10.2	-12.8	-13.2
Greece	-129.7	-140.5	-130.8	-126.8	-129.5	-124.0	-119.0	-11.0	-6.8	-7.8
Ireland	-167.8	-172.0	-154.3	-143.8	-185.5	-173.4	-161.9	13.4	19.1	18.1
Italy	-14.3	-12.6	-9.5	-7.1	-17.3	-15.1	-13.1	4.7	5.6	6.0
Latvia	-55.4	-55.0	-47.5	-43.1	-54.6	-48.7	-44.3	-0.4	1.2	1.2
Lithuania	-41.2	-43.1	-39.9	-38.7	-42.4	-41.2	-40.3	-0.7	1.3	1.6
Luxembourg	22.1	25.9	27.6	30.1	39.9	41.9	44.2	-14.0	-14.3	-14.1
Malta	47.3	46.9	46.6	46.2	40.5	40.2	40.0	6.4	6.3	6.3
Netherlands	65.4	73.8	81.3	88.9	78.7	85.3	91.9	-4.9	-4.0	-3.0
Portugal	-104.8	-98.4	-93.3	-89.2	-101.3	-98.0	-95.2	2.8	4.7	6.1
Slovak Republic	-54.8	-55.6	-48.9	-44.2	-53.3	-48.9	-44.1	-2.3	-0.1	-0.1
Slovenia	-35.1	-30.7	-23.4	-18.1	-29.2	-23.0	-17.3	-1.5	-0.4	-0.7
Spain	-81.7	-83.5	-74.7	-69.5	-78.5	-73.7	-68.8	-5.0	-1.0	-0.7
Nordic economies	31.6	32.9	34.1	36.2	30.3	33.1	35.7	2.7	1.0	0.5
Denmark	53.3	62.9	65.8	70.7	45.5	52.1	57.8	17.4	13.7	12.8
Iceland	1.2	3.9	9.9	14.2	7.7	14.4	19.2	-3.7	-4.6	-5.0
Norway	199.5	197.5	193.4	190.0	195.6	191.7	188.4	1.9	1.7	1.5
Sweden	15.5	19.2	19.8	21.2	18.6	20.2	21.8	0.6	-0.4	-0.6
Other European advanced economies	36.2	35.4	32.5	30.8	37.1	36.1	35.1	-1.8	-3.6	-4.3
Czech Republic	-29.0	-25.8	-21.5	-19.6	-24.7	-21.4	-19.0	-1.1	-0.2	-0.7
Israel	34.3	36.0	38.4	41.1	35.3	38.0	40.3	0.7	0.5	0.8
Switzerland	103.6	112.8	110.0	112.4	121.6	127.6	133.0	-8.8	-17.6	-20.6
United Kingdom	24.2	19.7	15.8	12.3	19.9	16.3	13.1	-0.2	-0.5	-0.9
Emerging European economies	-24.2	-23.7	-21.2	-19.7	-18.8	-17.0	-15.6	-4.9	-4.2	-4.1
Central Europe	-59.3	-53.5	-46.7	-44.0	-59.9	-56.1	-53.2	6.4	9.4	9.2
Hungary	-63.4	-52.2	-40.3	-32.6	-55.3	-46.1	-39.3	3.1	5.9	6.7
Poland	-58.2	-53.8	-48.3	-46.8	-61.0	-58.6	-56.7	7.2	10.3	9.8
Southeastern European EU member states	-55.6	-55.8	-50.1	-47.2	-55.3	-52.1	-49.3	-0.5	2.0	2.1
Bulgaria	-48.9	-47.0	-39.5	-34.2	-45.0	-39.0	-33.4	-2.0	-0.5	-0.8
Croatia	-96.3	-86.3	-75.6	-69.2	-93.3	-87.5	-82.2	7.0	11.9	13.0
Romania	-46.5	-50.3	-46.5	-45.2	-48.1	-46.5	-45.3	-2.2	0.1	0.1
Southeastern European non-EU member states	-72.9	-74.6	-73.6	-73.4	-78.9	-79.1	-79.0	4.2	5.5	5.6
Albania	-57.1	-58.8	-59.6	-61.6	-68.5	-74.4	-77.6	9.7	14.8	15.9
Bosnia and Herzegovina	-57.5	-56.9	-56.2	-57.0	-61.6	-62.3	-62.9	4.7	6.1	6.0
Kosovo	0.0	-12.3	-13.2	-17.2	-6.5	-9.2	-15.6	-5.9	-4.0	-1.6
Macedonia, FYR	-49.1	-59.2	-57.6	-57.2	-52.5	-52.0	-51.5	-6.8	-5.6	-5.7
Montenegro	...	...	...	...	...	...	...	...	...	...
Serbia	-104.3	-102.8	-100.4	-98.2	-110.6	-108.3	-105.7	7.9	7.9	7.5
Commonwealth of Independent States	9.9	11.7	15.5	18.5	19.0	22.6	25.6	-7.3	-7.1	-7.0
Belarus	-86.2	-83.1	-85.8	-86.3	-81.0	-83.2	-84.9	-2.2	-2.6	-1.4
Moldova	-88.3	-73.7	-63.2	-54.0	-74.8	-73.9	-75.0	1.1	10.7	20.9
Russia	17.7	19.2	23.5	27.0	27.7	31.9	35.4	-8.5	-8.3	-8.4
Ukraine	-41.4	-39.7	-39.7	-38.9	-58.6	-57.9	-55.1	19.0	18.3	16.2
Turkey	-41.4	-52.6	-53.4	-54.7	-49.6	-52.1	-53.3	-3.0	-1.3	-1.4
Memorandum										
World	...	...	...	...	...	...	...	...	...	...
Advanced economies	-1.2	-0.5	0.4	1.2	-0.2	0.4	1.0	-0.3	-0.1	0.2
Emerging market and developing economies	...	...	...	...	...	...	...	...	...	...
European Union	1.0	1.0	3.5	5.7	3.0	5.3	7.6	-1.9	-1.8	-1.9
United States	-44.7	-43.8	-44.6	-45.6	-44.5	-45.7	-47.3	0.6	1.1	1.7
China	16.0	16.5	16.2	15.9	16.6	16.5	16.5	-0.1	-0.4	-0.7
Japan	61.0	65.9	68.1	70.8	70.0	73.5	76.7	-4.1	-5.4	-6.0

Source: IMF, *World Economic Outlook* (WEO).

Annex Table 1.10. Growth Rate of GDP Per Capita
(Year-over-year percent change; real GDP per capita in purchasing power parity)

	2000–08										October 2017 WEO Projections									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022						
Europe	2.9	-5.2	2.5	2.5	0.3	0.8	1.7	1.2	1.4	2.2	1.9	1.7	1.7	1.7						
Advanced European economies	1.7	-4.8	1.7	1.2	-0.8	-0.1	1.3	1.6	1.4	1.7	1.6	1.4	1.4	1.3						
Euro area	1.6	-4.8	1.8	1.3	-1.1	-0.5	1.1	1.7	1.5	1.9	1.8	1.5	1.5	1.4						
Austria	1.8	-4.0	1.7	2.5	0.3	-0.5	-0.1	0.0	0.2	1.4	1.0	0.8	0.8	0.8						
Belgium	1.7	-3.1	1.9	0.3	-0.7	-0.7	1.5	1.0	0.5	1.1	1.1	1.0	1.0	1.0						
Cyprus	2.6	-4.3	-1.4	-2.1	-5.7	-6.4	-0.6	3.0	2.7	2.8	2.0	1.8	1.6	1.6						
Estonia	6.9	-14.6	2.4	7.9	4.7	2.3	3.2	1.9	2.2	4.2	4.0	3.3	3.3	3.3						
Finland	2.9	-8.7	2.5	2.1	-1.9	-1.2	-1.1	-0.4	1.6	2.4	2.0	1.5	1.3	1.2						
France	1.2	-3.5	1.5	1.6	-0.3	0.1	0.4	0.6	0.8	1.1	1.3	1.4	1.5	1.4						
Germany	1.6	-5.2	4.2	3.7	0.5	0.3	1.5	0.6	0.9	1.9	1.7	1.4	1.4	1.3						
Greece	3.2	-4.6	-5.7	-9.2	-7.0	-2.5	1.1	0.4	0.7	1.8	2.7	2.0	2.0	1.9						
Ireland	2.9	-5.3	1.3	2.7	-0.3	1.3	8.0	24.6	4.1	3.1	2.4	2.0	1.9	1.8						
Italy	0.8	-6.1	1.2	0.2	-3.2	-2.3	-0.3	0.8	1.1	1.3	1.1	0.9	1.0	0.9						
Latvia	8.3	-13.2	-1.9	8.7	5.5	3.7	3.3	3.5	2.8	4.4	4.2	3.8	3.4	3.2						
Lithuania	8.2	-13.9	3.8	8.5	5.2	4.6	4.4	2.7	3.5	4.7	4.7	4.6	4.4	4.2						
Luxembourg	2.5	-6.2	3.1	0.5	-2.7	1.6	3.2	1.5	1.8	1.5	1.3	0.9	0.8	0.7						
Malta	1.4	-3.2	2.8	1.2	2.0	3.6	7.1	6.1	4.3	4.8	4.1	3.6	3.3	3.0						
Netherlands	1.8	-4.3	0.9	1.2	-1.4	-0.5	1.1	1.8	1.7	2.8	2.3	1.6	1.6	1.5						
Portugal	1.0	-3.1	1.9	-1.7	-3.6	-0.6	1.4	2.0	1.8	2.8	2.4	2.0	1.8	1.5						
Slovak Republic	5.7	-5.5	4.9	2.8	1.4	1.4	2.5	3.7	3.2	3.2	3.6	3.8	3.4	3.3						
Slovenia	4.0	-8.8	0.5	0.5	-2.9	-1.3	2.9	2.2	3.1	3.9	2.5	2.0	1.7	1.7						
Spain	1.9	-4.4	-0.4	-1.4	-3.0	-1.3	1.7	3.3	3.3	3.2	2.7	2.2	2.0	1.8						
Nordic economies	1.8	-4.8	2.2	1.0	0.0	0.3	1.2	1.8	1.0	0.9	0.9	1.0	0.9	0.9						
Denmark	1.3	-5.5	1.4	0.9	-0.1	0.5	1.2	1.0	0.8	1.1	1.1	1.0	1.1	1.1						
Iceland	3.1	-6.4	-3.8	1.6	0.5	3.2	0.9	3.0	6.0	4.3	2.1	1.9	1.9	1.6						
Norway	1.5	-2.8	-0.7	-0.3	1.4	-0.2	0.7	0.7	0.2	0.0	0.3	0.8	0.7	0.7						
Sweden	2.3	-6.0	5.1	1.9	-1.0	0.3	1.5	3.0	1.7	1.3	1.2	1.0	0.9	0.8						
Other European advanced economies	2.0	-4.6	1.4	1.0	0.4	1.1	2.2	1.5	1.1	1.1	0.9	1.0	1.1	1.1						
Czech Republic	4.3	-5.6	1.9	1.5	-1.0	-0.6	2.8	5.1	2.4	3.3	2.4	2.1	2.1	2.2						
Israel	1.7	-0.9	3.6	3.3	0.3	2.3	1.5	0.6	1.9	1.2	1.4	1.1	1.1	1.1						
Switzerland	1.7	-3.6	1.8	0.7	-0.1	0.8	1.2	0.0	0.3	-0.1	0.2	0.4	0.5	0.5						
United Kingdom	1.9	-5.0	1.1	0.7	0.6	1.3	2.3	1.4	1.0	1.1	0.8	0.9	1.1	1.1						
Emerging European economies	6.0	-6.2	4.1	5.6	2.7	2.8	2.2	0.2	1.3	3.0	2.5	2.4	2.4	2.4						
Central Europe	4.1	0.4	3.3	4.3	1.0	1.6	3.6	3.8	2.6	3.7	3.4	3.1	2.8	2.6						
Hungary	3.7	-6.4	0.8	2.0	-1.1	2.4	4.4	3.4	2.2	3.4	3.6	3.0	2.8	2.4						
Poland	4.2	2.6	4.0	4.9	1.6	1.4	3.4	3.9	2.7	3.8	3.4	3.1	2.9	2.8						
Southeastern European EU member states	6.6	-5.7	0.2	2.3	0.6	2.7	2.6	4.2	4.9	4.9	4.1	3.6	3.2	3.1						
Bulgaria	6.7	-3.0	2.1	4.4	0.7	1.5	1.8	4.3	4.2	4.2	3.8	3.5	3.3	3.1						
Croatia	4.6	-7.3	-1.5	2.9	-1.9	-0.8	-0.1	3.1	3.8	3.3	3.0	2.7	2.4	2.1						
Romania	7.1	-6.2	-0.1	1.5	1.2	3.9	3.4	4.4	5.4	5.5	4.4	3.8	3.3	3.3						

Southeastern European non-EU member states	3.9	-1.1	1.7	2.1	-0.2	2.7	0.3	2.4	3.0	3.0	3.3	3.4	3.6	3.8	3.8
Albania	6.8	4.1	4.2	2.8	1.6	1.2	2.0	2.5	3.5	3.7	3.8	3.9	4.0	4.1	4.1
Bosnia and Herzegovina	4.3	-0.6	1.0	1.1	-0.8	2.6	1.3	3.2	2.2	2.8	2.8	2.9	2.9	3.2	3.4
Kosovo	2.1	1.9	1.7	2.8	2.5	3.0	-0.3	4.3	3.4	2.0	2.0	2.1	2.2	2.3	2.5
Macedonia, FYR	3.3	-0.6	3.1	2.2	-0.6	2.8	3.5	3.7	2.3	2.4	3.1	3.3	3.5	3.5	3.7
Montenegro	4.9	-5.9	2.3	3.1	-2.8	3.4	1.7	3.3	2.4	2.9	2.7	2.6	2.2	2.9	3.0
Serbia	6.4	-2.7	1.0	2.2	-0.5	3.1	-1.4	1.3	3.3	3.4	3.9	3.9	4.4	4.4	4.4
Commonwealth of Independent States	7.4	-8.2	4.3	5.2	3.3	1.6	1.4	-3.4	0.0	1.9	1.8	1.8	1.9	1.9	2.0
Belarus	8.6	0.5	7.9	5.8	1.9	1.0	1.7	-4.0	-2.8	1.2	1.2	1.4	2.1	2.4	2.5
Moldova	6.2	-5.9	7.2	6.8	-0.7	9.5	4.9	-0.3	4.3	4.1	3.8	3.9	3.9	4.0	4.0
Russia	7.3	-7.8	4.5	5.0	3.6	1.7	0.7	-2.8	-0.2	1.8	1.7	1.6	1.6	1.7	1.7
Ukraine	7.8	-14.8	0.7	5.8	0.4	0.3	-1.1	-9.4	2.7	2.3	3.4	3.8	4.0	4.3	4.3
Turkey	3.6	-6.1	6.8	9.6	3.5	7.0	3.8	4.7	1.8	4.1	2.5	2.5	2.6	2.7	2.7
Memorandum															
World	2.9	-1.3	4.2	3.4	2.3	2.3	2.4	2.2	2.0	2.4	2.5	2.5	2.5	2.6	2.6
Advanced economies	1.7	-4.0	2.5	1.2	0.7	0.9	1.6	1.7	1.1	1.7	1.6	1.4	1.3	1.3	1.3
Emerging market and developing economies	4.9	1.5	6.0	5.4	4.0	3.8	3.4	2.9	3.0	3.3	3.5	3.6	3.7	3.7	3.7
European Union	2.1	-4.6	1.9	1.5	-0.6	0.1	1.6	2.0	1.7	2.1	1.9	1.6	1.6	1.6	1.5
United States	1.3	-3.6	1.7	0.9	1.5	1.0	1.8	2.1	0.8	1.5	1.7	1.3	1.1	1.1	1.1
China	9.7	8.7	10.1	9.0	7.4	7.3	6.7	6.4	6.1	6.1	5.9	5.7	5.6	5.4	5.1
Japan	1.1	-5.3	4.2	-0.3	1.7	2.2	0.5	1.2	1.0	1.7	0.9	1.1	0.6	1.1	1.0

Source: IMF, *World Economic Outlook* (WEO).

References

- Aiyar, Shekhar, Wolfgang Bergthaler, Jose M. Garrido, Anna Ilyina, Andreas Jobst, Kenneth H. Kang, Dmitriy Kovtun, Yan Liu, Dermot Monaghan, and Marina Moretti. 2015. “A Strategy for Resolving Europe’s Problem Loans.” IMF Staff Discussion Note 15/19, International Monetary Fund, Washington, DC.
- Grigoli, Francesco, Alexander Herman, Andrew J. Swiston, and Gabriel Di Bella. 2015. “Output Gap Uncertainty and Real Time Monetary Policy.” IMF Working Paper 15/14, International Monetary Fund, Washington, DC.
- International Monetary Fund. 2017a. “Euro Area Policies: 2017 Article IV Consultation.” Washington, DC.
- . 2017b. “2017 External Sector Report.” Washington, DC.
- Matheson, Troy, and Emil Stavrev. 2014. “News and monetary shocks at a high frequency: A simple approach.” *Economics Letters* 125: 282–86.
- Organisation for Economic Co-operation and Development (OECD). 2017. “OECD Employment Outlook 2017.” Paris.

2. Reforming the Judiciary: Learning from the Experience of Central, Eastern, and Southeastern Europe

The countries of Central, Eastern, and Southeastern Europe (CESEE) have made major progress in raising living standards over the past two and a half decades. This progress was supported by a radical transformation of their economies and institutions. Using case studies and empirical analysis, this chapter explores the role of internal and external factors, particularly accession to the European Union (EU), in supporting reforms to strengthen the effectiveness of the judiciary. The findings suggest that, beyond initial conditions, an enabling environment for judicial reforms was created by factors and policies that (1) improved the distribution of resources and opportunities, (2) upgraded rules and procedures to recruit and train civil servants, and (3) increased transparency and accountability. The European Union and the Council of Europe (CoE) acted as strong external anchors in catalyzing reforms. However, there were also some reversals of reforms, and the sustainability of reforms appears to depend mainly on domestic factors. These findings might offer insights in particular for countries aiming to join the European Union, but also for others seeking to improve the effectiveness of their judiciary.

Why Focus on Judicial Reforms?

CESEE countries have made significant progress in improving institutions since the transition to market economies, but they need a new wave of structural reforms to sustain the rapid convergence of incomes. The fast convergence before the global financial crisis, particularly in the CESEE EU countries, was supported by high productivity gains from rapid integration into European

supply chains, strong capital inflows attracted by underbanked economies, and extensive economic and institutional reforms implemented during the transition and EU accession. However, total factor productivity growth dropped substantially after the global financial crisis, and investment suffered. Projected declines in the working-age population, partly because of continued emigration, along with skill shortages compound the looming headwinds. With external conditions expected to be less supportive than during the transition, boosting potential growth requires a better environment for domestic savings and investment and, hence, new and more difficult institutional and governance reforms (Thomsen 2017a, 2017b). Sound legal institutions are vital in this regard.

Judicial reform and control of corruption are viewed as key structural reform priorities in many European countries. For example, the IMF has highlighted enhancing justice systems' efficiency and capacity to facilitate debt resolution in several countries (IMF 2015); improving contract enforcement and protection of property rights in Kosovo, Serbia, and Slovenia; and strengthening anticorruption efforts in Bulgaria, Greece, Hungary, Italy, Romania, and Ukraine. Recognizing progress made in many other structural reform areas, the May 2016 *Regional Economic Issues: Central, Eastern, and Southeastern Europe* suggested that incomplete reforms of judicial systems and protection of property rights in many CESEE economies may explain a significant part of the productivity gaps with the EU15.¹ Hence, judicial reforms may have considerable potential to boost incomes in the region (Figure 2.1). Judicial reforms continue to be high on policymakers' agendas and are relevant for all EU countries, but particularly for countries that aspire to join the European Union.

This chapter was prepared by a staff team consisting of Vizhdan Boranova, Raju Huidrom, Mariusz Jarmuzek, Martin Petri, Faezeh Raei, Tiberiu Scutaru, Ara Stepanyan, and Svetlana Vtyurina, with input from Nadeem Ilahi, Ricardo Llaudes, Pamela Madrid Angers, Francisco Parodi, Brett Rayner, Jason Weiss, and Ruifeng Zhang, as well as from country teams. The team was led by Laura Papi, under the general guidance of Jörg Decressin. Gilda Ordoñez-Baric provided skillful administrative support.

¹The EU15 are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

The IMF has long recognized the importance of good governance, including the rule of law, for long-term, inclusive growth (IMF 1997, 2017a). Institutions that contribute to good governance need to be effective in serving the well-being of all in society as opposed to only a few (Box 2.1). Recently, the IMF has highlighted the pernicious effects of corruption, especially on inclusive growth and on citizens' trust (IMF 2016a). In discussing the 2017 Board Paper on the IMF's role in governance, Directors called for further work in this area. In the October 2017 Global Policy Agenda, the IMF Managing Director stated that “[s]trengthening governance is essential in building support for reforms needed to raise long-term growth and ensure a domestic level-playing field” and that “[t]he Fund will strengthen its engagement on governance and corruption issues” (IMF 2017d). This study seeks to contribute to this work stream.

CESEE countries greatly improved their institutions, including the judiciary, during the transition and EU accession, and hence their experiences can provide useful insights. By choosing to join the European Union, most countries in the region have committed to the goal of effective rule of law. The differences in the institutional quality in these countries—despite somewhat similar settings, major reforms everywhere, and the common goal of EU accession—provide historical and recent background to study the factors affecting institutional progress. Hence, this chapter focuses on the 20 CESEE countries that are EU members or seek to join the European Union.²

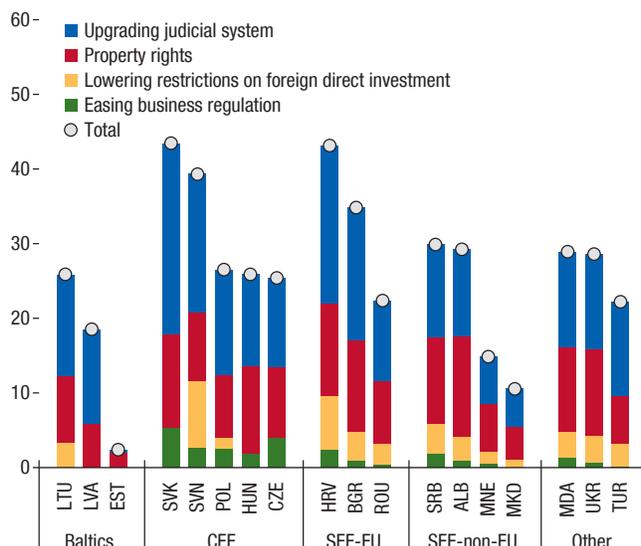
This chapter focuses on the effectiveness of justice systems and, to a more limited extent, the protection of property rights.³ A country's legal framework is a critical element of its business environment, as it affects all economic

²The CESEE countries are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, FYR, Moldova, Montenegro, Poland, Romania, Serbia, the Slovak Republic, Slovenia, Turkey, and Ukraine.

³In addition to an effective judiciary, property rights protection requires effective enforcement and foreclosure regimes, enforcement agents, bailiffs, notaries, and credit and land registries—aspects not covered in this chapter.

Figure 2.1. CESEE: Estimated Efficiency Gains from Institutional Reforms

(Percent; potential improvement in total factor productivity)



Source: IMF May 2016, *Regional Economic Issues: Central, Eastern, and Southeastern Europe*.

Note: Data labels use International Organization for Standardization (ISO) country abbreviations.

interactions and hence economic outcomes. The World Bank's *2017 World Development Report* emphasizes that the rule of law is “the very basis of good governance needed to realize full social and economic development,” but that the existence of laws does not assure these outcomes (World Bank 2017). Hence, the report calls for a focus on “the role of law,” which means its effect on the functions of the legal system rather than its form. Effective rule of law also plays a key role in control of corruption (Lagarde 2016, 2017). Within the rule of law, the effectiveness of the justice system and protection of property rights—which depend on the justice system to a large extent, but also on other elements—are critical to economic outcomes.⁴

This chapter explores the question of what might encourage judicial reforms. It adds several country case studies to the literature, as well as

⁴Many other economic institutions, such as fiscal and financial institutions, are important, but have been the subject of other studies. For example, the November 2016 *Regional Economic Issues: Central, Eastern, and Southeastern Europe* focused on government efficiency.

a comprehensive empirical analysis, with a view to distilling concrete policy lessons for countries that endeavor to improve the effectiveness of their judiciary systems. Importantly, the analysis does not provide legal assessments, but tries to address the following questions:

- What were the specific reforms of the justice system and protection of property rights and the context in which they took place?
- How have judicial reforms evolved over time, and how do they compare across countries?
- Which factors facilitated these reforms?
- What was the role of domestic factors and of the European Union in enabling change?

The chapter begins with an analytical framework that explores factors affecting institutional quality. Drawing on the framework, the section that follows presents country experiences. The chapter then offers a stocktaking of CESEE progress on judicial effectiveness, discusses factors that may have contributed to judicial reforms, and puts forth conclusions.

How to Analyze Institutional Quality: Conceptual Framework

The literature offers several theories to analyze differences in institutional quality that are combined in this chapter into a unified framework. As factors affecting judicial effectiveness are likely to be similar to those determining broader institutional quality, this section draws on the literature on institutions. Institutions that contribute to good governance need to be effective in serving the well-being of everyone in society.⁵ Institutional theories can be grouped into several approaches (Annex 2.1). This chapter adopts a political economy framework,

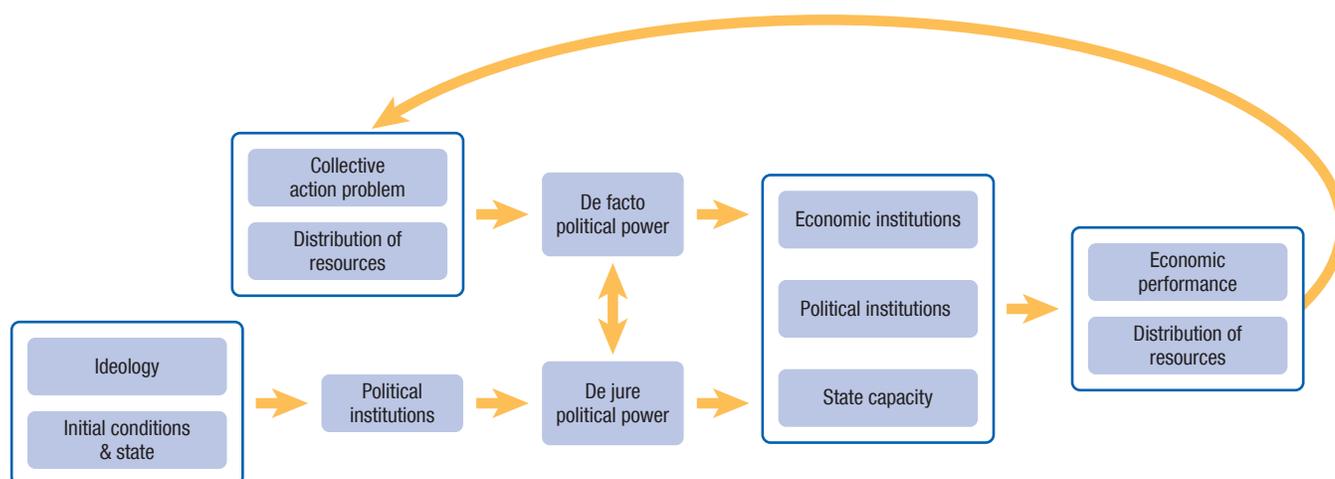
⁵Acemoğlu, Johnson, and Robinson (2005) refer to effective institutions as “inclusive institutions” and contrast them with “extractive institutions,” Fukuyama (2011) speaks of “accountable government” versus “patrimonialism,” and Mungiu-Pippidi (2015) refers to “ethical universalism” versus “particularism.”

building mainly on Acemoğlu, Johnson, and Robinson (2005), a seminal paper on the political economy approach. This framework encompasses two critical features: (1) economic institutions’ distributional consequences, which in turn affect institutions, giving rise to important feedback loops; and (2) politicians’ inability to commit to act only in the public interest, exacerbating collective action problems (Figure 2.2).⁶ De jure political power depends on political institutions, which result from initial conditions, ideology, and state capacity. De facto political power also depends on resource distribution and how different groups in society interact via bargaining. Given preferences of different groups in society, those with the most political power (both de facto and de jure) determine prevailing institutions and use them in their interest. Institutions then affect economic outcomes, the distribution of resources, and state capacity in subsequent periods, generating feedback loops between resource distribution and political and economic institutions.

According to this framework, in societies without dominant players, gaining political power is more competitive, leading to rules-based decision making and effective institutions. A concentrated distribution of resources and opportunities limits possibilities for many people to gain power. Many have expressed concern about large firms’ influence on the rules of the game (Guriev 2017; Zingales 2017). Conversely, civil society tends to promote participatory processes and effective institutions.

The greater a society’s ability to solve collective action problems, the more likely it is to establish effective institutions. Societies with less fragmentation along various dimensions (for example, ethnicities and cultures) tend to find it easier to reach agreement and solve their collective action problems (Trumbull 2012). Fragmentation in this context measures divisiveness and power imbalances as opposed to diversity. More diverse societies, particularly those where the views of different groups are well represented and

⁶In this context, the collective action problem is the inability to take actions that maximize the well-being of society as a whole.

Figure 2.2. Factors Shaping Institutional Quality¹

¹The figure builds on the framework presented in Acemoğlu, Johnson, and Robinson (2005) and includes some extensions to incorporate other channels summarized in Annex 2.1.

respected (that is, minority rights), might actually be better at finding common ground. Higher levels of transparency and accountability alleviate information asymmetries, discourage rent-seeking behavior, and may help overcome trust deficits, thereby facilitating time-consistent behavior in the pursuit of long-term goals, coordination, and cooperation (World Bank 2017).

The capacity of the public administration is also important for institutional quality. In countries with established rules and procedures for hiring and training public employees, political interference in public administration decision making is more limited and public service provision is better (Andrews, Pritchett, and Woolcock 2012). However, the capacity of the public administration itself may depend on powerful groups' decisions regarding state capacity.

Initial conditions and the external environment influence many of the above-mentioned elements through different channels:

- *Initial conditions:* History, geography, culture, societal norms, the initial level of development, and legal origins can matter in various ways.
- *External shocks:* Threats to sovereignty or crises could create a common purpose and make it easier to solve collective action problems, though the opposite could also occur. Technological change and other shocks could alter the distribution of resources and change the balance of power.
- *Openness:* Greater openness may promote a better judiciary to the extent that investors reward rules-based business environments and businesses adapt to global standards. Import competition in domestic markets may reduce the monopolization of power.
- *External anchors:* A prominent example is the European Union. The expected benefits from EU accession may have outweighed the loss of domestic policy autonomy for politically powerful groups, helping overcome domestic resistance to reforms (Box 2.2). The CoE (all countries concerned except Kosovo are members) has also helped CESEE countries advance judicial reforms through its binding and nonbinding legal standards. Assistance from international financial institutions may also provide incentives for broader institutional reforms.

The empirical analysis in this chapter considers all the factors presented in the above framework, while most previous studies test the relevance of specific hypotheses. The September 2005 *World Economic Outlook* found that openness and accountability were associated with higher institutional quality, while natural resource abundance was negatively associated with it. More recent studies suggest that imperfect accountability, limited transparency, and high income inequality hinder institutional quality (Ganiou Mijiyawa 2013; EBRD 2013). Several studies provide evidence of the beneficial role of an external anchor, such as the European Union (EBRD 2013; September 2005 *World Economic Outlook*). However, others argue that institutional reforms slowed after countries were offered EU membership and even reversed in some cases after the countries joined (Mungiu-Pippidi 2015). Prima facie, high and positive correlations are observed between the current level of economic aspects of the rule of law and the initial equality of resource distribution, transparency, and the capacity of public administration (Figure 2.3).⁷ However, more analysis is needed to understand causality given the feedback loops between institutions and economic outcomes.

This section refers to the EU concepts of effective justice systems and protection of property rights. The European Commission's *Acquis Judiciary and Fundamental Rights Chapter* states that “the establishment of an independent and efficient judiciary is of paramount importance. Impartiality, integrity and a high standard of adjudication by the courts are essential for safeguarding the rule of law. Equally, member states must fight corruption effectively, as it represents a threat to the stability of democratic institutions and the rule of law.” The *Acquis* notes that effective protection of property rights—established by the European Human Rights Convention and the EU Charter of Fundamental Rights—hinges on enforcement capacity, which requires an effective judiciary. This section focuses on the judiciary's efficiency,

⁷Initial conditions are taken as 1993 because the early 1990s denote the beginning of the CESEE transition, and due to data availability.

independence, and impartiality in order to capture the overall effectiveness of the judicial system.

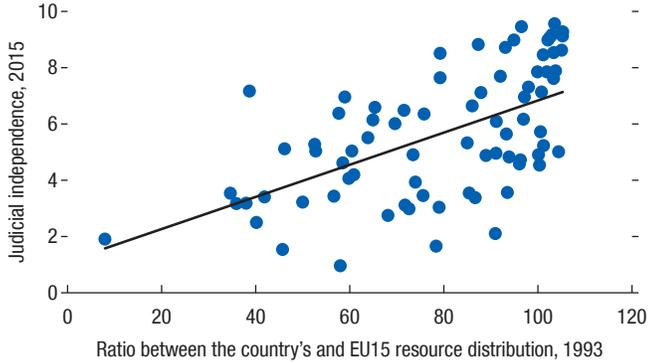
This chapter uses a wide range of information sources. It relies extensively on the standard setting and evaluations of the CoE bodies—the European Commission for the Efficiency of Justice (*Commission européenne pour l'efficacité de la justice*—CEPEJ) and the Group of States against Corruption (GRECO)—and the European Commission's reports, as well as on other studies and experts. However, CEPEJ data and the EU Justice Scoreboards start in 2010 or later. To have quantitative indicators over a long period for more countries and dimensions, and following most previous studies, we also employ data from the World Bank's *Worldwide Governance* and *Doing Business Indicators*, the World Economic Forum, the Varieties of Democracy Institute, and other sources (Annex 2.2). Most of these data are perception based and thus more subjective than other economic indicators. Nevertheless, economic decisions are based on agents' perceptions of many factors, including governance, effectiveness of the judiciary, and property rights protection. CoE 2015 notes that “. . . other factors, such as public perception, political culture and safeguards against corruption have a clear impact on the ability of courts and judges to command legitimacy and do their job.” The case studies that follow here rely on many sources to understand the context in which judicial reforms took place.

Country Case Studies

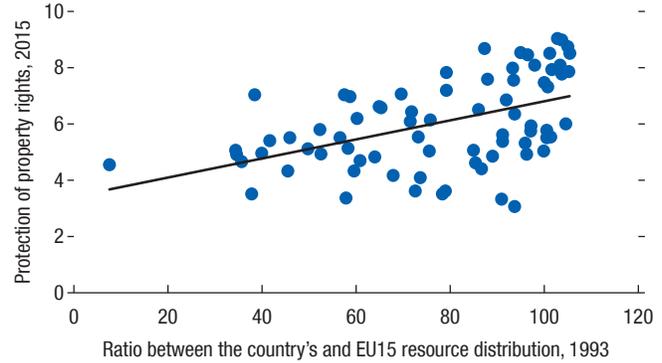
This section analyzes judicial reform episodes in six countries: Bosnia and Herzegovina, Croatia, Estonia, Poland, Romania, and Serbia. Employing the framework presented earlier, the section discusses factors shaping judicial effectiveness, such as the equality of resource distribution, transparency and accountability, state capacity, political power, and the role of external anchors. The mix of cases aims to ensure adequate representation across the region. We include countries with initial conditions more conducive to an effective judiciary (Estonia,

Figure 2.3. CESEE: Initial Level of Fundamentals and Aspects of the Rule of Law¹
(Index; 0 = worst, 10 = best)

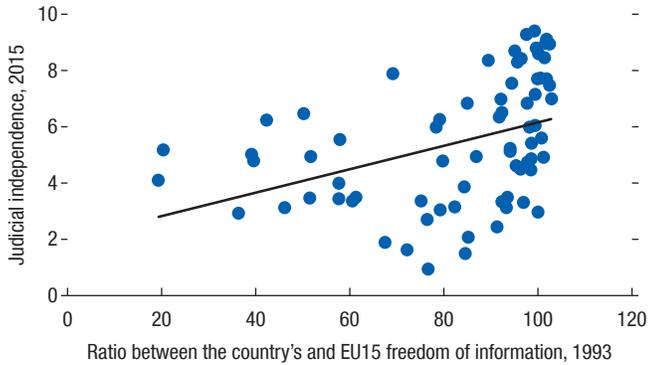
1. Resource Distribution versus Judicial Independence



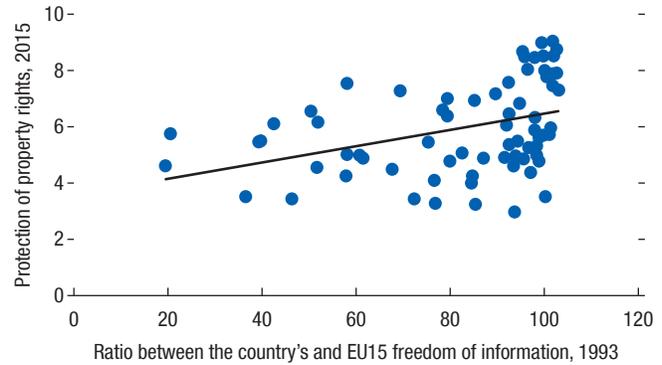
2. Resource Distribution versus Protection of Property Rights



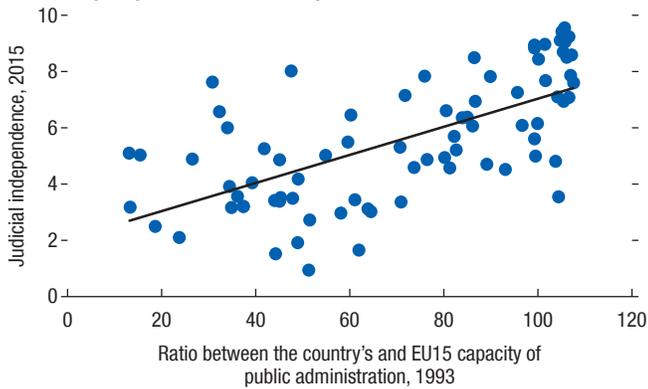
3. Transparency and Accountability versus Judicial Independence



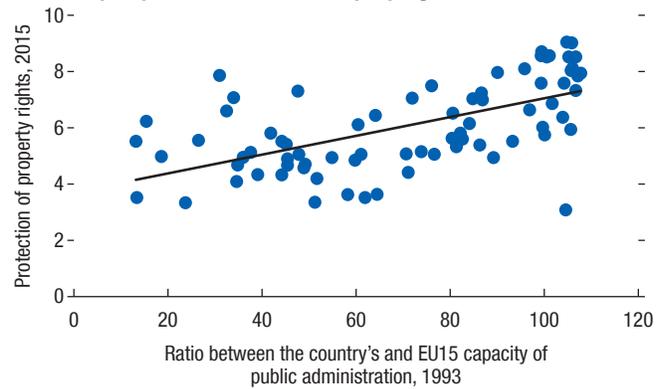
4. Transparency and Accountability versus Protection of Property Rights



5. State Capacity versus Judicial Independence



6. State Capacity versus Protection of Property Rights



Sources: World Economic Forum; University of Gothenburg; Varieties of Democracy Institute (V-Dem); and IMF staff calculations.
 Note: EU15 countries are listed in text footnote 1.

¹Based on available worldwide distribution of advanced and emerging market economies.

Poland), a country that faced more challenging domestic fundamentals (Romania), and countries that went through civil strife (Bosnia and Herzegovina, Croatia, Serbia). For each country, the analysis focuses on periods when significant

judicial reforms occurred in order to uncover drivers of change.

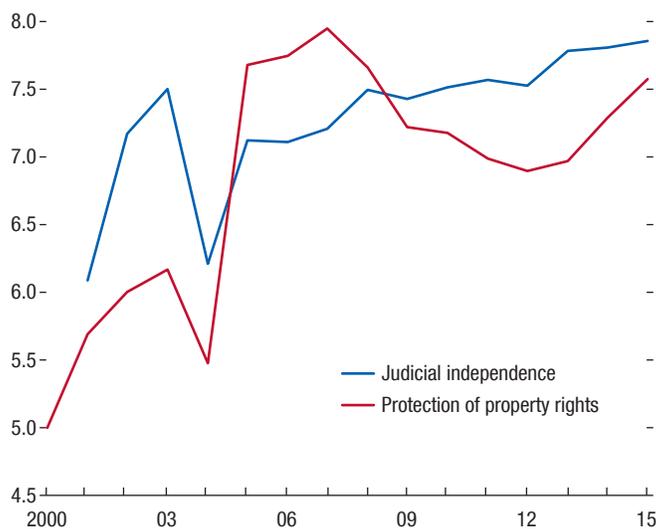
Estonia

Conducive initial conditions and carefully designed policies helped establish effective institutions in Estonia. Estonia's favorable initial conditions included a vibrant civil society. A relatively inclusive reform process ensured widespread distribution of privatized assets and eliminated barriers to foreign trade and investment by reducing high tariffs and nontariff restrictions. This limited the formation of national oligopolies and enhanced transparency and accountability to enable the involvement of citizens in the political process. Significant early investment in the capacity of the judiciary was also instrumental for judicial independence.

Estonia's transition involved a major and rapid overhaul of the institutional framework. Initial reforms laid out solid foundations for an independent judiciary. The Court Act and the Legal Status of Judges Act, adopted in 1991, regulated the functions of the judiciary (Gherasimov 2015). Drawing on Estonia's 1938 constitution, a new constitution adopted in 1992 provided the basis for the separation and balance of powers and guarantees for judicial independence. The new constitution reinstated a parliamentary democracy founded on legal continuity with the pre-Soviet Estonia (Pärna 2005). The guarantees took the form of life tenure for judges and protection against their removal from office (OSI 2001), while decisional independence and impartiality were assured by limits on judges' cross-branch or outside activity (GRECO 2013). The new judicial system became operational in 1993.

Subsequent reforms solidified the judiciary's independence and efficiency. The 2002 Courts Act helped reduce the influence of the Ministry of Justice and eliminated political involvement in disciplining judges by transferring the authority to initiate proceedings against judges from the ministry to the Legal Chancellor. Further, the 2010 Courts Act introduced shared oversight of the administration of courts by the Ministry of Justice and the Court Administration Advisory Council (leaving the Ministry of Justice in charge

Figure 2.4. Estonia: Judicial Independence and Protection of Property Rights
(Index; 0 = worst, 10 = best)



Sources: World Economic Forum; and IMF staff calculations.

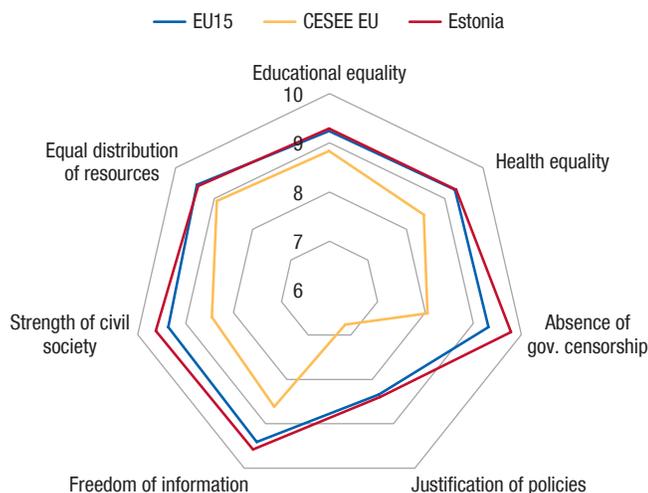
of budgetary issues, however). In recent years, the integrity of the judiciary improved further (for example, via supervision of judges' assets and interest declarations), and so did efficiency (Figure 2.4).

The privatization process ensured broad distribution of resources, fostering effective institutions. Estonia's privatization aimed at putting assets into the hands of those with the incentives and skills to use them effectively, while ensuring wide participation across society (Nellis 1996). The 1993 Privatization Law guaranteed broadly equal rights to domestic and foreign investors and physical and legal persons, while entities with more than a 30 percent public stake were excluded. By 1995, divestiture was largely completed, having turned many people into private owners and contributed to attaining income inequality levels similar to the EU average (Taube and Weber 1999; Laar 2007).⁸

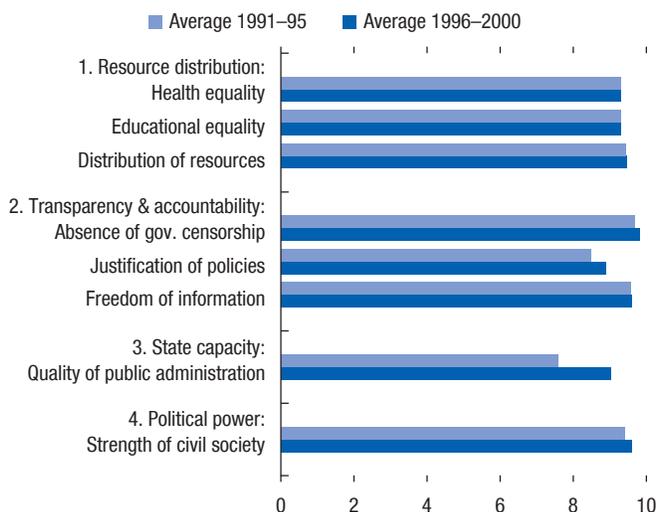
⁸However, some point to limited integration of the Russian-speaking minority as a cost of the otherwise inclusive reform strategy (OSCE 2014; ECRI 1999, 2015).

Figure 2.5. Estonia: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)

1. Cross-Country Comparison, 1993



2. Evolution over Time, 1991–2000



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

The rapid and sustained progress on institutional reforms was underpinned by favorable domestic factors (Figure 2.5). Specifically:

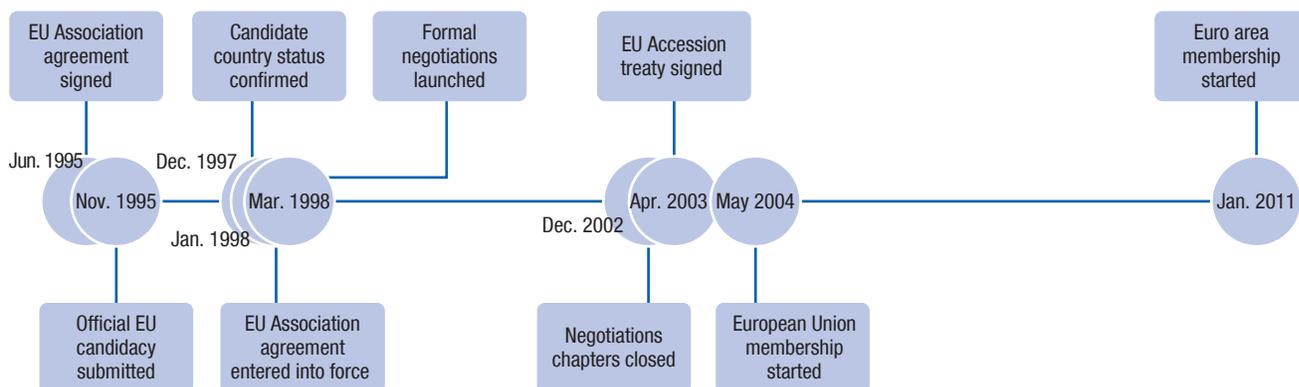
- The distribution of resources and opportunities in Estonia in the mid-1990s was similar to the EU average.
- The strength of civil society and the control of political corruption were similar to the EU15 average by the mid-1990s, providing checks and balances.⁹
- Government censorship was effectively abolished following the establishment of a private press and private broadcasting during 1991–94. Further, the media assumed a watchdog role regarding political scandals (Vihalemm and Masso 2003). Legal guarantees of access to information and extensive use of e-government increased transparency and accountability.

- The introduction of a modern legal and administrative framework for the civil service greatly strengthened public sector capacity, with assistance from various countries and institutions. A large part of the civil service was replaced with new personnel selected based on merit. This was considered one of the most comprehensive administrative reforms in the region (Sarapuu 2012; Tõnnisson and Randma-Liiv 2008).

Given the strong domestic drive for reforms, the European Union mainly provided benchmarks guaranteeing high standards in Estonia. EU accession negotiations began informally in 1993. The Free Trade Agreement with the European Union came into force in 1995 (Figure 2.6). The European Commission deemed Estonia’s respect for the rule of law and protection of property rights in line with its requirements in 1998.

⁹Control of corruption declined between 2001 and 2011, but has improved again in the past few years and is now comparable to the EU15 average.

Figure 2.6. Estonia: EU Accession Timeline



Source: European Commission.

Poland

Favorable initial conditions combined with the commitment to EU membership helped Poland achieve significant progress in judicial reform, but the process has been neither smooth nor linear. While Poland had strong initial conditions in terms of an active civil society and freedom of information that promoted significant reforms early in the transition, these conditions were not enough to ensure sustained progress in judicial reforms. Insufficient efforts to build the capacity of the judiciary, combined with deterioration in the equality of incomes and opportunities, appear to have contributed to some reversals in judicial independence. Commitment to EU membership supported by the country's vibrant civil society helped overcome some of these setbacks. However, in 2017 the European Commission launched an infringement procedure against Poland over legislation regarding the judiciary on concerns that the legislation may undermine its independence.

Poland's active civil society before the transition provided some favorable initial conditions for institutional reform (Figure 2.7). According to Bruszt and others (2009), political opposition before 1989 was more intense in Central and Eastern Europe, especially in Poland, compared with other communist countries. A vibrant civil society, and notably the role of the trade unions, was important for the formation of institutions

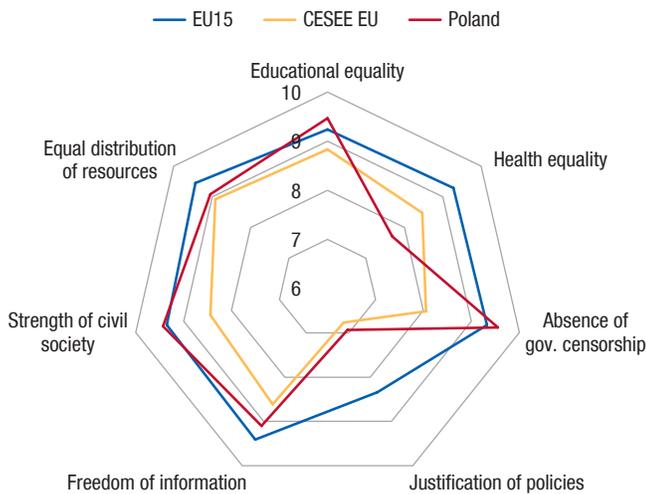
that provided checks and balances. Moreover, a massive expansion of media outlets enabled debates over social problems.

With a strong civil society and freedom of information, reforms of property rights and the judiciary started early. The 1989 constitutional amendments sanctioned the independence of judges and introduced the separation of the judiciary from other branches of government. Together with the 1988 Law on Economic Activity, this laid the foundation for freedom of business activity and property rights protection (Figure 2.8). A critical step in establishing judicial autonomy was the creation of the National Judicial Council, which recommends judgeship candidates to the president. When the preaccession process started in 1994, the judiciary had already been deeply transformed. In its first report, the European Commission stated that "the independence of the Polish judiciary vis-à-vis other institutions appears secured" (EC 1997). A new constitution approved in 1997 further separated powers and strengthened the Constitutional Tribunal and property rights protection. Perceived judicial independence was at a high level already in 1995, but deteriorated thereafter.

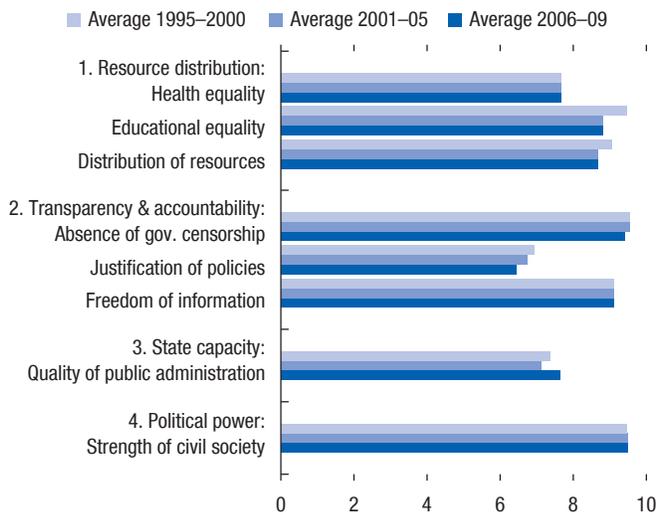
While privatization was not smooth, neither was it hasty, which helped limit resource concentration. About 70 percent of small and medium enterprises (SMEs) were privatized by the end of the 1990s

Figure 2.7. Poland: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)

1. Cross-Country Comparison, 1993



2. Evolution over Time, 1995–2009



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

Figure 2.8. Poland: Judicial Independence and Protection of Property Rights¹
(Index; 0 = worst, 10 = best)

(Index; 0 = worst, 10 = best)



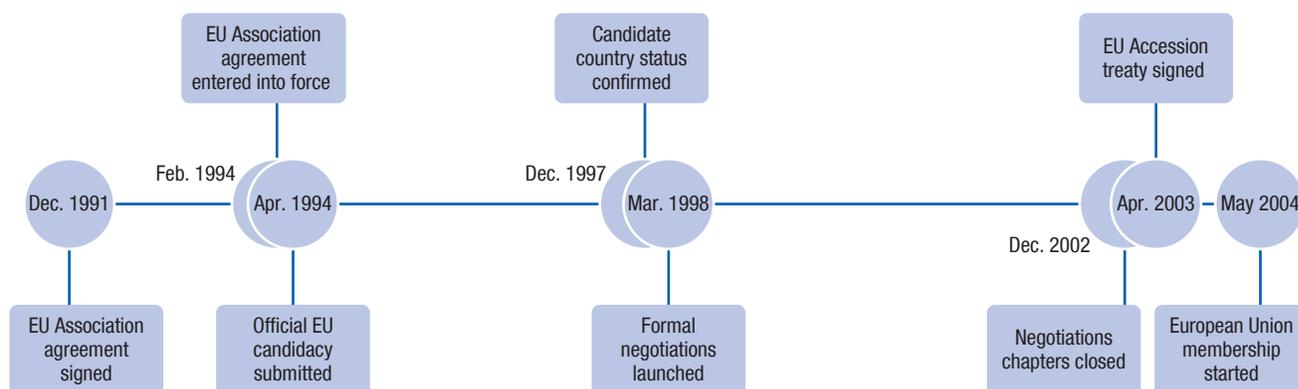
Sources: World Economic Forum; and IMF staff calculations.

¹Missing data for 1996–99 have been interpolated.

(Iwanek and Wellisz 1993). However, large-scale privatization took much longer than expected (Patena 2015). This slow process allowed private firms to emerge and compete for acquisition of public assets, which may have limited resource concentration. Meanwhile, state-owned enterprises (SOEs) still play an important role in the economy and dominate some sectors.

However, Poland’s judicial system witnessed a considerable deterioration during 1997–2003. The systemic judicial reforms and sizable changes in the opportunities available in the private and public sectors—as growth rapidly expanded jobs and pay in the former, while the latter did not adjust as quickly—created significant challenges for judiciary effectiveness. The system was not prepared for the large influx of cases caused by the systemic changes to the legal system and the economy (Freedom House 2003; Kucharczyk and Zbieranek 2010). This resulted in long processing times for legal cases and difficulties in enforcing court decisions (EC 1997). Many low-paid judges left to join the private sector, further diminishing judiciary capacity. Instances of corruption among

Figure 2.9. Poland: EU Accession Timeline



Source: European Commission.

the judiciary were observed in the 2000s, as long waits for routine commercial court decisions created incentives for bribery (EC 2000). The perception of corruption, the capacity of public administration, and equality of incomes and opportunities deteriorated during 1998–2003 (Kucharczyk and Zbieranek 2010).

Despite these setbacks, the commitment to reforms under the EU accession framework provided a strong impulse to rebuild trust in the judiciary (Figure 2.9). Poland's vibrant civil society once again fostered a civil movement resulting in a high turnout in the 2007 elections. Voters expressed dissatisfaction with some government measures viewed as undermining the rule of law. The EU oversight combined with the media's role helped address these challenges, as reflected in the improvement in Poland's ranking on the control of corruption index over its 2006 ranking (Ekiert and Soroka 2013). Another positive development was the reestablishment of an open and competitive process for recruiting senior government officials after 2007, resulting in a notable improvement in Poland's ranking on the index of public administration capacity.

The confluence of these positive developments may have contributed to the improvement in the 2007–09 perceived judicial independence. In response to several rulings by the European Court of Human Rights against Poland due to

the length of proceedings, the government passed a law in 2004 aimed at addressing the undue length of court proceedings (Kucharczyk and Zbieranek 2010). In 2009, the government also increased judges' salaries in response to massive protests (Kucharczyk and Zbieranek 2010). In October 2009, the Parliament revised the 1985 Act on Public Prosecution, separating the Ministry of Justice and the Office of the Public Prosecutor General, although this was reversed in 2016. The CoE acknowledged the constitutional independence of the Polish judiciary, pointing to only limited involvement of the Justice Minister (GRECO 2013).

In the summer of 2017, the EC launched an infringement procedure against Poland on concerns about judicial independence arising from new legislation. The government is undertaking judicial changes with the stated purpose “to meet people's expectations and increase the democratization of the judiciary” (Polish Justice Ministry 2017), including raising the efficiency of courts and reducing case backlogs. In 2016, the European Commission used a new EU framework (see Box 2.2) and initiated the rule of law investigation regarding the amendments to the Constitutional Tribunal adopted during 2015–16. The 2017 Law on Ordinary Courts Organization gives discretionary power to the minister of justice to prolong the mandate of judges who have reached retirement age (differentiated for women

and men), as well as to dismiss and appoint court presidents. The EC is concerned that the minister's discretionary power will undermine the courts' independence, and it is also concerned about gender discrimination. The EC launched the infringement procedure in July 2017 and issued a reasoned opinion in September 2017 after receiving the Polish authorities' letter regarding the approved law (EC 2017a, 2017c). Two additional draft laws that concern the Supreme Court and the National Judicial Council, vetoed by the president in July 2017, are currently being redrafted. Discussions between the Polish authorities and the EC are ongoing.

Romania

Romania's experience demonstrates the key role of an external anchor when domestic dynamics pose challenges to strengthening institutions. Civil society had been suppressed and the post-transition government did not have an appetite for reform. Privatization resulted in more concentrated resource distribution. Little investment in the capacity of the judiciary left the system with politically connected judges who resisted reforms. The EU accession played a catalytic role in strengthening civil society, freedom of information, and state capacity. This led to greater demand for and improvement in judicial independence and capacity. Nevertheless, Romania's achievements in judicial reform remain incomplete, and problems persist with the implementation of court decisions (EC 2016a; GRECO 2016).

In an environment of weak civil society, the government that came to power in 1990 made little progress on reforms. The austerity program introduced in the 1980s to repay the country's national debt resulted in shortages of basic goods and frequent electricity blackouts (Dăianu 2004). Oppression coupled with feelings of mistrust and secrecy cultivated by the old regime weakened civil society (Rossi 2012). Neither the student movement nor peripheral grassroots movements had the organizational capacity to replace the

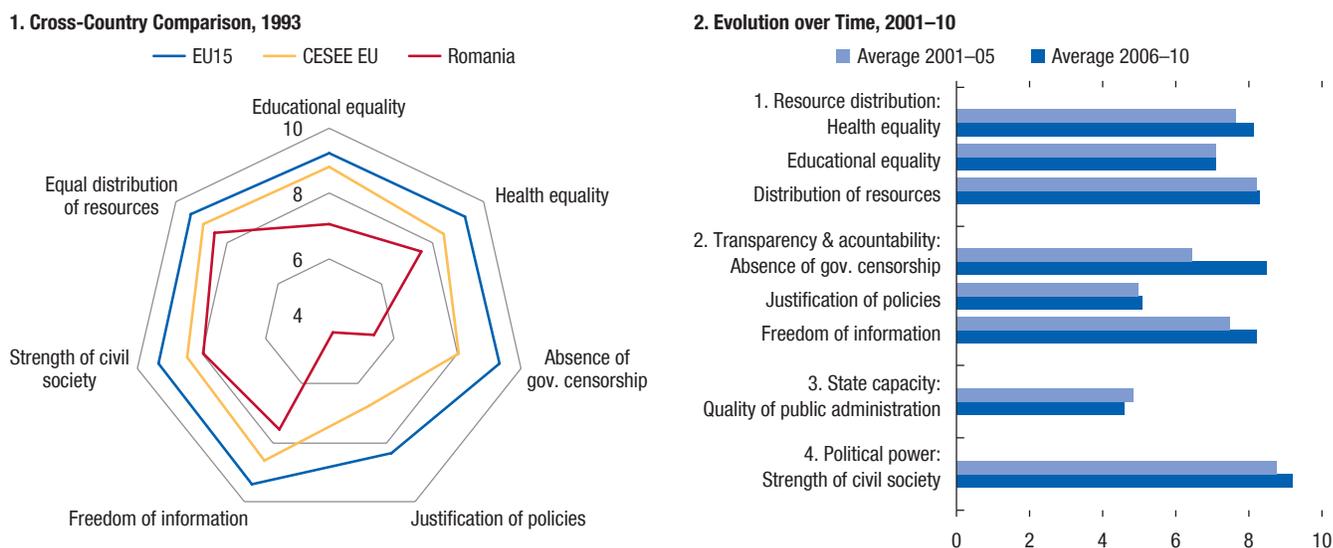
National Salvation Front (NSF) Party, which originated in the Communist Party. The NSF stayed in power longer than the originally expected interim role (Agh 2004; Siani-Davies 2005; Pralong 2004; Paramio 2002; Rossi 2012). Also, prevalent corruption hindered reforms, which previous elites bitterly opposed (Roman 2002; Dallara 2014).

In this challenging environment, judicial reforms faced many difficulties despite the EU accession process. Magistrates were generally loyal to the old regime, which limited judiciary independence (Demsorean, Parvulescu, and Vetrici-Soimu 2009). In 2002, the European Union postponed Romania's accession until 2007. The 2003 constitution institutionalized a powerful Superior Council of the Magistracy (SCM) charged with the careers, appointments, promotions, and evaluations of magistrates. However, *de facto*, all these competencies were exercised by the Justice Ministry (Coman 2009). The lack of judicial independence also weighed on property rights protection.

Romania's postcommunist privatizations contributed to the emergence of political and business elites who resisted reforms to the judiciary and protection of property rights. The privatization of large enterprises was long and contentious. Many viable large-scale enterprises were sold at fire sales, while the insolvent ones continued to burden the state (Gabanyi 2004; Bacon 2004). Members of the elite used their political power and control over state resources to solidify their control over the economy, politics, and the judiciary (Gabanyi 2004). Moreover, several nationalist political forces opposed foreign investors' participation in privatization (Paramio 2002). All this resulted in a significant concentration of resources, with the Gini coefficient—a measure of inequality—rising by 10 percentage points by the late 1990s.

A turning point came in 2004, when civil society gathered strength, capitalizing on the move toward EU accession. Civil society organizations launched an anticorruption campaign for the 2004 election, offering to screen political parties' candidates

Figure 2.10. Romania: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

on integrity criteria (Mungiu-Pippidi 2015).

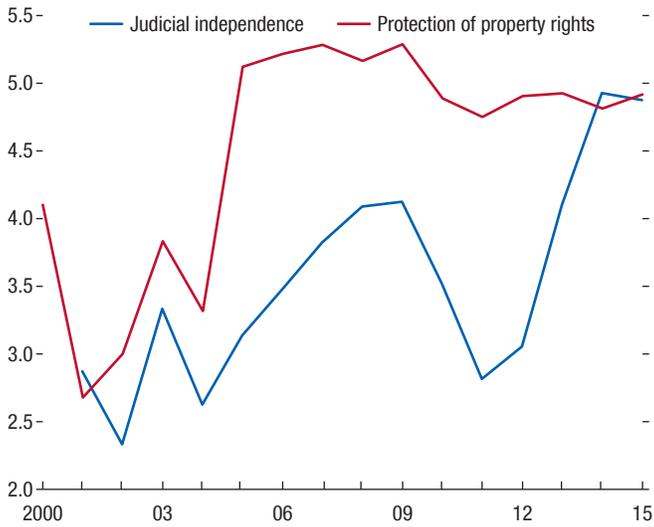
The earlier adoption of freedom of information legislation driven by EU accession facilitated this campaign. Civil society organizations used it to expose politicians' dishonest behavior and won several litigation cases against the government. This coincided with some decline in the perception of the corruption in politics. These factors, together with the prospect of EU accession, created common ground for the formation of an opposition coalition, despite unfavorable initial conditions (Vachudova 2006).

Tangible reforms started in 2004 (Figure 2.11). Following the elections, the new minister of justice quickly implemented judicial reforms and an anticorruption strategy to fulfill EU requirements (Dallara 2010; Mendelski 2012). A law envisaging the appointment of the courts' presidents and prosecutors was approved against the SCM's opposition (Coman 2007; Carp 2007), but declared unconstitutional by the Constitutional Court, which included several members of the SCM and the old Communist Party (Dallara 2014). A revised version of the law was adopted,

which included weaker provisions for judicial reforms. Although the European Union accepted this version, it introduced the Cooperation and Verification Mechanism (CVM) to address areas deemed in need of further progress, including the judiciary's independence and impartiality and the fight against corruption (EC 2007; Dallara 2014).

After EU accession in 2007, judicial reform slowed (Figure 2.12). The reform-minded minister of justice was replaced in the reshuffling of the government in 2007. Parliament endorsed a revised criminal code providing legal ways to protect corrupt officials, although adoption of the code was postponed and it was later modified (Dallara 2014). In addition, the government attempted to restrict the Constitutional Court's powers and threatened to impeach judges (Blokker 2013; Dallara 2014). The European Union also criticized Romania for not respecting values of democracy and the rule of law (EC 2009), and the country's ranking on the index of perceived judicial independence deteriorated.

Figure 2.11. Romania: Judicial Independence and Protection of Property Rights
(Index; 0 = worst, 10 = best)



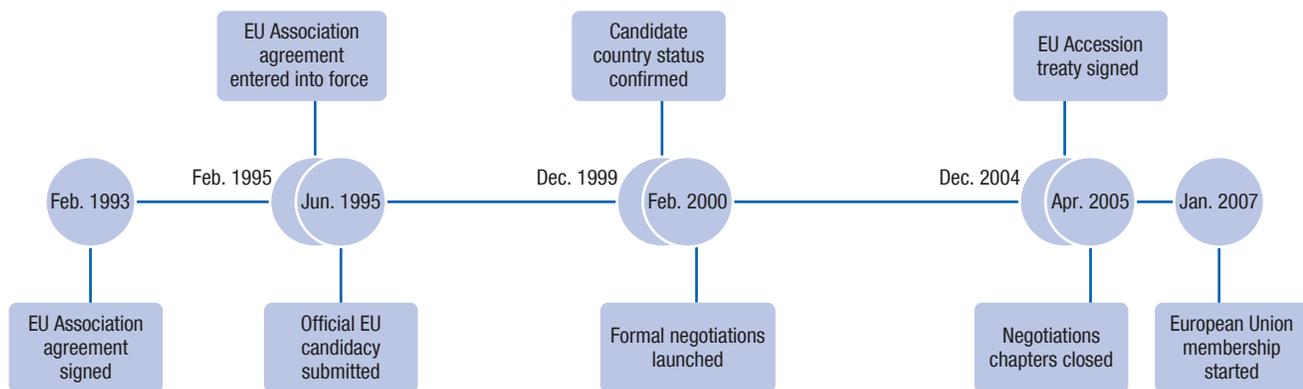
Sources: World Economic Forum; and IMF staff calculations.

The situation improved after 2011 with the emergence of a new generation of judges more open to reforms and a further strengthening of civil society. The National Institute for the Magistracy, which implemented the EU-driven reform of judicial training, started to graduate a new generation of well-trained judges (Piana and others 2013). Many Romanian judges involved in some CoE expert committees and other international judicial networks supported the

diffusion of best practices (Piana 2009). GRECO’s recommendations and the CVM promoted transparency, independence, and accountability of the justice system. The judiciary’s efficiency also improved, as evidenced by a 30 percent decline in disposition time for noncriminal cases over 2010–14 and more recently supported by increased resources allocated to the judiciary.

The trend regarding judicial reforms in Romania was positive until 2016, but since early 2017 some signs of slowing down seem to be emerging. As described in several CVM reports, a track record pointing to good progress and growing irreversibility of the reforms was evident with stronger judicial institutions and strengthened corruption prevention. However, “a number of key issues already identified in earlier reports have remained outstanding” (January 2017 CVM). This includes areas such as the independence of the judiciary and the effectiveness of the anticorruption framework. The authorities’ comprehensive “Strategy for the Development of the Judiciary 2015–2020” sets out the structural reform steps to be taken until 2020. The strategy is now underway and should bring major benefits to the users of the justice system and improve public trust in the system, provided its implementation is sufficiently robust. The population has been alert to signs of reversal as of 2017, as evidenced by public demonstrations. Overall the Romania case study shows that significant progress is possible,

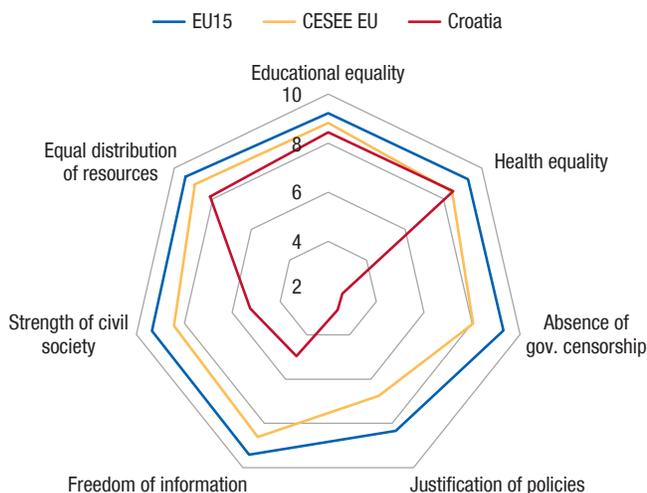
Figure 2.12. Romania: EU Accession Timeline



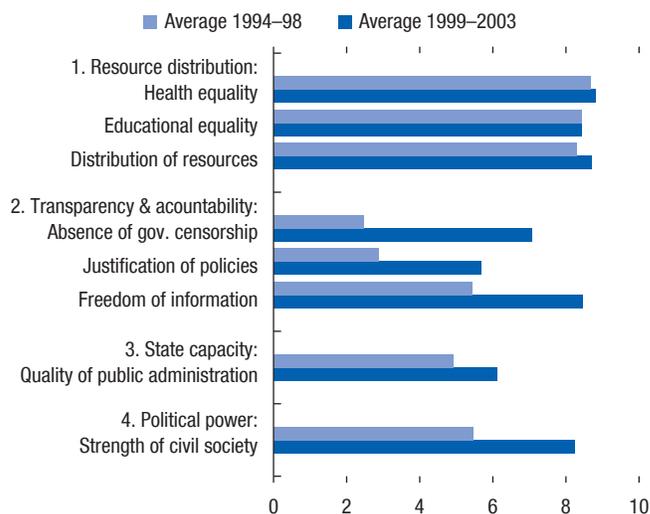
Source: European Commission.

Figure 2.13. Croatia: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)

1. Cross-Country Comparison, 1993



2. Evolution over Time, 1994–2003



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

but requires sustained efforts for the reforms to become embedded and deliver a better functioning judiciary for all its citizens.

Croatia

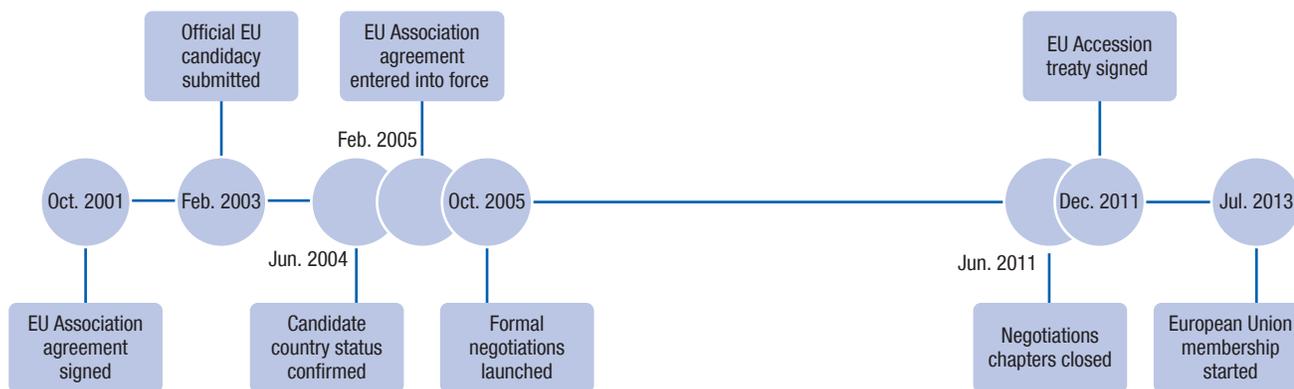
Institutional reforms in Croatia were slow during the initial stages of the transition, mainly owing to military conflict, but prospects for EU accession catalyzed reforms. Citing national security concerns, the government monopolized power, including over the justice system, during 1991–2000 (Blitz 2003; Dallara 2014; Jović 2006). The 1993 Court Act created the State Judicial Council (SJC), an independent body responsible for the selection and dismissal of judges. However, in practice, the SJC became a “lever in the hands of the executive” (Uzelac 2003) and political influence over judges’ removals and appointments continued until 2000 (GRECO 2014). A large outflow of judges limited the judiciary’s capacity (Dallara 2014). After the war ended, civil society increasingly demanded institutional changes, and transparency improved.

EU accession prospects were instrumental in encouraging reforms, though implementation gaps remain.

The judiciary’s inefficiency and poor implementation of privatization hindered property rights protection. Slow and inefficient court proceedings, poor case management, and low administrative and professional capacity were factors that undermined trust in effective enforcement of creditors’ and property rights. Privatization, which mostly took place in the 1990s, at times involved appointing new managers close to the ruling party, a trend that discouraged foreign investors and concentrated resources (Bartlett 2007).

The power of civil society groups increased and transparency improved starting in the late 1990s, catalyzing reforms (Figure 2.13). With the end of the war, and despite the unfavorable initial conditions, civil society gained some strength. The Croatian Judges Association became more critical of government actions and recorded significant victories against SJC rulings (Dallara

Figure 2.14. Croatia: EU Accession Timeline



Source: European Commission.

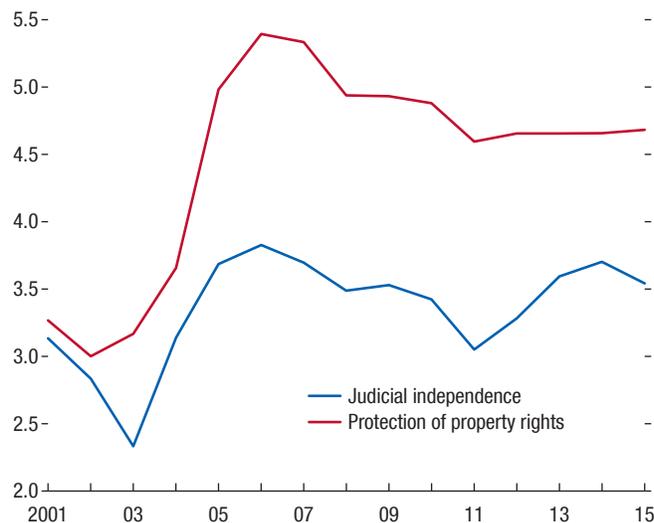
2014). In the late 1990s, the first public survey conducted regarding the Croatian judiciary highlighted the long duration of proceedings and case backlogs, helping to build reform momentum (Dallara 2014).

EU accession prospects and membership in several CoE bodies incentivized reforms. The government that took office in 2000 embarked on major reforms, including judicial reform. The signing of the association agreement with the European Union followed in 2001 (Figure 2.14). After 2000, the appointment procedures for judges were radically modified, providing limitations on political appointments (Dallara 2007). The main measures aimed at reducing political interference and making SJC membership incompatible with being chief justice. Other provisions gave the Constitutional Court broader powers to appeal SJC decisions.

The process of EU accession was instrumental in advancing judicial reforms (Figure 2.15). Croatia adopted the first Justice System Reform Strategy in 2005 and implemented one of the best rationalization reforms for the territorial reorganization of courts, achieving a 50 percent reduction in backlogged cases (Madir 2011; Carnevali 2013). In 2008, Croatia adopted a revised Justice System Reform Strategy that broadened justice reform as a prerequisite for continuing negotiations with the European

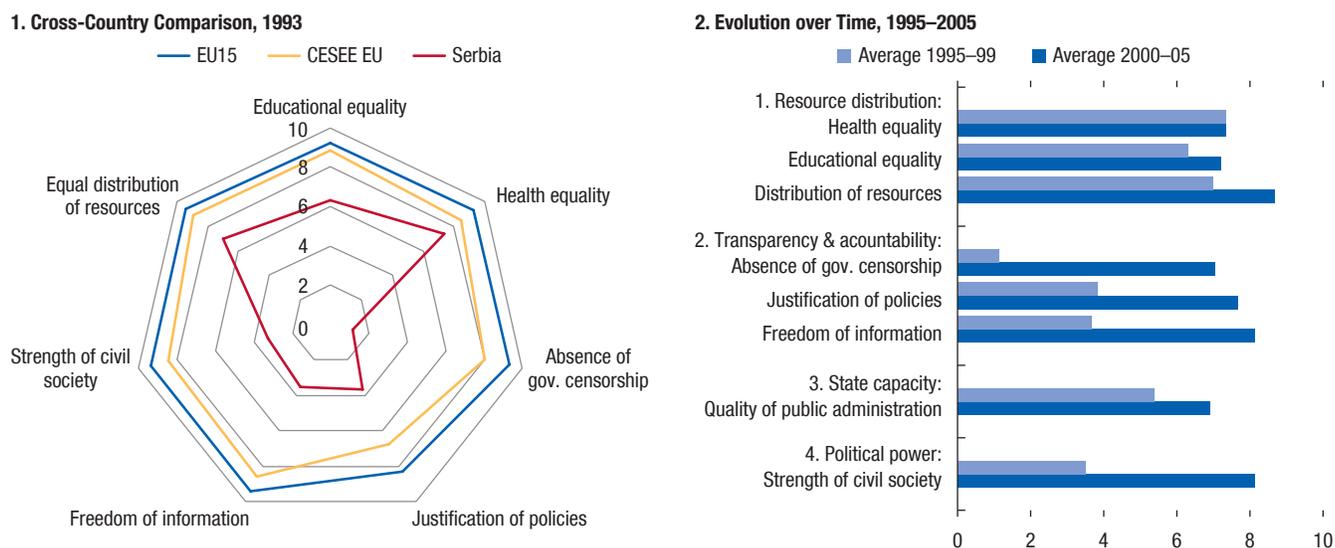
Union. In 2010, the constitution was amended to strengthen judicial independence and reduce political interference in the SJC. Also, new selection procedures based on verified qualifications were introduced for the appointment of judges and prosecutors, limiting the Justice Ministry’s power and increasing the autonomy of the SJC and the State Prosecutorial Council. In 2010, a new strategy was adopted for the period until 2015 as a requirement for closing

Figure 2.15. Croatia: Judicial Independence and Protection of Property Rights
(Index; 0 = worst, 10 = best)



Sources: World Economic Forum; and IMF staff calculations.

Figure 2.16. Serbia: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

negotiations with the European Union. Due to a challenging political environment, initially the Croatian government's cooperation with the International Criminal Tribunal for the Former Yugoslavia (ICTY) was erratic, despite this being a condition of European Union membership (Rajkovic 2012; Menz 2013). By 2013, however, Croatia complied, which was deemed a major step in judicial reform progress, paving the way to its joining the European Union.

By 2008, the EC deemed the protection of property rights to be generally assured, but enforcement to be weak. While the legal system put heavy emphasis on the rule of law, in practice, legal certainty was often limited. Regulations were sometimes inconsistent, and administrative bodies frequently lacked legal expertise. Thus, executive ordinances did not always comply with the original legal mandate. As a result, citizens and companies often lacked confidence in administrative procedures and frequently perceived acts of administrative bodies as arbitrary (Bartlett, Bönker, and Petak 2014). Reported threats and

harm to prosecutors also undermined judicial independence (CoE 2016).

Serbia

Serbia's institution-building path was uneven, as lingering effects of civil strife adversely affected domestic factors and relations with the European Union, weakening its role as an external anchor. The limited progress in judicial independence achieved after the fall of President Slobodan Milošević was not sustained. Reforms were stop-and-go, probably owing to increased concentration of resources related to flawed privatization and limited progress on transparency (Figure 2.16).

After the war, improving the effectiveness of the justice system became a priority as part of the broader reform agenda and possible EU accession (Figure 2.17). The efficiency of the judiciary had been undermined by an uneven workload between urban and rural courts, case backlogs, and the lack of a free legal aid system (EC 2016b). Political influence over the selection and appointment

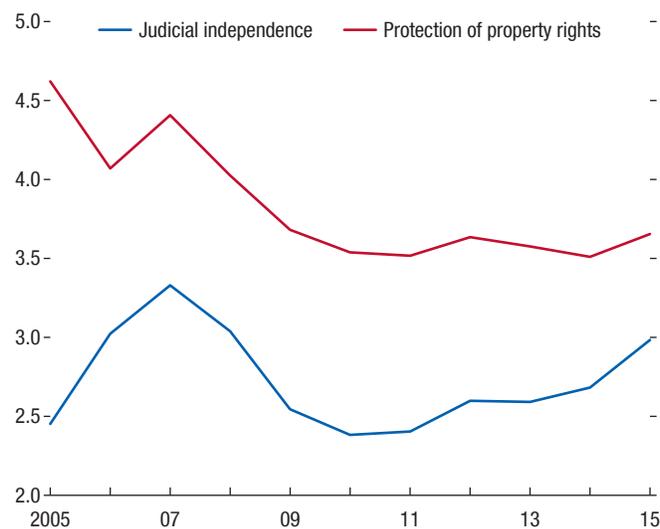
of judges was common (Dallara 2014). When reforms started, about half of active judges were dismissed. In 2001, a temporary government embarked on overhauling legislation and strongly encouraged judges in important positions to resign. But because of the lack of sufficient candidates to fill positions, this measure had a limited effect compared with that in other CESEE countries (Pavlovic 2003).

Various domestic players continued to resist judicial reforms, though increased transparency helped achieve some progress. In 2001, several laws were enacted to provide a legal basis for the operation of general and specialized courts and prosecutors' offices, and for professional freedoms and guarantees for judges and public prosecutors (OSCE 2011). The introduction of a self-governed body responsible for recruiting and selecting magistrates was a major change. However, its establishment was delayed when the National Assembly attempted to amend the bill to control nominations. Under pressure from civil society, freedom of information improved, which appeared to promote more rules-based systems.

Increased cooperation with the European Union succeeded in advancing judicial reforms in the early and mid-2000s, the period that saw the greatest improvement. In 2001, the European Union launched the Stabilization and Association Process with Serbia and identified the country as a potential EU candidate in 2003 (Figure 2.18). Cooperation with the European Union helped overcome political resistance to judicial reforms, particularly concerning the self-governing body (Dallara 2014). With the new 2006 constitution approved, a new wave of judicial reforms established the self-governing High Judicial Council and reformed the State Prosecution Council (GRECO 2015a). These steps led to a considerable improvement in perceived judicial independence in 2005–07.

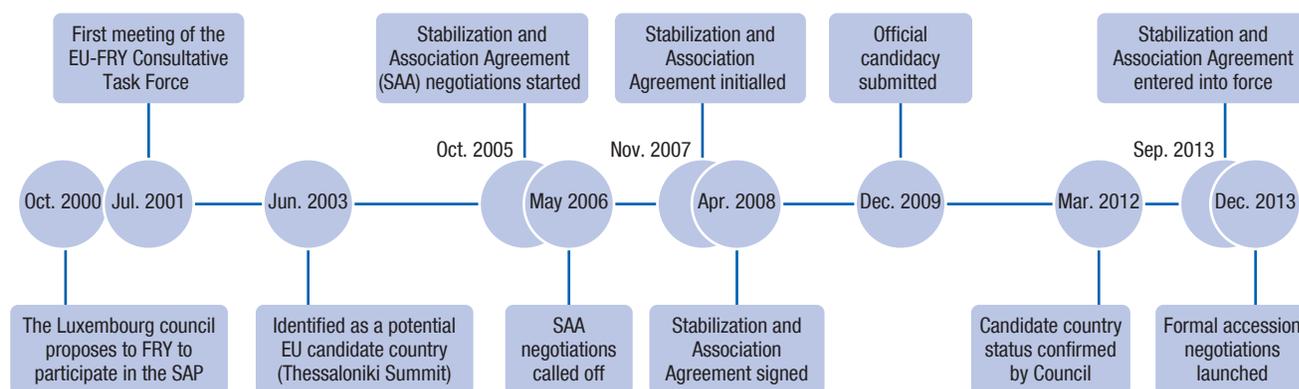
However, reforms stalled, reflecting continued power struggles and a deteriorating relationship with the European Union as a consequence of lingering effects of the war. In 2006, the European Union suspended negotiations with Serbia due to

Figure 2.17. Serbia: Judicial Independence and Protection of Property Rights
(Index; 0 = worst, 10 = best)



Sources: World Economic Forum; and IMF staff calculations.

lack of collaboration with the ICTY. A distinct antireform alliance formed between judges worried about losing their jobs and political parties seeking to maintain effective control over the judiciary (Begović and Hiber 2006). The lack of further progress on transparency and accountability, and considerable deterioration in income inequality, may have supported the formation of this alliance. Serbia's 2005 Gini coefficient was 5 percentage points higher than in 2000. Moreover, privatization was hasty, and special groups, some connected to the ruling party, received special treatment and protection for their firms (Radulović and Dragutinović 2014). Domestic business elites utilized their connections with politicians to preserve and even tighten barriers to entry (Pescic 2007; Begović 2013). The independence of self-governing bodies was hampered by the selection of the High Judicial Council members by the National Assembly instead of by peers (GRECO 2015a). The country still faces important challenges in cooperating with the ICTY, and such cooperation remains one of the European Union's demands during Serbia's accession talks (Ristic 2016).

Figure 2.18. Serbia: EU Accession Timeline

Source: European Commission.

Note: FRY = Federal Republic of Yugoslavia; SAA = Stabilization and Association Agreement; SAP = Stabilization and Association Process.

In this environment, the improvement in judicial independence and efficiency was not sustained, though some progress has been made recently. The 2009 judicial reforms failed to improve judicial efficiency (GRECO 2015a). The perceived independence of the judiciary deteriorated, and by 2010 it was at the level of 2005. The main concern was related to the provision requiring reappointment of judges, which limited judges' protection against removal and was denounced by the CoE (Murret 2010). Despite this criticism, in 2009 many judges were dismissed without clear criteria and without the right to contest the decision (Dicosola 2012). Closer integration with the European Union after 2010 provided a new impetus for judicial reforms, and the Constitutional Court reversed the 2009 decision on reappointment of all judges. Despite the improvement, perceived judicial independence in 2015 did not return to the level achieved in the mid-2000s, and trust in the judiciary remained limited (GRECO 2014, 2015a). As of 2014, a significant portion of judges (25 percent) and prosecutors (33 percent) reported that the judiciary was not independent, according to the World Bank Judicial Review. Judicial efficiency also remained troublesome, with disposition time some 30 percent higher than in other non-EU CESEE countries. The 2016 EC report notes that “the judicial system has reached some level of

preparation,” but that further steps are needed to tackle its independence (EC 2016b).

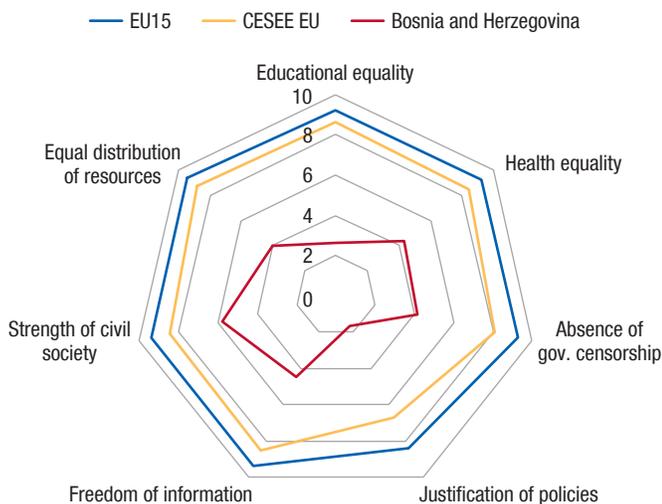
Bosnia and Herzegovina

Bosnia and Herzegovina has made some progress in institutional reforms, but its case demonstrates that external intervention cannot substitute for a domestic reform drive. The rigid and decentralized structure enshrined by the Dayton Peace Agreement has allowed ethnicity-based politics to weaken reform efforts, including judicial reforms. Bosnia and Herzegovina's current governance framework resulted from the 1995 Dayton Peace Agreement, which vested most government functions in the two semiautonomous entities—the Federation of Bosnia and Herzegovina and the Republika Srpska—and established above these entities the Institutions of Bosnia and Herzegovina (or “State”), though with a limited mandate. The countries guaranteeing the peace settlement installed the Office of the High Representative, which has extraordinary power to dismiss elected governments and officials. Although this architecture has succeeded in maintaining peace for a quarter century, it has not helped the country develop effective institutions (Figure 2.19).

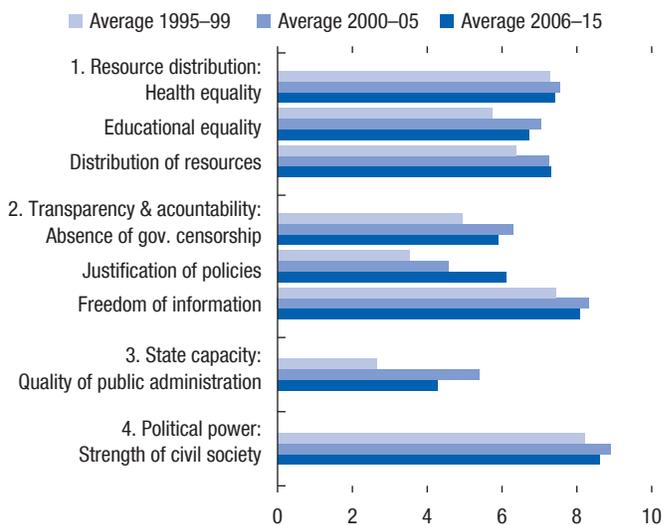
Judicial reform momentum picked up in the early 2000s as the Office of the High Representation took on a forceful role (Figure 2.20). With EU

Figure 2.19. Bosnia and Herzegovina: Factors Affecting Institutional Quality¹
(Index; 0 = worst, 10 = best)

1. Cross-Country Comparison, 1995



2. Evolution over Time, 1995–2015



Sources: Varieties of Democracy Institute (V-Dem) database (version 6.2); and IMF staff calculations.

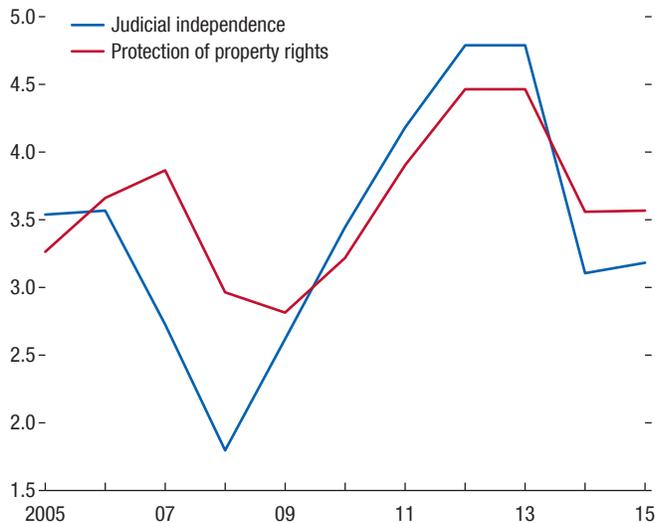
Note: EU15 countries are listed in text footnote 1.

¹Equal distribution of resources measures poverty and the distribution of goods and services as well as the levels of inequality in these distributions and the proportion of the population ineligible for social services.

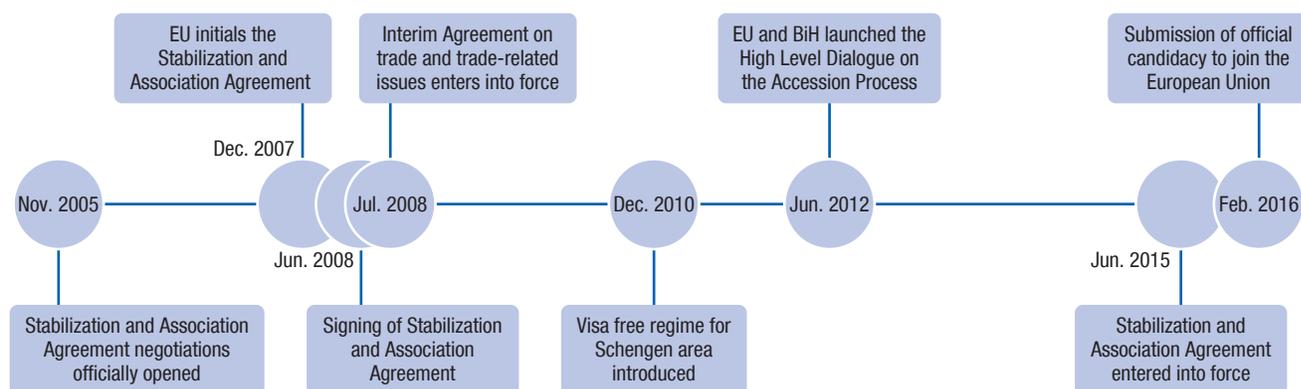
support, it began formally coordinating judicial reforms. The entities adopted laws on judicial and prosecutorial functions that represented the first major step toward the creation of a harmonized legal framework. In 2003, the Office of the High Representation introduced procedural laws that introduced harmonized country-wide civil and criminal procedures (HJPC 2017). Mid-decade reforms of the state-level judiciary also helped strengthen judicial independence. In 2004, the entities and the State agreed to establish the High Judicial and Prosecutorial Council, an independent body with the power to appoint and discipline judges and prosecutors. The State-level court and prosecutors became functional in 2005 (OSCE 2017). Early compliance problems with the ICTY were overcome in the early 2000s.

After 2006, judicial reform momentum weakened even as the country’s domestic revenue mobilization improved and external anchors shifted. The international community began to shift away from supporting the direct approach of the Office of the High Representative to the incentive-driven EU accession process. While

Figure 2.20. Bosnia and Herzegovina: Judicial Independence and Protection of Property Rights
(Index; 0 = worst, 10 = best)



Sources: World Economic Forum; and IMF staff calculations.

Figure 2.21. Bosnia and Herzegovina: EU Accession Timeline

Source: European Commission.

Note: BiH = Bosnia and Herzegovina.

the latter provided long-term incentives for institutional reforms, implementation over the short term was hampered by Bosnia and Herzegovina's heavily decentralized structure and inter-entity tensions. Reforms stalled, and a constitutional reform package was defeated in the State Parliament in 2007. While discussions to reengage on judicial reform subsequently picked up, progress on the ground was not as strong as that indicated by the index shown in Figure 2.20, which is based on perceptions.

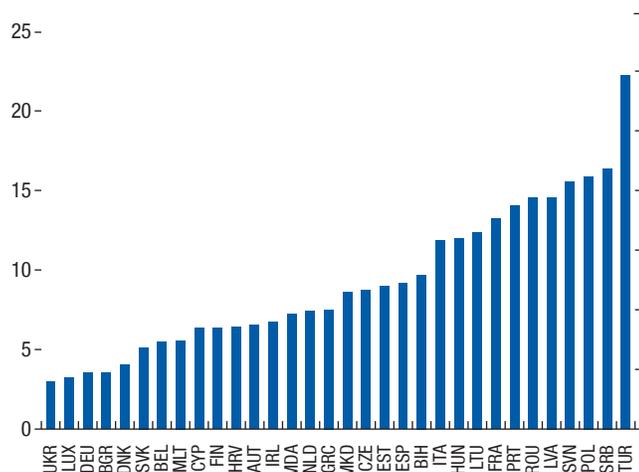
Despite episodic improvements, judicial performance in Bosnia and Herzegovina remains weak. The structure of governance is fragmented, contributing to judicial ineffectiveness. Entity laws are not harmonized horizontally, coordination among judicial institutions is lacking, and governments exercise undue influence on judicial budgets (OSCE 2017; CoE 2016). Persistent interethnic squabbles have prevented implementation of many Constitutional Court decisions (EC 2016c). Courts are slow to issue judgments, despite some improvement in the clearance rate and disposition time of cases. Because judgments remain unenforced (EBRD 2017), plaintiffs often reinitiate new lawsuits. Judges are perceived as subscribing to legal approaches seen as more favorable to political parties representing their ethnicity. The quality of judgments on economic and financial cases is

often poor; many judges award disproportionate compensation without addressing the underlying problem. International indicators also reflect the weaknesses in Bosnia and Herzegovina's judicial system: the overall state of judicial effectiveness in the country is poor compared with regional peers (European Commission for Efficiency of Justice 2016), and the public's perception of the judiciary is also negative (GRECO 2015b). The enforcement of property rights is also weak.

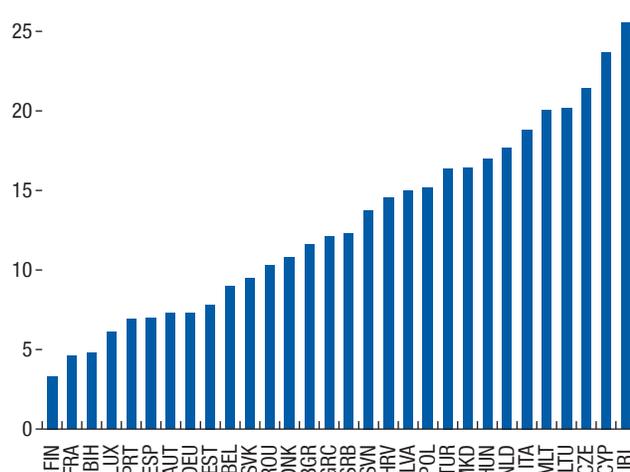
Judicial reforms are back in focus, supported by the European Union, but the outcome is uncertain. In 2015, the authorities adopted the Reform Agenda, which lays out plans to improve the rule of law and is supported by Bosnia and Herzegovina's international partners, with the European Union in the lead (meaningful progress on the agenda is a prerequisite for EU candidate status (Figure 2.21).) The IMF's Extended Fund Facility, approved in 2016, contributes to this agenda by aiming to strengthen governance of state development banks and SOEs. Box 2.3 reviews reforms related to governance in IMF-supported programs in selected CESEE countries (Kosovo and Ukraine).

Figure 2.22. Consistency of Similar Indicators from Different Sources¹
(Standard deviation)

1. Judicial System



2. Protection of Property Rights



Sources: Varieties of Democracy Institute (V-Dem); World Bank, Doing Business; World Economic Forum (WEF); and IMF staff calculations.

Note: Data labels use International Organization for Standardization (ISO) country abbreviations.

¹Standard deviations are calculated across different indicators, ranked by percentiles of the distribution and then averaged over time. For the judicial system, the following indices are used: judicial independence and impartiality of courts from the WEF and judicial accountability from the V-Dem. For the protection of property rights, indices used are protection of property rights from the WEF, protection of property rights from the Heritage Foundation, and enforcement of contracts from the World Bank's Doing Business Indicators.

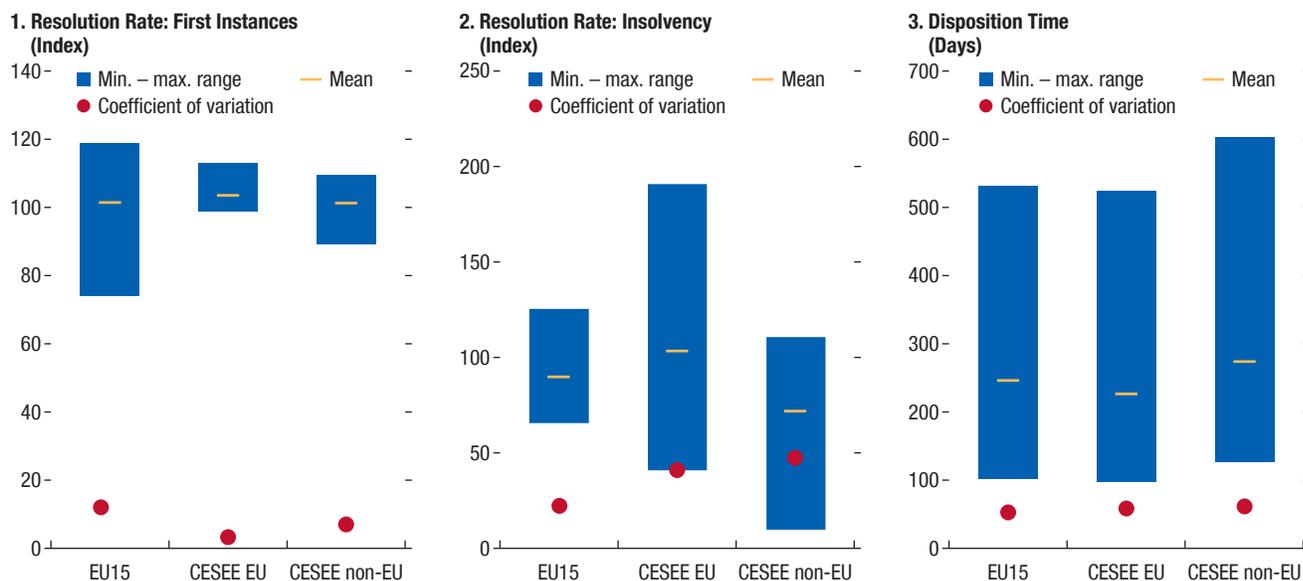
Evolution of the Effectiveness of CESEE Justice Systems and Property Rights Protection

This section reviews the evolution of judicial effectiveness in all the 20 CESEE countries covered. We include the rule of law indicator, for which data are available starting in the 1990s; indicators on the judiciary's efficiency, independence, and impartiality; and protection of property rights, for which data start in the 2000s. The data show significant progress as well as setbacks over the past two decades, as seen in the case studies.¹⁰ The average standard deviation across indicators from different sources measuring judicial system effectiveness and protection of property rights provides an indication of whether different sources of information agree (Figure 2.22). For some countries, the differences are relatively small, suggesting that there is broad consensus, while for others, indicators from

different sources vary significantly, suggesting greater uncertainty and hence the need for a more cautious assessment.

CEPEJ data indicate that CESEE EU countries perform well in terms of justice system efficiency compared with the EU15, but there is significant heterogeneity. CEPEJ hard data indicate that CESEE EU countries, on average, have slightly higher resolution rates compared with CESEE non-EU countries, or even the EU15 (Figure 2.23). For insolvency cases, however, the resolution rate in CESEE non-EU countries is significantly lower than in EU countries. Further, substantial variation exists, with the Czech Republic and Slovenia at the high end of the spectrum and Croatia and Romania at the low end. Disposition time data show comparable efficiency levels in CESEE-EU countries and the EU15, with similar variation within the two groups. Other efficiency indicators presented by the EU Justice Scoreboard also point to some CESEE EU countries having greater judicial efficiency than some of the EU15 countries (EC 2017). CESEE non-EU countries have

¹⁰The rule of law is a broader indicator, while the judiciary's effectiveness (including efficiency, independence, and impartiality) and the protection of property rights are components of the rule of law.

Figure 2.23. CESEE: Case Resolution Rate and Disposition Time, 2014¹

Source: European Commission for the Efficiency of Justice.

Note: EU15 countries are listed in text footnote 1.

¹For resolution rate: values higher than 100 indicate that more cases are resolved than received. For disposition time: higher values indicate higher theoretical duration for a court to solve the pending cases. Criminal cases are excluded.

longer disposition times and hence overall lower efficiency.

Despite significant progress, the CESEE's perceived judicial indicators on average still appear weaker than in the EU15. Comparing the four indicators presented in Figure 2.24, the perceived differences between the CESEE and the EU15 average are smallest for the rule of law and largest for judicial independence. The 2016 Eurobarometer Survey suggests that the perceived independence of courts and judges among the general public and companies is lower in CESEE-EU countries than in the EU15 (though with significant in-group variations), which is attributed to greater interference by governments or politicians (Figure 2.25). This is despite the fact that the EU Justice Scoreboard suggests that CESEE-EU countries do not significantly deviate in terms of de jure safeguards of judicial independence from the EU15.¹¹ Typically,

¹¹The EU Justice Scoreboard provides information on safeguards related to the status of judges regarding their appointment, evaluation, possible transfer without consent, and potential dismissal (EC 2017b).

CESEE-EU countries perform better than CESEE non-EU countries.

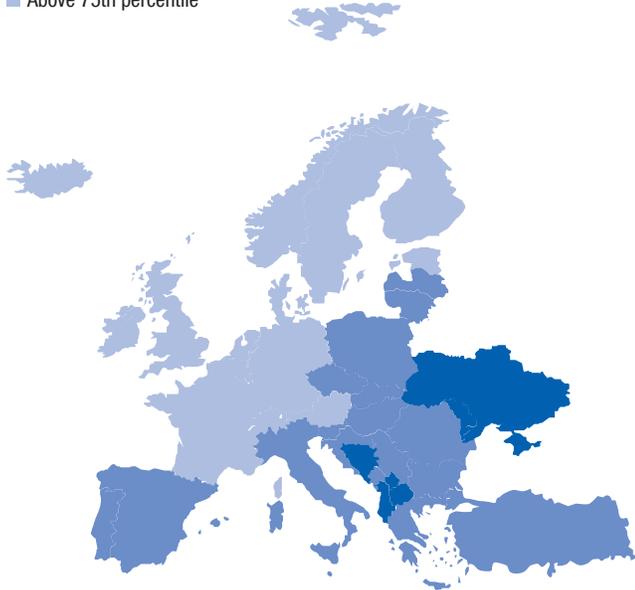
Cross-country variations are significant for all four indicators, with the best-performing CESEE countries perceived to have judicial indicators exceeding those of some EU15 countries. Importantly, while many CESEE countries are in the middle two quartiles of the global distribution for the rule of law indicator, 10 or 11 CESEE countries are in the lower quartile for the other three indicators, broadly in line with the case study findings and GRECO's evaluations. There are also up to three EU15 countries in the lower quartile for judicial independence and impartiality, in line with GRECO reports that note concerns arising especially regarding judicial independence and impartiality in over a third of CoE member countries (CoE 2015, 2016).

Regulatory enforcement in CESEE countries seems weaker than de jure indicators suggest. On average, the CESEE countries in the study rank around the 57th percentile of the rule of law index global distribution. However, the region ranks lower, around the 48th percentile, on

Figure 2.24. Europe: The Rule of Law and Some of Its Components
(Lighter blue = better; darker blue = worse)¹

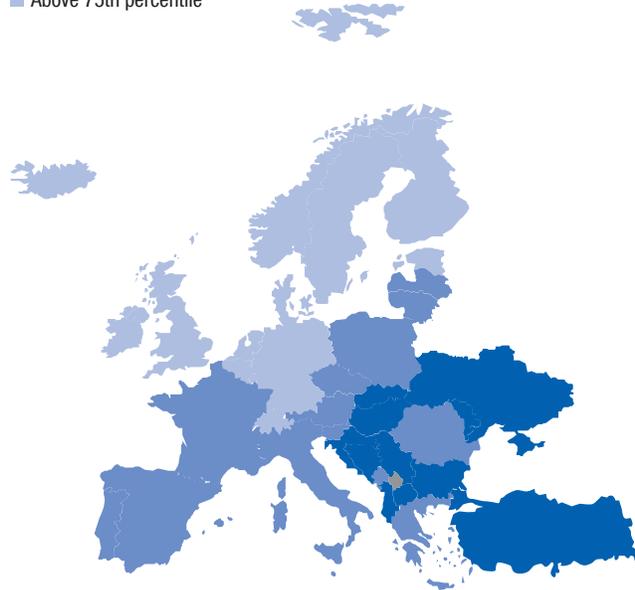
1. Rule of Law, 2016

- Below 25th percentile
- Between 25th and 75th percentiles
- Above 75th percentile



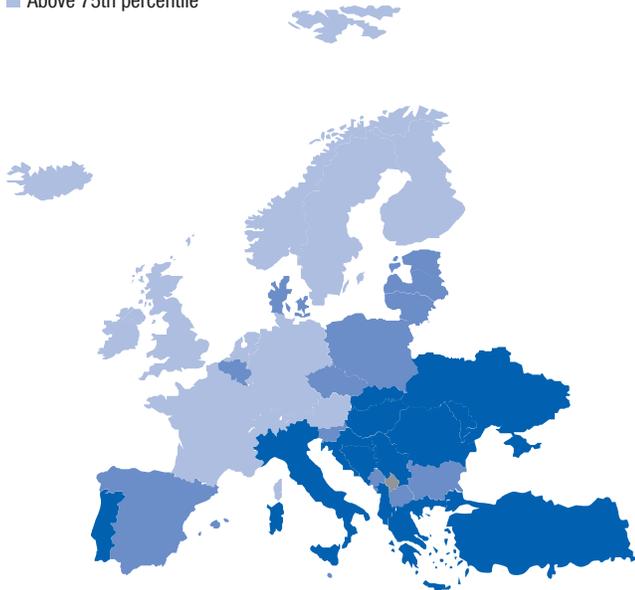
2. Judicial Independence, 2015

- Below 25th percentile
- Between 25th and 75th percentiles
- Above 75th percentile



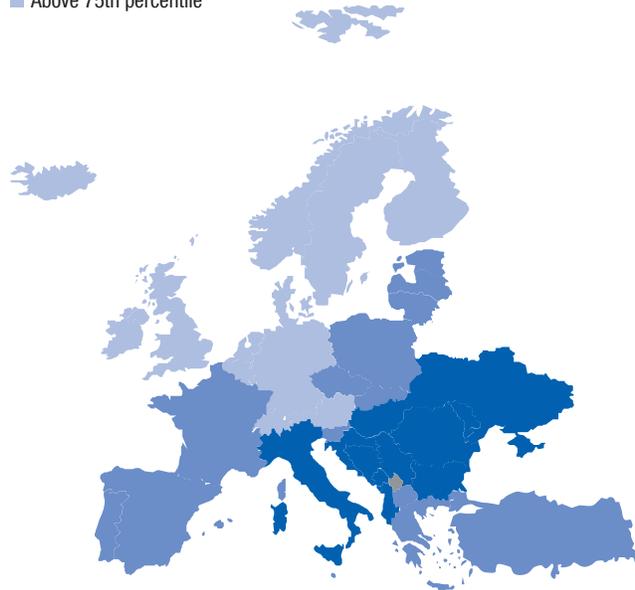
3. Impartiality of Courts, 2015

- Below 25th percentile
- Between 25th and 75th percentiles
- Above 75th percentile



4. Protection of Property Rights, 2015

- Below 25th percentile
- Between 25th and 75th percentiles
- Above 75th percentile

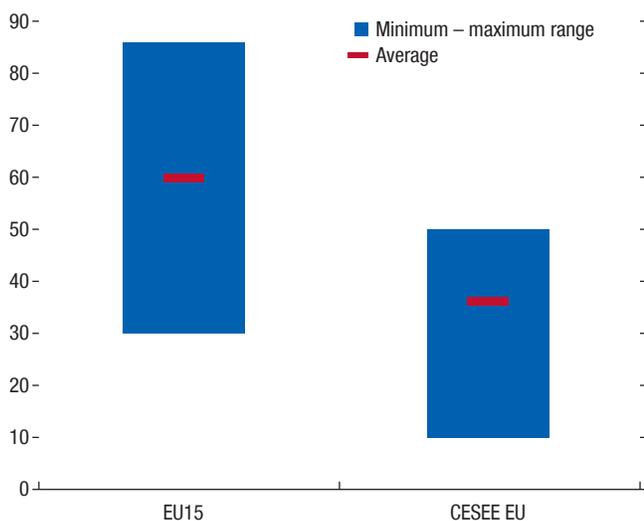


Sources: World Bank, Worldwide Governance Indicators (rule of law); World Economic Forum (protection of property rights, judicial independence, impartiality of courts); and IMF staff calculations.

Note: Data on judicial independence, impartiality of courts, and protection of property rights are not available for Kosovo.

¹The percentiles are defined based on the worldwide rankings of available countries excluding low-income countries.

Figure 2.25. Perceived Independence of Courts, 2017¹
(Percent)



Source: Eurobarometer.

Note: EU15 countries are listed in text footnote 1.

¹Percentage of respondents that ranked independence of courts in their country as fairly or very good.

the regulatory enforcement index compiled by the World Justice Project. This suggests weaker performance in regulatory enforcement in CESEE countries than the performance in establishing the regulatory framework. GRECO (2017) finds that while solid legal and institutional foundations have been established on paper, in many CESEE countries effective implementation is lacking. The Global Integrity Report also estimates a large gap between the regulatory framework and its actual implementation in the region—on average about 30 percentage points—that is similar to the report’s estimates for emerging market economies.

Despite much progress, the pace of improvement appears to have slowed or even reversed since the global financial crisis.

- In general, countries farther behind have recorded larger improvements in judicial indicators since 2001 (Figure 2.26).
- While the perceived rule of law has continued to improve in several CESEE countries in recent years, in about half of them the pace of improvement has slowed or even reversed

since 2007, as shown in the case studies (Figure 2.27). The evolution is worse for the other indicators, especially for judicial impartiality and independence.

- These findings are consistent with those of other authors highlighting a slowdown or reversal of judicial reforms and anticorruption efforts after EU accession (Mungiu-Pippidi 2015; EBRD 2013, 2016). Aslund and Djankov (2014) maintain that several of Bulgaria’s and Hungary’s reforms have proved vulnerable,¹² and the EC recently registered concern about Poland’s judicial independence.

Main Findings

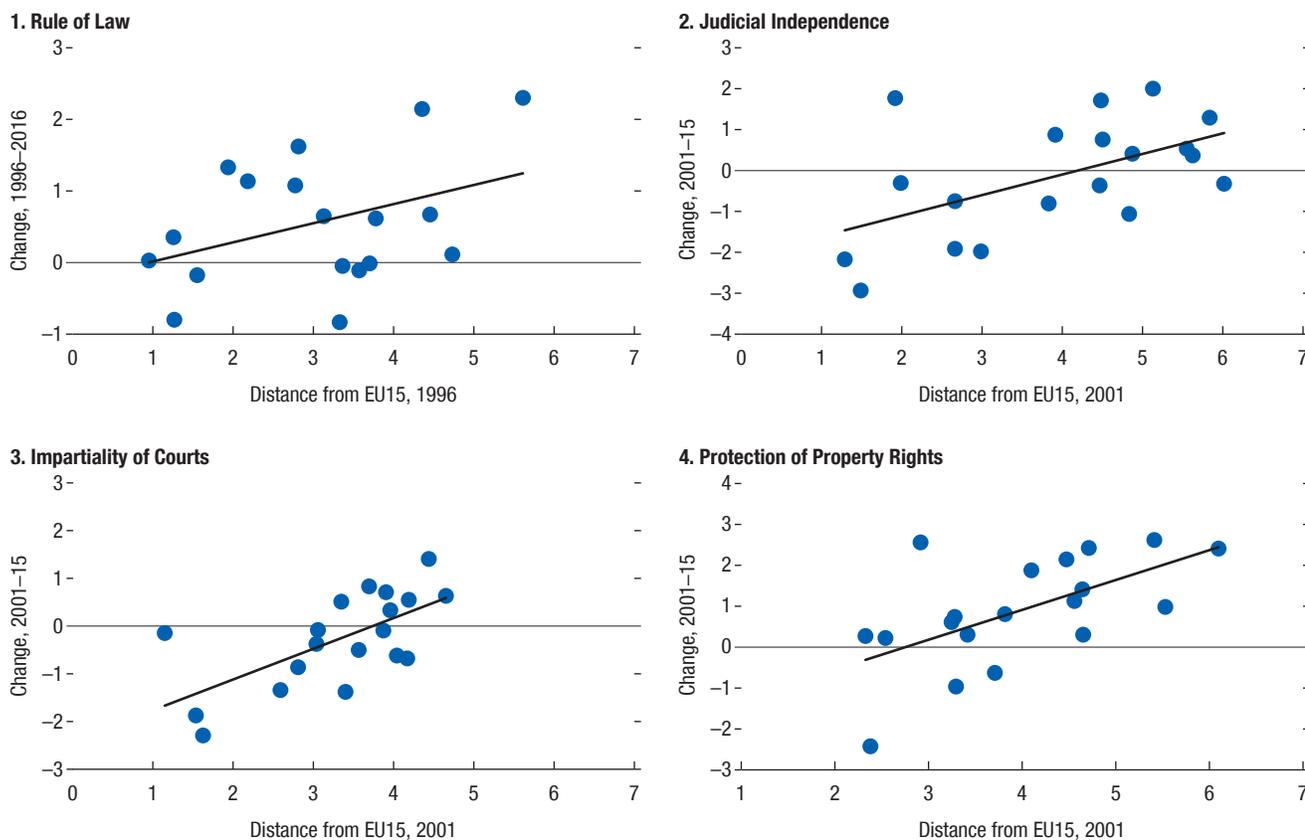
This section presents the main findings from all the strands of analysis carried out in this chapter, including some econometric evidence. It draws from the case studies, the judicial indicators, and regressions covering all advanced and emerging market economies that explore the determinants of judicial independence and protection of property rights in a global setting. Panel regressions were estimated with five-year, nonoverlapping averages using model specifications based on the conceptual framework presented earlier in this chapter (Box 2.4).

This chapter finds empirical support for the importance of the distribution of resources and of opportunities for strengthening judicial systems and the protection of property rights.

- From the case studies, countries that managed to prevent large increases in inequality and the emergence of oligarchic structures attained better institutions (see also Guriev 2017).¹³ Policies implemented as part

¹²The State Audit Office of Hungary (2016) reports an improvement in survey-based corruption risk indicators between 2013 and 2015, but indicates that “the ratio of institutions applying anti-corruption procedures still remains low.”

¹³The transition from a centrally planned to a market-based economy generally entailed higher measured inequality. The region’s posttax Gini coefficient, on average, increased by 4 percentage points during the 1990s, though it started at very low levels. Nevertheless, this may overestimate the increase, as the income distribution in

Figure 2.26. CESEE: Evolution of the Elements of the Rule of Law

Sources: World Bank, Worldwide Governance Indicators; World Economic Forum; and IMF staff calculations.

Note: EU15 countries are listed in text footnote 1.

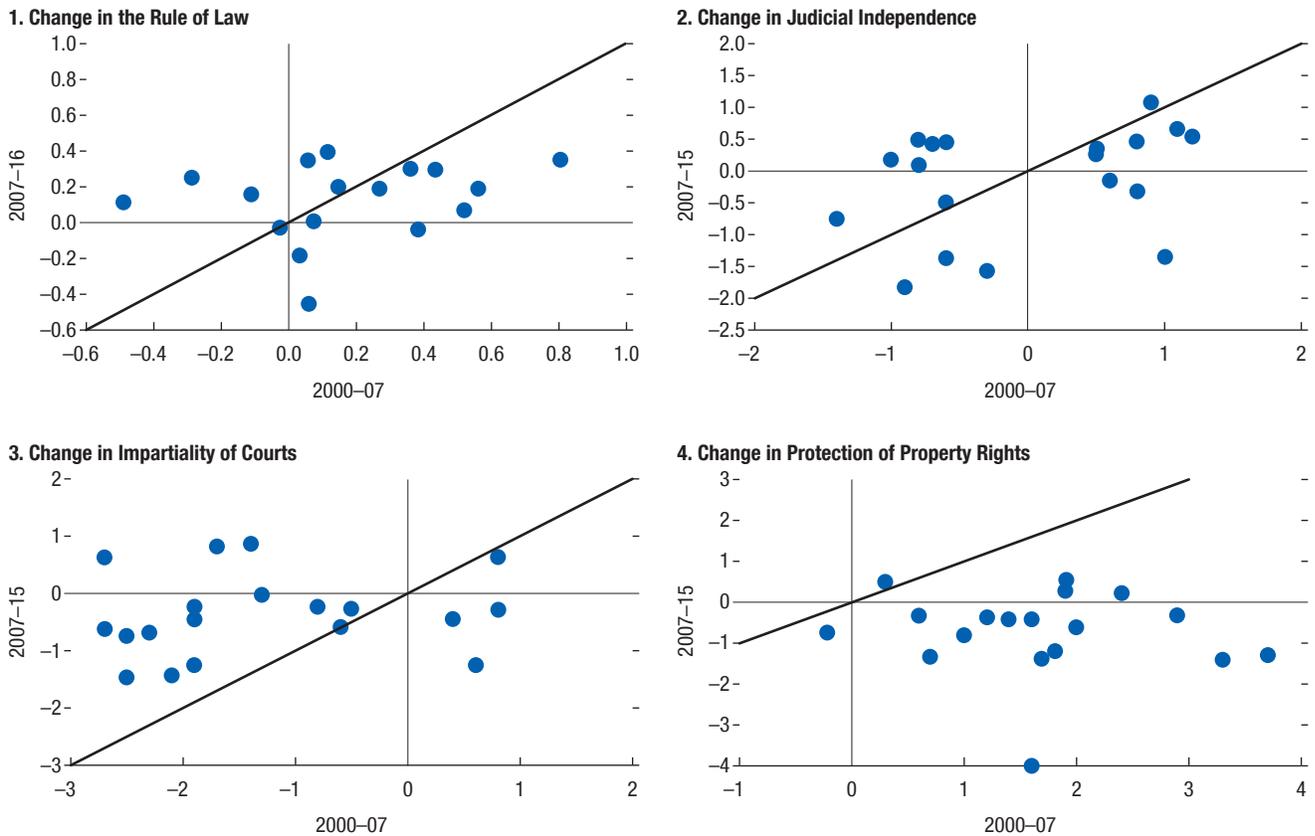
of the transition, such as privatization, deregulation, restructuring of SOEs, and implementation of competition policies, had a considerable impact on income inequality and on preventing the emergence of oligarchic structures, a finding that Djankov (2014b) also highlights. In particular, the way privatization was conducted played a significant role in resource distribution, with implications for institutional quality. For example, most members of Romania's elite used insider knowledge, political power, and control over state resources to solidify their control over the economy during privatization, resulting in a much higher Gini coefficient by the late 1990s and contributing to considerable resistance to judicial reforms

(Gabanyi 2004). In contrast, Estonia's privatization, which aimed to put assets into the hands of those with the incentives and skills to use them effectively, combined with wide participation across society, appears to have been vital for Estonia's success in institution building. In Serbia, members of the business elite managed to increase their control over resources, undermining judicial independence. In Poland and Hungary, far-reaching policies to liberalize trade and commercial activities succeeded in demonopolizing the economy early in the transition, which may have aided judicial independence and control of corruption (Slay 1995).¹⁴ But setbacks also occurred in several countries, as documented in the case studies

command economies likely underestimated the degree of inequality due to price controls and shortages.

¹⁴OECD (2014) notes that more competition results in less corruption.

Figure 2.27. CESEE: Evolution of Institutions before and after 2007



Sources: World Bank, Worldwide Governance Indicators; World Economic Forum; and IMF staff calculations.

and in the indicators. EBRD (2016) links these to a perceived unfair distribution of earlier reform gains, and Aslund and Djankov (2014) attribute some of the deterioration to the influence of business groups with strong ties to the government. In some cases, the private sector may also influence the independence of the courts directly.

- As in several previous empirical studies, the econometric work for this chapter finds that the Gini coefficient has a negative correlation with judicial institutions, but is not always statistically significant. However, a broader index of resource distribution—which besides income equality also includes equality of access to education and healthcare and the distribution of power among different socioeconomic groups—has a more robust association with higher independence

of the judiciary and better protection of property rights.

The capacity of the public administration is critical to achieving judicial independence and overall effectiveness. In several countries, for example in Kosovo and Poland, rapid changes in the legal framework, an increasing number of court cases, and opportunities for better-paid jobs emerging in the private sector (especially for legal, finance, and economist professions) initially put pressure on the capacity of the judiciary. In almost all the cases studies, the creation of an independent, self-governing body responsible for recruiting and selecting magistrates helped limit political involvement in selecting and disciplining judges. While most countries in the case studies created, de jure, an independent self-governing body, de facto independence varied significantly

across countries. Ensuring the independence of the self-governing body was easier in countries such as Estonia that early on managed to replace most of the communist-era political appointees in important judiciary positions. However, the case studies show that in countries where replacement of judges with integrity problems or political connections was not comprehensive, an antireform alliance formed among judges worried about losing their jobs and political parties that wanted to keep control over the justice system. This appears to have been the case in Romania and Serbia early in the transition, and it delayed the establishment of a de facto independent self-governing body. Where a qualified and professional bureaucracy was established, the effectiveness of the judiciary was fostered and de jure reforms appeared to be implemented more successfully. The variable capturing merit-based procedures to recruit and promote civil servants has a robust association with judicial independence and property rights protection in the regressions.

Transparency and accountability mechanisms feature prominently in the case studies, and they seem to play a particularly important role when the environment is unfavorable to robust institutions. Transparency took many forms. For example, Estonia's publishing of formal coalition agreements contributed to the continuation of reforms despite frequent government changes. In Croatia, the publication of results of surveys on the judicial system enabled public scrutiny and helped catalyze reforms. Romania's civil society organizations used the freedom of information legislation adopted during the EU accession process to expose politicians' dishonest behavior, facilitating judicial reforms. In Ukraine, legal reforms requiring the identification of ultimate beneficiaries made bank owners liable for losses from related-party lending. Freedom of information gets some support in our econometric analysis in line with earlier results (IMF 2005; Borner, Bodmer, and Kobler 2004), and its marginal impact rises when resource distribution or public administration capacity are not conducive to robust institutions. These

findings echo others' findings that transparency, especially related to fiscal issues, including public procurement, increases the effectiveness of laws that otherwise exist only on paper (Mungiu-Pippidi and Dadasov 2017; OECD 2014). To improve the efficiency of the judiciary, GRECO recommends transparency in the recruitment, promotion, and case assignments of judges and in measures of judicial system performance.

In line with the literature, openness tends to be positively associated with judicial independence and protection of property rights. Estonia's experience suggests that substantial reductions in trade tariffs and nontariff barriers, elimination of export restrictions, and guarantees for equal rights for both foreign and domestic investors during the privatization process facilitated institutional reforms by increasing competition and discouraging rent seeking. In Poland, the Balcerowicz Plan replaced import restrictions and foreign trade monopolies with tariffs (IMF 2014), thereby reducing opportunities for rent seeking. Foreign ownership of banks also fostered competitive credit allocation and limited connected lending, for example in Estonia and Poland, strengthening the constituency for more rules-based institutions (Poghosyan and Poghosyan 2010; Bonin, Hasan, and Wachtel 2005; Nikiel and Opiela 2002). In the regressions, lower barriers to trade and the institutional quality of trading partners have a significant positive correlation with judicial independence and the protection of property rights.

The case studies suggest that the European Union and the CoE played different roles as external anchors, depending on the dynamics of domestic factors affecting institutional quality. In countries like Estonia, with strong domestic fundamentals for effective institutions, institutional reforms were largely domestically driven and used EU and CoE standards as benchmarks. In countries where domestic fundamentals were not as conducive to effective institutions, such as, Croatia, Romania, and Serbia, the European Union and the CoE helped overcome political resistance to reforms.

While EU-driven reforms initially were largely *de jure*, they did facilitate improvements in domestic fundamentals as well, and ultimately in the judiciary's *de facto* effectiveness. In Croatia and Serbia, incentives from EU accession coupled with recommendations by CoE monitoring bodies helped establish magistrates' self-governing bodies. However, when the incentives offered by the European Union were viewed as unattractive, as in Serbia in 2005–07, anti-EU political parties blocked reforms. For Croatia and Romania, EU conditionality was instrumental for the adoption of a judicial reform strategy aimed at separating the judiciary and the political branches of government. Also, the European Union and the CoE continue to encourage reforms via, for example, the Cooperation and Verification Mechanism for Bulgaria and Romania. Some previous studies also support the view that the EU “anchor” played a positive role for institutional improvement (IMF 2005; EBRD 2013; Mulas-Granados, Koranchelian, and Segura-Ubiergo 2008), though Mungiu-Pippidi (2015) warns that the EU impact is limited if reforms are implemented as bureaucratic requirements and do not engage civil society and change domestic agents' incentives. In the regression, the EU impact is captured via trading partners' institutional quality, which is found to be significant for judicial independence, but not for property rights protection.

Additional noneconomic factors that appear to matter for judicial effectiveness and property rights protection are

- *Societal fragmentation*: In Bosnia and Herzegovina, Croatia, and Serbia, long wars delayed the transition, and societal fragmentation stifled judicial reforms. Also, fragmentation along rural and urban population lines may have complicated institutional reforms in Poland and contributed to reform reversals in other countries. These results are in line with the literature (Guriev 2017). The negative association of the old-age dependency ratio with institutional quality may reflect

difficulties in solving collective action problems in societies with a large share of retirees who may favor the status quo and oppose reforms with long-term payoffs.¹⁵

- *The strength of civil society*, which appears to help judicial reforms, as illustrated in Estonia, Poland, and Romania: Some authors (Bakolias 2000; Mungiu-Pippidi 2017; Rodríguez-Ferreira 2013) argue that civil society is critical to supporting effective justice systems, for example by fostering public debate, increasing awareness, and demanding transparency and accountability.
- *Favoritism in politics*, which has a strong negative link to judicial independence and property rights protection in the regressions: Clientelism enables some groups to capture institutions, as found in the case studies. At times, state-owned banks were an important conduit of weak governance. Ukraine's experience suggests that high levels of corruption and entrenched vested interests impede governance and judicial reforms. In Poland, instances of corruption among the judiciary and members of the political elite during 1998–2003 coincided with the perceived deterioration in judicial independence. The power struggles between different groups are deemed a cause for the ups and downs in judicial reforms in most of the case studies. A 2017 GRECO report attributes implementation gaps in many CESEE countries' legal frameworks to remaining corruption and clientelism among those who wish to preserve their grip on power and the status quo. Surveys such as the 2017 EU Justice Scoreboard also point to political pressure as one of the main reasons for perceived lack of judicial independence.

¹⁵Atoyan and others (2016) find that the exit of young and skilled people from the region over the past 20 years (the largest economic emigration in modern history as a share of home population) removed a voice that could have been critical for improving institutions.

Conclusion

CESEE countries significantly strengthened the effectiveness of judicial systems and property rights protection, though achievements varied across countries, and progress was not linear. Looking ahead, a number of countries aspire to join the European Union. For these countries, but also for others seeking to improve the effectiveness of their judiciary and institutions, the main policy insights from the case studies, indicators, and econometric analysis are

- The importance of distributional factors in countries' success in judicial reforms calls for careful examination of the distributional impact of policies. The way privatization was implemented, as well as the opening up of the economy, had a critical bearing on whether a few dominant players emerged or more balanced economic structures prevailed. This had attendant implications for judicial effectiveness, especially for independence and impartiality. This calls for careful consideration of the distributional implications of all policies and other drivers of inequality and argues for reforms that can help ensure a level playing field. Strong enforcement of competition rules and lower trade and entry barriers can reduce monopolistic power. Redistributive fiscal policies can be another policy lever, with attention also given to equality of opportunities.
- Selecting and promoting public officials (judicial and otherwise) strictly on merit and strengthening the independence of the civil service can improve institutional quality.
- Countries' experiences suggest that better transparency and accountability can foster reforms. Besides freedom of information legislation, economic policies that can contribute to transparency include fiscal transparency, accountability on the use of public resources, e-government, financial disclosures of public officials, and transparency of ownership structures of financial and nonfinancial corporations. The impact of transparency and accountability seems stronger when other fundamentals were not conducive to high institutional quality, suggesting that this could be an area that presents several entry points for policymakers.
- The European Union and the CoE played a key role as external anchors, though the sustainability of reforms rested more on domestic factors. In countries with domestically driven reforms, EU and CoE legal standards acted as a benchmark for high institutional quality. In countries with a limited domestic drive for institutional reforms, the incentive of EU membership helped overcome some political resistance to reforms, though setbacks were common. EU conditionality helped align domestic legal frameworks to those of the European Union. While this generated *de jure* changes, *de facto* improvements appear to have followed a less linear path. Yet in many cases, EU and CoE standards facilitated improvements in domestic factors conducive to institutional reforms. For example, the adoption of freedom of information laws enabled civil society to be more successful in exposing rent-seeking behavior of government officials. The European Union and the CoE continue to play a catalytic role through technical assistance and enforcement procedures, though their effectiveness after accession may be more limited.
- IMF-supported program cases also indicated that operating on domestic levers can help nudge institutional reforms. The IMF can enhance its analysis of distributional impacts and promote policies that favor a more equal distribution of resources and opportunities. Its technical assistance can help strengthen state capacity in many ways, though other institutions are more active in overall civil service reform. The IMF can contribute to transparency in many ways—for example, via comparative analyses, standard setting, data, fiscal and financial transparency, and

anti-money-laundering initiatives, as well as in increasing accountability mechanisms.

- Many of these factors interacted with each other due to important feedback loops, suggesting that there can be several entry points for policy intervention. “The insight that ‘everything matters’ can be both paralyzing and empowering” (Thaler and Sunstein 2009). Transparency presents many opportunities for nudges to start a virtuous cycle.

These findings are tentative, and more work is needed to understand institutional reforms. Judicial effectiveness and property rights protection, as well as a host of socioeconomic factors that may determine them, are inherently difficult to measure and assess. Complex political economy interactions affect reforms, making it hard to uncover how agreement was reached and maintained. More work is needed to understand factors and policies that affect the balance of power and increase the chances that institutional reforms are undertaken, make a difference in practice, and are sustained.

Box 2.1. Institutions and Economic Outcomes

Effective institutions, which encompass an effective rule of law, play a key role in promoting more equitable and sustainable growth. A well-documented stylized fact is that societies with high institutional quality tend to be more prosperous. Several authors identify causal effects from institutions to per capita income and underscore that differences in institutional quality can explain cross-country variations in economic development. The World Bank's 2017 *World Development Report* argues that peace, justice, and strong institutions (UN Sustainable Development Goal (SDG) 16) hold “important instrumental value because the attainment of the goal will aid in the attainment of all the other SDGs.” It highlights that “the achievement of all the SDGs will require a solid understanding of governance to enable more effective policies.”

Institutions foster equitable and sustainable growth through several channels. The main ones include

- Ensuring more equal access to opportunities—a level playing field—and appropriate rewards to those who provide labor, capital, and ideas.
- Providing checks and balances that discourage rent-seeking behavior and promote more efficient/fairer use of public resources and better government services. Checks and balances make decision making less dependent on individuals, thereby limiting policies that benefit only particular interest groups.
- Securing a high level of responsiveness to citizens' preferences and demands, which is key for building public trust in government and institutions, thus facilitating consensus around growth-enhancing reforms.

Institutions can affect growth by enhancing commitment and collective action (World Bank 2017). These factors are particularly relevant for investment and efficiency. The first factor, commitment, involves preparing an environment where firms and individuals feel secure to invest resources in productive activities. The second factor, trust and collective action, pertains to the ability to form partnerships and undertake specialization in production and correct potential market failures (World Bank 2017). Recent microeconomic studies provide evidence for these mechanisms and highlight how institutions affect factors of production. We focus on the following three direct channels, recognizing that they are also interrelated:

- *Labor*: Empirical studies have found a strong effect of weak institutions and governance on the emigration of skilled workers (Cooray and Schneider 2016). Similarly, Atoyán and others (2016) argue that better institutions hold the promise of retaining and slowing emigration of skilled workers.
- *Investment*: In the absence of effective protection of property rights, incentives for investment and innovation will be harmed. Micro studies find that firms that feel more secure from the threat of expropriation invest a larger share of their profits in their business (Johnson and others 2002). Institutions also affect foreign direct investment, which in turn affects productivity and technology adoption (Bénassy-Quéré, Coupet, and Mayer 2007; Bevan and Estrin 2004).
- *Efficiency (total factor productivity)*: The theory predicts that institutions affect innovation and productivity through enhanced trust, cooperation, commitment, and contract enforcement (World Bank 2017). The rule of law is critical, as weaknesses in contract enforcement prevent specialization and optimal allocation of labor and capital (North 1990), which stifles total factor productivity. Firms and workers are hesitant to specialize if they are not sure whether all parties will adhere to the agreed contract. As market size grows and products get more complicated, trust, specialization, coordination, and enforcement of contracts matter more (Dixit 2007; World Bank 2017). Better contract enforcement helps firms expand their pool of suppliers by enhancing trust between unknown parties (Johnson and others 2002).

Prepared by Faezeh Raei.

Box 2.1 (continued)

Institutions also affect intermediate variables that matter for growth, including but not limited to

- *Government expenditure, revenue, and services:* For a government to collect taxes needed to provide public goods, its citizens must be willing to comply and cooperate. Legitimacy and cooperation are maximized if the rule of law is applied consistently, trust is built, and decision-making processes are inclusive (World Bank 2017). Weak institutions and governance can lead to forgone tax revenue, larger unofficial economy size (IMF 2016a), and government's inability to deliver quality public services (World Bank 2017). Studies show that better public investment management institutions—transparent procurement and project appraisal processes—are associated with more efficient public infrastructure and higher absorption of EU funds (IMF 2016a).
- *Access to credit:* The strength of the legal system in credit protection and collateral execution affects how much financing creditors are willing to extend (Townsend 1979; Aghion and Bolton 1992; Hart and Moore 1994). Similarly, better contract enforcement is associated with higher lending and fewer defaults (Bianco and others 2005). In addition, weak debt enforcement and ineffective insolvency frameworks tend to lower recovery values of problem loans (IMF 2015).
- *Economic resilience:* The ability to withstand negative shocks is affected by institutions because they govern the quality of policies and their implementation (OECD 2016). Better institutions are associated with greater fiscal policy countercyclicality (Frankel, Vegh, and Vuletin 2013) and with more effective monetary policy transmission (Mishra and others 2014). Countries with stronger protection of property rights are found to have lower probability of market crashes (Blau 2017). Better policies and institutions may enable countries to avoid or withstand episodes of debt distress (Kraay and Nehru 2006; IMF 2017a).
- Some credit rating agencies and capital market participants acknowledge the importance of institutions and governance for macroeconomic stability and sovereign risk assessment (for example, Standard and Poor's 2011, 2013; Moody's 2016; Briegel and Bruinshoofd 2016, Bruinshoofd 2016).

Institutions have an important impact on inequality and inclusive growth. Corruption can undermine the state's ability to deliver inclusive economic growth through its adverse effect on macro and financial stability, lower investment, and reduced human capital accumulation and social spending (IMF 2016a, 2017a). Effective institutions enhance cooperation and trust, making it easier to undertake reforms, collect taxes, and provide quality public services, thus helping achieve more sustainable growth (World Bank 2017).

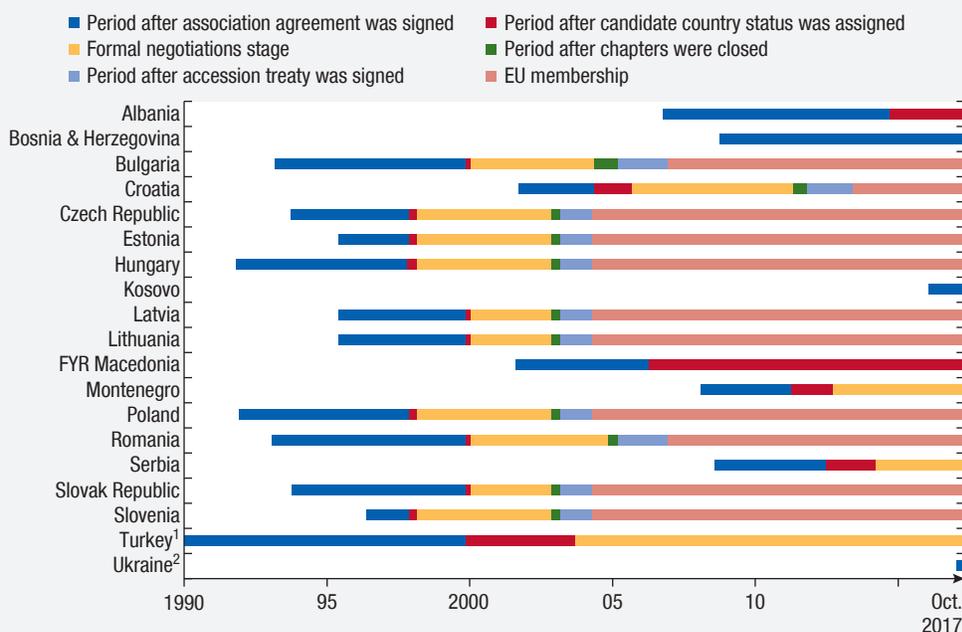
Many cross-country studies suggest a causal relationship from institutions to growth. While it is likely that causality runs both ways (Barro 2015), or that some third factor (such as accumulated physical and human capital) affects both institutions and growth, several cross-country studies provide evidence that institutions matter for long-term growth (Mauro 1995; Hall and Jones 1999; Acemoğlu, Johnson, and Robinson 2001; and Banerjee and Iyer 2005). To overcome the challenge of endogeneity of institutions, these studies focus on differences in strength of certain institutions—for example, property rights that were driven by exogenous factors such as culture or historical events. Acemoğlu, Johnson, and Robinson (2001), for example, used European mortality rates during colonization as an instrument for current institutions and estimated large effects of institutions on income per capita. Nonetheless, disagreements remain. Several papers challenge the measurement of institutions (Hoyland, Moene, and Willumsen 2012; Donchev and Ujhelyi 2014) or argue that the instruments used to identify causal effects are not appropriate (Docquier 2014). A large body of social science literature deals with two-way linkages between economic and political institutions and the sequencing of reforms. Changes in state capacity or partial improvement in property rights could jump-start development and lead to citizens demanding better institutions (Fukuyama and Levy 2010; Fukuyama 2008).

Box 2.2. The Process of European Union Membership and the Rule of Law

Nineteen countries of Central, Eastern, and Southeastern Europe (CESSEE) are associated with the European Union (EU) in various forms. Eleven are EU members (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, Slovak Republic), five are candidates (Albania, Macedonia, Montenegro, Serbia, Turkey), and two are potential candidates (Bosnia and Herzegovina, Kosovo) (Figure 2.2.1). Potential candidates have the prospect of joining the European Union, but have not yet been granted candidate-country status, and their relationship with the European Union is governed by the Stabilization and Association Agreements.¹ In 2017, Ukraine entered an association agreement with the European Union.

The EU accession process entails aligning local laws and institutions with EU laws. The rule of law, together with other political, economic, and institutional criteria (the Copenhagen criteria) must be fulfilled by countries in order to join the European Union. The accession process follows a series of formal steps from a preaccession agreement to membership candidacy, the negotiation phase, ratification of the final accession

Figure 2.2.1. CESEE: Timeline of European Union Accession



Source: European Commission.

¹Turkey signed an Association Agreement with the European Economic Community (predecessor of the EU) on September 12, 1963.

²Ukraine fully implemented an Association Agreement with the European Union on September 1, 2017. The Association Agreement was negotiated between 2007 and 2011 and signed in 2014. Substantial parts of the Association Agreement have been applied provisionally since November 1, 2014, and January 1, 2016, for the Deep and Comprehensive Free Trade Area.

Prepared by Faezeh Raei and Vizhdan Boranova.

¹The Stabilization and Association Agreements set out additional conditions for membership for the Western Balkan countries with the aim to (1) stabilize the countries politically and encourage their swift transition to a market economy, (2) promote regional cooperation, and (3) attain eventual membership in the European Union.

Box 2.2 *(continued)*

treaty, and, finally, membership. The process requires the adoption of EU laws and preparations to be able to properly apply such laws, known as the *Acquis Communautaire*. The *Acquis* is divided into 35 chapters for negotiations between the European Union and candidate states. Each chapter covers a major aspect of EU policy, such as free movement of goods, capital, and workers; economic policy; energy; transportation; regional and foreign policy; fundamental rights; and the judicial system. Chapter 23 of the *Acquis*, Judiciary and Fundamental Rights, deals with the judicial system.

The Judiciary and Fundamental Rights chapter requires reforming the judicial system to ensure its independence and efficiency. It promotes the establishment of an independent, effective, and impartial judiciary to effectively safeguard the rule of law. In particular, it requires eliminating external influences over the judiciary, putting in place legal guarantees for fair trial procedures, and providing adequate financial resources and training. Relatedly, members are required to deter and fight corruption effectively, since corruption represents a threat to the rule of law.

Specific benchmarks guide transposing the chapter on Judiciary and Fundamental Rights into local law and the country's institutional setup. For most chapters, the European Union sets what are called closing benchmarks, which need to be fulfilled by adopting laws and putting in place institutions. These benchmarks fall into two interlinked categories: (1) independence, accountability, and transparency of the judicial system and protection of property rights; and (2) fighting high-level corruption. Some recommended actions include establishing a judicial inspectorate to monitor the integrity of the judicial system and follow up on complaints; legal provisions for independent staffing of the inspectorate; random assignment of judicial cases to reduce political influence; and merit-based guidelines for the progression of judicial staff. Some recommended actions related to the prevention of high-level corruption include (1) establishing a specialized institution for the prosecution of high-level corruption; (2) independent staffing of such an institution; (3) creating legal provisions for whistle-blowers; (4) implementing a system to verify asset declarations of public officials; (5) investigating inexplicable wealth; and (6) publishing statistics on investigation and conviction cases.

The process of reforming the judiciary in line with the chapter on Judiciary and Fundamental Rights could extend well beyond EU accession. Creating and maintaining an independent and impartial judiciary and administration is a long-term process. For this reason, the European Commission allows some of the required actions to take place after accession by setting interim benchmarks and through continuous monitoring and progress reports. For example, a Cooperation and Verification Mechanism has been in place in Bulgaria and Romania to monitor and guide reforms of the judicial system and fight corruption after those countries joined the European Union in 2007. As European Commission reports indicate, despite progress, efforts are still needed to demonstrate a track record, finalize the adoption of legal codes, and ensure the implementation of court decisions in these countries.

The European Union also has a framework aimed at respecting and strengthening the rule of law in all its members. If the mechanisms established to secure the rule of law at the national level cease to operate effectively, there is a systemic threat to the rule of law and, hence, to the functioning of the European Union (EC 2010). In such situations, the European Commission can act to protect the rule of law by launching infringement procedures and activating Article 7 of the Treaty of the European Union. Given, however, the very high thresholds for activating Article 7, a new framework aimed at preventing the emergence of a systemic threat to the rule of law was enacted in 2014 (EC 2014).

Box 2.3. Specific Reforms to the Rule of Law in IMF-Supported Programs: Kosovo and Ukraine

This box focuses on specific reforms in Kosovo and Ukraine in the context of IMF-supported programs. The reforms have a narrower focus—control of corruption in Ukraine and clearing court backlogs in Kosovo. Their experiences highlight the difficulty in making progress in judicial reforms and the need to learn by doing and adapting to the local context. External actors have the strongest impact when they support domestic reform actors.

Ukraine

Corruption and oligarchic structures thwart improvements in the rule of law in Ukraine. Multiple data sources suggest that corruption is more prevalent in Ukraine than in other countries of Central, Eastern, and Southeastern Europe (CESSEE) or the European Union (EU) (IMF 2017b). Less-active civil society groups, flawed and minimal privatization, and weak initial reform strategies are often cited as reasons for the lack of progress (Yemelianova 2010; Valдай Discussion Club 2014). Vested interests continue to resist reform, and political fragmentation makes progress more challenging, but civil society is currently quite active and gathering support and is calling attention to corruption.

The IMF-supported program in Ukraine focuses on tackling corruption. Reforms have included (1) the independent National Anti-Corruption Bureau of Ukraine (NABU), (2) comprehensive asset declarations for high-level officials, and (3) a business ombudsman. Over 85 cases have been sent to court by the NABU, financial assets have been seized, and prominent figures have been arrested. However, there have been no major convictions yet. The program includes policies to reduce opportunities for corruption by streamlining business licenses, improving public procurement, bringing energy prices to import parity, overhauling tax administration, cleaning up the banking system, and putting in place an effective anti-money-laundering framework. But additional efforts are needed to address the perception of impunity.

Progress in the reform of state-owned enterprises has been limited, although progress has been made in the banking sector. Weak governance of state-owned enterprises has led to inefficiencies and corruption. Amendments to the privatization law were adopted in January 2016, but no large state-owned enterprises have been privatized. A new law on governance of these enterprises requires independent supervisory boards and adequate auditing principles. Ukraine has oligarch-owned banks, which use deposits to fund dubious related-party transactions (Baum and others 2008). Weaknesses in the rule of law and supervisory powers made it difficult to effectively control the banks, which allowed some owners to earn fictitious profits at the expense of taxpayers and depositors. A break came in 2014–15, when reform-oriented management was appointed at the National Bank of Ukraine (NBU), which saw its independence and powers strengthened (due in part to prior actions under the IMF Extended Fund Facility). Legal reforms required the identification of ultimate beneficiary owners, made bank owners liable for related-party lending losses, and shifted the burden of proof from the NBU to the banks. The NBU has closed nearly 90 of 180 banks since 2014, and the largest private bank was recently nationalized, but firmer efforts to collect related-party loans are needed.

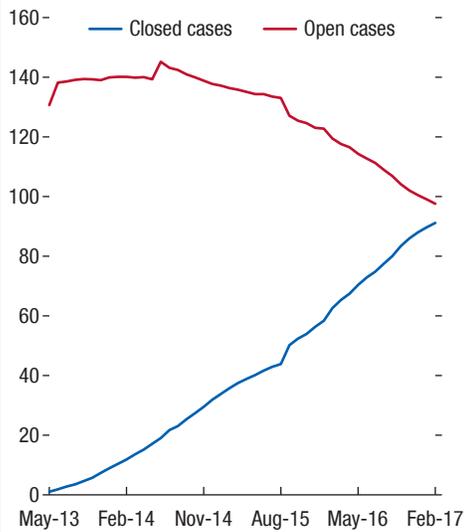
Kosovo

Although Kosovo has a short history with institution-building, some progress has been made in improving the court system. The most recent IMF-supported program emphasized Kosovo's inefficient court system as a major impediment to bank lending and growth. Kosovo's courts had large case backlogs due to low institutional capacity, weak management, and poor incentives. Creditors could not efficiently obtain and enforce judgments and hence required more collateral and higher lending rates.

Prepared by Ricardo Llaudes, Brett Rayner, Pamela Madrid Angers, and Jason Weiss.

Box 2.2 (continued)

Figure 2.3.1. Kosovo: Court Backlog Clearance under USAID Program
(Cumulative, thousands of court cases)



Source: US Agency for International Development (USAID) Contract Enforcement Program.

The authorities decided to confront the backlog of open cases (Figure 2.3.1). With help from the US Agency for International Development, the authorities (1) introduced a system of private enforcement agents that helped creditors enforce court judgments and recover assets and reduced the burden on courts; (2) established a centralized registry of bank account holders at the Central Bank of Kosovo, which enables the private enforcement agents to garnish accounts; and (3) improved court case resolution procedures. A large reduction in court cases was achieved. In parallel, private enforcement agents resolved numerous cases and recovered millions of dollars in assets. The progress in contract enforcement likely contributed to the sharp recent decline in lending rates. However, there are remaining gaps in judicial effectiveness, as debtors can sometimes sidestep enforcement actions.

Box 2.4. Econometric Analysis

We estimate panel regressions with five-year nonoverlapping averages with time dummies and random effects, conduct robustness checks, and attempt to mitigate endogeneity.

Dependent Variables

The main variables are judicial independence and protection of property rights indices from the World Economic Forum (WEF). For robustness, we also use the protection of property rights index from the Heritage Foundation and an indicator of court impartiality based on WEF data.

Explanatory Variables

To capture power asymmetries owing to the unequal distribution of resources and opportunities, we employ a composite indicator of resource distribution encompassing socioeconomic groups, education, health, and gender, with some of these aspects regressed separately as well. Also, we use indicators of market dominance, natural resource availability, and corruption in politics—the latter reflecting the prevalence of favoritism in politics. For the ability to solve collective action problems, we use the press freedom index, several measures of transparency and accountability, the old-age dependency ratio, and the urbanization rate. State capacity is represented by the variable covering the extent of established rules and procedures to hire and train government employees. We include trade barriers and trading partners' institutional quality to analyze the role of external factors. We control for GDP per capita. The sample includes 26 advanced and 53 emerging market economies from 1990 to 2014.

The baseline econometric analysis provides support for some variables capturing power asymmetries, transparency, state capacity, and openness, as well as noneconomic factors (Table 2.4.1). We identify a positive association between institutional quality and more equal distribution of resources, higher information freedom, state capacity, lower trade barriers, trading partners' institutional quality, and less corruption in politics. Another relatively new factor that seems to matter is the old-age dependency ratio, which is negatively associated with institutional quality.¹ Perhaps this captures the higher demand for checks and balances in societies with a larger share of working-age population. Gorodnichenko and Roland (2011) emphasize that attitudes in societies change slowly due to culture. These findings are broadly in line with the more recent literature, which finds that many factors contribute to institutional quality (see EBRD 2013; Ganiou Mijiyawa 2013).

Some interaction terms between the explanatory variables matter. The positive impact of information freedom is larger when the quality of public administration is low, resources are more concentrated, or the level of GDP per capita is lower. This suggests that when resource distribution or public administration capacity is not conducive to strengthening institutions, the marginal impact of checks and balances imposed by information freedom on politicians and government officials rises.

The baseline results are fairly robust to various model specifications and alternative measures (see Annex 2.3). Market dominance indicators are strongly associated with both judicial independence and property rights protection, but their presence eliminates the significance of trade barriers. This is possibly because market power indicators and openness operate through the common channel of competition.

Alternative measures for property rights protection, resource distribution, trade openness, and transparency and accountability do not alter the results materially. Some measures of transparency and accountability,

Prepared by Raju Huidrom, Mariusz Jarmuzek, and Ara Stepanyan.

¹Straub (2000) used life expectancy in a panel regression and identified a statistically significant positive association with institutional quality.

Box 2.4 (continued)

while having the expected sign, are not statistically significant. We could not identify a statistically significant correlation with the urbanization rate and educational attainment (though education opportunities are included in the composite indicator of resources and opportunities distribution). Dropping variables that might be considered as institutions themselves—corruption in politics, state capacity, and transparency and accountability—maintains the significance of variables capturing power asymmetries and openness.

Caveats abound, given difficulties in assessing the effectiveness of judicial systems and protection of property rights and the feedback loops between these institutions and their potential determinants. While we have used the instrumental variable approach by including lagged variables to mitigate the potential reverse causality between institutional quality and economic performance, some residual endogeneity bias is likely to remain. Cross-sectional regressions, however, broadly confirm the panel results. Controlling for GDP per capita addresses concerns that some of the identified associations might reflect the impact of better institutions on the explanatory variables through high income. However, other factors not included in our regressions may drive both the dependent and explanatory variables.

Table 2.4.1 Factors Affecting Institutional Quality

	Expected Sign	Judicial Independence			Protection of Property Rights		
		(1)	(2)	(3)	(1)	(2)	(3)
Equal distribution of resources	+	2.225** (1.076)	3.141** (1.283)	1.747* (1.033)	0.143 (0.846)	1.698* (0.991)	-0.405 (0.815)
Freedom of the press	+	0.00968 (0.00625)	0.0484** (0.0235)	0.0425*** (0.0140)	0.0114*** (0.00443)	0.0708*** (0.0167)	0.0545*** (0.0140)
Impartial public administration	+	0.875*** (0.224)	0.865*** (0.232)	1.251*** (0.248)	0.507*** (0.171)	0.462*** (0.179)	1.008*** (0.166)
Lower barriers to trade	+	0.194*** (0.0715)	0.183** (0.0722)	0.196*** (0.0737)	0.573*** (0.0972)	0.561*** (0.0975)	0.576*** (0.103)
Institutional quality of trading partners	+	0.396*** (0.131)	0.356*** (0.131)	0.356*** (0.129)	0.109 (0.106)	0.0284 (0.111)	0.0518 (0.103)
Old-age-dependency ratio	-	-0.0685** (0.0291)	-0.0648** (0.0295)	-0.0676** (0.0289)	-0.0469*** (0.0178)	-0.0458** (0.0179)	-0.0479*** (0.0180)
Control of corruption in politics	+	0.425*** (0.114)	0.407*** (0.113)	0.416*** (0.114)	0.349*** (0.107)	0.303*** (0.107)	0.300*** (0.0998)
GDP per capita, constant purchasing power parity	+	0.578** (0.244)	0.599** (0.244)	0.529** (0.246)	0.840*** (0.190)	0.920*** (0.181)	0.799*** (0.181)
Freedom of the press × equal distribution of resources	-0.0612* (0.0342)	...	...	-0.0965*** (0.0342)	...
Freedom of the press × impartial public administration	-0.0150*** (0.00577)	...	...	-0.0203*** (0.00616)
Constant	...	-8.770*** (1.770)	-9.316*** (1.811)	-8.768*** (1.814)	-9.853*** (1.313)	-9.316*** (1.811)	-9.961*** (1.249)
Observations		204	204	204	204	204	204
Number of countries		75	75	75	75	75	75
Time effect		Yes	Yes	Yes	Yes	Yes	Yes

Source: IMF staff estimates.

Note: Robust standard errors in parentheses.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Annex 2.1. Institutions: Literature Review

Annex Table 2.1.1. Summary of the Theoretical Literature on Institutions

Theory	Description	References
Economic: Efficient institutions	Societies choose efficient economic institutions that facilitate the maximization of the income of society as a whole. However, the distribution of the resulting income is independent of the distribution of political power. If the existing economic institutions in a country penalize some groups and benefit others, the two groups can engage in negotiations to modify the existing institutions or to create new institutions. This would produce beneficial outcomes for all. Institutions are therefore created when the social benefits of their creation exceed their social costs, so the search for efficiency prevents the existence of inefficient economic institutions. This is more likely to materialize when the economy is large or expanding.	Coase 1960 Demsetz 1967 Williamson 1985 Grossman and Hart 1986
Cultural: Ideological beliefs and behavior	Institutions are different because of cultural differences. There are three main strands of theory. First, different societies have different beliefs and behaviors, which shape collective action and consequently the quality of governments and institutions. One interpretation is that some societies have cultural values favorable to the emergence of efficient institutions, while others do not. Another interpretation is that cultural values favoring trust in strangers serve to facilitate collective action and increase the supply of public goods, including efficient economic institutions. Yet another interpretation is that cultural values that incite intolerance, xenophobia, and closed-mindedness hinder economic development and the emergence of efficient institutions. Second, countries choose their economic institutions based on that society's conception of what is most beneficial for its citizens. Since societies do not have the same concept of what is "good" for their members, economic institutions vary from country to country. This difference is reinforced by the uncertainties about the ex ante knowledge of what constitutes a "good" economic institution. Third, in societies whose primary social institutions legitimize individuals' expression of their own preferences and emphasize the moral equality of individuals, more specific norms of governance are expected to promote legal entitlements, authority undistorted by bribes, and feedback mechanisms of accountability. Cultural differences are expected to be reflected by religious affiliation and cultural profiles of nations.	Banfield 1958 Weber 1930, 1958, 1968 Putnam 1993 Piketty 1995 Landes 1998 Romer 2003 Williamson 2000 Roland 2004 Licht and others 2007
Historical: Past events	Institutions are the consequences of historical events. These events occur at a certain point in time, which subsequently determines the nature of institutions and makes them persist over time. There are two main strands of thought here. First, class coalitions and the way agriculture is organized determine which political institutions will emerge, although organization of agriculture is not predetermined to influence political institutions, and these institutions are just an unintended consequence. Second, the organization of a country's legal system is the result of historical circumstances. More specifically, legal origins have an important impact on the quality of property rights protection, which in turn determines institutions.	Moore 1966 Gaesper and Shleifer 2002
Political economy: Social conflict	Institutions are not chosen by all members of society, but rather by a group of individuals who control political power at a given point in time. The dominance of the group holding political power is the result of social conflict, and this group will therefore set up institutions that maximize personal payoffs, regardless of whether this will increase the income of the society as a whole. Two main strands dominate here. First, individuals who control political power as economic agents pursue their personal interests. Transaction costs associated with monitoring and verifying the agents' behavior generate a gap between the institutions chosen by policymakers for the maximization of their personal payoffs and the institutions that maximize the income of the society as a whole. Second, economic institutions determine not only the level of income, but also income distribution. Consequently, the existence of individuals who do not benefit equally from institutions may result in divergent individual preferences pertaining to institutions. Institutions should therefore be considered endogenous because they depend on political power, which in turn is endogenous as it depends on de jure political power conferred by political institutions and de facto political power conferred by the distribution of resources.	North 1981 Finer 1997 Acemoğlu, Johnson, and Robinson 2005 Acemoğlu 2006
State capacity	This theory claims that in many countries state capacity is not sufficient to adopt and implement economic institutions consistent with best practices that support an efficient functioning of markets. The argument is that policy choices in market regulation (including property rights) and taxation are constrained by past investments in legal and fiscal capacity.	Acemoğlu 2005, 2006 Besley and Persson 2009 Andrews, Pritchett, and Woolcock 2012

Annex Table 2.1.2. Summary of the Empirical Literature on Institutions

Theory	Evidence	Studies
Economic	<p>Given that economic institutions are established when the benefits of their creation exceed their costs, institutional quality could be positively associated with larger and/or expanding economies.</p> <p>Variable:</p> <ul style="list-style-type: none"> • <i>GDP per capita</i> <p>Findings:</p> <ul style="list-style-type: none"> • Generally significant and positive association 	<p>Clague and others 1996 La Porta and others 1997 Chong and Zanforlin 2000 Kaufmann and Kraay 2002 Ganiou Mijiyawa 2013</p>
Cultural	<p>Given that cultural differences are approximated by religions and cultural profiles, the quality of institutions could be associated with religious affiliation and nations' cultural profiles. In particular, Protestantism is hypothesized to be better for effective economic institutions. The autonomy of individuals is hypothesized to be positively associated with institutional quality, while hierarchy tends to be negatively associated with it.</p> <p>Variables:</p> <ul style="list-style-type: none"> • <i>Religious affiliation</i>: Proxy for professional ethics, tolerance, and trust • <i>Cultural profiles of nations</i>: Proxy for the extent to which societies prefer change versus maintaining the status quo • <i>Individualism</i>: Instrumented by genetic distance between the population in a given country and that of the United States <p>Findings:</p> <ul style="list-style-type: none"> • Generally significant and positive association with Protestantism • Generally significant and negative association with Islam and Catholicism • Partial support for authority and hierarchy as well as the English-speaking environment/heritage • Two-way causal effect between culture and institutions 	<p>La Porta and others 1999 Schwartz 1994, 1999 Stulz and Williamson 2003 Borner, Bodmer, and Kobler 2004 Licht, Goldschmidt, and Schwartz 2007 La Porta, Lopez-de-Silanes, and Shleifer 2008 Gorodnichenko and Roland 2011 Ganiou Mijiyawa 2013</p>
Historical	<p>Given that institutions can be shaped by historical events, institutional quality could be associated with legal origin.</p> <p>Variable:</p> <ul style="list-style-type: none"> • <i>Legal origin</i>: Proxy for common law and/or other laws • <i>Tenure of judges</i>: Proxy for autonomy/independence <p>Findings:</p> <ul style="list-style-type: none"> • Generally significant and positive association with common law • Generally significant and negative association with French and German law as well as socialist legal origin • Partial support for tenure of judges 	<p>La Porta and others 1998, 1999 Chong and Zanforlin 2000 Straub 2000 Acemoğlu, Johnson, and Robinson 2001, 2002 Djankov and others 2002, 2003 Borner, Bodmer, and Kobler 2004 La Porta, Lopez-de-Silanes, and Shleifer 2008 Ganiou Mijiyawa 2013 Alonso and Garcimartin 2013</p>
Social conflict/Political economy	<p>Given that institutions can be determined by social conflict, their quality could be associated with the concentration of political power, income inequality, and abundance of natural resources.</p> <p>Variables:</p> <ul style="list-style-type: none"> • <i>Concentration of political power</i>: Voice and accountability index • <i>Income inequality</i>: Gini index • <i>Abundance of natural resources</i> <p>Findings:</p> <ul style="list-style-type: none"> • Generally significant and negative association with the concentration of political power and abundance of natural resources • Partial support for income inequality 	<p>Straub 2000 Panizza 2001 Borner, Bodmer, and Kobler 2004 Ganiou Mijiyawa 2013</p>
External factors	<p>The European Union makes effective rule of law and control of corruption conditions for accession, helping address governance in the following ways:</p> <ul style="list-style-type: none"> • By overcoming collective action problems • By developing and codifying anticorruption legal norms internationally • By promoting and establishing legal constraints at the national level <p>Findings:</p> <ul style="list-style-type: none"> • Generally significant and positive impact on the rule of law during the pre-accession phase, at least de jure • Progress seems to slow once the EU membership offer has been made • Once countries have joined, many actually reverse the progress made 	<p>Mungiu-Pippidi 2015 EBRD 2013 Johnsøn, Taxell, and Zaum 2012 IMF 2005</p>

Annex Table 2.1.3. Institutions and Economic Outcomes

Economic Outcomes	Evidence	Studies
Sustainable and inclusive growth	Institutions matter for long-term growth and help achieve growth that is more sustainable and inclusive. Effective institutions, which encompass effective rule of law, ensure a level playing field and provide checks and balances. The latter discourages rent-seeking behavior and promotes more efficient and fairer use of resources. Within the rule of law, the effectiveness of the justice system and protection of property rights are critical functions for economic outcomes.	Mauro 1995 Hall and Jones 1999 Acemoğlu, Johnson, and Robinson 2001 Mahoney 2001 Feld and Voigt 2003, 2005 Banerjee and Iyer 2005 Esposito, Lanau, and Pompe 2014 IMF 2016a, 2017a World Bank 2017
Growth via factors of production	Institutions can affect growth via the factors of production by enhancing commitment, that is, by creating an environment where economic agents feel secure to invest in productive activities. By enhancing trust, contract enforcement, and collective action, institutions promote partnerships, specialization in production, and the solving of market failures. <i>Labor:</i> Weak institutions and governance have a strong effect on the emigration of skilled workers. Better institutions hold the promise of retaining and slowing emigration of skilled workers. <i>Investment:</i> Firms that feel more secure from expropriation invest a larger share of their profits in their business. A well-functioning, independent, and impartial judicial system improves foreign direct investment, the availability and cost of credit, investment, and growth. <i>Efficiency (total factor productivity—TFP):</i> Weaknesses in contract enforcement prevent specialization and optimal allocation of labor and capital, hence hampering TFP. Better contract enforcement can help firms expand their pool of suppliers by enhancing trust and cooperation between unknown parties.	North 1990 Johnson, McMillan, and Woodruff 2002 Bevan and Estrin 2004 Bianco, Jappelli, and Pagano 2005 Laeven and Majnoni 2005 Bénassy-Quéré, Coupet, and Mayer 2007 Dixit 2007 Djankov and others 2008 Atoyan and others 2016 Cooray and Schneider 2016
Growth via intermediate factors	Institutions affect a host of intermediate factors that ultimately matter for growth, including but not limited to <i>Government finances:</i> Institutions help government tax collection efforts by ensuring compliance and cooperation from citizens. Weak institutions and governance can lead to forgone tax revenue, a larger informal economy, and the inability of government to deliver quality public services. Better institutions, particularly in the areas of public investment management—such as transparent procurement and project appraisal processes—are associated with more efficient public infrastructure and higher absorption of EU funds. <i>Access to credit:</i> The strength of the legal system in credit protection and collateral execution affects how much financing creditors are willing to extend to the economy. Better contract enforcement is associated with higher lending and fewer defaults. In addition, weak debt enforcement and ineffective insolvency frameworks tend to lower recovery values of problem loans. <i>Economic resilience:</i> Institutions affect the ability of countries to withstand negative shocks because those institutions govern the quality of policies and their implementation. Better institutions are also associated with greater fiscal policy countercyclicality and with more effective monetary policy transmission. Countries with stronger protection of property rights have lower probability of market crashes. Better policies and institutions may enable countries to avoid or withstand debt distress. Some credit rating agencies and capital market participants acknowledge the importance of institutions and governance for macroeconomic stability and sovereign risk assessment.	Townsend 1979 Aghion and Bolton 1992 Hart and Moore 1994 Bianco, Jappelli, and Pagano 2005 Kraay and Nehru 2006 Standard and Poor's 2011, 2013 Frankel, Vegh, and Vuletin 2013 Mishra and others 2014 IMF 2015, 2016b, 2017a Briegel and Bruinshoofd 2016 Bruinshoofd 2016 Moody's Investor Service 2016 OECD 2016 Blau 2017 World Bank 2017
Causality between growth and institutions	Even though causality between growth and institutions likely runs both ways, several cross-country studies suggest that institutions matter for long-term growth. These studies have used various techniques to establish a causal relationship, including instrumental variables, natural experiments, and more narrative approaches. Nonetheless, disagreements remain. Several studies challenge the measurement of institutions and instruments used for identifying causal effects. A large body of social science literature deals with two-way linkages between economic and political institutions, and the dynamics of sequencing of reforms from one area to another. For example, it is argued that changes in state capacity or even partial improvements in property rights can jump-start development, which in turn could lead to the emergence of a citizen class demanding better institutions.	North 1981, 1990 Mauro 1995 Hall and Jones 1999 Acemoğlu, Johnson, and Robinson 2001 Banerjee and Iyer 2005 Dell 2010 Acemoğlu and Robinson 2012 Hoyland, Moene, and Willumsen 2012 Docquier 2014 Donchev and Ujhelyi 2014 Barro 2015

Annex 2.2. Indicators and Sources

In line with the IMF Board paper on the “Use of Third-Party Indicators (TPIs) in Fund Reports” (IMF 2017c), this annex describes the indicators used and their sources. Specific descriptions of indicators used are described in Annex Table 2.2.1.

The World Bank’s Worldwide Governance Indicators

The Worldwide Governance Indicators draw on four different types of source data: surveys of households and firms, including the Afrobarometer surveys, the Gallup World Poll, and Global Competitiveness Report surveys; commercial business information providers, including the Economist Intelligence Unit, Global Insight, and Political Risk Services; nongovernmental organizations, including Global Integrity, Freedom House, and Reporters Without Borders; and public sector organizations, including the Country Policy and Institutional Assessments of the World Bank and regional development banks, the European Bank for Reconstruction and Development Transition Reports, and the French Ministry of Finance Institutional Profiles Database.

World Economic Forum Global Competitiveness Index

The Global Competitiveness Index is a composite index based on data largely obtained from an opinion survey asking business executives to evaluate aspects of their economy. The survey is conducted with the help of a network of 160 partner institutes that follow detailed sampling guidelines to ensure that the sample of respondents is the most representative possible and comparable. To improve comparability, 4 of 10 questionnaires are filled out by executives who have previously taken part in the survey. Official statistics are also used.

World Bank Doing Business Index

The Doing Business Index looks at domestic small and medium companies and measures the regulations applying to them through their life cycle. To provide different perspectives on the data, the index presents data both for individual indicators and for two aggregate measures: the distance to frontier score and the ease of doing business ranking. Doing Business uses a simple averaging approach for weighting component indicators, calculating rankings, and determining the distance to frontier score.

European Commission for the Efficiency of Justice (*Commission européenne pour l’efficacité de la justice*—CEPEJ)

The CEPEJ maintains a comprehensive database with data on judicial systems of Council of Europe member states for 2010, 2012, and 2014. The data are based on reports submitted by country authorities. Since 2008, the CEPEJ has implemented a peer evaluation process for the systems for judicial data collection and reporting in Council of Europe members. The CEPEJ data cover topics such as the budget of judicial systems and legal aid, professionals, courts and users, and the efficiency of the justice system.

Group of States Against Corruption (GRECO)

GRECO’s objective is to improve the capacity of its 49 member states to fight corruption by monitoring their compliance with the Council of Europe’s anticorruption standards and their effective implementation. GRECO uses a dynamic process of mutual evaluation and peer pressure. Its country-by-country evaluations identify deficiencies in national anti-corruption frameworks and make recommendations on addressing shortcomings, thus prompting the necessary legislative, institutional, and practical

reforms. GRECO also produces evaluation reports that cover justice systems.

Varieties of Democracy Institute (V-Dem)

The V-Dem Project is a collaborative international effort that unites thousands of social scientists working in the sphere of democracy and governance. It is coordinated by the University of Gothenburg's V-Dem Institute and the University of Notre Dame's Kellogg Institute. Approximately half of the indicators in the V-Dem data set are based on factual information obtainable from official documents such as constitutions and government records. The other half consists of more subjective assessments on topics like political practices and compliance with de jure rules. On such issues, typically, five experts per country provide ratings. These experts are generally

academics or professionals working in government, media, or public affairs. They are also generally nationals of and/or residents in the country and have documented knowledge of both that country and a specific substantive area.

International Country Risk Guide (ICRG)

The ICRG provides ratings based on indicators for countries that forecast political, financial, and economic risk. A separate index is created for each of the subcategories. This data set is produced by the PRS Group of Syracuse, New York. Political risk assessments are based on a compiler's judgement, while financial and economic ratings are based on macro-financial data. Weights assigned to each variable and subcategory are predetermined and identical for every country.

Annex Table 2.2.1. Description of Third-party Indicators

Indicator	Source	Country Coverage	Notes
1. Justice system and protection of property rights			
Rule of law	World Bank, World Governance Indicators	Global	Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, and the likelihood of crime and violence. It is constructed from surveys of firms and individuals, and from assessments by commercial risk rating agencies, nongovernmental agencies, multilateral aid agencies, and other public sector organizations.
Rule of law	World Justice Project	Global	Measures how the rule of law is experienced and perceived by the public based on household and expert surveys. Performance is measured using indicators across eight primary factors (constraint on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice), each of which is scored and ranked globally and against regional and income peers.
Judicial independence	World Economic Forum, Global Competitiveness Index	Global	Measured through opinion surveys of company executives and based on the following question: In your country, how independent is the judicial system from influences of the government, individuals, or companies? (1 = not independent at all; 7 = entirely independent).
Judicial independence	Eurobarometer	EU countries	Based on a series of public opinion surveys conducted by the European Commission. It is conducted in two formats: (1) a standard survey, a cross-national longitudinal study, and (2) flash Eurobarometer, ad hoc thematic telephone interviews.
Structural independence	EU Justice Scoreboard	EU countries	An overview of how justice systems are organized to safeguard judicial independence in certain types of situations where independence may be at risk. Focuses on some of the main aspects of the judges' status: appointment of judges, evaluation of judges, transfer of judges without their consent, and dismissal of judges.
Impartiality of courts	World Economic Forum, Global Competitiveness Index	Global	Measured through opinion surveys of company executives and based on two indicators: (1) <i>Efficiency of the legal framework in settling disputes</i> , based on the question of how efficient the legal and judicial systems are for settling disputes among companies (1 = extremely inefficient; 7 = extremely efficient); and (2) <i>Efficiency of the legal framework in challenging regulations</i> , based on the question of how easy it is for private businesses to challenge government actions and/or regulations through the legal system (1 = extremely difficult; 7 = extremely easy).
Protection of property rights	World Economic Forum, Global Competitiveness Index	Global	Measured through opinion surveys of company executives and based on the following question: To what extent are property rights, including financial assets, protected? (1 = not at all; 7 = to a great extent).
Clearance rate	European Commission for the Efficiency of Justice (<i>Commission européenne pour l'efficacité de la justice</i> - CEPEJ)	Council of Europe countries	Measured as a ratio between resolved cases and incoming cases.
Disposition time	European Commission for the Efficiency of Justice (<i>Commission européenne pour l'efficacité de la justice</i> - CEPEJ)	Council of Europe countries	Calculated as the length of court proceedings, based on a ratio between pending and resolved cases.
2. Distribution of resources and opportunities			
Equal distribution of resources	Varieties of Democracy Institute (V-Dem)	Global	Measured as an index by taking the point estimates from a Bayesian factor analysis model of the indicators for particularistic or public goods, means tested versus universalistic welfare policies, educational equality, health equality, power distributed by socioeconomic position, power distributed by social group, and power distributed by gender.
Educational equality	Varieties of Democracy Institute (V-Dem)	Global	Measures the extent to which education can be achieved through the Gini coefficient of educational inequality, based on the following question: How unequal is the level of education achieved by the population aged 15 years and older? The Gini coefficient is estimated from average education data using the method as suggested by Thomas, Wang, and Fan (2000).
Health equality	Varieties of Democracy Institute (V-Dem)	Global	Based on the following question: To what extent is high-quality basic healthcare guaranteed to all, sufficient to enable them to exercise their basic political rights as adult citizens?
Market dominance	World Economic Forum, Global Competitiveness Index	Global	Measured through opinion surveys of company executives and based on the following question: How do you characterize corporate activity? (1 = dominated by a few business groups; 7 = spread among many firms).
Effectiveness of anti-monopoly policy	World Economic Forum, Global Competitiveness Index	Global	Measured through opinion surveys of company executives and based on the following question: How effective are anti-monopoly policies at ensuring fair competition? (1 = not effective at all; 7 = extremely effective).

Annex Table 2.2.1. Description of Third-party Indicators (continued)

Indicator	Source	Country Coverage	Notes
3. Transparency and accountability			
Government censorship	Varieties of Democracy Institute (V-Dem)	Global	Based on the following question: Does the government directly or indirectly attempt to censor the print or broadcast media? (0 = attempts to censor are direct and routine; 4 = the government rarely attempts to censor major media).
Justification of policies	Varieties of Democracy Institute (V-Dem)	Global	Based on the following question: When important policy changes are being considered (that is, before a decision has been made), to what extent do political elites give public and reasoned justifications for their positions? (0 = no justification; 3 = sophisticated justification).
Press freedom	Reporters Without Borders	Global	This is a snapshot of the media freedom situation based on an evaluation of pluralism, independence of the media, the quality of the legislative framework, and the safety of journalists in each country.
4. State capacity			
Rigorous and impartial public administration	Varieties of Democracy Institute (V-Dem)	Global	Based on the following question: How do public officials handle the cases of ordinary people? (0 = the law is not respected by public officials; 4 = the law is generally fully respected by the public officials).
Quality of the bureaucracy	International Country Risk Guide	Global	Measures institutional strength and the quality of the bureaucracy. High scores are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. Countries that lack the cushioning effect of a strong bureaucracy receive low scores because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions.
5. External environment			
Regulatory barriers to trade	Varieties of Democracy Institute (V-Dem)	Global	Based on (1) <i>Nontariff trade barriers</i> : To what extent do tariff and nontariff barriers significantly reduce the ability of imported goods to compete in the domestic market? and (2) <i>Compliance cost of importing and exporting</i> : This includes data on the time required to import and export.
Institutional quality of trading partners	International Monetary Fund	Global	Calculated as a weighted average of trading partners with respect to judicial independence and property rights.
6. Political power			
Strength of civil society	Varieties of Democracy Institute (V-Dem)	Global	The questions cover the following: (1) Do policymakers routinely consult major civil society organizations (CSOs)? (2) How large is the public's involvement in CSOs? (3) Are women prevented from participating? (4) Are legislative candidate nominations within party organizations highly decentralized or made through party primaries? The index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for candidate selection—national/local, CSO consultation, CSO participatory environment, and women's participation in CSOs.
Corruption in politics	Varieties of Democracy Institute (V-Dem)	Global	The index includes measures of six distinct types of corruption that cover both different areas and levels of the polity realm, distinguishing between executive, legislative, and judicial corruption. Within the executive realm, the measures also distinguish between corruption mostly pertaining to bribery and corruption due to embezzlement. Finally, the measures differentiate between corruption in the highest echelons of the executive, on the one hand, and in the public sector at large, on the other. The measures thus tap into several distinctive types of corruption: both “petty” and “grand,” both bribery and theft, and both corruption aimed at influencing lawmaking and corruption affecting the implementation of laws.

Annex 2.3. Econometric Analysis: Additional Results

This annex presents three sets of robustness checks. First, some of the explanatory variables that could be considered measures of institutional quality themselves are removed from the regressions. Second, we examine additional variables, such as market dominance. Finally, we attempt to address endogeneity issues.

Following Acemoğlu and others (2003), who argue that historically determined components of institutions are slow-moving and can be considered exogenous, we do not include individual effects. The Breusch-Pagan test is employed to determine whether random effects should be included, with results broadly in favor of random effects. This serves as a benchmark for robustness checks.

Some of the explanatory variables in the baseline regressions—freedom of the press, impartiality of public administration, and corruption in politics—could also be considered as measures of institutional quality themselves. To address this concern, we remove each of these, one by one and all of them at the same time, from the set of explanatory variables, and reestimate the model. Variables capturing power asymmetries and openness remain significant (Annex Table 2.3.1). We also continue to find a statistically significant association with institutional quality of trading partners, old-age dependency, and per capita income.

We tried adding corporate market dominance, as it could be a source of power asymmetries. Hence, excluding this measure could result in an omitted variable bias. We find a positive and significant association between market dominance and judicial independence and property rights protection (Annex Table 2.3.2). However, when openness and corporate market dominance are jointly included, openness is not always statistically significant, though the signs are as expected. This likely reflects the fact that openness affects competition, as does market dominance.

Finally, we try to mitigate endogeneity concerns by using lags of variables as instruments in a generalized methods of moments (GMM) framework. Since including lags of variables as instruments may not satisfactorily address endogeneity, we also try cross-sectional regressions, and regress the most recent five-year period for the dependent variables on longer lags (average over 1990–2000) of explanatory variables. We find that measures of resource distribution, openness, and the old-age dependency ratio remain associated with the expected sign with judicial independence and protection of property rights, even though they are not always statistically significant (Annex Table 2.3.3). Other explanatory variables (for example, impartiality of public administration and transparency) have the expected sign as in the baseline in most alternative specifications, but lose significance.

Annex Table 2.3.1 Factors Affecting Institutional Quality: Dropping Variables

	Judicial Independence				Protection of Property Rights			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Equal distribution of resources	2.225** (1.076)	2.627** (1.217)	3.731*** (1.113)	2.666** (1.158)	0.143 (0.846)	-0.284 (0.735)	0.932 (0.814)	0.405 (0.930)
Freedom of the press	0.00968 (0.00625)	... ...	0.00245 (0.00669)	0.00446 (0.00609)	0.0114*** (0.00443)	... ...	0.00678 (0.00525)	0.00651 (0.00488)
Impartial public administration	0.875*** (0.224)	0.563*** (0.186)	... ...	0.741*** (0.224)	0.507*** (0.171)	0.410** (0.165)	... ...	0.436** (0.205)
Lower barriers to trade	0.194*** (0.0715)	0.114* (0.0689)	0.271*** (0.0776)	0.193** (0.0887)	0.573*** (0.0972)	0.353*** (0.0905)	0.631*** (0.0911)	0.563*** (0.116)
Institutional quality of trading partners	0.396*** (0.131)	0.412*** (0.143)	0.389*** (0.146)	0.425*** (0.128)	0.109 (0.106)	0.139 (0.118)	0.0943 (0.116)	0.180* (0.0992)
Old-age-dependency ratio	-0.0685** (0.0291)	-0.0594*** (0.0223)	-0.0534* (0.0274)	-0.0520* (0.0309)	-0.0469*** (0.0178)	-0.0427*** (0.0162)	-0.0386** (0.0186)	-0.0359* (0.0206)
Control of corruption in politics	0.425*** (0.114)	0.373*** (0.0922)	0.511*** (0.117)	... ...	0.349*** (0.107)	0.250*** (0.0886)	0.407*** (0.101)	... ...
GDP per capita, constant purchasing power parity	0.578** (0.244)	0.690*** (0.232)	0.639*** (0.230)	0.849*** (0.257)	0.840*** (0.190)	1.180*** (0.212)	0.882*** (0.202)	1.058*** (0.200)
Constant	-8.770*** (1.770)	-8.276*** (1.722)	-8.916*** (1.668)	-10.44*** (1.695)	-9.853*** (1.313)	-10.44*** (1.420)	-9.978*** (1.428)	-11.40*** (1.284)
Observations	204	246	204	217	204	246	204	217
Number of countries	75	75	75	81	75	75	75	81
Time effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: IMF staff estimates.

Note: Robust standard errors in parentheses.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Annex Table 2.3.2. Factors Affecting Institutional Quality: Adding Market Dominance

	Judicial Independence					Protection of Property Rights				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Equal distribution of resources	2.225** (1.076)	3.281*** (1.160)	3.398*** (1.199)	3.410*** (1.151)	3.452*** (1.193)	0.143 (0.846)	0.553 (0.847)	0.653 (0.790)	0.847 (0.790)	0.808 (0.767)
Freedom of the press	0.00968 (0.00625)	0.00652 (0.00644)	0.00577 (0.00664)	0.00632 (0.00637)	0.00553 (0.00653)	0.0114*** (0.00443)	0.00973* (0.00524)	0.00691 (0.00558)	0.00857 (0.00539)	0.00544 (0.00553)
Impartial public administration	0.875*** (0.224)	0.499* (0.274)	0.507* (0.277)	0.544** (0.274)	0.528* (0.281)	0.507*** (0.171)	0.394** (0.180)	0.322** (0.156)	0.541*** (0.176)	0.405** (0.164)
Lower barriers to trade	0.194*** (0.0715)	0.115 (0.126)	0.0606 (0.135)	...	...	0.573*** (0.0972)	0.347*** (0.124)	0.237* (0.132)	...	...
Institutional quality of trading partners	0.396*** (0.131)	0.378** (0.149)	0.358** (0.157)	0.405*** (0.148)	0.369** (0.156)	0.109 (0.106)	0.148 (0.103)	0.114 (0.0969)	0.232** (0.0972)	0.161* (0.0924)
Old-age-dependency ratio	-0.0685** (0.0291)	-0.0768*** (0.0220)	-0.0704*** (0.0242)	-0.0764*** (0.0217)	-0.0697*** (0.0236)	-0.0469*** (0.0178)	-0.0455*** (0.0142)	-0.0309** (0.0140)	-0.0465*** (0.0151)	-0.0292** (0.0139)
Control of corruption in politics	0.425*** (0.114)	0.570*** (0.139)	0.511*** (0.138)	0.567*** (0.141)	0.506*** (0.139)	0.349*** (0.107)	0.433*** (0.0876)	0.290*** (0.0982)	0.442*** (0.101)	0.273*** (0.0954)
GDP per capita, constant purchasing power parity	0.578** (0.244)	0.295 (0.255)	0.323 (0.259)	0.304 (0.255)	0.324 (0.261)	0.840*** (0.190)	0.426** (0.174)	0.383** (0.166)	0.479*** (0.180)	0.394** (0.180)
Market dominance	...	0.523*** (0.174)	...	0.546*** (0.170)	...	...	0.470*** (0.138)	...	0.517*** (0.144)	...
Anti-monopoly policies	...	...	0.518*** (0.190)	-	0.543*** (0.174)	...	...	0.742*** (0.167)	...	0.836*** (0.150)
Constant	-8.770*** (1.770)	-7.372*** (1.865)	-7.247*** (1.930)	-7.171*** (1.877)	-7.105*** (1.925)	-9.853*** (1.313)	-5.423*** (1.117)	-4.938*** (1.053)	-4.927*** (1.296)	-4.435*** (1.230)
Observations	204	139	139	139	139	204	139	139	139	139
Number of countries	75	75	75	75	75	75	75	75	75	75
Time effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: IMF staff estimates.

Note: Robust standard errors in parentheses.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Annex Table 2.3.3. Factors Affecting Institutional Quality: Endogeneity

	Judicial Independence				Protection of Property Rights			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Equal distribution of resources	2.225** (1.076)	2.151 (1.349)	4.177*** (1.297)	3.551* (1.952)	0.143 (0.846)	0.358 (0.959)	5.568*** (1.533)	1.041 (1.500)
Freedom of the press	0.00968 (0.00625)	0.0211*** (0.00682)	0.00945 (0.00650)	... ...	0.0114*** (0.00443)	0.0173*** (0.00517)	0.0113 (0.00766)	... ...
Impartial public administration	0.875*** (0.224)	0.834** (0.353)	0.488 (0.301)	1.340*** (0.257)	0.507*** (0.171)	0.662** (0.285)	-0.362 (0.382)	1.106*** (0.194)
Lower barriers to trade	0.194*** (0.0715)	0.402** (0.191)	0.0798 (0.0975)	... ...	0.573*** (0.0972)	0.531*** (0.152)	0.323*** (0.117)	... ...
Institutional quality of trading partners	0.396*** (0.131)	0.112 (0.133)	-0.293*** (0.0950)	... ...	0.109 (0.106)	0.0920 (0.108)	-0.350*** (0.113)	... ...
Old-age-dependency ratio	-0.0685** (0.0291)	-0.0690*** (0.0203)	-0.0823*** (0.0186)	-0.0838 (0.0557)	-0.0469*** (0.0178)	-0.0428*** (0.0130)	-0.0621*** (0.0213)	-0.0374 (0.0427)
Control of corruption in politics	0.425*** (0.114)	0.877*** (0.154)	0.377*** (0.125)	... ...	0.349*** (0.107)	0.538*** (0.104)	0.523*** (0.142)	... ...
GDP per capita, constant purchasing power parity	0.578** (0.244)	0.413 (0.269)	-0.159 (0.225)	... ...	0.840*** (0.190)	0.439** (0.198)	-0.177 (0.288)	... ...
Judicial independence, lagged	... ...	... ...	0.694*** (0.0827)	... ...	... ...	... ...	... ...	... ...
Protection of property rights, lagged	... ...	... ...	... ...	... ...	... ...	... ...	0.553*** (0.126)	... ...
Observations	204	129	175	84	204	129	175	84
Number of countries	75	70	70	84	75	70	70	84
Time effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	no

Source: IMF staff estimates.

Note: Robust standard errors in parentheses.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

References

- Acemoglu, Daron. 2005. "Constitutions, Politics, and Economics: A Review Essay on Persson and Tabellini's the Economic Effects of Constitutions." *Journal of Economic Literature* 43: 1025–048.
- . 2006. "Modeling Inefficient Institutions." NBER Working Paper No. 11940. National Bureau of Economic Research, Cambridge, MA.
- , and James Robinson. 2012. *Why Nations Fail*. Boston: Massachusetts Institute of Technology.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91 (5): 1369–401.
- . 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *Quarterly Journal of Economics* 117: 1231–294.
- . 2005. "Institutions as a Fundamental Cause of Long-run Growth." In *Handbook of Economic Growth Volume 1, Part A*, edited by Philippe Aghion and Steven N. Durlauf. Amsterdam: North-Holland.
- Acemoglu, Daron, Simon Johnson, James A. Robinson, and Yunyong Thacharoen. 2003. "Institutional Causes, Macroeconomic Symptoms: Volatility, Crises and Growth." *Journal of Monetary Economics* 50: 49–123.
- Agh, Attila. 2004. *Post-accession in East Central Europe*. Budapest: Hungarian Centre for Democracy Studies Press.
- Aghion, Philippe, and Patrick Bolton. 1992. "An Incomplete Contracts Approach to Financial Contracting." *The Review of Economic Studies* 59 (3): 473–94.
- Alonso, José Antonio, and Carlos Garcimartín. 2013. "The Determinants of Institutional Quality. More on the Debate." *Journal of International Development* 25 (2): 206–26.
- Andrews, Matt, Lant Pritchett, and Michael Woolcock. 2012. "Escaping Capability Traps through Problem-Driven Iterative Adaptation." CGD Working Paper No. 299, Center for Global Development, Washington, DC.
- Aslund, Anders and Simeon Djankov. 2014. "The Great Rebirth." Washington, DC: Peterson Institute for International Economics.
- Atoyán, Ruben, Lone Christiansen, Allan Dizioli, Christian Ebeke, Nadeem Ilahi, Anna Ilyina, Gil Mehrez, Haonan Qu, Faezeh Raei, Alaina Rhee, and Daria Zakharova. 2016. "Emigration and Its Economic Impact on Eastern Europe." IMF Staff Discussion Note 16/07, International Monetary Fund, Washington, DC.
- Bacon, Wally. 2004. "Economic Reform." In *Romania since 1989: Politics, Economics, and Society*, edited by Henry F. Carey. Lanham, MD: Lexington Books.
- Bakolias, Maria. 2000. "Legal and Judicial Development: The Role of Civil Society in the Reform Process." *Fordham International Law Journal* 24 (6): 26–55.
- Banerjee, Abhijit, and Lakshmi Iyer. 2005. "History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *American Economic Review* 95 (4): 1190–213.
- Banfield, Edward. 1958. "The Moral Basis of a Backward Society." Research Center in Economic Development and Cultural Change, University of Chicago.
- Barro, Robert J. 2015. "Convergence and Modernization." *The Economic Journal* 125: 911–42.
- Bartlett, William. 2007. *The Western Balkans. Varieties of Capitalism in the Post-communist Countries*. London: Palgrave.
- , Frank Bönker, and Zdravko Petak. 2014. "Sustainable Governance Indicators: 2014 Croatia Report." Gütersloh: Bertelsmann Stiftung.
- Baum, Christopher, Mustafa Caglayan, Dorothea Schäfer, and Oleksandr Talavera. 2008. "Political Patronage in Ukrainian Banking." Boston College Working Paper in Economics No. 67, Boston.
- Begović, Boris. 2013. "European Integrations and Serbian Economic Growth: Economic Integration as an Alternative to the EU Membership." *Anali Pravnog Fakulteta u Beogradu* 61 (1): 53–72.
- , and Dragor Hiber. 2006. "EU Democratic Rule of Law Promotion: The Case of Serbia." Center on Democracy, Development and the Rule of Law, Stanford University, Palo Alto, CA.
- Bénassy-Quéré, Agnès, Maylis Coupet, and Thierry Mayer. 2007. "Institutional Determinants of Foreign Direct Investment." *The World Economy* 30 (5): 764–82.
- Besley, Timothy, and Torsten Persson. 2009. "The Origins of State Capacity: Property Rights, Taxation, and Politics." *American Economic Review* 99 (4): 1218–244.
- Bevan, Alan A., and Saul Estrin. 2004. "The Determinants of Foreign Direct Investment into European Transition Economies." *Journal of Comparative Economics* 32 (4): 775–87.
- Bianco, Magda, Tullio Jappelli, and Marco Pagano. 2005. "Courts and Banks: Effects of Judicial Enforcement on Credit Markets." *Journal of Money, Credit and Banking* 37 (2): 223–44.

- Blau, Benjamin M. 2017. "Economic Freedom and Crashes in Financial Markets." *Journal of International Financial Markets, Institutions and Money* 47 (March): 33–46.
- Blitz, Brat K. 2003. "Refugee Returns in Croatia: Contradictions and Reform." *SAGE Journals: Politics* 23 (93): 181–91.
- Blokker, Paul. 2013. *New Democracies in Crisis? A Comparative Constitutional Study of the Czech Republic, Hungary, Poland, Slovakia and Romania*. London: Routledge.
- Bokros, Lajos. 2014. "Regression. Reform Reversal in Hungary After a Promising Start." In *The Great Rebirth*, edited by Anders Aslund and Simeon Djankov. Washington, DC: Peterson Institute for International Economics.
- Bonin, John P., Iftekhhar Hasan, and Paul Wachtel. 2005. "Privatization Matters: Bank Efficiency in Transition Countries." *Journal of Banking & Finance* 29: 2155–78.
- Borner, Silvio, Frank Bodmer, and Markus Kobler. 2004. "Institutional Efficiency and Its Determinants: The Role of Political Factors in Economic Growth." OECD Development Centre, Paris.
- Briegel, Fabian, and Allard Bruinshoofd. 2016. "Institutional Quality in Europe: Diverging Trends in Challenging Economic Times." Rabobank Research Economic Report, Utrecht.
- Bruinshoofd, Allard. 2016. "Institutional Quality and Economic Performance." Rabobank Research Economic Report, Utrecht.
- Bruszt, László, Nauro F. Campos, Jan Fidrmuc, and Gérard Roland. 2009. "Civil Society, Institutional Change, and the Politics of Reform: The Great Transition." In *Economies in Transition. Studies in Development Economics and Policy*, edited by G. Roland. London: Palgrave Macmillan.
- Carnevali, Davide. 2013. "La Nuova Geografia Giudiziaria." In *Argomenti di Ordinamento Giudiziario*, edited by D. Cavallini. Bologna: Bononia University Press.
- Carp, Radu. 2007. "A Constitutional Principle under Scrutiny: The Immovability of Judges – Romanian Regulations in a Comparative Law Perspective." In *Judicial Reforms in Central and Eastern European Countries*, edited by R. Coman and J.-M. De Waele. Brugge: Vanden Broele.
- Chong, Alberto, and Luisa Zanforlin. 2000. "Law Tradition and Institutional Quality: Some Empirical Evidence." *Journal of International Development* 12: 1057–068.
- Clague, Christopher, Philip Keefer, Stephen Knack, and Mancur Olson. 1996. "Property and Contract Rights under Democracy and Dictatorship." *Journal of Economic Growth* 1: 243–76.
- Coase, Ronald H. 1960. "The Problem of Social Cost." *Journal of Law and Economics* 3 (October): 1–44.
- Coman, Ramona. 2007. "Media, Justice and Politics or How the Independence of the Judiciary Became an Issue on the Romanian Political Agenda." In *Judicial Reforms in Central and Eastern European Countries*, edited by R. Coman and J. M. De Wade. Brugge: Vanden Braele.
- . 2009. "Reformer la Justice Dans un Pays Post-Communiste. Le Cas de la Roumanie." University of Brussels, Brussels.
- Cooray, Arusha, and Friedrich Schneider. 2016. "Does Corruption Promote Emigration? An Empirical Examination." *Journal of Population Economics* 29 (1): 293–310.
- Council of Europe (CoE). 2015. "State of Democracy, Human Rights and the Rule of Law in Europe." Report by the Secretary General of the Council of Europe, Strasbourg.
- . 2016. "Challenges for Judicial Independence and Impartiality in the Member States of the Council of Europe." Information Document, Council of Europe, Strasbourg.
- Dăianu, Daniel. 2004. "Fiscal and Monetary Policies." In *Romania since 1989: Politics, Economics, and Society*, edited by Henry F. Carey. Lanham, MD: Lexington Books.
- Dallara, Cristina. 2007. "Judicial Reforms in Transition: Legacies of the Past and Dominant Political Actors in Post-Communist Countries." IRSIG-CNR Working Paper, The Institute for Research on Judicial Systems, Bologna.
- . 2010. "External and Internal Factors of Democratization in the Western Balkans." *Transitions* 50 (1).
- . 2014. *Democracy and Judicial Reforms in South-East Europe between the EU and the Legacies of the Past*. New York: Springer International Publishing.
- Dell, Melissa. 2010. "The Persistent Effects of Peru's Mining Mita." *Econometrica* 78(6): 1863–903.
- Demsetz, Harold. 1967. "Toward a Theory of Property Rights." *The American Economic Review* 57 (2): 347–59.
- Demsoorean, Ana, Sorana Parvulescu, and Bogdan Vetrici-Soimu. 2009. "Romania: Vetoed Reforms, Skewed Results." In *International Actors, Democratization and the Rule of Law*, edited by A. Magen and L. Morline. Routledge/UACES Contemporary European Studies.
- Dicosola, Maria. 2012. "Judicial Independence and Impartiality in Serbia: Between Law and Culture." *Diritti Comparati*.
- Dixit, Avinash K. 2007. *Lawlessness and Economics: Alternative Modes of Governance*. Princeton, NJ: Princeton University Press.

2. REFORMING THE JUDICIARY: LEARNING FROM THE EXPERIENCE OF CENTRAL, EASTERN, AND SOUTHEASTERN EUROPE

- Djankov, Simeon. 2014a. "Bulgaria: The Greatest Vacillations." In *The Great Rebirth*, edited by Anders Aslund and Simeon Djankov. Washington, DC: Peterson Institute for International Economics.
- . 2014b. "The Microeconomics of Postcommunist Transformation." In *The Great Rebirth*, edited by Anders Aslund and Simeon Djankov. Washington, DC: Peterson Institute for International Economics.
- , Oliver Hart, Caralee McLiesh, and Andrei Shleifer. 2008. "Debt Enforcement around the World." *Journal of Political Economy* 116 (December): 1105–149.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *Quarterly Journal of Economics* 117: 1–37.
- . 2003. "Courts." *Quarterly Journal of Economics* 118: 453–517.
- Docquier, Frédéric. 2014. "Identifying the Effect of Institutions on Economic Growth." In *Institutional Competition between Common Law and Civil Law: Theory and Policy*, edited by H. Schmiegelow and M. Schmiegelow. New York: Springer.
- Donchev, Dilyan, and Gergely Ujhelyi. 2014. "What do Corruption Indices Measure?" *Economics & Politics* 26 (2): 309–31.
- Ekiert, Grzegorz, and George Soroka. 2013. "Pathways to Freedom. Poland: Political and Economic Lessons from Democratic Transitions." Civil Society, Markets, and Democracy Initiative, Council on Foreign Relations, New York.
- Esposito, Gianluca, Sergi Lanau, and Sebastian Pompe. 2014. "Judicial System Reform in Italy: A Key to Growth." IMF Working Paper 14/32. International Monetary Fund, Washington, DC.
- European Bank for Reconstruction and Development (EBRD). 2013. "Transition Report 2013." London.
- . 2014. "Commercial Laws of Bosnia and Herzegovina: An Assessment by the EBRD." London.
- . 2016. "Transition Report 2016–17." London.
- European Commission (EC). 1997. "Regular Report from the Commission on Poland's Progress Towards Accession." Brussels.
- . 2002. "Regular Report from the Commission on Poland's Progress Towards Accession." Brussels.
- . 2005. "Regular Report from the Commission on Croatia's Progress Towards Accession." Brussels.
- . 2007. "Report from the Commission to the European Council and Parliament on Romania's Progress on Accompanying Measures Following Accession." Brussels.
- . 2009. "Report from the Commission to the European Council and Parliament on Progress in Romania under the Co-operation and Verification Mechanism." Brussels.
- . 2016a. "Country Report Romania 2016: Including an In-Depth Review on the Prevention and Correction of Macroeconomic Imbalances." Brussels.
- . 2016b. "Serbia 2016 Report." Brussels.
- . 2016c. "Bosnia and Herzegovina 2016 Report." Brussels.
- . 2017a. "European Commission Launches Infringement Against Poland over Measures Affecting the Judiciary." Press Release, Brussels.
- . 2017b. "The 2017 EU Justice Scoreboard." Publications Office of the European Union, Luxembourg.
- European Commission for Efficiency of Justice (CEPEJ). 2016. "European Judicial Systems Efficiency and Quality of Justice 2016." CEPEJ Study No. 23, Strasbourg.
- European Commission on Racism and Intolerance (ECRI). 1999. "European Commission Against Racism and Intolerance, Country Report on Estonia." Strasbourg.
- . 2015. "European Commission Against Racism and Intolerance, Country Report on Estonia." Strasbourg.
- Feld, Lars P., and Stefan Voigt. 2003. "Economic Growth and Judicial Independence: Cross-country Evidence Using a New Set of Indicators." *European Journal of Political Economy* 19 (3): 497–527.
- . 2005. "How Does Judicial Independence Affect the Investment Climate?" In *Investment Climate, Growth, and Poverty*, edited by G. Kochendorfer-Lucius and B. Pleskovic. Washington, DC: World Bank.
- Finer, Samuel E. 1997. *The History of Government. Volumes I–III*. Cambridge, UK: Cambridge University Press.
- Frankel, Jeffrey, Carlos Vegh, and Guillermo Vuletin. 2013. "On Graduation from Fiscal Procyclicality." *Journal of Development Economics* 100 (1): 32–47.
- Freedom House. 2003. "Nations in Transit 2003 Report." Washington, DC.
- Fukuyama, Francis. 2008. "What Do We Know About the Relationship between the Political and Economic Dimensions of Development?" In *Governance, Growth, and Development Decision-Making*, edited by Daron Acemoglu, Francis Fukuyama, and Dani Rodrik. Washington, DC: World Bank.

- . 2011. *The Origins of Political Order: From Prehuman Times to the French Revolution*. New York: Farrar, Straus and Giroux.
- Fukuyama, Francis, and Brian Levy. 2010. “Development Strategies: Integrating Governance and Growth.” Policy Research Working Paper No. 5196, World Bank, Washington, DC.
- Gabanyi, Anneli Ute. 2004. “The New Business Elite: From Nomenclature to Oligarchy.” In *Romania since 1989: Politics, Economics, and Society*, edited by Henry F. Carey. Lanham, MD: Lexington Books.
- Ganiou Mijiyawa, Abdoul. 2013. “Determinants of Property Rights Institutions: Survey of Literature and New Evidence.” *Economics of Governance* 14 (2): 127–83.
- Gherasimov, Cristina. 2015. “Estonia and Poland: Setting Up Regional Examples in Anti-Corruption Performance Through Independent Judiciaries.” Presentation at ECPR Joint Sessions of Workshops, Warsaw, March 29–April 2.
- Glaeser, Edward L., and Andrei Shleifer. 2002. “Legal Origins.” *Quarterly Journal of Economics* 117 (November): 1193–230.
- Gorodnichenko, Yuriy, and Gerard Roland. 2010. “Culture, Institutions and the Wealth of Nations.” NBER Working Paper No. 16368. National Bureau of Economic Research, Cambridge, MA.
- Grossman, Sanford J., and Oliver D. Hart. 1986. “The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration.” *Journal of Political Economy* 94(4): 691–719.
- Group of States Against Corruption (GRECO). 2013. “Corruption Prevention in Respect of Members of Parliament, Judges and Prosecutors, Evaluation Report Estonia.” European Commission, Brussels.
- . 2014. “Corruption Prevention in Respect of Members of Parliament, Judges and Prosecutors, Evaluation Report Croatia.” European Commission, Brussels.
- . 2015a. “Corruption Prevention in Respect of Members of Parliament, Judges and Prosecutors, Evaluation Report Serbia.” European Commission, Brussels.
- . 2015b. “16th General Activity Report.” European Commission, Brussels.
- . 2016. “Corruption Prevention in Respect of Members of Parliament, Judges and Prosecutors, Evaluation Report Romania.” European Commission, Brussels.
- . 2017. “Fourth Evaluation Round Report: Conclusions and Trends.” European Commission, Brussels.
- Guriev, Sergei. 2017. “Political Economy and Reforms. Do Reforms Have to be Popular to be Successful?” Presentation at the 2017 Conference on Reaccelerating Convergence in Central, Eastern and Southeastern Europe: The Role of Governance and Institutions, Dubrovnik, Croatia. July 11.
- Gutmann, Jerg, and Stefan Voigt. 2017. “Judicial Independence in the EU–A Puzzle.” ILE Working Paper Series, No. 4. University of Hamburg Institute of Law and Economics, Hamburg.
- Hall, Robert, and Charles Jones. 1999. “Why Do Some Countries Produce So Much More Output per Worker than Others?” *Quarterly Journal of Economics* 114: 83–116.
- Hart, Oliver, and John Moore. 1994. “A Theory of Debt Based on the Inalienability of Human Capital.” *The Quarterly Journal of Economics* 109 (4): 841–79.
- Hiber, Dragor. 2005. “The Reform of the Judiciary and the Judicial Legislation.” In *Serbia Four Year of Transition*, edited by B. Begović and B. Mijatović. Center for Liberal Democratic Studies.
- High Judicial and Prosecutorial Council of Bosnia and Herzegovina (HJPC). 2017. “History of Judicial Reform and HJPC.” Sarajevo.
- Hoyland, Bjorn, Karl Moene, and Fredrik Willumsen. 2012. “The Tyranny of International Index Rankings.” *Journal of Development Economics* 97: 1–14.
- International Monetary Fund (IMF). 1997. “Good Governance. The IMF’s Role.” Washington, DC.
- . 2005. *World Economic Outlook*. Washington DC. September.
- . 2014. “25 Years of Transition Post-Communist Europe and the IMF.” *Regional Economic Issues*. Special Report. Washington DC. October.
- . 2015. “A Strategy for Resolving Europe’s Problem Loans.” IMF Staff Discussion Note 15/19, Washington, DC.
- . 2016a. “Corruption: Costs and Mitigating Strategies.” IMF Staff Discussion Note 16/05, Washington, DC.
- . 2016b. *Regional Economic Issues: Central, Eastern, and Southeastern Europe*. Washington, DC. November.
- . 2017a. “The Role of the Fund in Governance Issues—Review of the Guidance Note—Preliminary Considerations.” Washington, DC.

2. REFORMING THE JUDICIARY: LEARNING FROM THE EXPERIENCE OF CENTRAL, EASTERN, AND SOUTHEASTERN EUROPE

- . 2017b. “Ukraine: Selected Issues.” Country Report No. 17/84. European Department, Washington, DC. April.
- . 2017c. “Use of Third-party Indicators in Fund Reports.” Washington, DC. April.
- Iwanek, Maciej, and Stanisław Wellisz. 1993. “The Privatization of the Polish Economy.” *Eastern Economic Journal* 19 (3).
- Johnsøn, Jesper, Nils Taxell, and Dominik Zaum. 2012. “Mapping Evidence Gaps in Anti-corruption: Assessing the State of the Operationally Relevant Evidence on Donors’ Actions and Approaches to Reducing Corruption.” U4 Issue Paper No. 7/2012, Christian Michelsen Institute, Bergen.
- Johnson, Simon, John McMillan, and Christopher Woodruff. 2002. “Property Rights and Finance.” *American Economic Review* 92 (5): 1335–356.
- Jović, Dejan. 2006. “Croatia and the European Union: A Long-Delayed Journey.” *Journal of Southern Europe and the Balkans* 8(1): 85–103.
- Kalniņš, Valts. 2015. “Process-tracing Study Report on Estonia.” Centre for Public Policy, PROVIDUS, Riga Latvia.
- Kaufmann, Daniel, and Aart Kraay. 2002. “Growth Without Governance.” *Economía* (Winter): 169–215.
- Kraay, Aart, and Vikram Nehru. 2006. “When Is External Debt Sustainable?.” *The World Bank Economic Review* 20 (3): 341–365.
- Kubicek, Paul. 2004. *Organized Labor in Postcommunist States: From Solidarity to Infirmity*. Pittsburgh: University of Pittsburgh Press.
- Kucharczyk, Jacek, and Jarosław Zbieranek. 2010. “Democracy in Poland 1989–2009. Challenges for the Future.” Institute of Public Affairs, Warsaw.
- Laar, Mart. 2007. “The Estonian Economic Miracle.” Center for International Trade and Economics, The Heritage Foundation, Washington, DC.
- Laeven, Luc, and Giovanni Majnoni. 2005. “Does Judicial Efficiency Lower the Cost of Credit?.” *Journal of Banking & Finance* 29 (July): 1791–812.
- Lagarde, Christine. 2016. “Mending the Trust Divide.” Speech at the International Bar Association Conference, Washington, DC, September 18.
- . 2017. “Addressing Corruption with Clarity.” Speech at the Brookings Institution, Washington, DC, September 18.
- Landes, David S. 1998. *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor?* New York: W.W. Norton.
- La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2008. “The Economic Consequences of Legal Origins.” *Journal of Economic Literature* 46 (2): 285–332.
- La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. “Trust in Large Organizations.” *American Economic Review Papers and Proceedings* 87: 333–38.
- . 1998. “Law and Finance.” *Journal of Political Economy* 106: 1113–155.
- . 1999. “The Quality of Government.” *Journal of Law, Economics and Organization* 15: 222–79.
- Leutloff-Grandits, Carolin. 2006. “Claiming Ownership in Postwar Croatia: The Dynamics of Property Relations and Ethnic Conflict in the Knin Region.” *Social Anthropology* 17 (1): 134–35.
- Licht, Amir, Chanan Goldschmidt, and Shalom H. Schwartz. 2007. “Culture Rules: The Foundations of the Rule of Law and Other Norms of Governance.” *Journal of Comparative Economics* 35 (4): 659–88.
- Lumiste, Rünno, Robert Pefferly, and Alari Purju. 2008. “Estonia’s Economic Development: Trends, Practices, and Sources: A Case Study.” Commission on Growth and Development Working Paper No. 25, World Bank, Washington, DC.
- Madir, Jelena. 2011. “Recent Developments in Judicial Reform in Croatia.” *Law in Transition* 6: 52–59.
- Magen, Amichai, and Leonardo Morlino. 2009. “International Actors, Democratization and the Rule of Law: Anchoring Democracy?.” Routledge/UACES Contemporary European Studies. London.
- Mahoney, Paul G. 2001. “The Common Law and Economic Growth: Hayek Might Be Right.” *Journal of Legal Studies* 30 (2): 503–25.
- Marčeta, Irena. 2010. “The International Anchoring of Serbia’s Democracy: The Seeds of a Crisis Embedded.” *Italian Political Science Review* 2: 195–218.
- Mauro, Paolo. 1995. “Corruption and Growth.” *Quarterly Journal of Economics* 110: 681–712.
- Mendelski, Martin. 2012. “EU-driven Judicial Reforms in Romania: A Success Story?.” *East European Politics* 28 (1): 23–42.
- Menz, Christian. 2013. Explaining Croatia’s (non)compliance with EU Conditionality on ICTY Cooperation: Do External Incentives Make the Difference? Anchor Academic Publishing.

- Mishra, Prachi, Peter Moniel, Peter Pedroni, and Antonio Spilimbergo. 2014. "Monetary Policy and Bank Lending Rates in Low-Income Countries: Heterogeneous Panel Estimates." *Journal of Development Economics* 111: 117–31.
- Moody's Investor Service. 2016. "Rating Methodology: Sovereign Bond Ratings." December 22.
- Moore, B., Jr. 1966. *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World*. Boston: Beacon Press.
- Mulas-Granados, Carlos, Taline Koranchelian, and Alex Segura-Ubiergo. 2008. "Reforming Government Subsidies in the New Member States of the European Union." IMF Working Paper 08/165, International Monetary Fund, Washington, DC.
- Mungiu-Pippidi, Alina. 2015. *The Quest for Good Governance: How Societies Develop Control of Corruption?* Cambridge, UK: Cambridge University Press.
- . 2017. "Inclusive Institutions and Prosperity: CESEE Countries' Path So Far, How They are Likely to Evolve, and Possible Lessons." Presentation at the 2017 Conference on Reaccelerating Convergence in Central, Eastern and Southeastern Europe: The Role of Governance and Institutions, Dubrovnik, Croatia. July 11.
- , and Ramin Dadasov. 2017. "When Do Anticorruption Laws Matter? The Evidence on Public Integrity Enabling Contexts." *Crime, Law and Social Change*: 1–16.
- Murret, Eugene. 2010. "Judicial Reform in Serbia." *Judicature* 94 (1): 28–30.
- Nellis, John R. 1996. "Finding Real Owners – Lessons from Estonia's Privatization Program." Note No. 66. Private Sector Development Department, World Bank, Washington, D.C.
- Nikiel, Ewa M., and Timothy P. Opiela. 2002. "Customer Type and Bank Efficiency in Poland: Implications for Emerging Market Banking." *Contemporary Economic Policy* 20: 55–71.
- North, Douglass C. 1981. *Structure and Change in Economic History*. New York: W.W. Norton & Co.
- . 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge, UK: Cambridge University Press.
- Noutcheva, Gergana. 2006. "EU Conditionality and Balkan Compliance: Does Sovereignty Matter?" Doctoral Dissertation, University of Pittsburgh.
- Open Society Institute (OSI). 2001. "Monitoring the EU Accession Process: Judicial Independence." EU Accession Monitoring Program, Central European University Press, Budapest.
- Organisation for Economic Co-operation and Development (OECD). 2014. "Building More Effective, Accountable, and Inclusive Institutions for All." Element 6, Paper 1, Paris.
- . 2016. "OECD G-20 Policy Paper on Economic Resilience and Structural Policies." OECD, Paris. November 14.
- Organization for Security and Co-operation in Europe (OSCE). 2011. "Judicial Institutions in Serbia." Vienna.
- . 2014. "Baltic States: Citizenship and Language Rights of Russian-speaking Minorities." Presentation at the Human Rights Without Frontiers International OSCE Human Dimension Implementation Meeting, Warsaw, September 29.
- . 2017. "Strengthening the Justice Sector." Factsheet, January 1. <http://www.oscebih.org>.
- Panizza, Ugo. 2001. "Electoral Rules, Political Systems, and Institutional Quality." *Economics and Politics* 13 (3): 311–42.
- Paramio, Ludolfo. 2002. "Romania: An Excessively Long Transition." In *Democratic Transition in Romania*. Madrid: FRIDE.
- Pärna, Priidu. 2005. "Legal Reform in Estonia." *International Journal of Legal Information* 33 (2).
- Patena, Wiktor. 2015. "Post-Privatization Corporate Performance in Poland in 2008–2011." *SSRN Electronic Journal* (February 9).
- Pavlovic, L. 2003. "Comment on the Serbian Judiciary." Speech published on the online forum Justice in the Balkans.
- Pesic, Vesna. 2007. "State Capture and Widespread Corruption in Serbia." Center for European Policy Studies (CEPS) Working Document 262, Brussels.
- Piana, Daniela. 2009. "The Power Knock at the Courts' Back Door: Two Waves of Postcommunist Judicial Reforms." *Comparative Political Studies* 42 (6).
- , Philip Langbroek, Tomas Berkmanas, Ole Hammerslev, and Otilia Pacurari. 2013. "Legal Education and Judicial Training in Europe: The Menu for Justice Project Report." Eleven International Publishing.
- Piketty, Thomas. 1995. "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics* 100: 551–84.
- Poghosyan, Arsen, and Tigran Poghosyan. 2010. "Foreign Bank Entry, Bank Efficiency and Market Power in Central and Eastern European Countries." *Economics of Transition* 18 (3): 571–98.
- Polish Justice Ministry. 2017, Press release, July 12.

2. REFORMING THE JUDICIARY: LEARNING FROM THE EXPERIENCE OF CENTRAL, EASTERN, AND SOUTHEASTERN EUROPE

- Pralong, Sandra. 2004. "NGOs and the Development of Civil Society." In *Romania since 1989: Politics, Economics, and Society*, edited by Henry Carey. Lanham: Lexington Books.
- Putnam, Robert. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Radulović, Branko, and Stefan Dragutinović. 2014. "Case Studies of Privatization in Serbia." National Alliance for Local Economic Development, Belgrade. November.
- Rajkovic, Nikolas Milan. 2012. *The Politics of International Law and Compliance. Serbia, Croatia and The Hague Tribunal*. Abingdon, NY: Routledge.
- Ristic, Marija. 2016. "EU Insists on Serbian Cooperation Over War Crimes." *Balkan Transitional Justice*.
- Rodríguez-Ferreira, Octavio. 2013. "Civic Engagement and the Judicial Reform." The Wilson Center, Washington, DC.
- Roland, Gérard. 2004. "Understanding Institutional Change: Fast-moving and Slow-moving Institutions." *Studies of Comparative International Development* 38: 109–32.
- . 2014. *Development Economics*. The Pearson Series in Economics. London: Routledge.
- Roman, Petre. 2002. "Peculiarities of the Transition in Romania." In *Democratic Transition in Romania*. Madrid: FRIDE.
- Romer, David. 2003. "Misconceptions and Political Outcomes." *Economic Journal* 113: 1–20.
- Rossi, Federico M. 2012. "From the Coup to the Escalation of Violence: The Transition to Democracy in Romania." COSMOS Working Paper 2012/13, Center on Social Movement Studies, Florence.
- Sarapuu, Külli. 2012. "Administrative Structure in Times of Changes: The Development of Estonian Ministries and Government Agencies 1990–2010." *International Journal of Public Administration* 35 (12): 808–19.
- Schwartz, Shalom H. 1994. "Beyond Individualism/Collectivism: New Cultural Dimensions of Values." In *Individualism and Collectivism: Theory, Method, and Applications*, edited by Kim Uichol, Harry C. Triandis, Cigdem Kagitcibasi, Sang-Chin Choi, and Gene Yoon. Thousand Oaks, CA: SAGE Publications.
- . 1999. "Cultural Value Differences: Some Implications for Work." *Applied Psychology International Review* 48: 23–47.
- Siani-Davies, Peter. 2005. *The Romanian Revolution of December 1989*. Ithaca and London: Cornell University Press.
- Slay, Ben. 1995. "Industrial Demonopolization and Competition Policy in Poland and Hungary." *Economics of Transition* 3 (4): 479–504.
- Spasić, Ivana. 2008. "Serbia 2000–2008: A Changing Political Culture?" *Balkanologie* 11(1–2).
- Standard and Poor's. 2011. "Sovereign Government Rating Methodology and Assumptions." Ratings Direct. June 30.
- . 2013. "How We Rate Sovereigns." Ratings Direct. November 12.
- State Audit Office of Hungary. 2016. "Summary of the Results of the 2015 Integrity Survey." Budapest.
- Straub, Stéphane. 2000. "Empirical Determinants of Good Institutions: Do We Know Anything?" IDB Working Papers No. 6085, Inter-American Development Bank, Washington, DC.
- Stulz, Rene M., and Rohan Williamson. 2003. "Culture, Openness, and Finance." *Journal of Financial Economics* 70 (3): 313–49.
- Taube, Günther, and Rene Weber. 1999. "On the Fast Track to EU Accession: Macroeconomic Effects and Policy Challenges for Estonia." IMF Working Paper No. 99/156, International Monetary Fund, Washington, DC.
- Thaler, Richard H., and Cass R. Sunstein. 2009. *Nudge*. London: Penguin Books.
- Thomas, Vinod, Yan Wang, and Xibo Fan. 2000. "Measuring Educational Inequality: Education Gini Index from 1960 to 1990." Washington, DC: World Bank.
- Thomsen, Poul. 2017a. "The Role of Governance and Institutions." Speech at the 2017 Conference on Reaccelerating Convergence in Central, Eastern and Southeastern Europe: The Role of Governance and Institutions, Dubrovnik, Croatia. July 11.
- . 2017b. "Central, Eastern, and Southeastern Europe: Harnessing the Power of Good Governance." IMFblog, July 27.
- Tõnnisson, Kristina, and Tiina Randma-Liiv. 2008. "Public Management Reforms: Estonia." In *Public Management Reforms in Central and Eastern Europe*, edited by Geert Bouckaert, Juaj Nemec, Vitalis Nacrosis, Gyorgy Hajnal, and Kristina Tõnnisson. NISPAcee.
- Townsend, Robert. 1979. "Optimal Contracts and Competitive Markets with Costly State Verification." *Journal of Economic Theory* 21: 265–93.
- Trumbull, Gunnar. 2012. *Strength in Numbers: The Political Power of Weak Interests*. Cambridge MA: Harvard University Press.
- Uzelac, Alan. 2003. "Reform of the Judiciary in Croatia and its Limitations (Appointing Presidents of the Courts in the Republic of Croatia and the Outcomes)." In *Institutional*

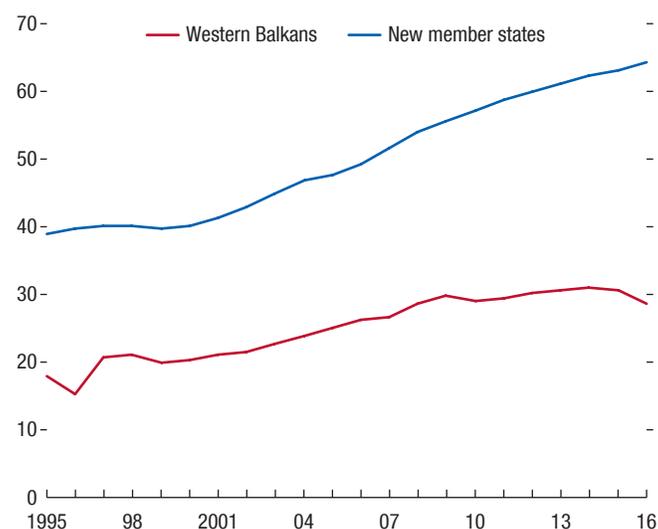
- Framework, Vol. I: Between Authoritarianism and Democracy: Serbia, Montenegro, Croatia.* Belgrade: CEDET.
- Vachudova, Milada Anna. 2006. "Democratization in Post-communist Europe: Illiberal Regimes and the Leverage of International Actors." Center for European Studies Working Paper No. 139. Center for European Studies, Cambridge, MA.
- Valdai Discussion Club. 2014. "The Crisis in Ukraine: Root Causes and Scenarios for the Future." September.
- Vihalemm, Triin, and Anu Masso. 2003. "Identity Dynamics of Russian-speakers of Estonia in the Transition Period." *Journal of Baltic Studies* 34(1): 92–116.
- Weber, Max. 1930. *The Protestant Ethic and the Spirit of Capitalism.* London: Allen and Unwin.
- . 1958. *The Religion of India.* Glencoe: Free Press.
- . 1968. *Economy and Society: An Outline of Interpretive Sociology.* Berkeley and Los Angeles: University of California Press.
- Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting.* New York: Free Press.
- . 2000. "The New Institutional Economics: Taking Stock Looking Ahead." *Journal of Economic Literature* 38: 595–613.
- World Bank. 2017. *World Development Report: Governance and the Law.* Washington, DC: World Bank.
- World Economic Forum (WEF). 2016. *Global Competitiveness Report, 2015–16.* WEF.
- Yemelianova, Anna. 2010. "A Diagnosis of Corruption in Ukraine." European Research Centre for Anti-Corruption and State-Building. Berlin.
- Zingales, Luigi. 2017. "Toward a Political Theory of the Firm." *Journal of Economic Perspectives* 31 (3): 113–30.

3. Banking Challenges in the Western Balkans: Prospects and Challenges

Income convergence in the Western Balkans has stalled at low levels.¹ Measured in purchasing-power-parity (PPP) terms, income levels in the region today are less than 30 percent what they are in the euro area (Figure 3.1). Equally noteworthy, the ratio has not changed since 2008. This is in sharp contrast to the experience of the New Member States of the European Union (EU), where relative incomes have continued to grow strongly since the global financial crisis and are now at nearly two-thirds those of the euro area. There are many reasons for this disappointing performance,² including an unfinished transition, exemplified in some countries by a large swath of inefficient state-owned enterprises; shortcomings in the rule of law and the business environment; limited human capital, exacerbated in some countries by significant emigration of qualified human resources, or “brain drain”; and scant and poor-quality public infrastructure. While acknowledging these issues, this chapter focuses on another important plank for the region’s development: the health of its banking sectors. Implicit is the assumption that, even if reforms in the other areas bring about high-quality bankable projects, their potential, and with it overall economic growth, will not be fully realized if banks are not in a good position to fund them.

In many ways, banks in the region are still reeling from the effects of a boom-and-bust cycle that was as severe as it was in other parts of Eastern Europe. In the precrisis boom years, most countries in the Western Balkans saw foreign parent banks finance

Figure 3.1. GDP per Capita
(Percent of euro area PPP GDP per capita)



Sources: IMF, *World Economic Outlook*; and World Bank, World Development Indicators.

Note: PPP = purchasing power parity.

and fuel a credit boom that boosted growth but also contributed to rising imbalances. When the global financial crisis broke, this foreign funding suddenly stopped, and the boom ended. The result was a pronounced slowdown in GDP growth, a large increase in nonperforming loans (NPLs), and a sharp drop in profitability.

This legacy is constraining credit growth at a time when credit is most needed. In most countries in the region, credit-to-GDP ratios are still below the levels predicted by fundamentals. Boosting credit penetration thus appears necessary to reinvigorate income convergence. Unfortunately, credit growth remains timid, despite a modest improvement in recent years, and the factors holding it back are unlikely to be resolved soon:

- *Insufficient funding:* Eight years after the trough, parent bank funding has at best stabilized, and further contractions cannot be ruled out. Foreign banks see limited

Prepared by a staff team consisting of Ezequiel Cabezon, Dilyana Dimova, Patrick Gitton, Haonan Qu, Alaina Rhee, Ruud Vermeulen, and Jason Weiss, under the supervision of Bas Bakker and Jacques Miniane. Special thanks to Plamen Iossifov for the codes for the credit gap estimation.

¹In this chapter, “Western Balkans” or “Western Balkan countries” refers to Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia. “New Member States” refers to Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

²For more details, see IMF 2015a.

prospects in the region, and many of them are following global trends toward self-funded subsidiaries. In addition, some parent banks of important subsidiaries in the Western Balkans have themselves faced stress in the past, while others remain vulnerable. In addition, restructuring plans by Greek banks submitted as part of the EU-led bailout envisage a significant scaling back of their activities in the Western Balkans, and some Greek banks have in fact started to sell their subsidiaries in the region. Also, global and EU regulatory changes are having significant indirect effects on Western Balkan banking systems via the dominance of foreign subsidiaries. The region's banks have been successful in attracting deposits since the crisis, but it remains to be seen whether in a region of historically low savings deposits alone will suffice to propel credit penetration forward. Meanwhile, fresh capital from non-EU groups has been limited, not least because they see that some countries already have too many banks, limiting the upside.

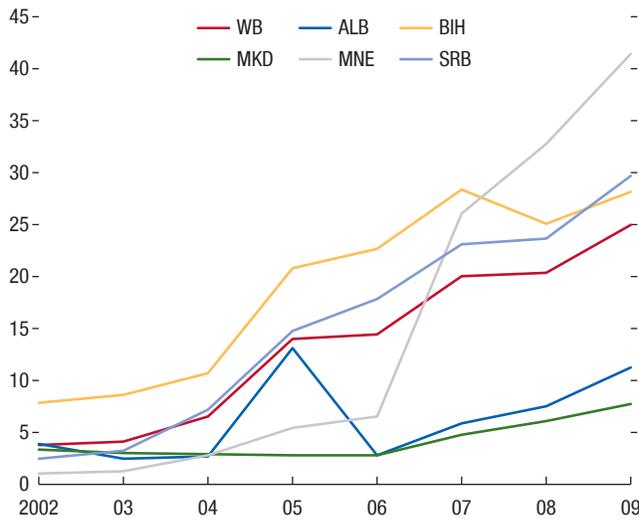
- *High levels of nonperforming loans and impaired profitability:* NPLs are gradually declining, and profitability is increasing. Yet in many countries NPLs are still at levels that are far from healthy. Econometric analysis in this chapter shows that weakened balance sheets are a large, negative damper on credit growth. Further analysis shows that, in the absence of forceful policy action, it will take a long time to repair balance sheets via the ongoing macro recoveries.
- *Structural nonbank factors:* Weak bankruptcy and insolvency regimes in some countries are perpetuating the debt overhang, with knock-on effects on banks. Uncertain property rights mean that a range of assets cannot be easily collateralized, while weak judiciaries make banks wary of lending for fear that debts will not be recovered.

In this setting, policymakers are advised to take a range of policy actions to speed up the healing

of the banking system and mitigate risks. These actions include strengthening balance sheets, expanding funding bases, and tackling nonbank structural obstacles to credit. Specifically:

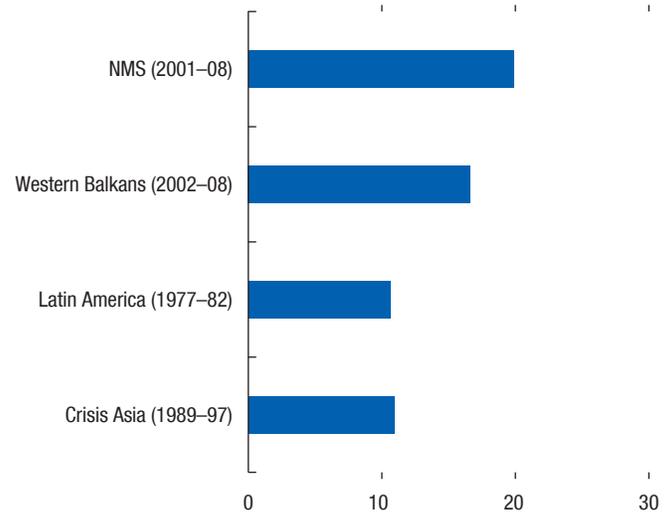
- *Elevated levels of nonperforming loans in most of the Western Balkans require a multipronged policy response.* Comprehensive asset quality reviews, as done in Serbia, would help shed an honest light on both the scale of impaired assets and the adequacy of banks' provisions. These reviews should be followed by a requirement that vulnerable banks draft time-bound remedial action plans that are supervised. Country authorities should also take steps to reduce impediments to NPL write-offs and facilitate more active markets for NPLs and distressed assets.
- *Expanding funding bases is key.* Managing external deleveraging, including potentially disruptive episodes, will be key to maintaining adequate funding bases across the region. As such, the authorities should remain in close communication with parent banks and home supervisors. At a minimum, Western Balkan supervisors should ensure that banks under their authority maintain updated contingency plans for any such event. In parallel, it is paramount to implement policy measures that help diversify bank funding sources and thus reduce dependence on external parent funding. Realistically, though, the development of local capital markets or initiatives that could boost domestic savings will take time to bear fruit. Similarly, enhancing the attractiveness of the region to new banking groups will require that some countries face the fact that they already have too many banks, which deters the upside perceived by foreign groups.
- Addressing weak bankruptcy and insolvency regimes, improving cadastral systems, and speeding up slow court procedures and judgments cannot be sidestepped if the region is to realize the full potential of financial intermediation. This chapter proposes concrete recommendations in this regard.

Figure 3.2. Foreign Banks' Funding to All Sectors, to Peak
(Foreign bank funding per GDP)



Sources: Bank for International Settlements (BIS); International Financial Statistics; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

Figure 3.3. Leveraging Episodes
(Increase in foreign bank funding, all sectors, percent of GDP)



Sources: Bank for International Settlements; International Financial Statistics; and IMF staff estimates.
Note: Western Balkans does not include Kosovo. NMS = new member states.

The Boom and Bust

Much of what ails banks in the region today stems from the boom-and-bust cycle of the past 15 years. Understanding the cycle as it affected the region's banks is thus key to evaluating future prospects.

While much has been written about the boom and bust in the New Member States of the European Union (Bakker and Gulde 2010, Bakker and Klingens 2012), much less has been said about the equally sharp cycle that gripped Western Balkan banking sectors.³ During the precrisis boom years, external bank funding across the Western Balkans rose by more than 500 percent or by 20 percentage points of GDP (Figure 3.2). This regional picture masks important variations across countries: Montenegro experienced a larger increase than the others (by 40 percent of GDP, one of the largest in the world), followed by Serbia and Bosnia and Herzegovina. At the other end, the ramp-up in funding was less noticeable in Albania and Macedonia. When measured in percent of GDP, the rise in external funding prior to the crisis was

³An important exception is IMF 2015a.

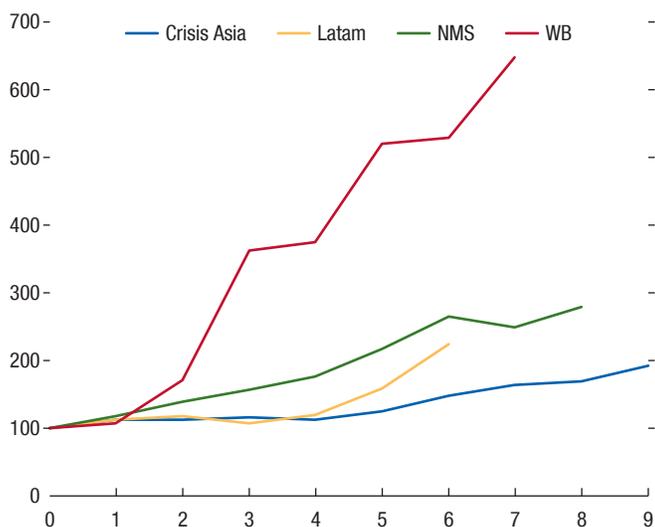
comparable to that in the New Member States and double that in Asia and Latin America before their famous banking crises (Figure 3.3). In percentage terms, the increase in funding was much higher in the Western Balkans than in other regions, owing to the low starting base.

The rise in external funding reflected both push and pull factors. On the supply side, much of the banking system in Southeastern Europe was foreign owned (Figure 3.4), and for the parent banks, banking in the Western Balkans was very profitable. In the region, foreign banks accounted for between 70 and 95 percent of banking sector assets before the crisis. In turn, the foreign presence was and remains dominated by EU banks, which before the crisis accounted for about 90 percent of total foreign banks by assets.⁴ On the demand side, credit penetration in the region was low, and pent-up demand high.

The large expansion of funding led to a big jump in credit penetration. Across the region, credit-to-GDP ratios increased by an average of

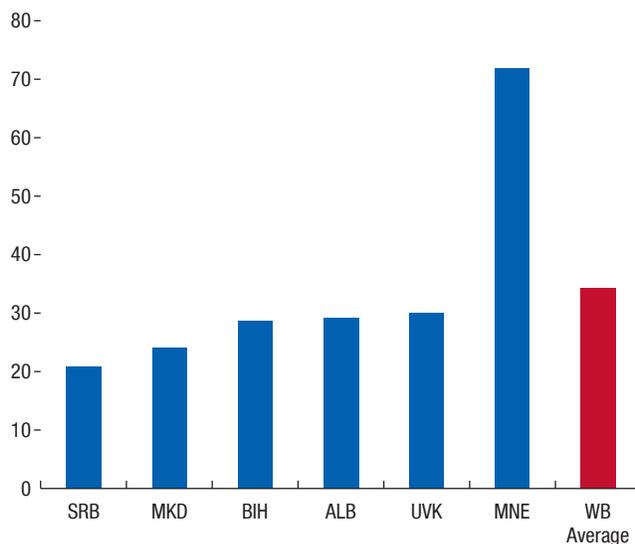
⁴As discussed below, this picture has changed slightly with the entry of non-EU groups in recent years.

Figure 3.4. Foreign Bank Funding, Lead-up to Peak
(100 = funding/GDP at previous trough $t = 0$)



Sources: Bank for International Settlements; International Financial Statistics; and IMF staff estimates.
Note: Latam = Latin America; NMS = EU new member states; WB = Western Balkans.

Figure 3.5. Western Balkans Private Credit to GDP
(Change over 2001–08)



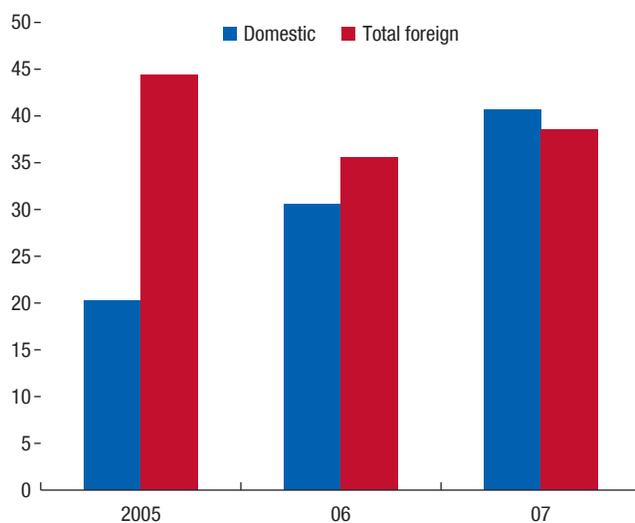
Sources: International Financial Statistics; Monetary and Financial Statistics; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. WB = Western Balkans.

30 percentage points of GDP in the 2000s up to the crisis, ranging from 20 percentage points in Serbia to 70 percentage points in Montenegro, one of the largest jumps in the world (Figure 3.5). Consistent with the push from parent funding, foreign banks increased credit faster than domestic banks (Figure 3.6). Adding to financial stability concerns, a large proportion of credit was in foreign currency (IMF 2016). In flow terms, this credit expansion benefited households most, although on a stock basis corporate loans still dominated banks' books (Figure 3.7).

The credit boom contributed to rapid growth (Figure 3.8), but also led to rising imbalances. Between 2003 and 2008, current account deficits increased most sharply in Montenegro and Serbia, followed by Albania and Macedonia (Figure 3.9). By 2008, the current account deficit in all Western Balkan countries was in double digits.

As in other regions, the onset of the global financial crisis brought about a reversal in external funding, though less severe than elsewhere. The decline in external funding averaged about 8 percentage points of GDP across the

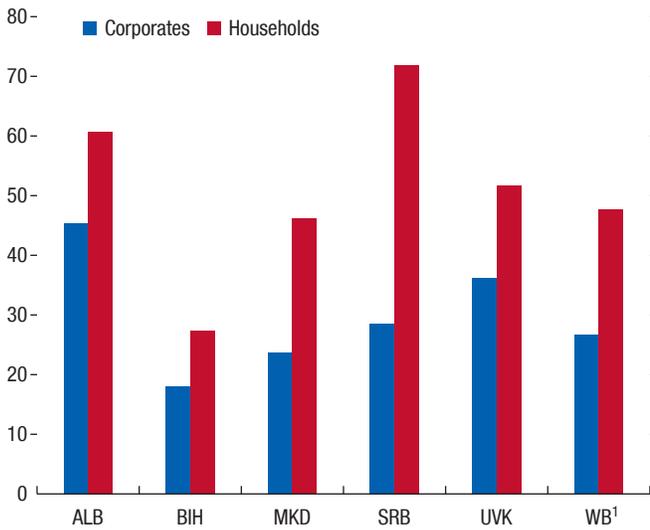
Figure 3.6. Western Balkans: Bank Credit Growth by Ownership
(Percent)



Sources: Bankscope, Monetary and Financial Statistics; and IMF staff estimates.

region, ranging from almost no change or even a slight increase in Albania and Macedonia to a 20 percentage point of GDP decline in Montenegro (Figure 3.10). Still, the deleveraging itself was significantly less sharp than in the New

Figure 3.7. Credit Growth by Sector
(Average annual year over year, 2004–08, percent)

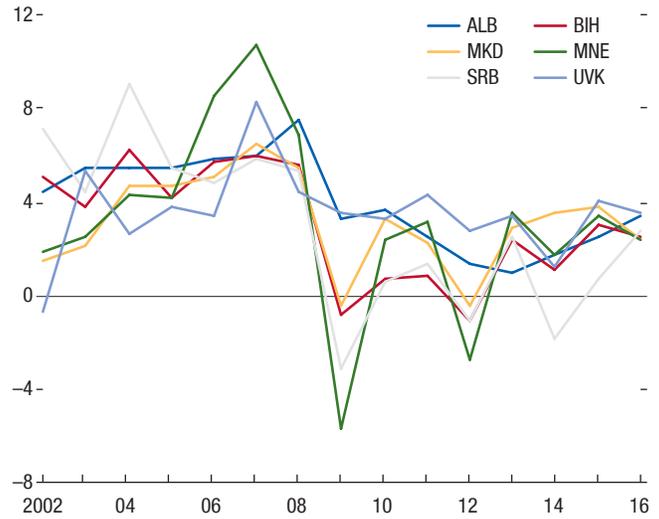


Sources: Monetary and Financial Statistics; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. WB = Western Balkans.
¹Excluding Montenegro.

Member States during the same period. It was also less severe than in Asia and Latin America during their respective crises (Figure 3.11). This is partly because banks in the region were not particularly highly leveraged despite the sharp run-up in credit, because the starting level was low. For instance, loan-to-deposit ratios were below 100 percent in all countries but Montenegro (and in the case of Albania and Kosovo, well below). Montenegro had a loan-to-deposit ratio of 147 percent in 2008, comparable to such ratios in the Baltics, and consequently suffered the largest external deleveraging.

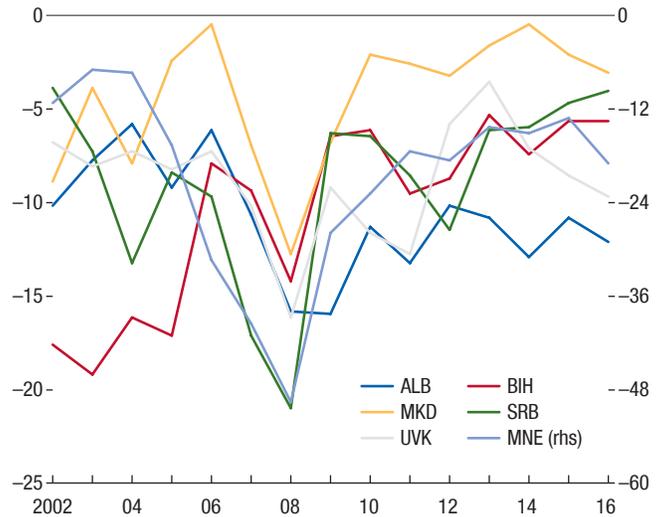
The sudden stop in external funding, the increase in global uncertainty, and lower external demand led to a sharp decline in growth, which fell by an average of 4½ percentage points in the aftermath of the crisis. With credit hit both from the funding (supply) side as well as from lower demand, credit growth went from about 30 percent before the crisis to about zero after, closely mirroring developments in the New Member States (Figure 3.12). Not surprisingly, the country with the biggest run-up during the leveraging episode

Figure 3.8. Real GDP Growth
(Percent)



Sources: IMF, *World Economic Outlook*, and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

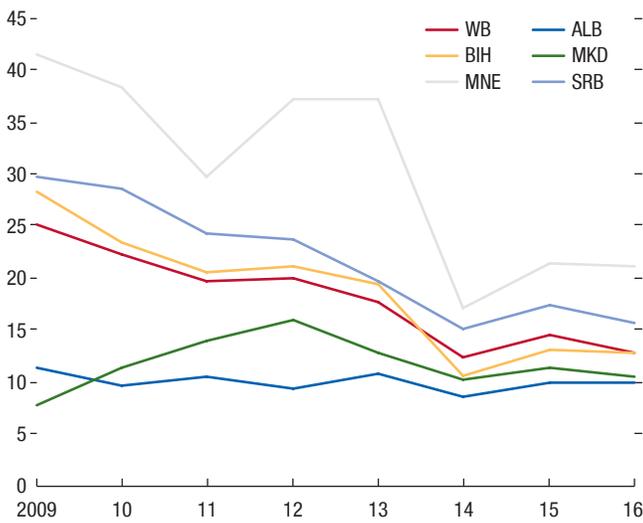
Figure 3.9. Current Account
(Percent of GDP)



Sources: IMF, *World Economic Outlook*, and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

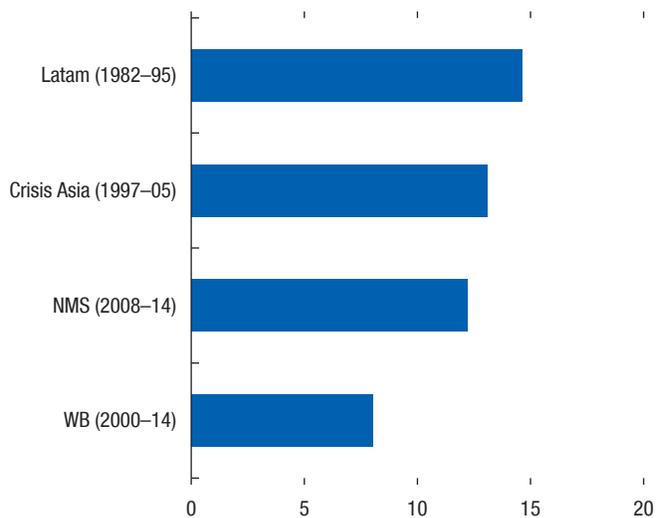
(Montenegro) suffered the largest crash in terms of credit (and GDP) growth (Figure 3.13). But credit growth fell by more than 15 percentage points in every country in the region, with EU-owned banks experiencing the sharpest falls, as expected (Figure 3.14). And just as household credit

Figure 3.10. Foreign Banks' Funding to all Sectors, Postcrisis
(Percent of GDP)



Sources: Bank for International Settlements; International Financial Statistics; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. WB = Western Balkans.

Figure 3.11. Deleveraging Episodes
(Drop in foreign bank funding, all sectors, percentage points of GDP)



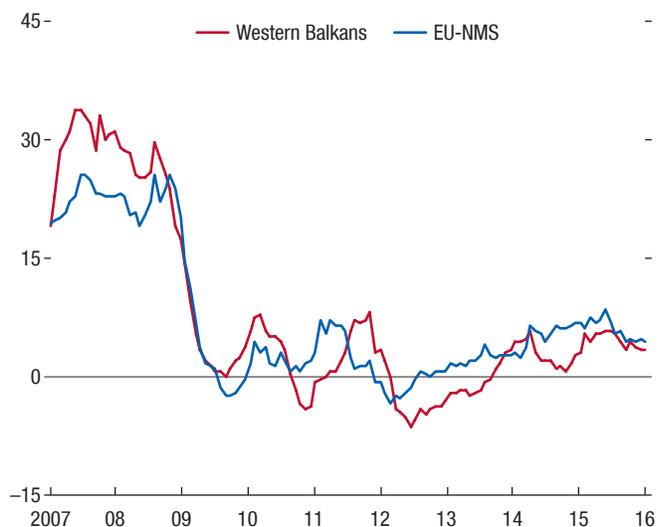
Sources: Bank for International Settlements; Central Bank of Kosovo; International Financial Statistics; and IMF staff estimates.
Note: Latam = Latin America; NMS = new member states; WB = Western Balkans.

outpaced credit to firms during the boom, it also suffered the biggest slowdown.⁵ Credit growth has since picked up a bit from its trough, but it remains well below precrisis levels.

The feedback loops between the financial sector and the overall economy crystallized in a sharp increase in NPLs and a decline in profitability that are both still hurting banks today. This was notably true in Montenegro and Serbia, which suffered the two largest growth slowdowns in the region, but also in Albania. Given the extent of the growth and credit slowdown in Montenegro, it is perhaps surprising that NPLs did not increase more there, but this could reflect the extent to which they were moved off balance sheets (Figure 3.15). Going by NPL data, the greatest distress was found in the corporate (often real estate) rather than the household sector. Corporate NPLs were higher not just because corporate loans represented a higher share of the total, but also because the NPL ratio within the corporate loan book was typically twice as high as for household loans, except in Kosovo. In the face of such NPLs

⁵In terms of levels, however, household credit continues to outpace corporate credit.

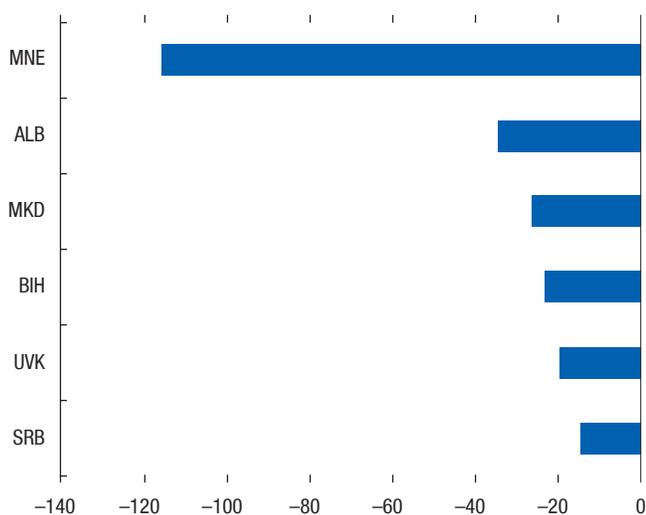
Figure 3.12. Real Credit to the Domestic Private Sector
(Percent change; seasonally adjusted smoothed growth rate against average of previous 12 months^{1,2})



Sources: Haver Analytics; International Financial Statistics; and IMF staff estimates.
Note: NMS = new member states.
¹Regional average based on weighted stocks of credit measured in euros.
²Smoothed growth rates measure the growth against previous 12-month average.

Figure 3.13. Decline in Real Credit Growth to the Domestic Private Sector, 2007–08 to 2010–11

(Percentage points; seasonally adjusted smoothed growth rate against average of previous 12 months¹)



Sources: Haver Analytics; International Financial Statistics; and IMF staff estimates.

Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

¹Smoothed growth rates measure the growth against previous 12-months average.

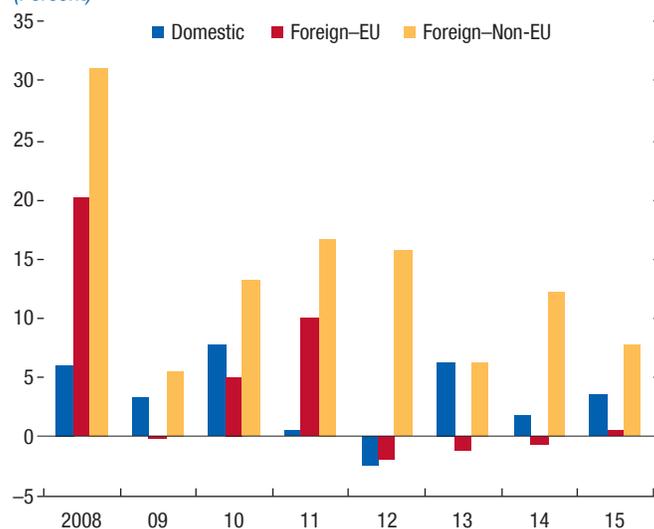
and mounting loan loss provisions, return on equity fell between 10 and 35 percentage points after the crisis (Figure 3.16). This occurred despite concerns that NPL provisioning rates overstate actual loan loss coverage because of optimistic collateral valuations (Box 3.1).

On balance, strong foreign ownership has served the region well but lessons need to be learned. Foreign banks were key to introducing modern banking practices to the region, as well as improving governance in the sector and access to credit.⁶ Nevertheless, the lessons from heavy reliance on foreign funding should not be forgotten. In good times these flows can amplify credit booms to unsustainable levels, and they are difficult for policymakers to control. In times of tight global liquidity, reliance on foreign funding exacerbates the retraction of credit supply, again

⁶High foreign ownership is largely a legacy of economic transition, during which banks were privatized so that strategic foreign investors could quickly introduce modern banking practices and secure financial stability.

Figure 3.14. Western Balkans: Bank Credit Growth by Ownership

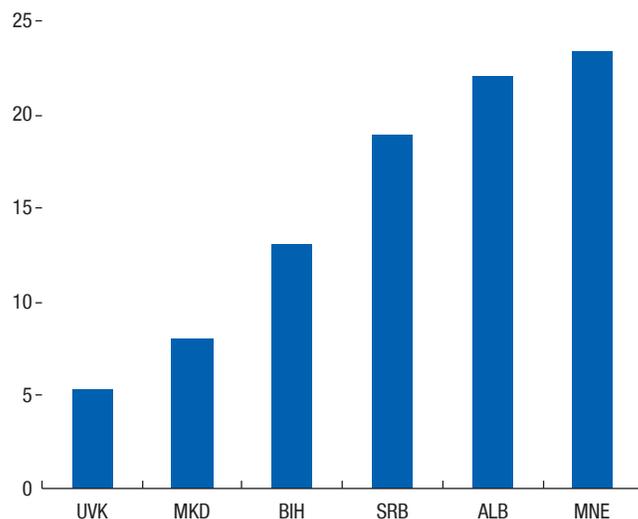
(Percent)



Sources: Bankscope; Monetary and Financial Statistics; and IMF staff estimations.

Figure 3.15. Nonperforming Loans: Trough-to-Peak Change

(Percentage points)



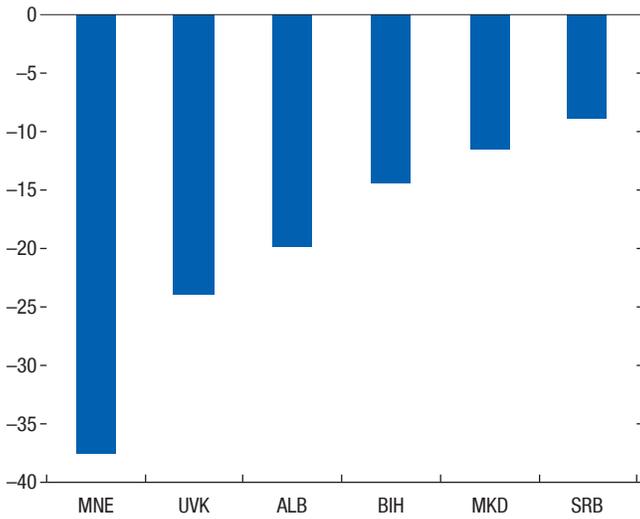
Sources: Country authorities; IMF, Financial Soundness Indicators; and IMF staff estimates.

Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

with little scope for domestic policymakers to counteract.

In short, Western Balkan banking systems endured a similar (though much less talked about) boom and bust as other banking systems in Eastern

Figure 3.16. Return on Equity: 2007-to-Trough Change
(Percentage points)



Sources: Country authorities; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

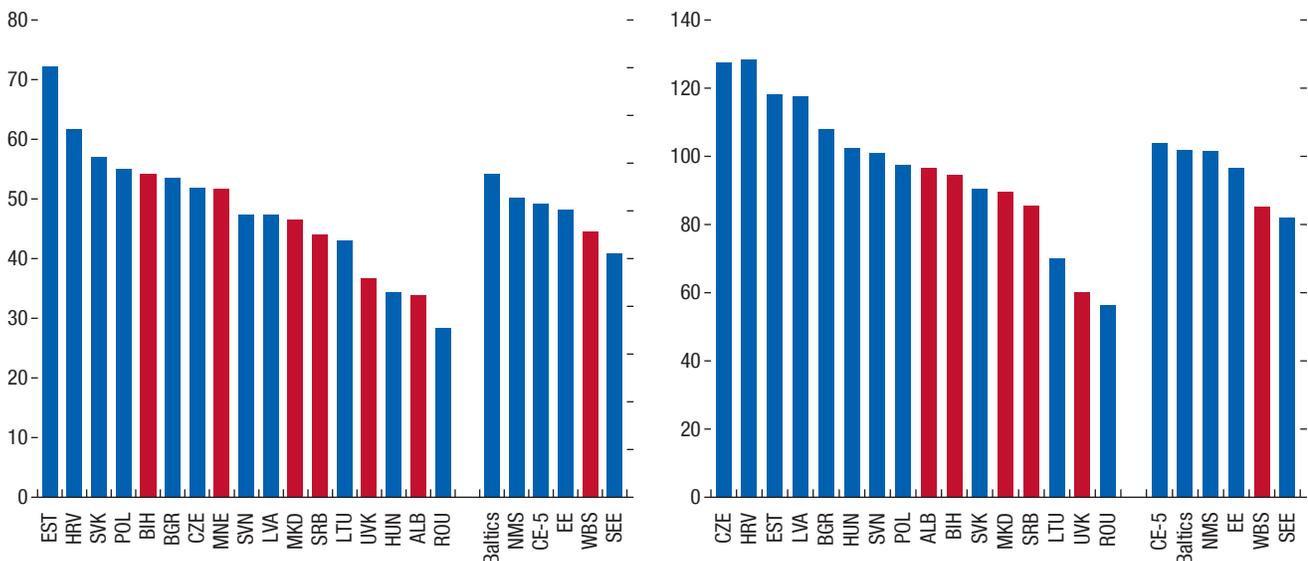
Europe. Despite some intraregional variation, the overall picture that emerges is of banking systems still reeling under high NPL levels, low profitability, and weak credit. Can banks in the region escape this cycle and contribute to sustained economic growth?

Looking Ahead

Are Current Levels of Credit Intermediation Sufficient?

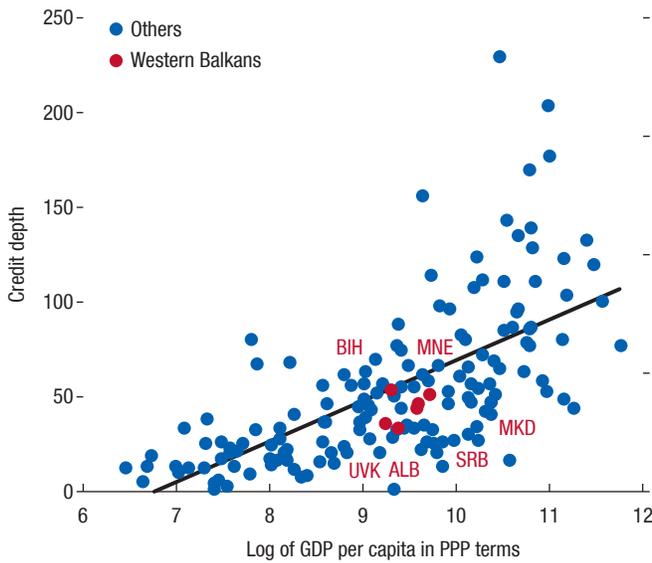
Compared with other countries of Central and Eastern Europe, financial intermediation levels in the Western Balkans are relatively low. The average credit-to-GDP ratio in the Western Balkans (45 percent) is below the average for Eastern Europe and below that for all Eastern European regions except Southeastern Europe (Figure 3.17). The contrast with other regions is even more pronounced in the bank-assets-to-GDP ratio, because nonlending activities of banks in the Western Balkans are largely limited to holding cash and government securities.

Figure 3.17. Emerging Europe: Financial Depth
(Bank credit to the private sector (lhs) and bank assets (rhs), percent of GDP, 2016)



Sources: International Financial Statistics; World Bank, Global Financial Development database; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. lhs = left-hand side; rhs = right-hand side.

Figure 3.18. GDP per Capita and Credit Depth in 2016
(Bank credit to the private sector, percent of GDP¹)

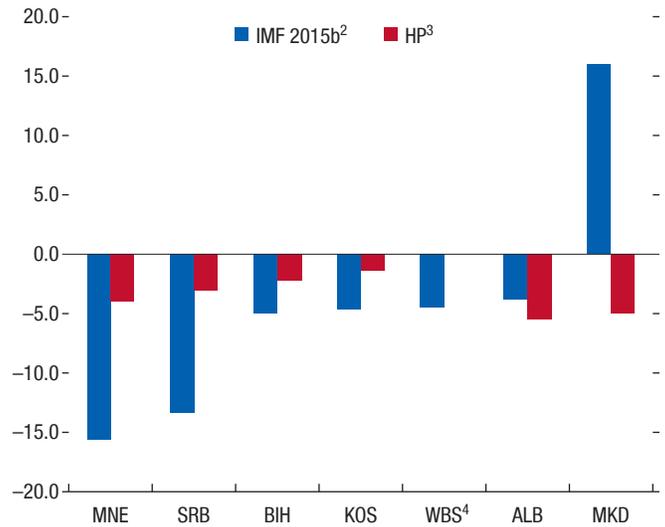


Sources: International Financial Statistics; *World Economic Outlook*; and IMF staff estimates.
 Note: PPP = purchasing power parity. Country abbreviations are International Organization for Standardization (ISO) country codes.
¹The sample includes all countries for which data are available.

Low financial intermediation reflects in part low incomes in the region, but credit to GDP still seems to fall short after adjusting for income and other fundamentals (Figure 3.18). Poorer countries tend to have low credit-to-GDP ratios. Once this is taken into account, financial intermediation levels in the Western Balkans no longer stand out dramatically. Nevertheless, they are all lower than can be explained by income alone, notably in Albania and to a lesser extent in Kosovo, Macedonia, and Serbia. More systematic analysis—panel regressions based on the May 2015 *Regional Economic Issues: Central, Eastern, and Southeastern Europe* that account for income, interest rate levels, and country-specific effects—appears to confirm that credit-to-GDP ratios are below levels predicted by these fundamentals except in Macedonia.⁷ While the gaps are

⁷See Annex 3.1 for details. It should be noted that the May 2015 *Regional Economic Issues: Central, Eastern, and Southeastern Europe* is not the only model to estimate the level of fundamentals-consistent credit. We settled on this model because it is relatively parsimonious in terms of data requirements, an advantage in this region. It should be noted, though, that other models could have found different

Figure 3.19. Estimated Credit Gaps in 2016
(Actual minus fundamentals-consistent level of private credit in percent of GDP)



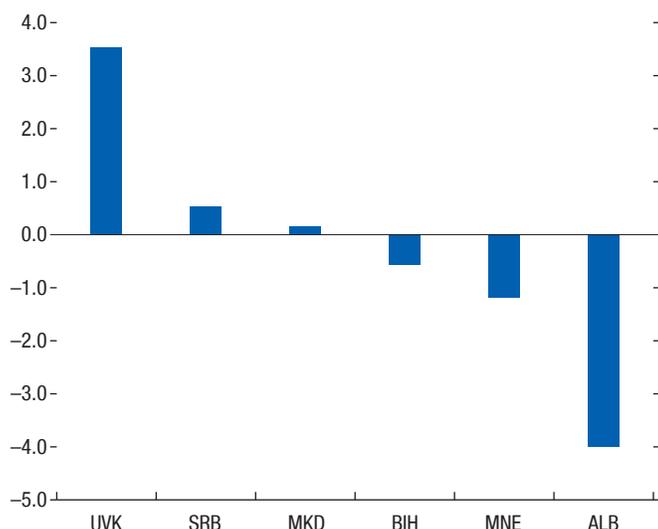
Sources: IMF staff estimates using *World Economic Outlook*; International Financial Statistics; Bank for International Settlements; World Bank, World Development Indicators and other data; and World Bank FinStats.
¹The fundamentals-consistent or long-run level of private sector credit is estimated for 34 European countries based on a reduced form relationship between per capita private credit and its key demand and supply determinants over 1995–2016 (see IMF 2015b). Private credit includes domestic bank and nonresident credit.
²Calculated as actual minus the Hodrick–Prescott (HP) filter of domestic bank credit to the private sector.
³Simple averages.

small in Albania, Bosnia and Herzegovina, and Kosovo, they are close to 15 percentage points of GDP in Montenegro and Serbia (Figure 3.19). Similarly, comparing the bank-credit-to-GDP ratio with its long-term trend (here proxied by its Hodrick–Prescott filter)⁸ also shows small but consistently negative gaps (that is, actual falling short of the trend). The story is consistent across countries: credit-to-GDP ratios were below their fundamental values in the early 2000s; rapid gains during the boom put them above their fundamental values; and the declines during the boost have brought them back down below those values.

credit gap levels, perhaps even a different sign. Moreover, there is estimation uncertainty within a single model.

⁸This can be considered the credit equivalent of the output gap.

Figure 3.20. Credit to GDP, Change from Trough to 2016
(Percentage points)



Sources: Monetary and Financial Statistics; and IMF staff estimates.
Note: Change from 2012 for countries with no trough. Country abbreviations are International Organization for Standardization (ISO) country codes.

Can Credit Intermediation Be Bolstered Going Forward?

Despite the need to bolster financial penetration, the credit recovery remains timid, with credit-to-GDP ratios moving sideways or contracting (Figure 3.20). Relative to the end of 2013 (close to the trough for most countries), credit growth increased by about 3 percentage points on average across the region. However, this masks significant cross-country variation. While credit growth fell over this period in Albania and stayed flat in Macedonia, it improved by more than 5 percentage points in Kosovo and 10 percentage points in Montenegro (though from a very low base). Notably, credit is clearly outpacing nominal GDP in Kosovo; in other countries, the credit-to-GDP ratio moved sideways (Macedonia and Serbia) or contracted, notably in Albania. Understanding the reasons for this weak credit performance is key to understanding prospects going forward.

Figure 3.21. External Bank Claims on Western Balkans¹
(Percent of GDP, all sectors)



Sources: Bank for International Settlements; IMF, International Financial Statistics; and IMF staff estimates.

¹Does not include Kosovo. 2016 uses GDP projections.

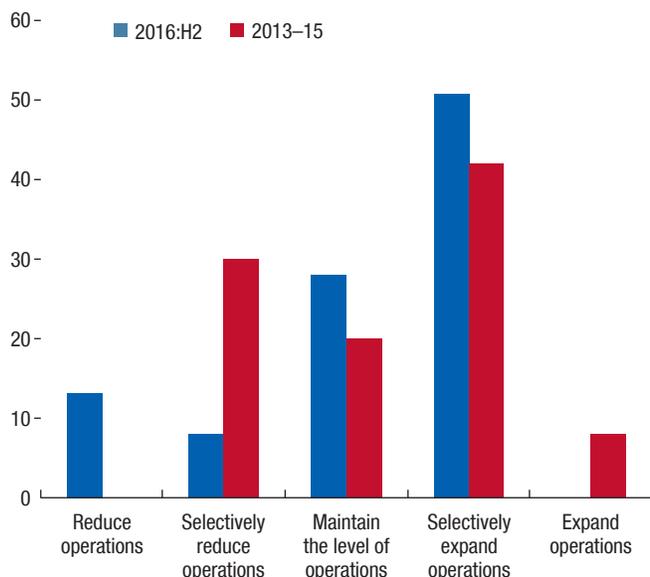
Weak Funding

Funding constraints appear to be a key reason for continued modest credit growth. In particular, parent bank funding has not returned to the region's banks following the sharp deleveraging.⁹ After a modest recovery in 2015, parent funding fell again slightly last year and remains more than 10 percentage points of GDP below its peak (Figure 3.21). Moreover, prospects for a turnaround in parent funding do not seem particularly promising, and there is a possibility that foreign funding will continue to contract. There are various factors supporting this stance (Figure 3.22):

- *Foreign banks see limited prospects in the region.* This phenomenon is, at some level, a vicious circle. Limited prospects are influenced by current modest profitability, which in turn influences funding decisions, which limit opportunities and profits. In the latest European Investment Bank survey, no

⁹In this context, it is worth noting that the largest three foreign banks in the Western Balkan countries account on average for almost half of the market share in the region. In contrast, they account for less than 6 percent of the assets of their parent groups on average.

Figure 3.22. Group-Level Response of Long-Term Strategies in CESEE (Percent)



Source: European Investment Bank: Central, Eastern, and Southeastern Europe Bank Lending Survey.

Note: H2 = second half of the year.

foreign banking group said it plans to expand operations in the region, slightly more than half said they will only selectively expand operations, and the rest said they will either maintain or reduce operations.

- *Parent bank stress.* Some parent banks of key subsidiaries in the Western Balkans have themselves faced stress in the past, and others remain vulnerable. This stress has impinged on the region's banking systems, either via pressure to consolidate capital at the parent level or in some cases via outright deposit outflows in the subsidiaries themselves when depositors lost confidence in the group (Box 3.2). In addition, the restructuring plans submitted by Greek banks as part of the EU-led bailout foresee significant scaling back of activities in the Western Balkans. Greek banks have in fact started to sell their subsidiaries in the region.¹⁰

¹⁰This would of course be positive going forward if the subsidiaries are sold to banking groups on a more solid footing.

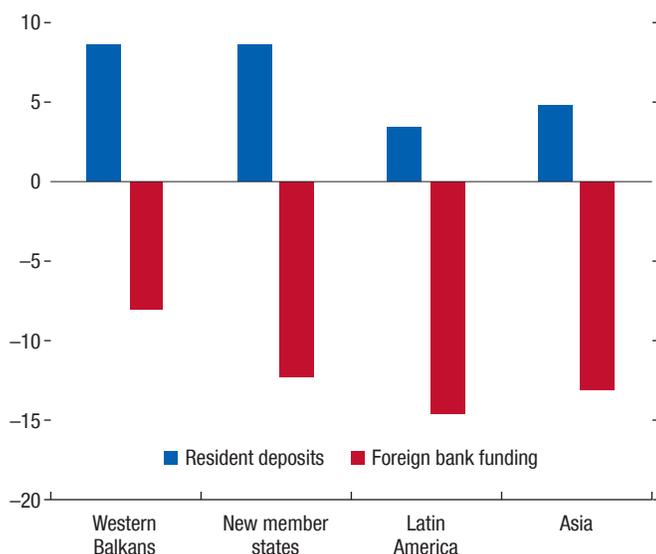
- *Global regulatory changes.* In addition to stress at specific banks, global and EU regulatory changes are having significant indirect effects on Western Balkan banking systems via the dominance of foreign subsidiaries (Annex 3.2). To give but one example, as of January 2018 risk weights on government bond exposures in non-EU countries will be gradually adjusted (the risk weights are currently at zero), even when funding is in local currency. This is a particular worry in Southeastern Europe, where banks are significant buyers of government securities.

Western Balkan banks were able to mitigate the decline in foreign funding via deposit growth. Resident deposits increased by close to 8 percentage points of GDP between the peak and trough of parent funding (2014),¹¹ making up for the decline in external funding (Figure 3.23). Bosnia, where deposit growth was disappointing, has been an exception. In contrast, the New Member States saw a similar increase in deposits but a sharper decline in parent funding postcrisis, for a net loss. In comparison, Latin America and Asia did much worse after their crises, with a significantly sharper decline in external funding barely mitigated by deposit growth. Deposit growth in the Western Balkans held up in part because the region's economies suffered comparatively less during the global financial crisis than other economies in Europe.

However, deposit growth is unlikely to be enough on its own to fund a meaningful expansion in credit in the medium to long term. Assuming deposits continue to grow in line with recent trends and that this deposit growth funds an expansion in credit, credit-to-GDP ratios would rise more than 10 percentage points over the next 10 years in Montenegro and Serbia—between 5 and 10 percentage points in Kosovo and Macedonia. But they would contract

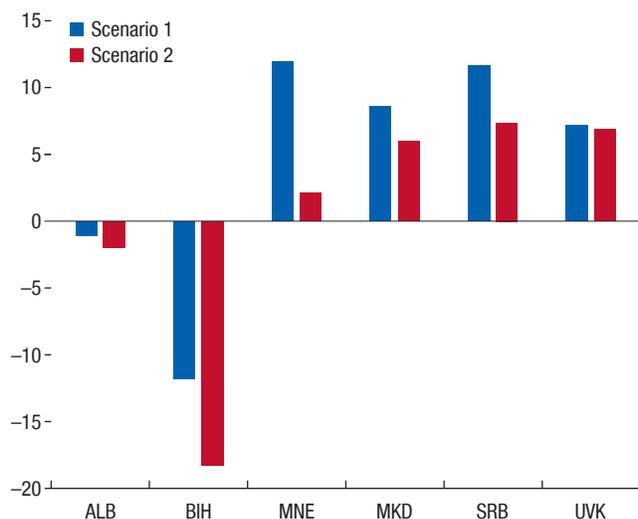
¹¹However, as mentioned previously, parent bank funding did not stop falling in 2014 (and in fact declined in 2016 as well). The increase in parent bank funding in 2015 means that, strictly speaking, the trough was recorded in 2014. The level at the end of 2017, however, could be below what it was in 2014.

Figure 3.23. Change from Peak to Trough
(Percent of GDP)



Sources: Bank for International Settlements; International Financial Statistics; Monetary and Financial Statistics; World Bank; Central Bank of Kosovo; Central Bank of Montenegro; and IMF staff estimates.
Note: Regional weighted average for deposits; aggregate for foreign funding. Residential deposits not available for Latin America and Asia. Deposit data in real terms for Latin America and Asia.

Figure 3.24. Change in Credit to GDP, 2016–26
(Percentage points)

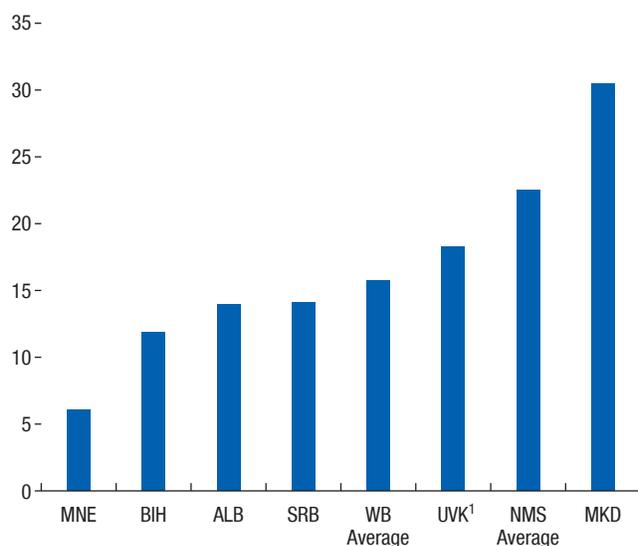


Sources: Monetary and Financial Statistics; International Financial Statistics; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.
Scenario 1: 2026 credit projected by applying 2010–16 average annual deposit growth to 2016 credit level.
Scenario 2: Scenario 1 minus potential deleveraging. For each country, half of the postcrisis decline in foreign funding to banks is subtracted from 2026 credit level.

significantly in Bosnia, and stay about flat in Albania (Figure 3.24). And these projections assume no further external deleveraging. If foreign funding contracts by half of the decline to date, credit-to-GDP ratios can be expected to fall dramatically in Bosnia, stay about flat in Albania and Montenegro, and grow by only 5 percentage points in Kosovo, Macedonia, and Serbia.¹² This is in part because the region’s low saving levels limit the medium-term upside for deposit deepening (Figure 3.25). In four of the six Western Balkan countries under study saving rates are below 15 percent of GDP. And the region’s average is more than 5 percentage points of GDP lower than in the New Member States.

Fresh capital could be provided by new foreign groups, but their interest in the region has been modest to date. Among a number of mergers and

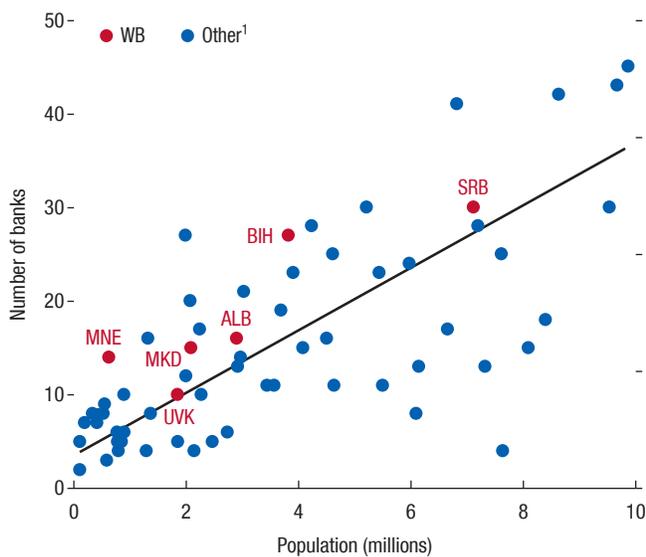
Figure 3.25. Gross National Savings, 2016
(Percent of GDP)



Sources: World Economic Outlook; and World Bank World Development Indicators.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. NMS = EU new member states; WB = Western Balkans.
¹2015 for Kosovo.

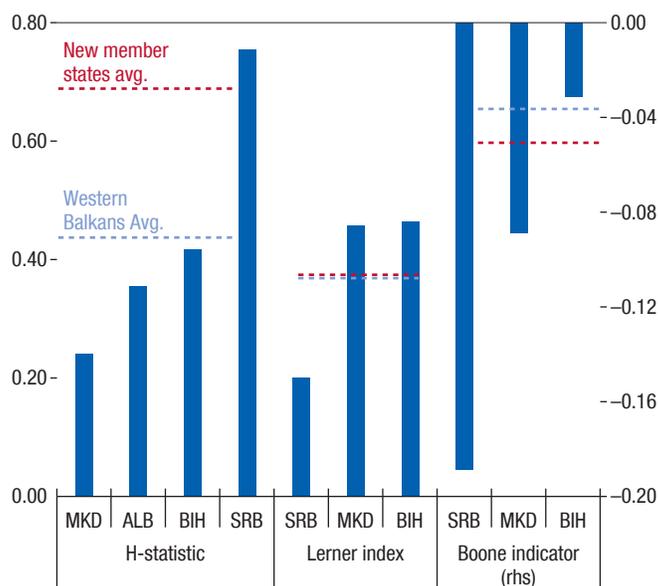
¹²It is true that loan-to-deposit ratios in the region are below 100 percent—sometimes significantly, as in Albania—potentially creating space to fund credit. Against this backdrop, it should be noted that banks in the region are significant purchasers of government securities.

Figure 3.26 Overbanking in the Western Balkans
(Population against number of banks in 2015)



Sources: IMF, Financial Access Survey; World Bank, FinStats; IMF, *World Economic Outlook*; and national central bank data.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes. WB = Western Balkans.
¹All other countries with a population below 10 million for which data are available (51 total), excluding other financial corporations. Not plotted are DNK and SWE.

Figure 3.27. More Indicators of Overbanking¹



Sources: World Bank; and IMF staff estimates.
Note: No data available for some Western Balkan countries.
¹For the H-statistic, a higher value indicates more competition. For the Lerner index and Boone indicator a lower value indicates more competition.

acquisitions during postcrisis restructuring in the region, some involved non-Western European groups (US-based and Turkish companies), filling the void left by the Western European groups (Table 3.1). New entrants to the market from abroad were rare during the period, although Kosovo attracted investors from Slovenia and Turkey, reflecting better market conditions and higher potential relative to its peers. Investors from the United Arab Emirates opened a bank in Serbia that started operations in 2015.

Why has interest from new investors been limited? Certainly, factors similar to those deterring

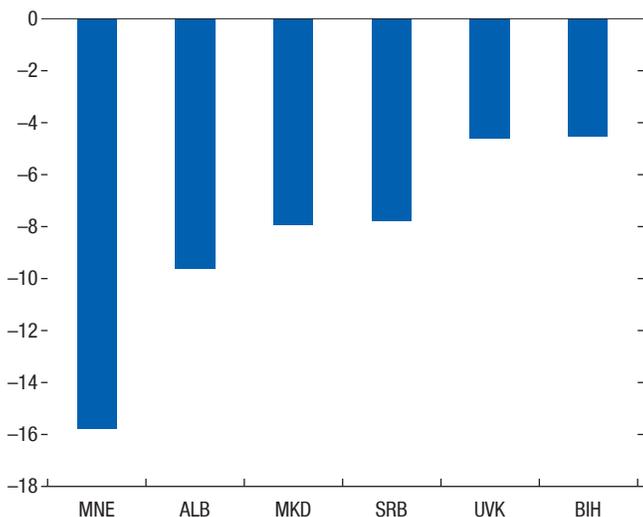
existing foreign groups are at play: low cyclical profitability, perceptions of limited growth prospects, and structurally low saving rates. In addition, new entrants have to face the fact that, in some countries in the region, there may already be too many banks (Figure 3.26). When looking across a large sample of similar-scale countries at the relationship between population and number of banks, all countries in the region lie at or above the predicted (sample average) value. Bosnia and Herzegovina and Montenegro stand out in this regard, but Albania, Macedonia, and Serbia are not exempt. Only Kosovo seems to have an average number of banks relative

Table 3.1. Major Bank Ownership Transactions (2009–17)

	Within the European Union	With the United States	With Turkey	New Foreign Entrants	Other
ALB	1	1	0	0	0
BIH	1	1	0	0	1
MKD	3	0	2	0	0
MNE	0	1	0	0	1
SRB	4	1	1	1	3
UVK	0	0	0	3	0

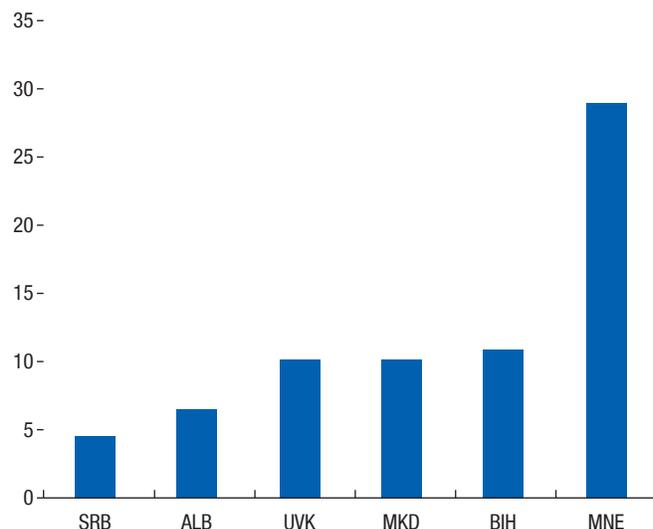
Sources: Bankscope; country authorities; and Fitch.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

Figure 3.28. Nonperforming Loans: Peak-to-Latest Change
(Percentage points)



Sources: Country authorities; Financial Soundness Indicators; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

Figure 3.29. Return on Equity: Trough-to-2016 Change
(Percentage points)



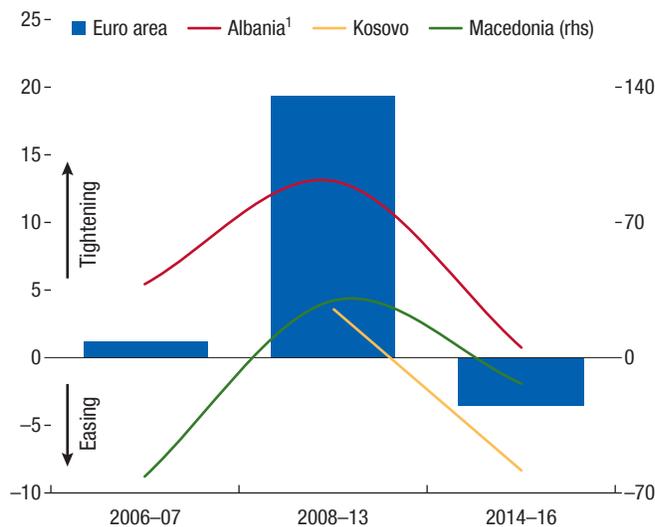
Sources: Country authorities; and IMF staff estimates.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

to its population. Other indicators such as the H-statistic, Lerner index, and Boone indicator also suggest that bank competition is particularly fierce in Serbia (Figure 3.27). While healthy bank competition may benefit consumers and the country, too much competition in the presence of imperfect regulation could lead to risk-taking above the social optimum, and would likely deter potential entrants.

Impaired Balance Sheets

Balance sheets have improved in the region in recent years as the economy has recovered from the postcrisis slump. GDP and domestic demand have bounced back from the trough in line with the global economy and domestic policy efforts. Various countries in the region are now growing north of 3 percent, better than before but below what would be desirable from an income convergence perspective (and well below precrisis levels in most countries). The economic recovery has brought NPL ratios down (Figure 3.28) and increased bank profitability (Figure 3.29), and bank lending standards have eased with improved confidence in economies and in the banks themselves (Figure 3.30).

Figure 3.30. Lending Standards Applied to Corporate Loans
(Percent, net balance; positive values = tightening of lending standards)



Sources: Country authorities; European Central Bank; and IMF staff estimates.
Note: rhs = right-hand side.
¹Albania data start in the first half of 2007.

However, asset impairment is still above precrisis levels, and weak balance sheets remain an important drag on credit growth (ECB 2015). The decline (increase) in NPLs (profitability) shown above, while welcome, falls far short of fully repairing the damage brought about by the

Table 3.2. GDP Growth Needed to Bring Nonperforming Loan Ratios to 2007 Levels¹
(Percent)

	NPL Ratio		Actual (2016)	GDP Growth	
	2007	2016		Needed (three year) ²	Needed (five year) ²
Albania	3.4	18.3	3.4	7.1	4.2
Bosnia and Herzegovina	3.0	11.8	2.5	4.2	2.5
Kosovo	4.1	4.9	3.6	0.8	0.5
Macedonia	7.5	6.3	2.4	...	...
Montenegro	3.2	11.1	2.4	3.8	2.3
Serbia	8.4	17.0	2.8	4.1	2.5

Source: IMF staff estimates.

Note: NPL = nonperforming loan.

¹Assuming no new NPL formation on top of the existing stock.²GDP growth needed to bring the existing NPL stock back to 2007 levels in a period of three (five) years.

crisis. Econometric analysis using bank-by-bank data that disaggregate credit developments into demand factors (proxied by GDP) and supply factors (NPL ratio, provisioning ratio, liquidity ratio, loan-to-deposit ratio, equity to net loans, and return on equity)¹³ shows that supply factors explain about half of the postcrisis credit slowdown (Figure 3.31).¹⁴ Perhaps more relevant, as recently as 2016, credit supply factors still explained about 40 percent of the difference in credit growth relative to the precrisis period, despite recent improvements in balance sheets. Put another way, if NPLs, profitability, and other bank-specific factors were back at precrisis levels, credit growth today would be about 10 percentage points higher even at current levels of aggregate and credit demand. These results are quite consistent across all countries in the region. And, not surprisingly, weak balance sheets have been and remain a bigger drag on credit in EU-owned banks that experienced a greater boom and bust. At the same time, the model result that weak demand explains about half of the credit slowdown should not be overlooked. After all, GDP growth remains well below precrisis (unsustainable) levels despite the recent recovery, and many borrowers remain trapped in a debt overhang, not least because of inefficient restructuring and insolvency frameworks, slow courts, and other issues, as discussed below.

¹³See Annex 3.1 for details.¹⁴Note that in the econometric model we count NPLs as a supply constraint to credit, when in fact NPLs are also a sign of distressed borrowers and hence could be a demand constraint as well. Adjusting for this in the model does not materially change the key results.

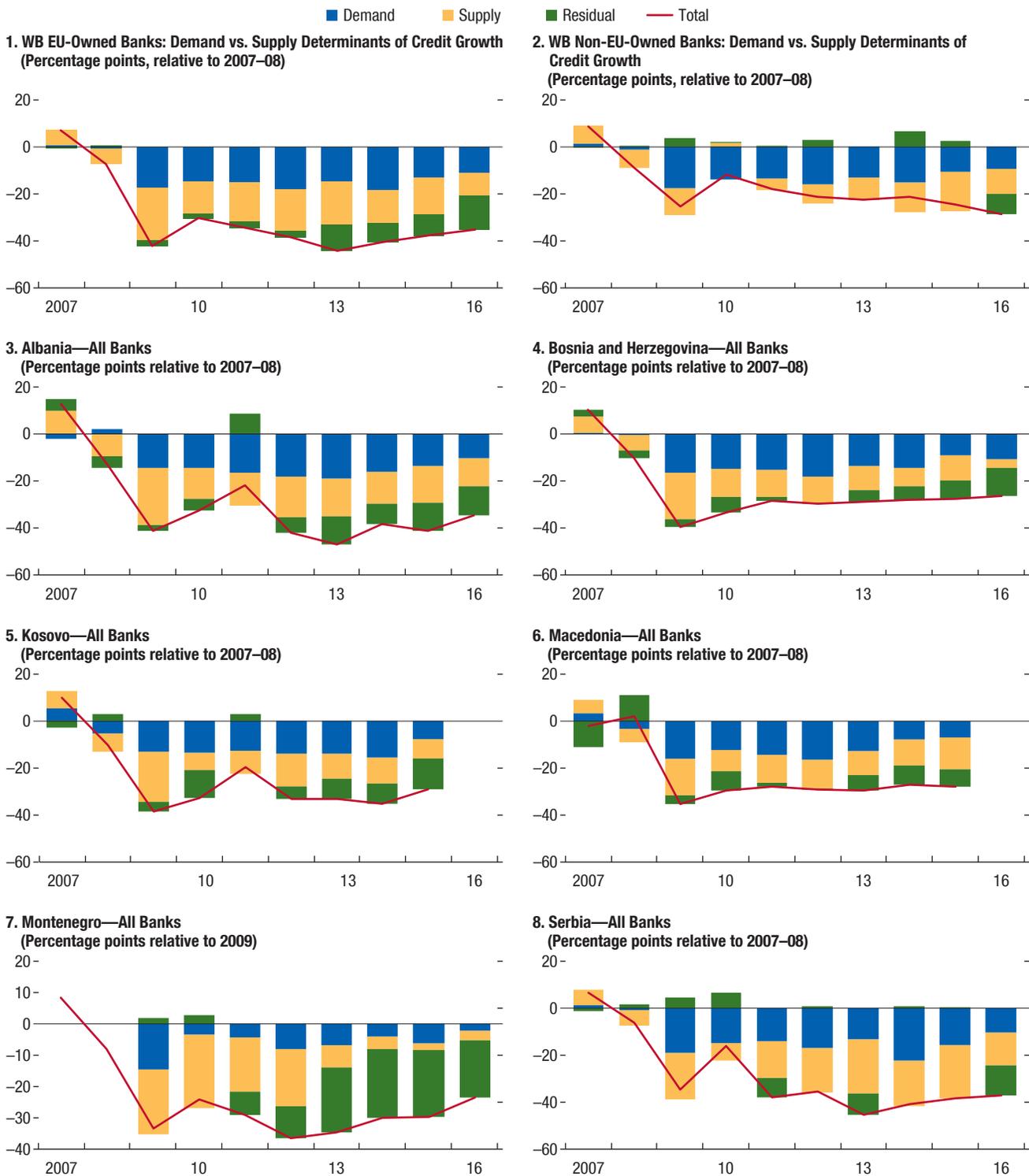
If impaired balance sheets are a problem, an important question is whether banks can ride the ongoing recovery to grow out of their balance sheet issues. The answer is that this would be a risky strategy. The main reason balance sheets have started to improve is less the recent recovery and more the forceful policy action undertaken in the region (see below). Another way to see this is to consider the counterfactual question: without additional policy efforts, how fast would the region's economies need to grow for banks' NPLs to return to 2007 levels? Econometric modeling of NPLs (see Annex 3.4) shows that, in all countries except Kosovo and Macedonia, reducing NPLs in three years via growth alone would require significantly faster expansions than those currently observed (Table 3.2).¹⁵ Alternatively, countries would need to sustain their current (relatively positive) growth rates for another five years to reduce NPLs to healthy levels. The first scenario is highly unlikely. The second scenario is still a stretch, and the wait would be costly. The bottom line is that policy efforts to repair balance sheets need to be sustained, and the current recovery should not give rise to complacency.

Nonbank Structural Factors

In addition to issues such as bank funding and impaired balance sheets, other nonbank factors have constrained and will continue to constrain

¹⁵Moreover, this exercise simply considers the current stock of NPLs and assumes no new NPL formation going forward; hence the estimated time needed to clear NPLs is a lower bound.

Figure 3.31. Western Balkans: Demand versus Supply Determinants of Credit Growth



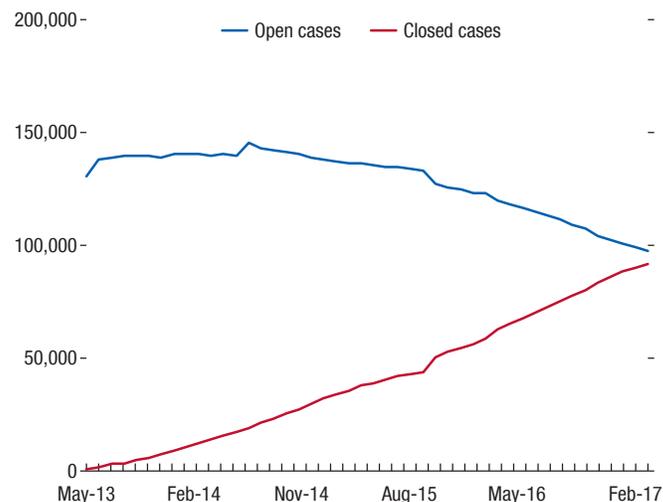
Source: IMF staff estimates.
Note: WB = Western Balkans.

credit provision in the Western Balkans. Across much of the region, large gaps in land titling and cadastral systems impede the collateralization of land and real estate property, and in other cases delay foreclosure when property is collateralized. These gaps are often a legacy of the wars in the 1990s, but not always. In Macedonia, the public real estate registry does not provide prices for real estate transactions or details on properties and is not regularly updated. In Kosovo, many properties are not recorded at all. In some countries, the lack of a regulated appraisal profession or licensing standards combined with an illiquid real estate market make valuation difficult. Even if property is properly titled and valued, difficulty executing the collateral if necessary limits its value as collateral *ex ante*—cultural factors such as the stigma of purchasing an acquaintance’s repossessed property from a bank also play a role.

Poor credit registries have been another bottleneck. Credit registries play a critical role in enhancing disclosure and making information available for creditors to make informed decisions about borrowers. Unfortunately, credit registries in the region are either incomplete (covering, for instance, only secured debt or only a subset of borrowers), in the process of being set up, or simply lacking altogether in some countries. And, for many firms in the region, particularly smaller ones, financial disclosure forms are either incomplete or untrustworthy, compounding the information asymmetry between borrowers and lenders.

Slow court procedures have also driven weak credit supply across the Western Balkans. Understaffed courts and large case backlogs throughout the region have meant that recovering assets through the court system can be extremely slow. This, in turn, leads banks to withhold credit and discourages the cleanup of NPLs. However, some countries in the region have taken steps in recent years to alleviate or circumvent such bottlenecks (see Vienna Initiative 2017). One promising avenue introduced in various countries in the region is using private enforcement agents tasked (by the creditor) with enforcing

Figure 3.32. Kosovo: Court Backlog Clearance
(Cumulative)



Source: USAID Contract Law Enforcement.

court orders. Kosovo introduced a system of private enforcement agents in 2014, which has significantly reduced court backlogs and eased asset recovery (Figure 3.32). Montenegro introduced a similar system. In both countries, however, the reforms remain a work in progress, as discussed below.

Weak insolvency regimes also discourage banks from lending, and such regimes are particularly damaging in a debt overhang context. The sharp increase in private debt across most of the Western Balkans in the run-up to the financial crisis means that banks have often had to deal with highly indebted borrowers. This is an ongoing problem in the region, reflecting weak insolvency regimes in many countries. In some Western Balkan countries, the insolvency of firms is too narrow (that is, debt restructuring often excludes debts in serious financial distress or insolvency). Lengthy court procedures lead to low reorganization prospects. Regarding personal insolvency, some countries in the region, such as Kosovo, Macedonia, and Serbia, have yet to introduce a dedicated framework.

In short, funding constraints, impaired balance sheets, and nonbank structural factors are holding back credit. And, as we have seen, the odds of

these issues getting resolved are small, which does not bode well for financial intermediation prospects in the region. Bold policy actions are thus called for.

Policy Recommendations

Clean up Balance Sheets

Elevated levels of nonperforming loans remain a major issue in most of the Western Balkans and require a multipronged policy response.¹⁶ Except in Kosovo, aggregate NPL ratios are high (in Albania and Serbia they are above 15 percent) and continue to discourage new lending. Approaches to dealing with these issues are emerging in various countries (Box 3.3):

- *Asset quality reviews:* The first step is always to shed an honest light on the problem, both in terms of the scale of impaired assets as well as the adequacy of banks' provisions. Serbia completed a comprehensive asset quality review in 2015 that covered the top 14 banks, or some 88 percent of banking sector assets. It resulted in significant adjustments in bank capital ratios.
- *Supervised action plans:* Once the true scale of the problem is established, authorities should require vulnerable banks to draft time-bound remedial actions that include, where necessary, capital injections by shareholders to cover actual and anticipated losses and resolution plans. As part of these action plans, impediments to loan restructuring must be tackled head-on. The authorities can play a key facilitation role here by coordinating multiple lenders, sharing information, and monitoring progress.
- *Development of distressed asset markets:* Beyond the two previous measures, country authorities should take additional steps to reduce impediments to NPL write-offs and facilitate more active markets for NPLs. Measures

can include providing tax and regulatory incentives for banks to write off NPLs and removing entry barriers to the market for distressed assets (for example, nonbank financial institutions and private asset management companies). For example, in Bosnia and Serbia retail NPLs can be sold only to banks. Albanian authorities recently created a category of nonbank financial institutions specializing in administering NPLs that are subject to lower capital requirements.

- *Elimination of tax disincentives for NPL sales:* In Albania, an NPL write-off is considered tax-deductible for provisions and write-offs, but if the collateral on the debt is recovered (or income is received from the sale of the NPL), it is considered extraordinary income and is taxed at a higher rate. In Serbia, recognizing write-offs for tax purposes and adjusting the treatment of debt forgiveness for personal income tax purposes will also support NPL market development. The Bosnian authorities should eliminate existing uncertainty over whether NPL transactions are subject to the value-added tax.
- *Enhanced supervision:* Efforts should continue to bolster bank supervision in order to ensure that banks apply proper credit underwriting standards and risk management practices. In hindsight, the large increase in NPLs following the crisis revealed weak risk management and lax credit standards before the crisis, which should have been spotted by supervisors.
- *The macro-financial impact of NPL cleanup should be manageable.* NPLs are about 6 to 7 percent of GDP in Albania, Bosnia and Herzegovina, and Serbia and less than half in Kosovo and Macedonia. This is much less than in, for example, Slovenia in 2012 (18 percent of GDP), where a banking crisis necessitated a large capital injection by the government in state-owned banks. NPLs net of provisions are 25 percent of capital in Montenegro and less in other countries. By comparison they were 85 percent of capital

¹⁶See Table 3.3 for detailed country-by-country recommendations.

in Slovenia in 2012. Moreover, because most banks are foreign owned, any capital shortfalls would typically be covered by the private sector and not by the government.

Expand Funding Bases

Managing external deleveraging, including potentially disruptive episodes, will be key to maintaining adequate funding bases across the region. As discussed in detail previously, external funding is unlikely to return in force, and could potentially continue to wither. As such, authorities should closely monitor banks and remain in close communication with parent banks and home supervisors in the event that any additional pullout from the region occurs. In this context, the Vienna Initiative will continue to play a crucial role.¹⁷ In some cases, deeper and more targeted measures than those discussed in Box 3.3 may be in order, particularly in cases of either disruptive deleveraging due to a crisis affecting the parent group directly, or sharp deposit withdrawals triggered by lack of confidence in the parent. At a minimum, Western Balkan supervisors should ensure that banks under their authority maintain updated contingency plans for any such event.

In some countries, attracting fresh capital from new banking groups or even from private equity investors (with day-to-day management provided by bank experts) will require tackling overbanking. Country authorities should respect market discipline and let weak banks fail if their failure does not pose a systemic risk. They should also

avoid granting licenses to banks or other investors that lack robust business plans (supported, in the case of private equity investors, by a credible investment horizon) or sufficient capital bases. Encouraging consolidation, including through takeover of exiting banks by banks already operating in the country, would help further.

Looking toward the medium term, countries should also consider policy measures to diversify bank funding sources and expand domestic savings. For most of the banking systems in the Western Balkans, residential deposit bases are sufficient to maintain current levels of lending but not to foster meaningful financial deepening, even with somewhat greater rates of deposit growth. The development of local capital markets where banks could issue corporate bonds could help expand the funding base. Setting up private sector pension funds and insurance companies would help create demand for bank bonds and could more generally spur domestic saving. However, capital markets are nascent or nonexistent in most of the Western Balkans and will not be a meaningful alternate funding source in the near term. For example, there have been few bond issuances in Albania (one in 2016), because most nonfinancial companies do not comply with the necessary accounting and transparency standards, and banks are liquid and easily funded with deposits. Building capacity at the supervisory level to oversee capital markets and deepen secondary government bond markets should be a first step in financial development.

Tackle Nonbank Structural Obstacles to Credit

Improving land and property titling will be key to facilitating the use of property as collateral and the development of mature mortgage markets. The legacy of the 1990s wars, during which thousands of property records were stolen, lost, or destroyed, will not be easily overcome. However, there have been ongoing efforts in the region (often with the support of donors) to improve the capacity of municipal cadastral offices—

¹⁷The Vienna Initiative and related agreements with foreign banks were a key part of the IMF program design in Bosnia and Herzegovina and Serbia. Since 2012, Vienna 2 has focused on improving cooperation between home and host authorities while monitoring the pace of deleveraging with a view to keeping it orderly. Recommendations have been made to relevant European institutions to improve supervisory coordination and cross-border bank resolution. The initiative has been a favored venue for dialogue between the banks that are systemically important in a country and the major interlocutors of those banks: the monetary authority and regulator, the parent international banking groups, and the latter's regulators.

including using modern GPS systems—and to raise public awareness about the importance of recording transactions. This has resulted in notable increases in the number of properties recorded and reduced the time needed to record them. These efforts need to be sustained at all costs. In parallel, strengthening licensing standards and methodologies for appraisers would help improve collateral valuations and facilitate sales of collateral. Finally, it will take time to change cultural factors that limit the sale of repossessed collateral, but this should not mean that banks cannot be incentivized to sell this collateral more quickly. Along these lines, Albania recently limited the time that a bank can hold repossessed collateral to seven years and now applies a 150 percent risk weighting to such assets.

Accelerating slow court procedures is another priority. Boosting staffing and budgets in the courts would be the standard approach to address this issue. However, the recent introduction of private bailiffs to accelerate the execution of court orders is a promising alternative. Despite the attractiveness of this option, the introduction of private bailiffs is a complex reform that requires a learning-by-doing attitude. For instance, Kosovo

recently introduced variable fees for the private enforcement agents, as the flat fees introduced in the original reform meant the bailiffs were mostly going after small debtors. More generally, the licensing, training, and oversight of the private bailiffs is paramount to avoid abuses and preserve the buy-in to the reform.

Insolvency frameworks remain unfinished business. Countries that lack personal insolvency regimes to enable overindebted individuals to get a fresh start within a reasonable period should consider developing such regimes, provided institutional preconditions are met. Personal insolvency in the context of a poorly designed regime, weak institutional capacity (for example, courts, insolvency practitioners, debt counselors), or weak transparency of debtors' assets can lead to significant moral hazard. Regarding the insolvency of firms, countries where minority creditors can de facto block restructuring should put in place fast-track procedures to confirm workout plans previously approved by a majority of creditors, making such plans binding for all creditors. This would encourage out-of-court negotiations and limit threats from minority holdouts.

Table 3.3. Summary of Key Policy Actions and Recommendations Fostering Bank Balance Sheet Repair

	Supervision/Regulation	Legislation	Taxation / Information shortcomings / Other
ALB	<p><i>Loan classification and provisioning:</i> relax provisioning requirements for restructured loans and issue guidelines for restructuring.</p> <p><i>Write-offs:</i> introduce time limits for holding of repossessed properties (and higher risk weights) as well as for NPLs in the loss category.</p> <p><i>Sale of NPLs:</i> create new category of NBF1 for AMCs subject to lower capital requirements.</p> <p><i>Other:</i> new regulation on related party / large exposures.</p>	<p><i>Bankruptcy law:</i> simplify process, expedite approval of OOCR plans, and enhance creditor protection. Introduce new personal bankruptcy law.</p> <p><i>Private bailiffs law:</i> introduce performance fees (and backload them); facilitate OOCR and integrate tax authorities in collateral execution process.</p> <p><i>Civil Procedures law:</i> tighten timelines/ grounds to appeals so as to accelerate court execution.</p>	<p><i>Taxation:</i> tax recovered amounts and NPL sales at normal rate (now considered as extraordinary income and thus taxed at a higher rate).</p> <p><i>Credit registry:</i> enhance registry to include ongoing court cases and restructured loans; introduce credit scoring.</p> <p><i>Other:</i> implement action plan to deal with top borrowers that helped improve creditor coordination.</p>
SRB	<p><i>Asset quality review:</i> review banks' credit portfolios and provisioning practices and provide bank-specific recommendations.</p> <p><i>Write-offs:</i> tighten policy to ensure timely loss recognition.</p> <p><i>Sale of retail NPLs:</i> allow sale to non-banks as well as creation of private AMCs.</p> <p><i>Other:</i> (i) improve collateral valuation incl. by tightening regulations for appraisers; (ii) introduce limits on interest accrual on distressed debt.</p>	<p><i>Bankruptcy law:</i> provide for adequate safeguards for the secured creditors' rights and better value maximization and more predictable and swift disposal of assets where assets are not strictly necessary for rehabilitation.</p> <p><i>Mortgage law:</i> strengthen appraisal standards; ensure transparency of auction procedures; facilitate the out-of-court mortgage enforcement by explicitly providing for clearance of all encumbrances/liens on the property title following the extra-judicial sales by the creditor; ensure proper limitations on a debtor's ability to file repeated objections to an out-of-court foreclosure.</p>	<p><i>Taxation:</i> remove tax disincentives to the debt write-offs.</p>
BIH	<p><i>Sale of NPLs:</i> introduce regulations and guidelines, and allow sale to non-banks.</p>	<p><i>Bankruptcy law:</i> introduce new law to facilitate liquidation, reorganization, and cross-border insolvency. Already adopted in one entity.</p> <p><i>Judicial system:</i> improve effectiveness by shortening the period of proceedings and add more commercial judges to handle the big backlog of court cases.</p> <p><i>Out-of-court restructuring:</i> introduce OOCR mechanism if needed after judicial efficiency improves.</p>	<p><i>Taxation:</i> remove uncertainty regarding VAT on NPL transactions.</p>
MNE	<p><i>Asset quality review:</i> conduct AQR to review loan classification and provisioning practices and adequacy.</p> <p><i>Loan classification and provisioning:</i> provisions should better reflect expected losses; no longer allow reclassification of assets based on collateral type only.</p> <p><i>Transfer of NPLs:</i> require banks to separate NPLs into specialized workout subsidiaries.</p> <p><i>Other:</i> develop time-bound supervisory action plans for at-risk banks, incl. recap by shareholders to cover actual and anticipated losses and resolution plans.</p>	<p><i>Private bailiffs law:</i> close loopholes that allow for multiple collections of the same debt; tighten licensing and education requirements; and strengthen the oversight and supervision of bailiffs.</p> <p><i>Consumer protection law:</i> remove the provision prohibiting creditors to liquidate residential property if it is deemed meeting "basic housing needs". Assess institutional infrastructure needed to support an improved personal bankruptcy regime, incl. creation of a mediation service and special insolvency fund.</p> <p><i>Debt restructuring law:</i> broaden coverage to include debtors in serious financial distress or insolvency; facilitate OOCR by making workout plans approved by a majority of creditors binding for all through a fast-track procedure.</p>	<p><i>Credit registry:</i> strengthen registry to ensure the reliability of financial information on debtors.</p> <p><i>Cadastral information:</i> close gaps in land titling procedures and cadastral information, particularly for rural areas.</p>

Table 3.3. Summary of Key Policy Actions and Recommendations Fostering Bank Balance Sheet Repair *(continued)*

UVK	<p><i>Write-offs:</i> define mandatory time limits for write-offs.</p> <p><i>Other:</i> close remaining gaps in regulation incl. for (i) country and transfer risk; (ii) collateral valuation; (iii) pre-set forbearance criteria.</p>	<p><i>Private bailiffs law:</i> close loopholes in law on enforcement procedures that allow debtors to escape enforcement actions through appeals; improve the collateral auction system; improve fee structure for bailiffs; strengthen oversight.</p>	<p><i>Cadastral information:</i> intensify efforts to bring Kosovo's cadastre system into line with international standards.</p>
MKD	<p><i>Sale of NPLs:</i> establish a licensing and regulatory regime for non-banks to manage NPLs.</p> <p><i>Write-offs:</i> provide additional incentives for NPLs write-offs by increasing capital charges or setting time limits on holding NPLs.</p> <p><i>Other:</i> improve valuation and availability of a wider set of collateral; allow covenants in loan agreements that would trigger technical default if certain conditions are breached (e.g. asset growth cap, ownership change).</p> <p><i>[NPL management:</i> issue guidelines that incl. strategy, quantitative targets with timeline, creation of NPL workout units, etc.]</p>	<p><i>Bankruptcy law:</i> introduce personal bankruptcy law.</p>	<p><i>Taxation:</i> make write-offs or collateral sale tax deductible (provisioning is already deductible and there is a tax loss carry forward mechanism such as a deferred tax asset).</p> <p><i>Cadastral information:</i> expand public registers to include regularly updated prices of all residential and commercial real estate transactions and a detailed description of properties.</p>
	<p>Policy measure completed</p> <p>Policy measure ongoing</p> <p>Policy measure recommended</p>		

Sources: IMF Country Article IV Reports, IMF Country FSAP Reports, and IMF staff recommendations.

Note: Country abbreviations are International Organization for Standardization country codes.

Box 3.1. Are Loan Loss Provisions Sufficient?

Optimistic valuation of real estate collateral overstates actual loan loss provisioning, because the value of the collateral reduces the capital needed to build provision reserves. If banks cannot execute collateral at the book price, losses will be larger than shown in the books.

In the Western Balkans, an illiquid real estate market is a source of concern for collateral overvaluation. Lack of reliable and robust data on real estate prices leaves significant room for discretion when determining collateral value. Central banks in the region have aimed to address these issues through regulation and guidelines for property appraisals. Two recent experiences illustrate these efforts:

- The National Bank of Serbia in 2015 launched an asset quality review accompanied by a new regulation requiring banks to submit appraisals of collateral—by valuation experts—to the National Bank of Serbia. This information will be consolidated into a database of real estate transactions to allow for accurate collateral valuation and improve real estate appraisal practices. Adjustments to collateral values were a material driver of the Serbian asset quality review findings, which resulted in adjustments to capital of about €200 million, equivalent to a 175 basis point reduction in the adjusted capital adequacy ratio.
- The Bank of Albania responded even more aggressively by setting the value of real estate collateral to zero for the provisioning of nonperforming loans. While this does not enhance collateral valuation practices, it allays any fears of collateral overvaluation.

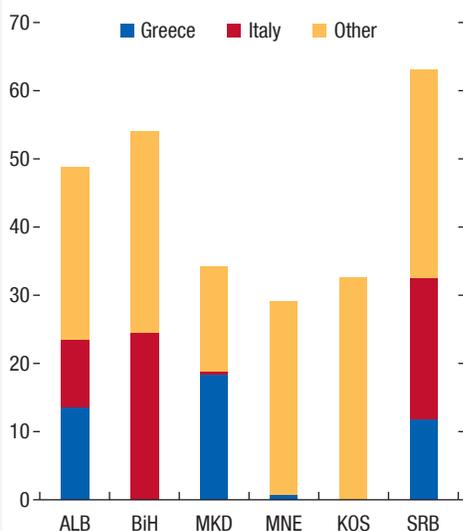
This box was prepared by Ezequiel Cabezon.

Box 3.2. Spillovers from Parent Bank Stress

Foreign bank subsidiaries from European Union (EU) countries that have experienced appreciable financial stress represent a sizable share of banking systems in the Western Balkans. As of the end of 2015, claims of Italian and Greek banks, for example, accounted for an average of more than 18 percent of GDP in Albania,

Bosnia and Herzegovina, Macedonia, and Serbia (Figure 3.2.1). Kosovo and Montenegro do not have meaningful exposures. Currently, concerns relate to some Greek banks

Figure 3.2.1. Foreign Claims of BIS Banks¹
(Percent of GDP)



Sources: Bank for International Settlements (BIS); IMF, *World Economic Outlook*; and Kosovo national authorities.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

¹Data for Kosovo include all banks' foreign claims.

Subsidiaries of Greek banks have been under pressure from liquidity-starved parents in recent years. The 2015 financial turbulence in Greece triggered a deposit run against the subsidiaries of Greek banks in Macedonia. Greek subsidiaries in Serbia also experienced some loss of their retail deposits during the same episode. Authorities in the region dealt successfully with the pressures via a wide range of tools, including closely monitoring banks' placements in Greek parents or other subsidiaries overseas; encouraging Greek subsidiaries to gradually eliminate exposures to Greece; instituting pre-approvals for large transactions; introducing time-bound capital flow measures aimed at preventing Greek-owned businesses from borrowing from local banks and transferring the funds to Greece; and imposing the mandatory transfer of deposits held at parent banks and group companies to accounts at the central bank.

While the turbulence has receded, the next step will be to manage the withdrawal of Greek banks from the region. The restructuring plans submitted by Greek banks as part of the EU-led bailout envisage a sizable scaling back of their activities abroad. Piraeus, Greece's largest bank in terms of assets, plans to sell its subsidiaries in Albania and Serbia (in addition to those in Bulgaria, Romania, and

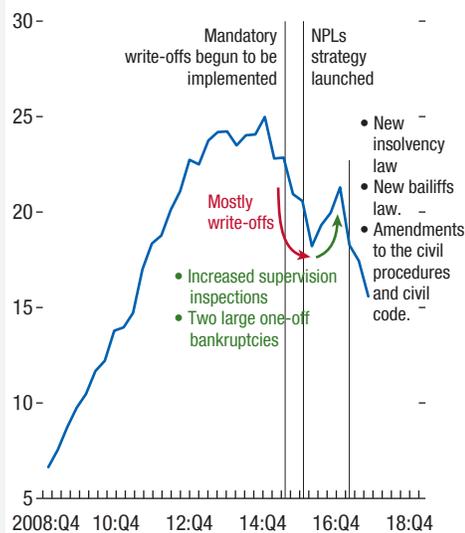
Ukraine). Greece's second-largest lender, National Bank, might have to sell its subsidiaries in Southeastern Europe by June 2018, including those in Albania, Macedonia, and Serbia. National Bank agreed in early August to sell its subsidiary in Serbia to Hungarian-based OTP. Alpha Bank announced January 31, 2017, that it has agreed with Serbia's MK Group on the sale of its 100 percent stake in the share capital of Alpha Bank Srbija.

This box was prepared by Haonan Qu.

Box 3.3. Lessons from Comprehensive Nonperforming Loan Strategies in Albania and Serbia

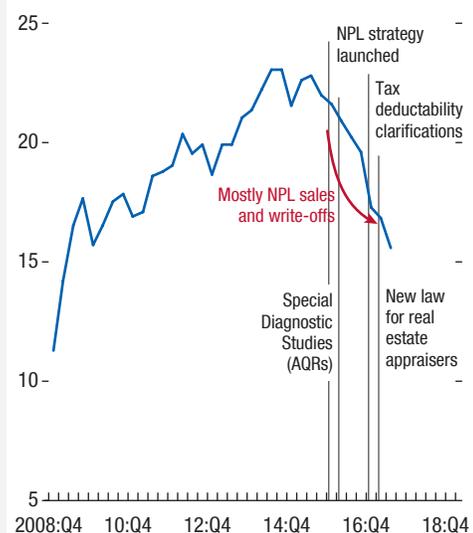
Faced with some of the highest nonperforming loan (NPL) ratios in the region, Albania and Serbia have designed comprehensive strategies to tackle the multidimensional nature of the problem (Figures 3.3.1 and 3.3.2). Launched in the second half of 2015, the strategies cover banking supervision, tax issues, court procedures, and legal aspects, among other areas. Each strategy requires a joint approach that coordinates central banks, ministries of finance, tax authorities, and the judicial system. The strategies include a write-off phase to reduce NPLs and a structural reform phase to prevent new NPLs and accelerate their resolution.

Figure 3.3.1. Albania: Nonperforming Loans
(Percent of total loans)



Sources: Bank of Albania; and IMF staff estimates.

Figure 3.3.2. Serbia: Nonperforming Loans
(Percent of total loans)



Sources: National Bank of Serbia; and IMF staff estimates.

The first phase, focused on write-off policies, has helped lower NPL levels. Previously, write-offs were resisted by banks due to insufficient provisions, parent group credit targets, and tax issues. While in Albania regulations on write-offs had been amended before the comprehensive strategy, write-offs accelerated after the launching of the strategy. The Bank of Albania also increased bank inspections, resulting in additional NPLs being uncovered. In Serbia, write-offs—driven by asset quality reviews tailored for each bank and by regulation amendments—also contributed to reducing NPLs after the strategy was launched. Over 2015–16, write-offs reached about 6 percent of total loans in Albania, and more than 3 percent in Serbia.

While write-offs reduced NPL ratios, slow court execution processes and low collateral recovery remained downstream problems. NPLs have been moved off balance sheets, providing incentives for renegotiation and sales. Nevertheless, NPL sales have been limited in Albania and Serbia, as asset management companies expect low recovery rates. Challenges for recovering and selling collateral are attributed to long court procedures, cultural features (in small towns foreclosed homes are hard to sell because they are associated with the previous

This box was prepared by Ezequiel Cabezon.

Box 3.3 *(continued)*

owner), and a lack of economies of scale. Asset management companies prefer more profitable large NPL markets like Italy over small markets like Albania or Serbia.

A second phase of the strategies includes measures to improve NPL resolution by accelerating court execution, but this phase will require some time to be fully deployed. These measures have been lagging in part due to the complex coordination required to amend laws, such as insolvency and civil codes, which are needed to accelerate court processes and collateral execution. Albania approved new laws on insolvency and bailiffs (December 2016), but their implementation is pending until bylaws are issued. Serbia adopted a law regulating real estate appraisals (December 2016), which is critical for sound collateral valuation. Despite this progress, core legislation is still in the process of being approved in Serbia. The approval of draft amendments to the corporate insolvency law—submitted to Parliament in August 2007—are still pending. In both Albania and Serbia, the strategies call for out-of-court restructuring frameworks, but such mechanisms require the threat of an efficient judiciary system if out-of-court agreement is not reached.

Finally, having monitoring mechanisms in place is key to the success of the strategies. Regular reporting on progress and follow-up help ensure accountability and implementation. While Serbia's strategy requires a regular progress report every six months, Albania's strategy involves only ad hoc monitoring, which could undermine accountability and implementation.

Annex 3.1. Estimating Fundamentals-Consistent Levels of Credit

Estimating Credit Gaps—The Model from the IMF’s May 2015 *Regional Economic Issues: Central, Eastern, and Southeastern Europe*

The long-run relationship between private sector credit and its main determinants is estimated for 34 European countries during 1995–2016. In a stylized, reduced-form model, private sector credit is driven by per capita income that positively affects both credit demand and supply as well as the nominal interest rate on private debt, which has a negative effect on demand and a positive effect on supply. The model also includes country-specific constants:

$$\ln \frac{D_{it}}{P_{it}} = \alpha_i + \sum_{j=1}^2 \beta_j \ln \frac{D_{it-j}}{P_{it-j}} + \sum_{j=0}^1 \gamma_j \ln \frac{Y_{it-j}}{P_{it-j}} + \sum_{j=0}^1 \delta_j R_{it-j} + \epsilon_{i,t} \quad (\text{A3.1.1})$$

$\frac{D_t}{P_t}$ – Per capita private sector debt stock in thousands of 2005 PPP US dollars;

$\frac{Y_t}{P_t}$ – Per capita GDP in thousands of 2005 PPP US dollars;

R_t – nominal interest rate on private sector debt;¹

i – country index

t – time index.

¹For EU countries, the implicit interest rate is calculated using sectoral accounts data as the ratio of interest payments (including financial intermediation services indirectly measured) over the average of the beginning- and end-period combined stock of debt of firms and households. For other countries, data are mostly for the lending rate, published in the IMF’s IFS database, with gaps in country coverage filled with data for the short-term interest rate published in the Organisation for Economic Co-operation and Development’s Economic Outlook database and from national data sources.

Private sector debt is composed of domestic bank credit to the nonfinancial private sector (*International Financial Statistics*—IFS) and private external debt liabilities (*World Economic Outlook*—WEO). Unless indicated otherwise, the data source for the other series is the WEO. All series are time demeaned by subtracting the mean across all countries in a given period from the individual country values.² Regression results are presented in Annex Table 3.1.1. The preferred specification is the Arellano-Bond dynamic-panel system generalized method of moments (GMM-SYS). The coefficients of real per capita income and the nominal interest rate are sizable, and their signs are consistent with theoretical priors.

To arrive at fundamentals-consistent private sector credit estimates, country- and time-specific effects are incorporated. Based on GMM-SYS regression results, the long-run relationship between private sector debt and its fundamentals is:

$$d_{it}^* = 1.62 y_{it}^* - 2.58 R_{it}^*, \quad (\text{A3.1.2})$$

in which lowercase variables are expressed in natural logarithm of per capita quantities in thousands of 2005 purchasing-power-parity (PPP) US dollars, and the asterisk indicates long-term value. Country-specific effects are included to ensure that the actual series and their fundamentals-consistent counterparts have the same means for each country in the sample and reflect the assumption that Central, Eastern, and Southeastern European countries may not converge to a common equilibrium path for private sector credit from different starting points. Common time effects are included, reflecting the assumption that the dynamics of fundamentals have the same impact on the “equilibrium” debt burdens, whether or not they are driven by common time effects or country idiosyncratic factors. Credit gaps are then calculated as the deviation of actual private sector credit from its fundamentals-consistent level.

²This removes nuisance cross-sectional dependence that creates size distortions and makes inference based on two-stage generalized method of moments estimates unreliable (Roodman 2009).

Annex Table 3.1.1. Determinants of Real Per Capita Private Sector Debt in Europe

Dependent variable Regression model Estimator	Log of per capita private sector debt in thousand 2005 PPP USD				
	(1)		(2)		
	OLS	FE	OLS	FE	GMM-SYS ⁵
Lagged dependent variable	...	...	0.90 (0.012)***	0.76 (0.040)***	0.64 (0.101)***
Log of per capita GDP in thousand 2005 PPP USD	1.57 (0.035)***	1.81 (0.302)***	0.10 (0.019)***	0.38 (0.084)***	0.58 (0.252)**
Interest rate (fraction)	-2.21 (0.225)***	-0.71 (0.485)	-0.44 (0.111)***	-0.51 (0.141)***	-0.92 (0.240)***
Common intercept	-0.05 (0.017)***	-0.07 (0.031)**	0.02 (0.004)***	0.00 (0.006)	-0.03 (0.034)
Country-specific effects	No	Yes	No	Yes	Yes
Observations	619		598		
Number of countries	34		34		
Adjusted <i>R</i> -squared	0.90	0.89	0.99	0.99	...
Within adjusted <i>R</i> -squared	...	0.49	...	0.89	...
Chi ² (54) ¹	...	...	...	...	23.17
F(2,33) ²	...	50.47***	...	...	...
AR(1) ³	...	...	...	...	-2.87***
AR(2) ³	...	...	...	...	0.54

Source: IMF staff estimates.

Note: All variables are time demeaned. Standard errors are in parentheses. GMM = generalized method of moments; OLS = ordinary least squares; PPP = purchasing power parity; USD = US dollars.

*Coefficient significant at 10%; **significant at 5%; ***significant at 1%.

¹Hansen test of overidentifying restrictions (whether the instruments, as a group, appear exogenous).

²Wooldridge test for autocorrelation in panel data (H0: no first-order autocorrelation).

³Test of (n-th) order serial correlation in regression residuals in first differences, N(0,1). Null hypothesis is no autocorrelation.

⁴F-test that all fixed effects are jointly zero.

⁵Instruments for (1) first differences equation: L(2/3). (l_crdprs_ppp_r_pc_dt l_gdp_ppp_r_pc_dt int_rat_dt); and (2) levels equation: DL.(l_crdprs_ppp_r_pc_dt l_gdp_ppp_r_pc_dt int_rat_dt), using the first 50 principal components of the GMM-style instruments.

Annex 3.2. Impact of Global and Local Regulatory Changes

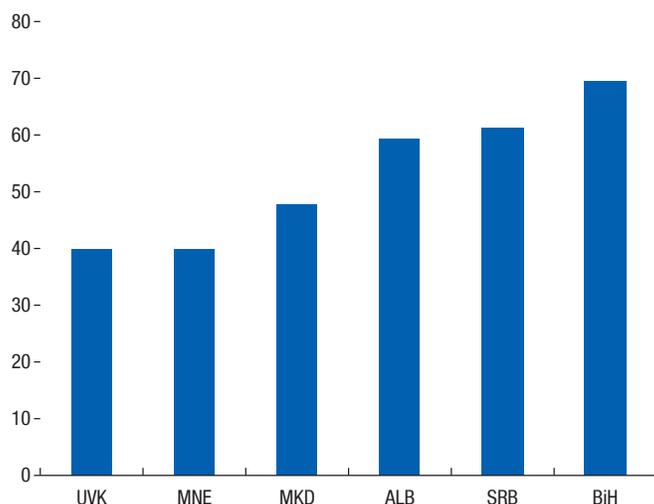
The European banking sector has experienced significant changes in its regulatory environment since the global financial crisis. New Basel III requirements and their European Union (EU) transposition can constrain the funding of international parent groups, initiating ripple effects on their Southeastern European (SEE) subsidiaries. Completion of the EU Banking Union is expected to further affect SEE banking systems. Uncertainties associated with these and other ongoing regulatory developments can lead cross-border banking groups to precautionary scaling down of operations in SEE countries.

SEE banking systems have been affected by regulatory changes implemented in home countries of cross-border banking groups. These changes include tightened regulations on the quantity and quality of capital, deleveraging, funding profiles, bail-in-able debt, and risk management practices. While both home and host countries tightened their own regulations on banks' international operations between 2006 and 2017, regulatory changes in home countries seem to have been more important in explaining the decline in foreign lending (Ichiue and Lambert 2016).

As an example of how Basel III requirements and their EU transposition constrain the funding of international parent groups, with rippling effects on their SEE subsidiaries, higher risk weights for parent banks when subsidiaries hold SEE-based securities may reduce parent funding of local banks. There are also tensions in the application of the liquidity framework, for instance with respect to the liquidity coverage ratio and the net stable funding ratio. On the asset side, liquid assets of SEE banks are to a large extent domestic central bank bills and treasury bills that do not have an investment grade. On the liability side, banks have limited options to fund themselves through alternative sources such as local bond markets.

The non-EU SEE countries will be affected by the ongoing shaping of the EU Banking Union.

Figure 3.2.1. Share of Banking Assets under ECB's Home Supervision (Percent)



Source: Bankscope; and IMF, Financial System Stability Assessment.
Note: ECB = European Central Bank. Country abbreviations are International Organization for Standardization (ISO) country codes.

While these countries will not be members of the union, euro-area headquartered banks often have a systemically important presence in non-EU SEE countries, particularly banks from Austria, Greece, Italy, France, and Slovenia. Non-EU SEE banking systems face common challenges in the context of the Single Supervisory Mechanism, the Single Resolution Mechanism, and the potential European Deposit Insurance Scheme. Specifically:

- From January 2018 on, risk weights on government bond exposures in non-EU countries will be gradually adjusted (risk weights are currently at zero), even when funding is in local currency. For example, if an Albanian subsidiary has used local deposits to buy Albanian government bonds, the risk weights for the parents will be non-zero. This is particularly worrisome in the SEE region, because it would put banks under pressure to reduce their exposure to governments. However, Article 114 of the Capital Requirements Regulation allows for an exemption in case of “third countries, which apply supervisory and regulatory arrangements at least equivalent to those

applied in the Union.” This means that the European Banking Committee needs to decide whether SEE countries can be exempted, but there is no clarity as to the conditions for the exemptions.

- **Single Supervisory Mechanism (SSM):** For SEE host supervisors, the European Banking Authority (EBA) is the key counterpart to facilitate access to the “core” supervisory colleges of EU bank groups. As 13 of 17 euro-area-headquartered banks operating in SEE countries are deemed “significant,” the European Central Bank (ECB) has become the home supervisor of SEE-based subsidiaries. While the cooperation between the EU and SEE authorities was formalized through a memorandum signed with the EBA under the auspices of the Vienna Initiative, the memorandum does not guarantee the integration of SEE authorities into EU supervisory college activities. Reflecting the minor share of SEE EU-owned subsidiaries at the consolidated-group level, SEE authorities worry about potential negligence by centralized decision makers regarding spillovers to SEE banking systems. Moreover, there is concern that competitive distortions that negatively affect domestically owned banks—as a result of euro area bank subsidiaries’ indirect access to ECB liquidity through their parents—will be reinforced by the EU Banking Union.
- **Single Resolution Mechanism (SRM):** Subsidiaries of European globally systemically important banks (G-SIBs), as well as banks that are domestically systemically relevant (D-SIBs), may be required to issue more liabilities with high loss-absorption capacity, which would reshape SEE banks’ funding model. The issue of participation of host countries in the resolution of cross-border banks, for instance by avoiding ring-fencing and by providing domestic financial support in case of a crisis, remains problematic.

It is within reason, for example, that host subsidiaries might fall back on their core equity capital and repay their parent’s subordinated loans to prevent sudden withdrawal in case of group-wide distress. As with the implementation of the SSM, conflicts of interest between the home and the host authorities may appear if a subsidiary is systemically important in a host country but is only a minor fraction of the group.

- **European Deposit Insurance Scheme (EDIS):** Prospects for a harmonized EDIS may influence cross-border allocations of deposits. The EDIS will be necessary to complement the EU Banking Union so as prevent national governments and domestic deposit schemes from remaining as the ultimate backstop in case of a cross-border banking crisis. It is also needed to avoid a “death loop” between sovereigns and banks. The peripheral situation of SEE countries may trigger uneven levels of depositor confidence, which could lead to deposit flight toward institutions affiliated with a mutualized European safety net, possibly backstopped by the European Stability Mechanism.
- **General uncertainty regarding the above regulatory developments engenders risk in the form of precautionary scaling down of regional operations by cross-border banking.** Remaining shortcomings in the anti-money laundering/combating the financing of terrorism framework in recipient countries, economies of scale in compliance, broader reorientation of bank business models, and reputation concerns about banks dealing with offshore companies or countries may spur reevaluation of business models and precautionary retrenchment from correspondent banking relationships. As in other jurisdictions, there is anecdotal evidence of a sometimes significant decline in foreign correspondent banking relationships in the region (“derisking”).

Annex 3.3. Contributions of Supply versus Demand Factors to Credit Growth

This annex details the estimation of demand and supply contributions to credit growth. The estimation follows the specifications in IMF 2013 and Everaert and others 2015 and tailors them to the Western Balkan region.

Data

The sample covers 70 banks (unbalanced panel) for the period 2006–15. Data were extracted from the FitchConnect Database. Total loans were used as a proxy given the limited availability of bank-level data on lending to the private sector.

Estimation Method

The estimation of demand and supply drivers of credit growth is done using ordinary least squares random effects. We tested for autocorrelation as well as for robust standard errors. As the results are relatively stable, we present the basic estimations to facilitate the presentation.

Identification Strategy

Demand drivers are approximated with aggregate macro variables. These can be considered exogenous for each bank. Supply drivers are approximated mostly with lagged balance sheet indicators of each bank. Among the supply drivers, the Emerging Market Bond Index spread is included to capture risk aversion of the banks in the absence of lending standards at the bank level. The contemporaneous change in provisions can be considered exogenous for two reasons: (1) a part of the provisions is dependent on the

aging of nonperforming loans (NPLs); and (2) banks' provisions largely follow the banks' business plans, which are determined ex ante based on idiosyncratic information of their customers and the forecast cycles.

Credit growth is decomposed into demand and supply contributions using the regression coefficients. The subscript c denotes country, b denotes bank, and t denotes the period.

$$\begin{aligned} Demand_{c,b,t} &= b_1 RealGDPgrowth_{c,t} + b_2 Dum. \\ &RealGDPgrowth_{c,t} + \frac{b_5}{2} NPLstogrossloans_{c,b,t-1} + \frac{b_6}{2} \\ &(Crisis * NPLstogrossloans_{c,b,t-1}) + \frac{constant}{2} \end{aligned}$$

$$\begin{aligned} Supply_{c,b,t} &= b_4 EMBIGlobalEurope_t \\ &+ \frac{b_5}{2} NPLstogrossloans_{c,b,t-1} + \frac{b_6}{2} (Crisis * \\ &NPLstogrossloans_{c,b,t-1}) \\ &+ b_7 (EUparent * NPLstogrossloans_{c,b,t-1} \\ &) + b_8 \Delta Prov. togrossloans_{c,b,t} + b_9 \\ &(Crisis * \Delta Prov. togrossloans_{c,b,t}) + b_{10} \\ &(EUparent * \Delta Prov. togrossloans_{c,b,t} \\ &) + b_{11} Liquidassetstodep._{c,b,t-1} + b_{12} \\ &(Crisis * Liquidassetstodep._{c,b,t-1}) + b_{13} \\ &(EUparent * Liquidassetstodep._{c,b,t-1}) + b_{14} \\ &Equitytonetlaons_{c,b,t-1} + b_{15} Loantodeposits_{c,b,t-1} \\ &+ b_{16} ROE._{c,b,t-1} + b_{17} (EUparent * ROE._{c,b,t-1} \\ &) + \frac{constant}{2} \end{aligned}$$

$$Residual_{c,b,t} = Creditgrowth_{c,b,t} - Supply_{c,b,t} - Demand_{c,b,t}$$

Results

The estimations have the expected signs and are quite robust to different specifications and to the choice of sample period.

Annex Table 3.3.1. Data Details

Variable	Definition	Source
Credit growth	Growth of net total loans measured in euros	FitchConnect
Real GDP growth	Real GDP growth (in percent)	<i>World Economic Outlook</i> (April 2017)
EMBI Global Europe	EMBI Global for emerging Europe (in basis points)	Bloomberg Finance L.P.
Nonperforming loan-to-gross loans ratio (1 st lag)	Nonperforming loan to gross loans ratio (in percent)	FitchConnect
Δ provisions-to-gross loans	Δ provisions to gross loans (in percentage points)	FitchConnect
Liquid assets-to-dep.& ST funding (1 st lag)	Liquid assets to total deposits and short term funding (in percent)	FitchConnect
Equity to net loans ratio (1 st lag)	Equity to net loans (in percent)	FitchConnect
Loan-to-deposits (1 st lag)	Loans to deposits (in percent)	FitchConnect
ROE (1 st lag)	Return on equity (in percent)	FitchConnect
FX depreciation (↑ = domestic currency appreciates)	Exchange rate versus euro (foreign exchange per local currency unit)	<i>World Economic Outlook</i> (April 2017)
EU parent	Dummy equal 1 if 1) bank is owned by EU parent group and 2) year > 2008	
Crisis	Dummy equal 1 if year > 2008	

Source: IMF staff estimates.

Annex Table 3.3.2. Determinants of Credit Growth
Dependent Variable: Credit Growth¹

	I	II	III (for simulations)
Demand drivers			
Real GDP growth, in percent	1.968 (0.00)**	2.797 (0.00)**	2.687 (0.00)**
x dummy crisis (= 1 if 2009–13)		-1.672 (0.04)**	-1.467 (0.07)*
Supply drivers			
EMBIG Europe	-0.050 (0.00)**	-0.058 (0.00)**	-0.058 (0.00)**
NPL ratio (<i>t</i> -1)	-0.350 (0.00)**	-0.402 (0.00)**	-0.405 (0.00)**
x dummy crisis		0.079 (0.53)	0.102 (0.59)
x dummy 1 if EU Parent ²			-0.041 (0.85)
Diff. prov.-to-loans (<i>t</i>)	-2.390 (0.00)**	-2.268 (0.00)**	-2.176 (0.00)**
x dummy crisis		-1.446 (0.01)**	-1.540 (0.14)+
x dummy 1 if EU parent ²			0.073 (0.95)
Liquid assets-to-dep+ST fund (<i>t</i> -1)	0.317 (0.00)**	0.236 (0.00)**	0.239 (0.00)**
x dummy crisis		0.056 (0.51)	0.121 (0.21)
x dummy 1 if EU parent ²			-0.163 (0.14)+
Equity-to-net loans (<i>t</i> -1)	0.028 (0.67)	0.041 (0.52)	0.011 (0.86)
Loan-to-deposits (<i>t</i> -1)	-0.019 (0.28)	-0.022 (0.19)	-0.020 (0.24)
ROE (<i>t</i> -1)	0.164 (0.01)**	0.087 (0.17)	0.103 (0.18)
x dummy 1 if EU parent ²			-0.074 (0.54)
Depreciation	-0.633 (0.04)**	-0.714 (0.02)**	-0.810 (0.01)**
Constant	18.510 (0.00)**	22.648 (0.00)**	23.579 (0.00)**
<i>N</i>	449	436	436
Banks	71	70	70
<i>R</i> -squared	0.45	0.47	0.48

+ $p < 0.15$; * $p < 0.1$; ** $p < 0.05$

Source: IMF staff estimates.

¹The estimates follow a random-effects approach to avoid reducing the degrees of freedom and to capture the ownership dimensions that would otherwise be mixed with the specific bank fixed effect. The Hausman test fails to reject the null hypothesis (random effect is adequate) at 0.71 percent.

²The EU parent dummy includes an interaction with the crisis dummy.

Annex 3.4. The Macroeconomic and Bank-Specific Determinants of Nonperforming Loans

Since the share of nonperforming loans (NPLs) in total loans is explained by both macroeconomic and bank-specific factors, the econometric analysis uses the Arellano-Bond (1991) dynamic panel approach to isolate the persistence of NPLs and evaluate the effect of the variables of interest. The econometric model as specified is:

$$NPLratio_{i,j,t} = NPLratio_{i,j,t-1} + \sum_{k=1}^k \beta_k X_{k,i,j,t} + \sum_{n=1}^n \gamma_j Y_{n,j,t} + Z_j + u_{i,j,t}$$

in which X is a vector of bank-specific indicators for bank i in country j at time t . Y is a vector of country-specific indicators for country j at time t . Z is a fixed effect for country j , and u is the stochastic error term with errors assumed as independently and identically distributed. A lag of the dependent variable is included in some versions of the econometric specification to capture the effect of omitted explanatory variables and the persistence of the NPL ratio.

Variables

The set of explanatory variables includes a broad range of bank-specific and macroeconomic variables. Bank-specific indicators include profitability measures (return on equity, net interest margin), provisioning, capital adequacy (Tier 1 capital to risk-weighted capital), market share (share of total banking sector deposits), and loan growth (total loans net of impaired loans). Real GDP growth is used as an indicator of general macroeconomic performance. Inflation, the lending rate, and the exchange rate vis-à-vis the euro are included as additional indicators of the state of the macroeconomic and financial environment, which affects loan quality. Another variable of importance is the private sector credit-to-GDP ratio, which acts as a proxy of the aggregate debt burden of households and businesses. Data on banks' risk-taking behavior are limited.

The relevance and expected signs of the relationships between NPLs and the selected macroeconomic variables are as follows:

- A slow economy is likely to be associated with sluggish incomes and increased financial distress, so low or negative GDP growth may contribute to high levels of NPLs.
- A hike in interest rates weakens borrowers' debt-servicing capacity, more so if loan rates are variable. Therefore, NPLs are expected to be positively related to interest rates.
- Inflation affects borrowers' debt-servicing capacity through different channels, and its impact on NPLs can be positive or negative. Higher inflation can make debt servicing easier either by reducing the real value of outstanding loans or simply because it is associated with low unemployment. However, it can also weaken some borrowers' ability to service debt by reducing real incomes when wages are sticky.
- An appreciation of the exchange rate can have mixed implications. On the one hand, it can weaken the competitiveness of export-oriented firms and adversely affect their ability to service their debt (Fofack 2005). On the other hand, it can improve the debt-servicing capacity of borrowers who borrow in foreign currency, but it makes the loans more expensive in domestic currency.

Data

The sample covers 67 banks (unbalanced panel) for the period 2006–15. Bank-level data were extracted from Fitch. Country-level data come from the IMF's Intentional Financial Statistics and World Economic Outlook databases.

Estimation

In order to capture the persistence of the growth of the NPL ratio, we use the Arellano-Bond (1991)

dynamic panel approach. Since NPLs are highly persistent, fixed-effect estimations can give rise to endogeneity issues. In contrast, Arellano-Bond is designed for situations with (1) “small T, large N” panels, meaning few time periods and many individuals; (2) a linear functional relationship; (3) one left-side variable that is dynamic, depending on its own past realizations; (4) independent variables that are not strictly exogenous, meaning they are correlated with past and possibly current realizations of the error; (5) fixed individual effects; and (6) heteroscedasticity and autocorrelation within individuals but not across them.

Moreover, we would like to treat real GDP and nominal effective exchange rates as endogenous, since the causality can run in both directions, and both variables can be correlated with the

error term. Simple pair-wise regressions suggest that NPLs do have a significant impact on real GDP and the nominal effective exchange rate. For the other variables included in the model this is not the case. Finally, to avoid problems of correlation among errors and to obtain additional efficiency gains, a generalized method of moments (GMM) with instrumental variables is needed for our analysis. All the issues discussed above are addressed by the Arellano-Bond difference GMM estimation, with robust standard errors.

We use this estimation to find the determinants of the NPL ratio as well as bank profitability.

Results

The results are shown in Annex Table 3.4.1.

Annex Table 3.4.1. Determinants of Nonperforming Loans (Arellano-Bond Estimation)

	(1)	(2)	(3)
	Nonperforming Loan Share of Total Loans		
NPL Share, t-1	1.031***	1.171***	1.328***
<i>x Foreign EU</i>	-0.163	-0.125	-0.273
	0.11	-0.128	-0.329
	-0.499	-0.28	-0.812
<i>x Foreign non-EU</i>	-0.941***	-0.936***	-0.924***
	-0.202	-0.281	-0.179
ROE, t-1	-0.121***		-0.075
	-0.022		-0.118
<i>x Foreign EU</i>	0.162*		0.08
	-0.127		-0.133
<i>x Foreign non-EU</i>	0.534		0.91
	-1.48		-1.615
Net Interest Margin, t-1	-1.3		-1.162
	-1.311		-1.203
<i>x Foreign EU</i>	1.082		0.896
	-1.379		-1.471
<i>x Foreign non-EU</i>	1.676		1.194
	-7.487		-5.452
Capital Adequacy, t-1	0.401		0.328
	-0.267		-0.264
<i>x Foreign EU</i>	-0.611***		-0.667**
	-0.199		-0.281
<i>x Foreign non-EU</i>	-0.769		-0.706
	-1.628		-1.124
Provisioning Share, t-1	-0.006*		-0.008*
	-0.003		-0.007
<i>x Foreign EU</i>	0.001		0.016
	-0.008		-0.02
<i>x Foreign non-EU</i>	0.071		0.927
	-0.207		-0.904
GDP growth rate		-0.720**	-0.709***
		-0.291	-0.243
Inflation rate		-0.002	0.032
		-0.018	-0.06
Lending rate		-0.569	0.106
		-0.384	-0.513
Real effective exchange rate		0.059***	0.08
		-0.021	-0.058
Constant	6.382*	-4.104	-10.488
	-3.628	-12.831	-36.258
Observations	334	342	312
Number of banks	69	66	66
Number of instruments	56	56	56
AR(1) test <i>p</i> -value	0.037	0.009	0.028
AR(2) test <i>p</i> -value	0.095	0.917	0.844
Hansen test <i>p</i> -value	0.977	0.460	0.985

Source: IMF staff estimates.

Note: Robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

References

- Arellano, Manuel, and Stephen Bond. 1991. "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations." *The Review of Economic Studies* 58 (2): 277–97.
- Bakker, B. Bas, and Anne Marie-Gulde. 2010. "The Credit Boom in the EU New Member States: Bad Luck or Bad Policies?" IMF Working Paper 10/130, International Monetary Fund, Washington, DC.
- Bakker, B. Bas, and Christoph Kligen, editors. 2012. "How Emerging Europe Came Through the 2008/09 Crisis: An Inside Account by the Staff of the IMF's European Department." International Monetary Fund, Washington, DC. August.
- European Central Bank (ECB). 2015. "Financial Stability Challenges in EU Candidate and Potential Candidate Countries." ECB Occasional Paper No. 164. European Central Bank, Frankfurt.
- Everaert, Greetje, Natasha Che, Nan Geng, Bertrand Gruss, Gregorio Impavido, Yinqiu Lu, Christian Saborowski, Jerome Vandenbussche, and Li Zeng. 2015. "Does Supply or Demand Drive the Credit Cycle? Evidence from Central, Eastern, and Southeastern Europe." IMF Working Paper No. 15/15, International Monetary Fund, Washington, DC.
- Fofack, Hippolyte. 2005. "Nonperforming Loans in Sub-Saharan Africa: Causal Analysis and Macroeconomic Implications," World Bank Working Paper. November. Washington, DC.
- Ichiue, Hibiki, and Frederic Lambert. 2016. "Postcrisis International Banking: An Analysis with New Regulatory Survey Data." IMF Working Paper 16/88, International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2013. "Financing Future Growth: The Evolving Role of the Banking System in CESEE: Technical Notes." Washington, DC. April.
- . 2015a. "The Western Balkans: 15 Years of Economic Transition." EUR Regional Economic Issues Special Report, Washington, DC. March.
- . 2015b. "Central, Eastern and Southeastern Europe: Mind the Credit Gap." EUR Regional Economic Issues, Washington, DC. May.
- . 2016. "Taking Stock of Monetary and Exchange Rate Regimes in Emerging Europe." European Department, Washington, DC. November.
- Roodman, D. 2009. "How To Do Xtabond2: An Introduction to Difference and System GMM in Stata." *The Stata Journal* 9 (1) 86–139.
- Vienna Initiative. 2017. "NPL Monitor for the CESEE Region 2017H1." Luxembourg.