

International Monetary Fund

**The Western Balkans:  
15 Years of Economic Transition**

Regional Economic Issues  
Special Report

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Zuzana Murgasova, Nadeem Ilahi, Jacques Miniane,  
Alasdair Scott, Ivanna Vladkova-Hollar,  
and an IMF Staff Team

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Approved By  
**Aasim M. Husain**

Prepared by a staff team from the European Department led by Zuzana Murgasova, Nadeem Ilahi, Jacques Miniane, Alasdair Scott, and Ivanna Vladkova-Hollar; and including Pamela Madrid Angers, Nina Budina, Natasha Che, Chris Faircloth, Marc Gerard, Nikita Kannekanti, Zsoka Koczan, Ricardo Laudes, Murad Omoev, Janyne Quarm, Jesse Siminitz, Dustin Smith, Eugen Tereanu, Ron van Rooden, Johannes Wiegand, and Zaijin Zhan (Washington, DC); Ruben Atoyán and Patrick Gitton (Resident Representatives to Bosnia and Herzegovina and FYR Macedonia, respectively); Irena Jankulov (Sarajevo Office); and Norbert Funke, Maksym Ivanyna, and Mikhail Pranovich (Joint Vienna Institute). Administrative and editorial assistance was provided by Joanna Swirszcz. Helpful comments on earlier drafts by country teams, other IMF departments, and others outside the IMF are gratefully acknowledged.

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## FOREWORD

David Lipton, IMF First Deputy Managing Director

For the Western Balkan countries, the transition from socialism to capitalism and democracy was less smooth than in other parts of Emerging Europe. But once the war ended and peace returned, these countries did more than rebuild: they began a transformation into market economies, liberalizing prices, privatizing many state- and socially-owned enterprises, and building the institutions needed to support a market economy. During my time at the U.S. Treasury in the 1990s, I was closely involved with the Western Balkans and saw first-hand how the seeds of this transformation were planted. The process that unfolded was not uniform across the region, as starting positions differed, and has not been completed. Moreover, each country's political realities and social and cultural preferences all played a role in the approaches taken. Nevertheless, progress over the last two decades has been evident in every country, resulting in rising incomes and living standards. One objective of this book is to document this transformation, both the tangible achievements as well as the missed opportunities.

Perhaps the most tangible achievement of all lies in the fact that most of the Western Balkan countries are on a path towards European Union accession, something that seemed far off in the 1990s. It is incumbent upon us not to understate the serious challenges that lie ahead, both in terms of macroeconomic stability and even more so with regard to longer-term development. A key contribution of this book is to underscore the incomplete reform process in the region. *We should* be worried about this, as without further reforms the lackluster growth of recent years could become the norm, imperiling the convergence of living standards towards Advanced European levels, and denying employment opportunities to many in the region.

Yet, I remain confident that the region will rise to the challenge, as happened time and again in the past. Western Balkan countries understand that, without macroeconomic stability, there can be no hope of durable growth. A new wave of elected leaders, and an increasingly vibrant civil society, are ready for a second reform wave, embracing private ownership and competition, and tackling vested interests while convincing electorates that the benefits of reform need not be for the very few. We at the IMF remain deeply committed to the region, through our policy advice, our capacity building support, and, if and where needed, our financing. Here's hoping that the next 15 years will bring even more positive change than the previous 15.

### Structure and Focus of the Report

This report analyses the main economic developments and achievements in the Western Balkan countries, and lays out the key macroeconomic policy challenges for the future. While the collapse of communism 25 years ago marked the start of the transition to market economies for all Emerging Europe, the economic transformation of the Western Balkans really got going only after the conflicts that engulfed the region in the 1990s subsided. Hence, the past 15 years are the main focus of this report.

The report is structured as follows. The overview chapter surveys the key findings and policy recommendations. Individual analytical chapters then focus in depth on the following key thematic issues: growth and structural reforms, macroeconomic developments and policies and the role of the IMF in the economic transformation, and the financial sector. Each analytical chapter concludes by outlining the key challenges that the Western Balkans face and suggests possible policy responses.

Given that the Western Balkan countries are following the path previously taken by New Member States to become members of the European Union, the analysis relies heavily on comparisons between these two subregions. In compressing the experience of more than 17 countries over 15 very eventful years, the report inevitably focuses on broad themes, and cannot do justice to the nuance and diversity of individual country narratives.

While the report highlights the role of the IMF during the economic transition, the Fund is only one of a number of agencies that have supported these countries over the past 25 years. In particular, the IMF may have taken a lead role in the early phases of transition, but for some Western Balkan countries the prospect of accession to the European Union has also been an important catalyst for reform. Other key players include the European Bank for Reconstruction and Development, European Central Bank, European Investment Bank, and World Bank, as well as bilateral country donors and private and voluntary sector institutions. But whether external assistance comes from the IMF or others, its impact pales in significance to the importance of domestically-driven reform and development, which is the principal subject of the report.

The report was prepared by a team from IMF headquarters in Washington DC, IMF offices in the region, and the IMF's Joint Vienna Institute (JVI). The views presented are those of the authors.

### Country Coverage and Acronyms

In order to have reasonably consistent country groupings for analytic purposes, the report broadly follows the division of countries used within the IMF's internal organizational structure. The regional aggregates are defined and country acronyms are used as follows:

- Western Balkans (WBS, **red**): Albania (ALB), Bosnia and Herzegovina (BIH), Croatia (HRV), Kosovo (UVK), FYR Macedonia (MKD), Montenegro (MNE), Serbia (SRB)
- New Member States (NMS, **blue**), which are countries that joined the EU during the 2004 and 2007 enlargement: Bulgaria (BGR), Czech Republic (CZE), Estonia (EST), Hungary (HUN), Lithuania (LTU), Latvia (LVA), Poland (POL), Romania (ROU), Slovak Republic (SVK), Slovenia (SVN)
- Central Europe (CEE5, **green**): Czech Republic (CZE), Hungary (HUN), Poland (POL), Slovak Republic (SVK), Slovenia (SVN)
- Baltics (**orange**): Estonia (EST); Latvia (LVA), Lithuania (LTU)
- Southeastern Europe (SEE, **light blue**): Bulgaria (BGR), Romania (ROU)
- Emerging Europe: Albania (ALB), Bosnia and Herzegovina (BIH), Bulgaria (BGR), Croatia (HRV), Czech Republic (CZE), Estonia (EST), Hungary (HUN), Kosovo (UVK), Lithuania (LTU), Latvia (LVA), FYR Macedonia (MKD), Montenegro (MNE), Poland (POL), Romania (ROU), Serbia (SRB), Slovak Republic (SVK), Slovenia (SVN)
- Advanced European Union (EU17, **purple**): Austria (AUT), Belgium (BEL), Cyprus (CYP), Denmark (DNK), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Ireland (IRL), Italy (ITA), Luxembourg (LUX), Malta (MLT), Netherlands (NLD), Portugal (PRT), Spain (ESP), Sweden (SWE), United Kingdom (GBR)



## Executive Summary

March 10, 2015

# THE WESTERN BALKANS: 15 YEARS OF ECONOMIC TRANSITION

The countries of the Western Balkans have undergone a major economic transformation over the past 15 years, and many are unrecognizable compared with where they stood at the turn of the century. Following the conflict-ridden 1990s, these countries set out to comprehensively rebuild and reform their economies. They opened up to global trade and became increasingly export-oriented, expanded the role of the private sector, dismantled regulations that stifled business development, and began to build institutions needed to support a market system. Banking systems were built up—literally from scratch in some cases—with the aid of foreign capital and know-how. The result of these efforts has been robust economic growth, a significant rise in incomes and living standards, and enhanced macroeconomic stability.

However, the process of structural transformation began to stall in the mid-2000s, in the face of vested interests and as reform fatigue set in, and remains incomplete. By the time of the global financial crisis, growth in the Western Balkans was driven more by ample global liquidity and unsustainable capital inflows than by real progress in economic reform. Clear evidence of the weakness in the region's economic model can be found in the extremely high unemployment rates, which remained above 20 percent in many countries even at the height of the precrisis boom.

Growth in the postcrisis period in the Western Balkan countries has been lackluster. The external environment has been weak, but it is the incomplete reform process that is holding back convergence to income levels of richer European Union economies. And faster growth, in itself, may not be enough. The Western Balkan countries also need to generate jobs to reverse the weak labor market outcomes that are leaving so many behind.

What, then, needs to be done? Preserving macroeconomic stability is paramount for durable growth. Previous gains in terms of low inflation should be safeguarded. Countries that are facing high fiscal deficits and public debt need to tackle them urgently; others should gradually rebuild fiscal buffers. Everywhere in the region, investment in the tradable sectors is needed to boost exports and reduce large trade and current account deficits. In addition, high levels of nonperforming loans need to be addressed so that credit can grow again and facilitate the recovery. The development of nonbank financial markets would help diversify sources of funding.

Embarking anew on deep structural reform is a key policy priority for the region. Many inefficient state- or socially-owned enterprises remain to be privatized; competitiveness problems, including red tape and weak governance, will have to be addressed if the private sector is to become the key engine of growth; and legacy practices that prevent the expansion of employment and distort labor markets outcomes will need to be dismantled.

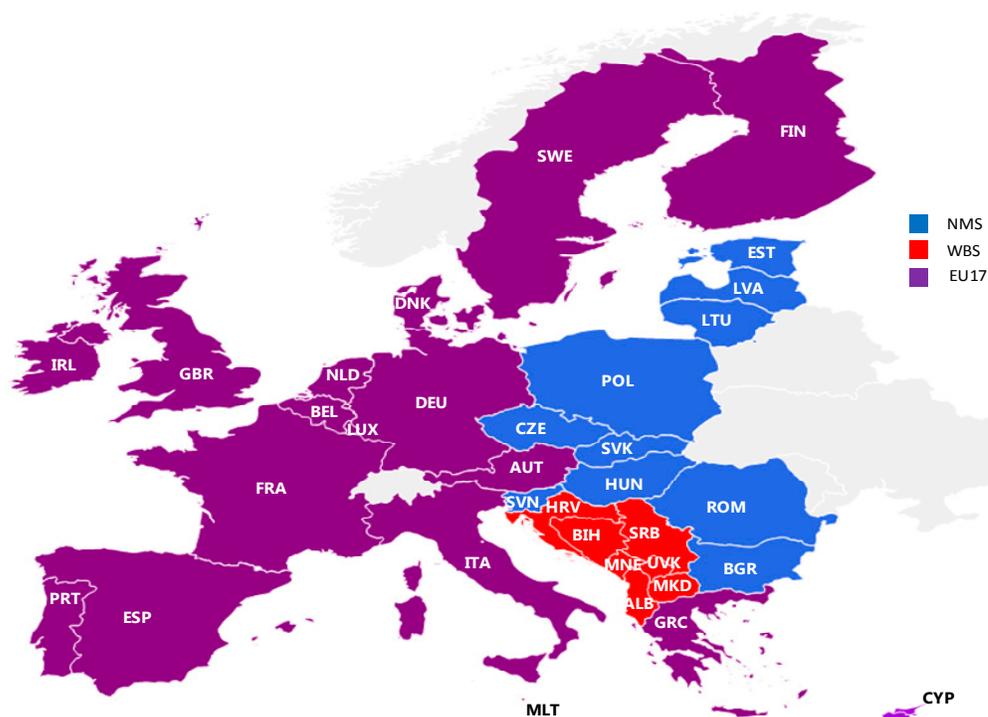


## Overview

# ECONOMIC TRANSFORMATION IN THE WESTERN BALKANS

After spending much of the 1990s mired in conflict, the Western Balkan countries have experienced a notable transformation over the last 15 years. They have transitioned toward market-based systems, privatized many inefficient state- and socially-owned enterprises, rapidly adopted modern banking systems, and enhanced the external orientation of their economies. The result has been a significant catch-up in living standards relative to their richer neighbors in advanced European Union economies. However, the pace of structural reform has been disappointing, owing to a combination of reform fatigue, resistance from vested interests, difficult politics that have constrained reform efforts, and delayed membership in the European Union. And in hindsight, part of the process of catching up was driven by unsustainable inflows in the years leading up to the global financial crisis. The region is thus still coping with the legacies of the boom period and incomplete transition. As a result, the Western Balkan countries still lag well behind the New Member States of the European Union in terms of economic transformation and income levels, which are around one-third of those in Advanced EU economies. Vigorously reviving the reform momentum will be essential to improve living standards and revive income convergence.

### The Western Balkans, New Member States, and Advanced European Union



The Western Balkan economies have experienced a notable transformation. While the rest of Emerging Europe transitioned peacefully out of communism and into democracy, many Western Balkan countries spent the better part of the 1990s engulfed in a devastating conflict. Yet, while the conflict caused widespread devastation and put the region's economic transformation on hold, significant structural reforms were initiated during this decade that were then carried forward once the conflicts abated. Since then, the Western Balkan countries have made impressive gains in rebuilding their war-torn economies and moving forward with the transition to market economies. Vast swathes of state- or socially-owned enterprises have been privatized, tripling the share of the private sector in economic activity. Countries have eliminated many legacy regulations, while large projects have completely redrawn the infrastructure landscape in the region.

As they transitioned toward market-based systems, the region's economies opened up to the world. Economies have become increasingly export-oriented, with FYR Macedonia and Serbia experiencing particularly noticeable gains. And this has been accompanied by increasing diversification of their export markets, with greater trade within the region and with the New Member States, and, concomitantly, lesser reliance on exports to Advanced EU economies. And just as Western Balkan firms were discovering new markets, foreign direct investment (FDI) into the region also took off.

One sector that has been entirely transformed by foreign investment is banking, which has facilitated a more efficient allocation of capital. Starting in the early 2000s, foreign investment into banking, combined with increased deposit bases, boosted private sector credit. In fact, with deposits and credit rising by more than 30 percent of GDP since the early 2000s, financial sectors in the Western Balkans have deepened more than those in the New Member States at comparable stages of transition. Beyond deepening, there has been an increase in financial inclusion—access to banking services for poor and remote populations—as well as banking sector efficiency, although they remain below levels in the New Member States.

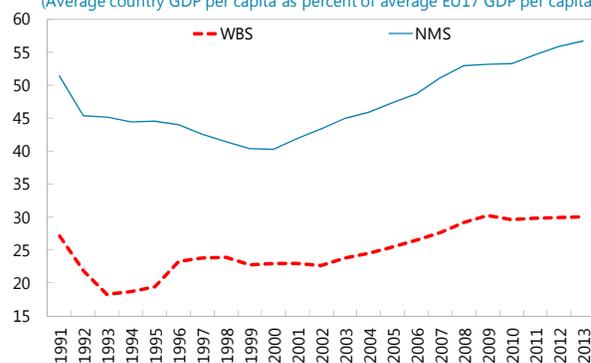
The IMF was closely engaged in the Western Balkan's economic transformation from the start. In addition to providing advice on economic matters, the IMF has had financial arrangements with almost every country in the region, often more than once. These arrangements have typically aimed at preserving macroeconomic stability in the face of major economic transformation, which the Fund was simultaneously trying to advance. In addition, the IMF has provided significant technical assistance and training to the region. This, together with efforts from other donors, has helped the region build and gradually improve key institutions for economic policymaking, be it public finance laws or bank regulatory and supervisory regimes, among others.

Altogether, the region experienced significant gains in terms of incomes and living standards, although perhaps not as much as could have been expected. With average economic growth across the region exceeding 5 percent per year over 2000–08, income per capita increased significantly and partially closed the gap with the standards of living of Europe's richest countries. Still, income convergence of the Western Balkans cannot be seen as entirely satisfactory. In particular, the New Member States caught up with Advanced EU economies significantly faster at similar stages of transition, which raises the question why the Western Balkans did not advance at the same rate. Part

of the explanation lies in the closer physical distance of the New Member States to Europe's core, allowing some of them to integrate into the German supply chain. But another, more troubling, part of the explanation is that income convergence in the Western Balkans was slower because structural reforms proceeded more slowly and did not advance as far as in the New Member States, particularly in the area of reducing state ownership and improving governance.

#### Catching up with Advanced Europe

(Average country GDP per capita as percent of average EU17 GDP per capita)



Sources: Penn World Table; and IMF staff calculations.

In hindsight, abundant global liquidity channeled into the Western Balkan countries through equity investment in their domestic banking systems facilitated some of the growth catch-up and masked the incomplete structural transformation. In the years leading up to the global financial crisis, the increase in capital flowing into the Western Balkans was as significant as that into Central and Southeastern Europe. These capital inflows were intermediated by domestic banks, and the resulting extension of credit went beyond what fundamentals would have warranted. Indeed, according to some metrics, only half of the precrisis increase in credit-to-GDP ratios in the Western Balkans could have been explained by economic fundamentals. This was similar to the experience in other Emerging European economies, although in the Baltics and Bulgaria credit expansions were both significantly greater than in the Western Balkans (with the exception of Montenegro, and perhaps Kosovo), and significantly less driven by fundamentals. But the experience of the Western Balkan countries did differ from the New Member states in one key respect—the inflows into the banking systems of the former were largely in the form of FDI and equity investment, rather than borrowing from parent banks and wholesale funding markets.

In the years leading up to the global financial crisis, current account deficits increased on average by more than 10 percent of GDP. Montenegro, in particular, experienced one of the sharpest current account deteriorations in the world. While some of this reflected capital formation, much of the increase was directed into nontradable sectors, where the scope for productivity growth tends to be lower. This exacerbated the region's competitiveness problems, reflected by relatively narrow export bases and concomitant dependence on imports. The preference of most Western Balkan countries for fixed or near-fixed exchange rates made the needed adjustment to the competitiveness challenge more difficult.

Perhaps the biggest flaw in the Western Balkan economic model has been the chronic underutilization of human resources. In 2008, at the tail end of the growth spurt, the unemployment rate in the region still averaged more than 20 percent. Employment levels tell an equally disappointing story, hovering between 40 and 45 percent on average since 2000, a full 10 percentage points lower than in the New Member States. Employment is particularly low among women and the young, strikingly so in Bosnia and Herzegovina and Kosovo. Why has this been so? According to available evidence, skill gaps have been particularly severe in the Western Balkans,

more so than in the Baltics or Central Europe. Moreover, in some countries, failure to tackle the legacy of self-management and so-called social ownership has contributed to labor market rigidity and de facto protection for insiders. These problems have, in turn, been compounded by the region's heavy reliance on remittances, which tend to raise reservation wages (i.e., the wage at which people are willing to work) above what productivity levels can sustain.

Like elsewhere, boom times came to an end, imperiling income convergence. With the onset of the global financial crisis and the associated pull-back in global liquidity, capital flows reversed in the Western Balkans as they did elsewhere. As a consequence, credit growth slowed sharply, and current account deficits contracted by more than 10 percent of GDP on average. With the exception of Croatia, these current account contractions were not mirrored by GDP contractions, as happened elsewhere in Europe. Rather, growth simply slowed down in most Western Balkan countries. The problem is that seven years after the onset of the crisis, growth remains lackluster in the region, and hence income convergence has stalled. At currently projected growth rates, Western Balkan economies will only close a small fraction of the gap with Advanced EU economies' income per capita levels by 2030. And it is not just about incomes: faster growth is also needed to provide employment opportunities to the large surplus of unutilized labor in the region.

In some countries, the growth and jobs challenge is compounded by the need to pursue fiscal consolidation. As happened elsewhere in Europe, a substantial share of the rise in tax revenues during the boom years proved in hindsight to be cyclical, and this share disappeared once economic growth slowed or went into reverse. The boom had also prompted some countries in the region to lower tax rates. Once the crisis hit, Western Balkan countries found it hard to scale back spending to match the decline in revenues, not least because their share of precommitted spending is higher than in the New Member States or Advanced EU economies. As a result, some of the countries, notably Serbia and Croatia, now have very high public debt levels, exacerbated by ongoing fiscal deficits that need to be brought down.

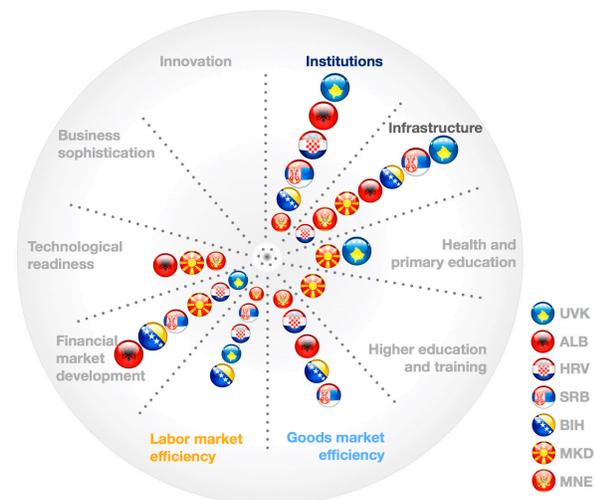
Important financial sector reforms remain to be done. Tackling the large stock of nonperforming loans (NPLs) is a priority if credit is to support the economic recovery. NPLs rose significantly more following the global financial crisis in the New Member States than in the Western Balkan countries. However, in the former NPLs have started to come down, while in the latter they remain at postcrisis peaks, and in some countries they are still increasing. While financial stability risks are mitigated by comfortable levels of bank capital and provisioning, NPLs will continue to weigh on profitability and credit growth if left unresolved. A multi-pronged effort is needed to tackle the problem, including better collateral enforcement, improved frameworks for going-concern and out-of-court restructurings, and the clearing of bottlenecks in overloaded court systems. Reforms to strengthen supervision and regulation of financial institutions have to be redoubled. Lastly, it is critical to create an environment where nonbank financial development can take place.

The key challenge facing the region going forward is to complete the structural transformation process that began two decades ago. The impressive reform process born out of the ashes of socialism had largely stalled by the mid-2000s and was left incomplete, a victim of reform fatigue, a difficult political economy, vested interests that had grown in power and sophistication, and disillusionment with the way some reforms were executed. The process of accession to EU membership—arguably the main catalyst of reforms in the New Member States—remained a

distant prospect for most of the Western Balkans. But abundant global liquidity gave the illusion, albeit temporarily, that fast economic growth was possible without reforming. Today, the region lags well behind the New Member States in terms of structural transformation. In some Western Balkan countries, resistance to private ownership has meant that many inefficient state- or socially-owned enterprises have survived and continue to impose a drag on public finances and resource allocation. Throughout the region, red tape and corruption continue to hamper economic activity, while corporate governance reform remains a long overdue promise. Importantly, wide political support for far-reaching reform—a crucial element in the transformation in the New Member States—has been elusive in most Western Balkans countries. There is a sense in the Western Balkans that reforms have underdelivered, and that the spoils of growth have benefited only a few.

As this report will make clear, however, it is the inadequacy of reform over the last 10 years, rather than the nature of the reforms undertaken, that is holding the region back. Without a courageous reform push, Western Balkan countries cannot expect to attract the scale of investment flows that is needed to finance rapid sustained growth, and they risk staying stuck at income levels less than one-third of those of their richer European neighbors.

### Top 5 Reform Priorities for Each of the WB States<sup>1/2/</sup>



1/ These are assessed relative to the NMS in each of the 10 main pillars of the Global Competitiveness Index.

2/ Larger bubbles represent reform areas that receive a higher rank ordering.

Note: For Kosovo, a different methodology was used as GCI data is not available for the country.

## Chapter 1: Growth, Jobs, and Convergence<sup>1</sup>

### OBSTACLES AND THE ROADMAP FOR REFORM

After the collapse of socialist regimes in the early 1990s, ensuing conflicts in the region caused major disruptions, and income per capita fell. The pace of recovery was uneven in the second half of the 1990s: some countries such as Bosnia and Herzegovina and Croatia experienced a sharp turnaround in growth, while others such as Serbia and Albania faced high growth volatility. By the end of the decade, however, real GDP per capita in the region had recovered to its pre-1990 level, despite another recession around the turn of the century, when output in Albania, Montenegro, and Serbia shrank by over 10 percent in a single year.

After 2000, the Western Balkan countries enjoyed sustained economic growth up until the global financial crisis. During this precrisis period, real GDP per capita in the region increased by more than 40 percent on average, riding the tide of deeper financial and trade integration with the rest of Europe, high capital inflows, rapid credit expansion, and productivity growth. Poverty fell sharply—both in absolute numbers and in depth. Rapid growth brought uneven benefits, however, and the early 2000s saw large increases in inequality; while in absolute terms everyone became better off, disparities in income distribution increased.

The boom years came to an abrupt end in 2009, and per capita GDP growth has largely stalled since then. Reigniting convergence will not be easy. In the aftermath of the global financial crisis, growth in the euro area—a key export market for the region—has been weak, and could remain so over the medium term, creating a less than supportive external environment for the Western Balkan states. In addition, the end of a period of rapid global growth unmasked problems associated with stalled domestic reform agendas in the Western Balkans, which will continue to weigh on growth potential if left unaddressed. While economic transformation in the region is largely complete in some areas, notably with respect to price, trade, and foreign exchange liberalization, more effort is needed in upgrading institutions, improving the business environment, building infrastructure, and developing financing markets.

What policies can help address the Western Balkans' high unemployment, which represents a unique regional challenge both in its importance and magnitude? The region was unable to generate significant employment gains during the boom years and registered large job losses during the global crisis. A comprehensive set of reforms will be needed to address the region's persistently high unemployment, and this chapter's findings of a significant positive impact of structural reforms on the probability of employment is worth highlighting.

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<sup>1</sup> Prepared by Nina Budina and Natasha Che (Growth and Convergence), Zsoka Koczan (Progress in Structural Transformation), Dustin Smith and Eugen Tereanu (Openness), Norbert Funke and Maksym Ivanyna (Ranking Structural Reform Priorities), and Ruben Atoyan, Irena Jankulov, and Ron Van Rooden (The Quest for Jobs), under the supervision of Ivanna Vladkova-Hollar.

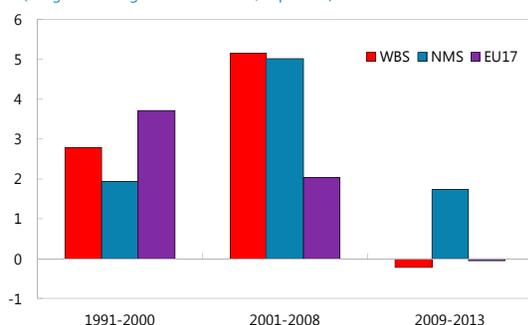
Section A of this chapter surveys the historical growth and convergence track record of the Western Balkans, exploring both similarities and differences with respect to other emerging markets. Section B analyzes progress in transforming economic structures and also benchmarks the sequence and depth of reforms to the experience of the New Member States. With this background, and by underscoring lessons from the transition elsewhere in Europe, Section C presents a prioritization of reforms that should help generate a strong payback in growth and accelerate convergence. Section D explores the demographic, macroeconomic, and structural drivers of labor market outcomes in the region, offering insight into the likely effects of various possible reforms. Section E summarizes lessons for stronger convergence.

## A. Growth and Convergence—A Cup Half Full or Half Empty?

All the Western Balkan countries enjoyed high and sustained economic growth starting at the turn of the century, in line with the rest of Emerging Europe. What were the main factors driving growth performance in the region?

**Average Real GDP Growth**

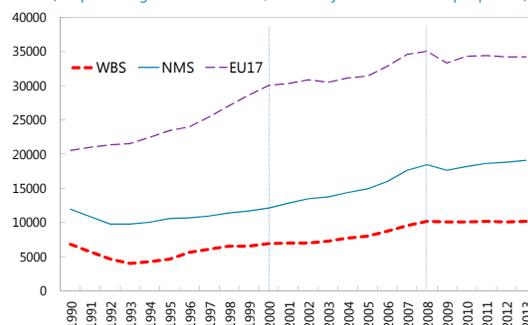
(Weighted average across countries, in percent)



Sources: Penn World Table; WEO; and IMF staff calculation.

**Real GDP per Capita**

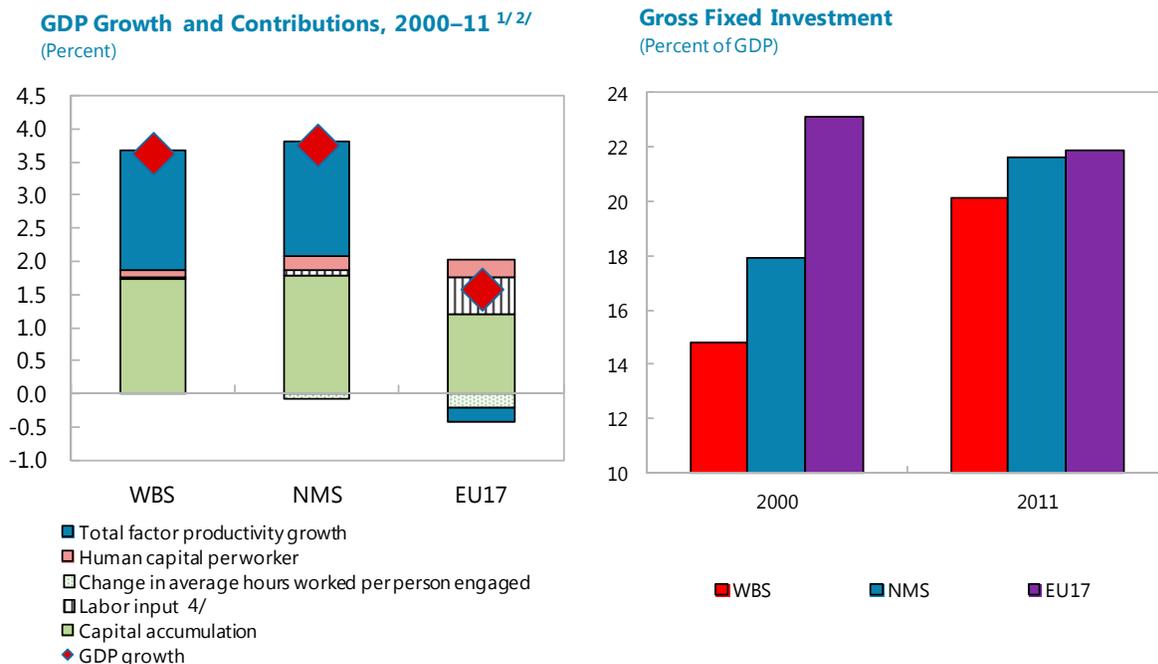
(Simple average across countries; in PPP adjusted U.S. dollars per person)



Sources: Penn World Table; and IMF staff calculations.

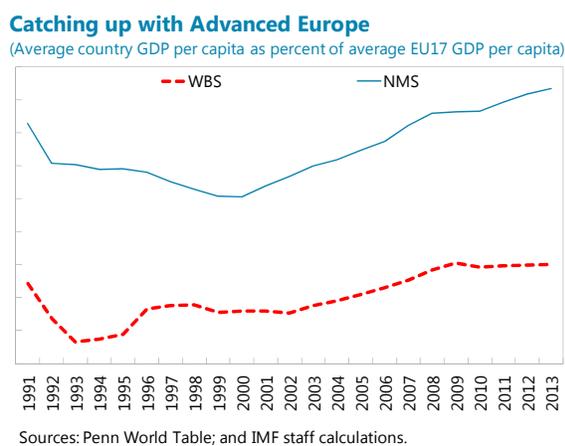
A simple growth-accounting exercise suggests that capital accumulation and total factor productivity gains were the biggest growth drivers in both the New Member States and the Western Balkans during the precrisis years (Annex 1.1). Indeed, both the Western Balkans and the New Member States experienced investment booms in the 2000s owing to substantial capital inflows and low global interest rates (see Chapter 2). The large productivity gains likely resulted from the transformation toward market economies, although the relatively small contribution of labor inputs and the consequent high importance of productivity—a residual—could be also partly explained by the large informal economies in the Western Balkan countries, which tend to be more labor-intensive (Gërzhani 2004). Nonetheless, similar patterns have been observed elsewhere—in particular, recent evidence suggests that the uptick in growth in emerging market economies during the 2000–12 period is mainly explained by higher total factor productivity (Tsounta 2014). In addition, the very low contribution of labor and human capital to GDP growth in the Western Balkans is in line with findings of other studies (Campos and Coricelli 2002; IMF 2009; and EBRD 2013).

### Average Output Growth and Sources 2000–11



Sources: Penn World Table; Inklaar and Timmer (2013); University of Groningen Growth and Development Centre; and IMF staff calculations.  
 1/ Growth accounting uses measures of capital stocks from Penn World Table 8.0 and adjusts employment growth for years of schooling as in Barro and Lee (2013).  
 2/ The chart shows simple average growth rates for real GDP and the respective contributions of human capital, labour, physical capital and total factor productivity.  
 3/ Montenegro data starts in 2006.  
 4/ For EU countries, the contribution of labor has been adjusted for the change in average hours worked per person engaged.

Yet despite a limited contribution from labor, the impulse to growth from other factors was strong enough to generate substantial improvements in living standards, as well as a reduction in poverty (Box 1.1). By 2008, the Western Balkan countries had made impressive progress and reduced their gap in GDP per capita vis-à-vis Advanced EU economies by 30 percent. But contrary to predictions of standard economic theory, the speed of convergence was slower in the poorer Western Balkans than that of the richer New Member States during the boom years.



Why did the Western Balkans converge more slowly? One possible explanation is that the closer physical distance of the New Member States to advanced EU economies may have offered advantages in terms of access to markets and investments, and facilitated the transfer of knowledge. These relative advantages are only recently partially offset by improvements in infrastructure links between the Western Balkans and Advanced EU economies. Yet even after controlling for the physical distance, econometric evidence suggests that, except for the postwar recovery period, the pace of convergence in the Western Balkans has been slower than in the New Member States (see Annex 1.2). This is partly due to the absence of convergence *within* the Western Balkan region, because poorer countries such as Albania and Bosnia and Herzegovina failed to grow significantly faster than the richer countries, such as Croatia.

What other factors may have constrained faster convergence? There is a growing literature on the impact of structural factors on convergence, though mostly on larger panels of countries. Findings suggest that domestic financial development speeds up convergence (Aghion, Howitt, and Mayer-Foulkes 2005; Fung 2009) and that human capital is more important to growth for countries that are less developed (Fung 2009; Ciccone and Papaioannou 2009). Better institutional infrastructure and selected labor market reforms have been shown to facilitate convergence at the regional level (Che and Spilimbergo 2012). Reform priorities for sustaining convergence have been found to vary with income levels. Empirical evidence suggests that in lower-middle-income countries, priorities should be reforming banking and agricultural sectors, reducing barriers to FDI, increasing competition in product markets for a more vibrant services sector, improving the quality of secondary and tertiary education, and alleviating infrastructure bottlenecks. In upper-middle-income countries, boosting productivity growth would require deepening capital markets, developing more competitive and flexible product and labor markets, fostering a more skilled labor force, and investing in research and development and new technologies (Dabla-Norris and others 2013). Finally, a survey of various studies that focus specifically on the transition process concludes that institutional quality and market liberalization policies to promote private sector growth have a positive impact on economic growth, despite their initially disruptive effect (Campos and Coricelli 2002).

In line with these findings, the analysis here shows that improving the quality of governance, and developing market-oriented institutions, a strong human capital base, and deeper financial systems help poorer countries catch up (Annex 1.2). In contrast, the dominance of the public sector in the economy hinders the catching-up process. And the Western Balkans have lagged behind the New Member States in these areas. In light of the critical importance of economic transformation, the next section explores progress to date.

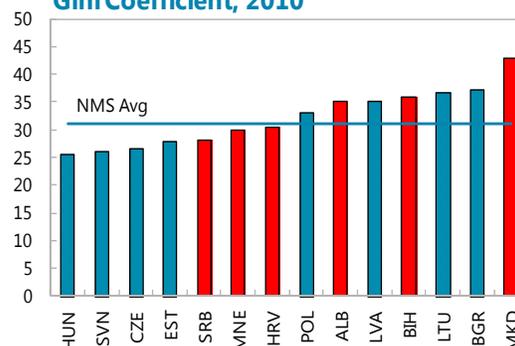
### Box 1.1. Inequality and Poverty in the Western Balkans

The boom years of the early 2000s brought steady increases in incomes across the region. Poverty fell sharply both in terms of absolute numbers (poverty headcount) and severity (as indicated by the poverty gap, a measure of the distance between average incomes and the poverty line).<sup>1</sup>

Initially, rapid growth brought uneven benefits, and the early 2000s saw large increases in inequality (as measured by the Gini index). While in absolute terms all income groups were better off, disparities increased as the income share of the top quintile rose relative to the income share of the bottom quintile. Income inequality in the region has since declined, although it remains high, particularly in Bosnia and Herzegovina and FYR Macedonia.

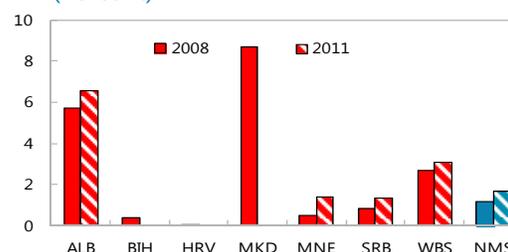
Poverty, however, has increased since 2008, though with significant variation across countries, and to a lesser extent than in the New Member States. Albania and Montenegro have seen the sharpest increase in poverty since the global financial crisis, although poverty in Serbia also increased. Wage reductions, and importantly, a loss of remittances served to transmit the economic slowdown across Europe to poverty levels in the Western Balkans.

#### Gini Coefficient, 2010



Sources: Povcal; and World Bank, World Development Indicators.

#### Poverty Headcount<sup>1/</sup> (Percent)



Sources: World Bank Povcal Database, and IMF staff calculations. Data for Kosovo is not available. Poverty rates are for 2007 for BIH. 2011 data not available for BIH, HRV and MKD.

<sup>1/</sup> Percent of population living below poverty line defined at USD 2.50 per day.

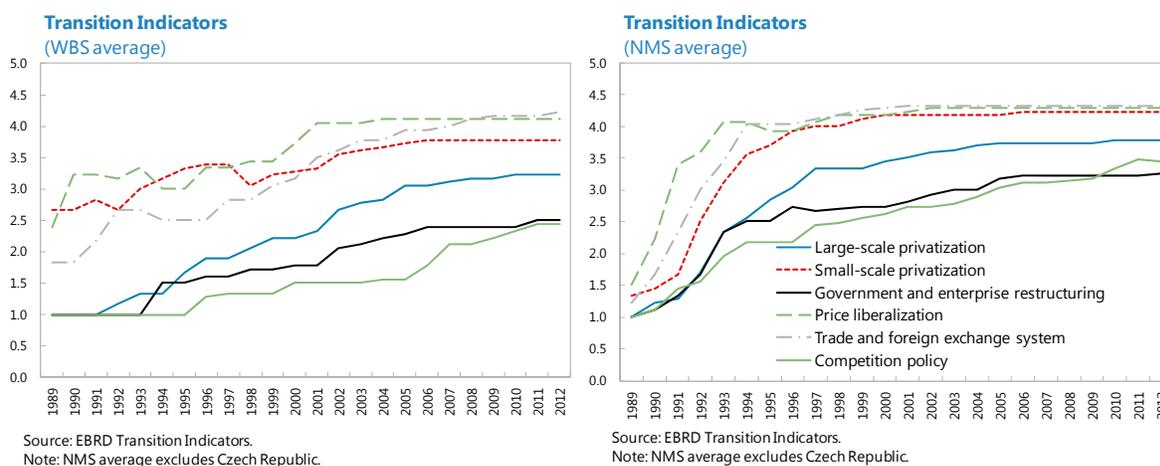
<sup>1/</sup>The poverty line used here is USD 75 per month, corresponding to USD 2.50 per day in 2005 PPP.

## B. Progress in Economic Transformation

### Structural Reforms—What Has Been Accomplished?

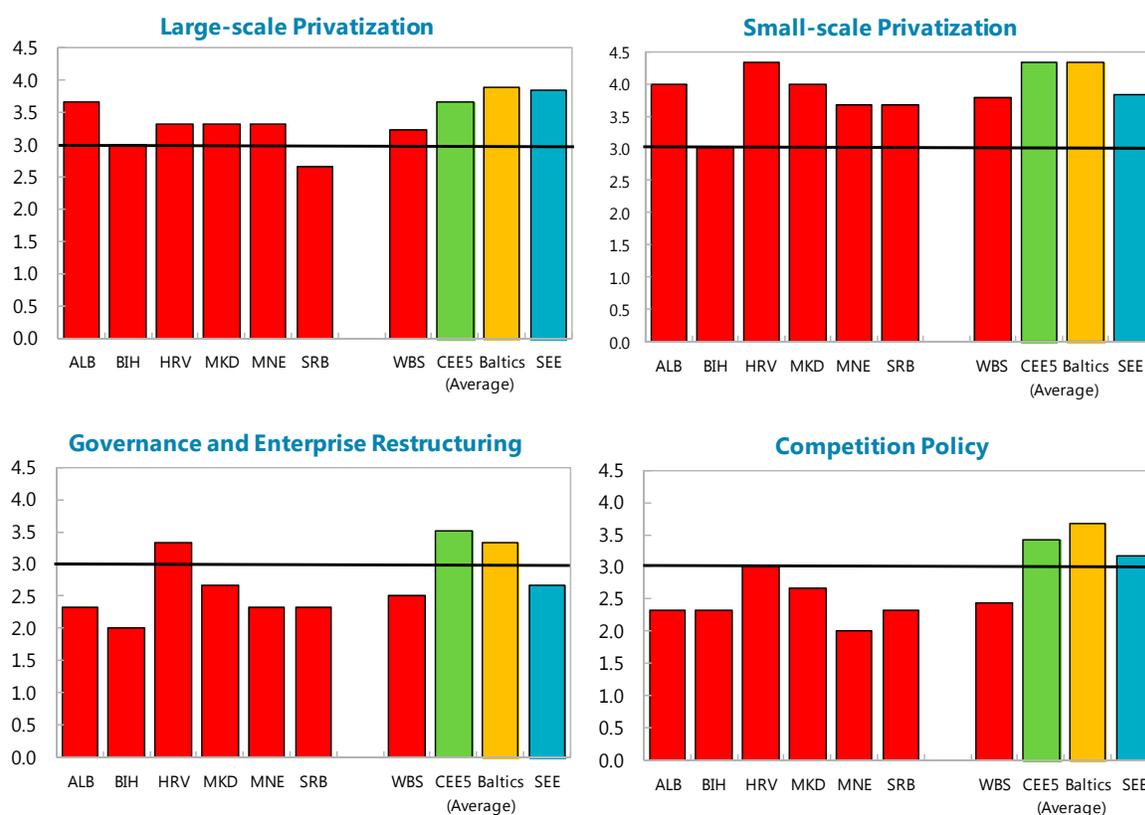
Structural reforms are an integral part of the process of transformation into a market economy. So how did the Western Balkans fare in their implementation? The *sequence of reforms* was similar to that in the New Member States. Specifically, price liberalization and reforms to trade and foreign exchange systems preceded privatization, and were followed only later by reforms to governance and competition policy. However, the *pace of reforms* was quite different, and the Western Balkans have not progressed as far as the New Member States along a critical set of structural reforms.

One notable feature of the early transition period was the unique economic system, known as “market socialism”, that was in place in the former Yugoslavia well before the 1990s, where heavy reliance on administrative controls coexisted with a vibrant private sector of small and medium enterprises without Soviet-style central planning (Boughton 2012). Albania, on the other hand, started the transition process as an isolated and autarkic state with virtually no elements of a market economy, but made swift progress, particularly in trade and foreign exchange liberalization, where reforms went further than in the rest of the Western Balkan states as early as 1992.



Despite a difficult decade, by 1999 the Western Balkans as a group had reached a fairly advanced stage of transition (measured by a value of 3 or higher for the Transition Indicators of the European Bank for Reconstruction and Development) in the areas of price liberalization, trade and foreign exchange, and small-scale privatization by 1999, trailing the New Member States by only a few years. However, other reforms, such as large-scale privatization, were delayed, and the Western Balkans are yet to reach the advanced stage of transition in governance and competition policy areas. A key culprit was another Yugoslavia-specific feature—the “socially-owned” system of enterprise ownership, in contrast to state ownership in centrally planned economies elsewhere—which posed important challenges to large-scale privatization. The absence of a legal property owner required sorting out how to convert social to private ownership; the method of conversion varied across the different countries (Hashi 2001). The nature of the privatization process and the resulting stakeholder structure in those enterprises had implications for corporate governance and incentives to restructure:

## Selected Transition Indicators, 2012



Source: EBRD Transition Indicators and IMF staff calculations.

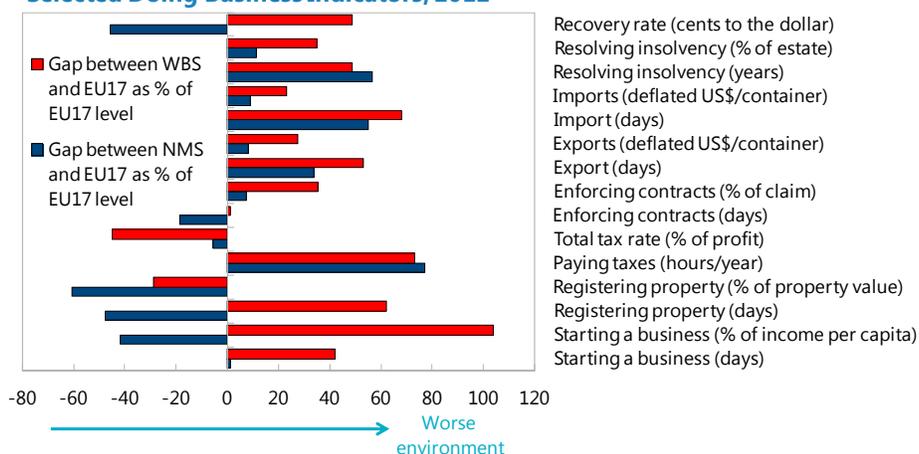
Note: The scales range from 1 to 4+, where 1 represents little or no change from a rigid centrally planned economy and 4+ represents the standards of an industrialized market economy. A value of 3 indicates an advanced stage of transition. Data for Czech Republic and Kosovo is not available.

- The progress in *large-scale privatizations* was uneven across the region. While many Western Balkan countries had already initiated these privatizations in the late 1990s and early 2000s, Bosnia and Herzegovina, Serbia, and Montenegro joined the process at later stages. There was also considerable variation across sectors: privatizations in the banking, telecommunications, and in some cases energy sectors generally moved ahead, but large public enterprises in historically important industries—such as metals, shipyards, utilities, and railways—proved particularly difficult to privatize. Stalled privatizations often reflected large social opposition, high short-run costs, and few serious bidders.
- *Corporate governance and enterprise restructuring* of former state-owned enterprises remained a challenge across the region and state support often continued. For example, in Bosnia and Herzegovina the management of privatized enterprises was hampered by diffuse or ill-defined ownership rights. In FYR Macedonia, most socially-owned enterprises were sold to insiders rather than to strategic investors with capital and know-how, and many firms thus survived with substandard performance. Progress in winding down a few large loss-making enterprises has been slow. In Serbia, weak governance and output price controls resulted in large enterprise losses at significant fiscal cost. In Croatia, sizable direct state aid persisted, particularly in agriculture and shipbuilding, up until EU accession. In Montenegro, privatized steel and aluminum enterprises continued to drain public finances.

The Western Balkans made substantial progress in reducing red tape and improving the *business environment* in the mid-2000s. Steps were taken across the region to lighten the regulatory burden. Several countries initiated “regulatory guillotines” to eliminate unnecessary regulations, set up one-stop-shops for starting a business and obtaining construction permits, reduced non-tax fees, strengthened bankruptcy procedures, improved investor protection, introduced or expanded the coverage of real estate cadastres, introduced or improved investment promotion laws, and set up entrepreneurial zones with good infrastructure and land free of ownership uncertainty. Large infrastructure projects were initiated to fill critical gaps. According to the World Bank’s Doing Business Indicators,

significant progress across the region was made on some fronts: registering property is cheaper in the Western Balkans than in the Advanced EU countries, and the tax burden is lighter. Yet it is still time-consuming for businesses to trade, pay taxes, or resolve insolvency, and costly to start a business or enforce contracts. Most countries in the region continue to face large infrastructure needs in transportation as well as in energy. Overall, rigid business environments often continue to hamper foreign investment, though there are isolated success stories.

**Selected Doing Business Indicators, 2012**

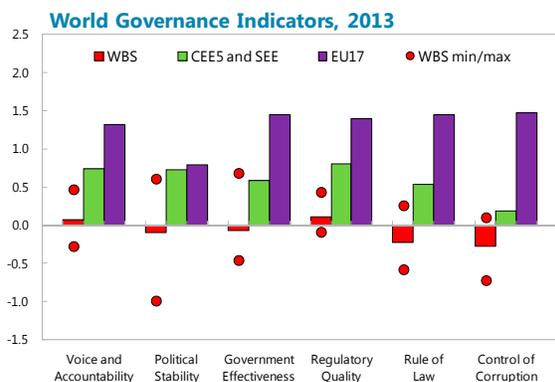


Source: World Bank, Doing Business Indicators; and IMF staff calculations.

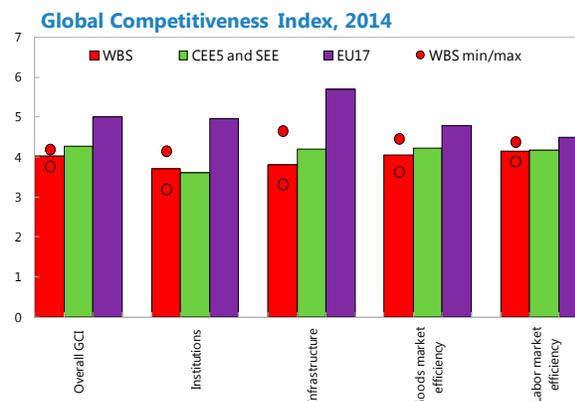
Note: A large positive gap signals large shortfalls in ranking relative to the EU17.

A formidable challenge facing the region is reforming *governance*. While better governance facilitates higher per capita incomes, empirical evidence does not point to a virtuous cycle whereby higher growth automatically brings about improvements in governance (Kaufmann and Kraay 2002). This underscores the need for a concerted effort to improve the quality of governance. The Western Balkans still lag far behind the EU and New Member States peers in rule of law, control of corruption, and political stability, according to the World Bank’s World Governance indicators. Cross-country analysis shows that the quality of such institutions depends on several factors, particularly openness—that is, countries with greater openness to trade and finance tend to have better economic institutions (EBRD, 2013).<sup>2</sup>

<sup>2</sup> The EBRD’s 2013 *Transition Report* notes that openness is a particularly powerful tool to improve institutional quality, as it is achievable across a wide range of political systems. The report posits that international integration may help institutions through several channels. The increased presence of international firms helps to disseminate international business practices and standards. It may also put pressure on national and local authorities to improve the quality of government services. Dual listing of company shares may contribute to improved corporate governance.



Sources: World Bank, World Governance Indicators, and IMF staff calculations. Note: Estimate of governance ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance.

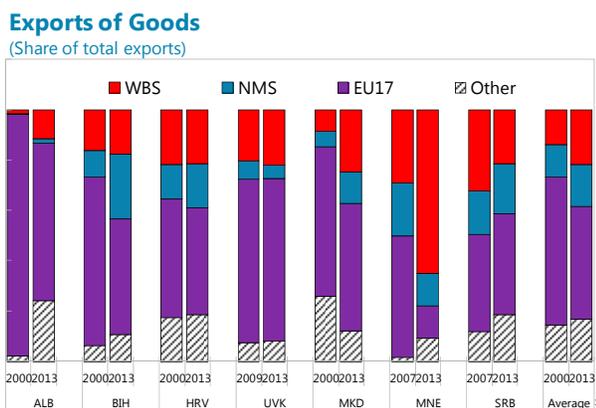


Source: World Economic Forum Global Competitiveness Indicators; and IMF staff calculations. Note: Scale 1-7, 7 is best. Data not available for Kosovo.

### Gradual Increase in Openness

Given that greater trade openness is commonly associated with higher economic growth and efficiency, we now turn to an assessment of the progress of the Western Balkans in this area.

While the region has gradually moved toward greater openness, the Western Balkan’s average share of exports stands at under half of the New Member States average of 60 percent of GDP. The average share of exports to GDP increased by 8 percentage points between 2000 and 2013, albeit representing disparate cross-country dynamics: a twofold and threefold increase in export shares took place in relatively closed economies like Bosnia and Herzegovina and Albania, in contrast with limited gains in export shares in Montenegro.

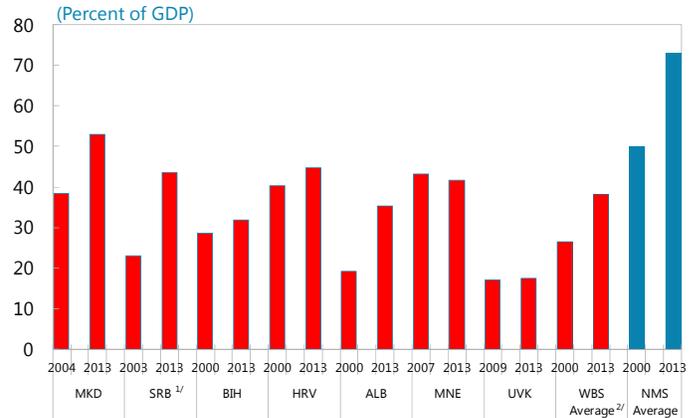


Sources: Direction of Trade Database; and IMF staff calculations. 1/2000 average uses Serbia and Montenegro data.

The EU has been the largest export market for the region for some time, and continues to absorb about 60 percent of Western Balkan exports, with the notable exception of Montenegro. Yet trade among the Western Balkan countries themselves has become more important as well since 2000. The strength of regional integration is confirmed by an econometric analysis of trade linkages: augmenting a standard gravity model of trade with regional groupings shows that for both exports and imports, membership in the Western Balkan group is a strong explanatory factor of the size of trade flows (Annex 1.3).

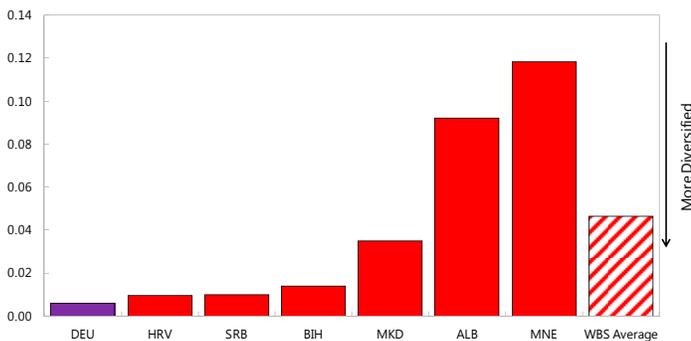
The evolution of the structure of export goods in the Western Balkans as a group has broadly mirrored the experience of New Member States, which saw a rise in higher-value-added exports accompanied by an increase in agricultural exports and minerals. However, this masks large heterogeneity across the region. Whereas FYR Macedonia and Serbia have augmented their shares of exports of machinery and transport, mineral exports have increasingly dominated the export structure in Albania, Bosnia and Herzegovina, and Montenegro. Albania and Montenegro lag behind Western Balkan peers in export diversification, whereas Serbia has made significant progress, and Croatia has preserved its relatively more favorable starting point.

**Exports of Goods and Services**



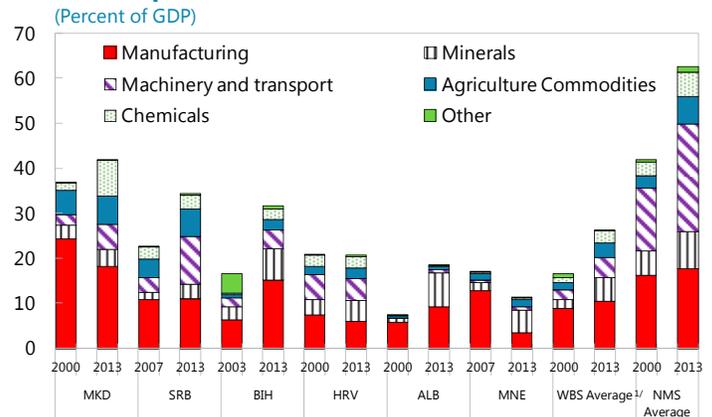
Sources: World Economic Outlook; and IMF staff calculations.  
 1/ 2003 data uses Serbia and Montenegro data.  
 2/ 2000 average uses 2004 data for Macedonia, 2003 data for Serbia and Montenegro.

**Herfindahl-Hirschman Product Concentration Index, 2013**



Sources: UN Comtrade Database; and IMF staff calculations.  
 Note: Data for Kosovo is unavailable. This indicator is a measure of the dispersion of trade value across an exporter's products. A country with a preponderance of trade value concentrated in a very few products will have an index value close to 1. Thus, it is an indicator of the exporter's vulnerability to trade shocks. Measured over time, a fall in the index may be an indication of diversification in the exporter's trade profile. HS6 classification was used when creating the Herfindahl-Hirschman Product Concentration Index.

**Total Exports of Goods**



Sources: UN Comtrade Database; and IMF staff calculations.  
 1/ 2000 average uses Serbia and Montenegro data.  
 Note: Data for Kosovo is unavailable. SITC Rev. 4 commodity codes from Comtrade were used to create aggregations.

### C. Ranking Structural Reforms Priorities for Faster Growth<sup>3</sup>

It is generally accepted that ambitious structural reforms can boost economic growth. But which specific reforms would deliver the strongest growth dividend in each of the Western Balkan countries? This question is tackled here by first identifying country-specific reform gaps, and then comparing the performance of the Western Balkan economies along a wide set of competitiveness indicators with the performance of New Member States and the average EU country.<sup>4</sup> Growth regressions are then used to rank reforms according to their importance for growth. The results allow for proposing country-specific reform priorities in areas where both the competitiveness gap is large and the estimated growth impact of reform is high (see Annex 1.4 for methodological notes).

We first analyze the *aggregated set of factors* that determine productivity and growth, encompassing 10 broad areas such as institutions, infrastructure, and innovation, among others.<sup>5</sup> Along a few dimensions the Western Balkan states have closed the distance with New Member states, but those most gaps are still negative. When assessed against EU averages, however, the pending reform agenda looms large. Where do the main gaps lie?

- **Relative to NMS**, Montenegro and, to a lesser extent, FYR Macedonia compare relatively favorably: most of the estimated gaps are small, and a few are slightly positive—meaning that in these specific areas the competitiveness profile of these two countries is similar to that of NMS (Figure 1). The results for Albania, Bosnia and Herzegovina, and Croatia are more mixed—while the gap is relatively small in some areas, in other areas these countries lag behind significantly. For Albania and Bosnia and Herzegovina, the notable gaps are in infrastructure and financial market development; for Croatia, the gaps are in goods and labor market efficiency. Serbia generally faces more formidable structural challenges, as it compares unfavorably to NMS along all 10 indicators.

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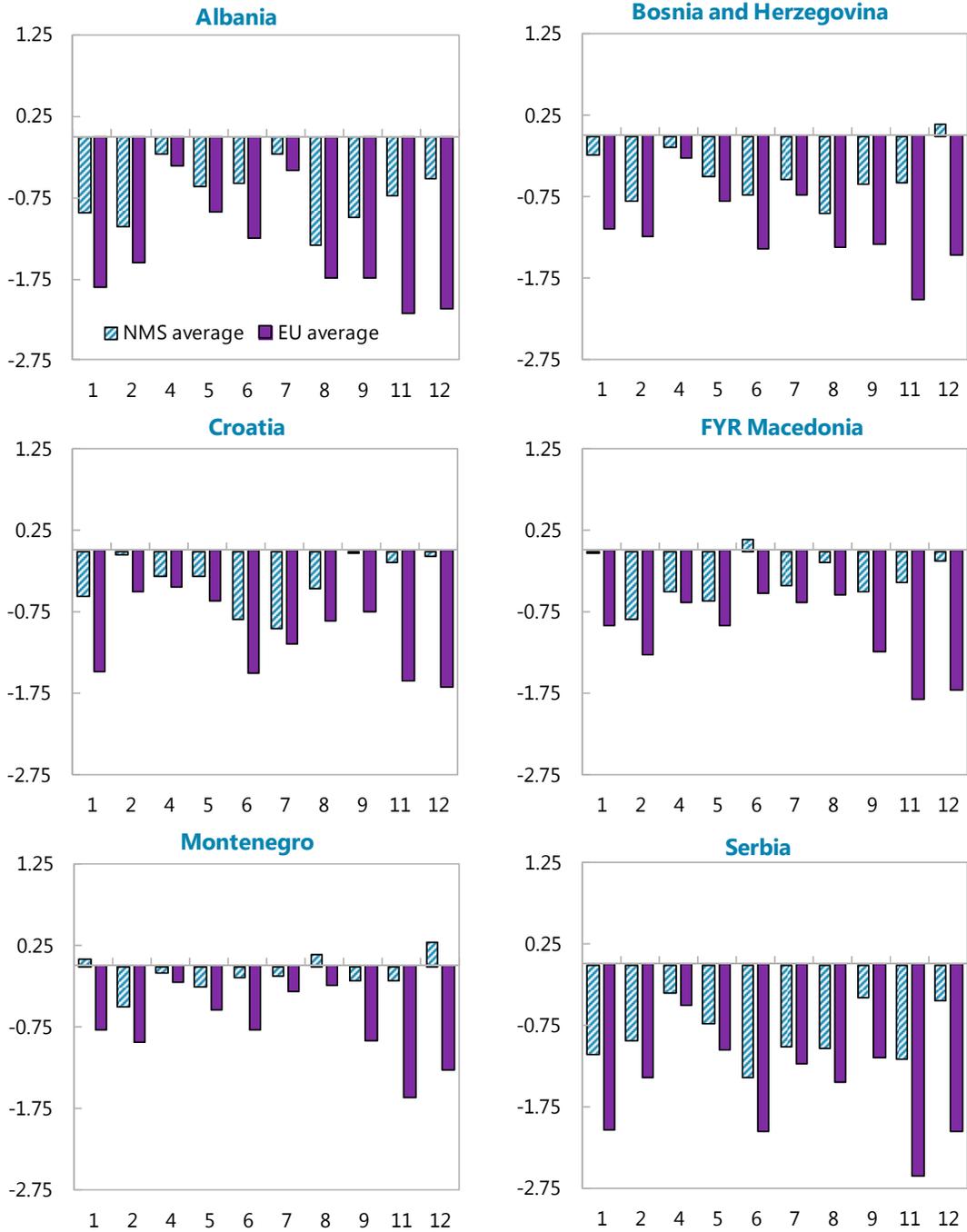
<sup>3</sup> Kosovo could not be included in the empirical analysis of reform priorities in the Western Balkans given data constraints. Structural reforms in Kosovo are described in detail in Box 1.3.

<sup>4</sup> The analysis is based on data from the World Economic Forum's *Global Competitiveness Report*. Competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country. The database covers 144 countries, including six of the seven Western Balkan countries under consideration. Data for Kosovo are not available.

<sup>5</sup> While the *Global Competitiveness Report* covers 12 reform areas (pillars), we omit two: Macroeconomic Environment and Market Size. The macroeconomic environment is analyzed in Chapter 3.

### Main Reform Gaps in the Western Balkans

(Standard deviations)



Sources: World Economic Forum; and IMF staff calculations.

Note: Kosovo data is unavailable. Global Competitiveness Report Pillars: 1 - Institutions, 2 - Infrastructure, 4 - Health and Primary Education, 5 - Higher Education and Training, 6 - Goods Markets Efficiency, 7 - Labor Markets Efficiency, 8 - Financial Markets Development, 9 - Technological Readiness, 11 - Business Sophistication, 12 - Innovation. Excluded are Macroeconomic Environment (pillar 3) and Market Size (pillar 10).

- **Relative to the EU average**, the gaps in all Western Balkan countries tend to be wider, highlighting significant structural reform needs in almost all areas. This is also true for Montenegro and FYR Macedonia, which compare reasonably well to the New Member States. Overall, the major gaps throughout the region are in institutions, infrastructure, goods market efficiency, and financial market development. The estimated gaps in business sophistication and innovation are particularly large compared to the EU, both relative to other reform areas and in contrast to generally good performance of the region along this dimension relative to New Member State peers.

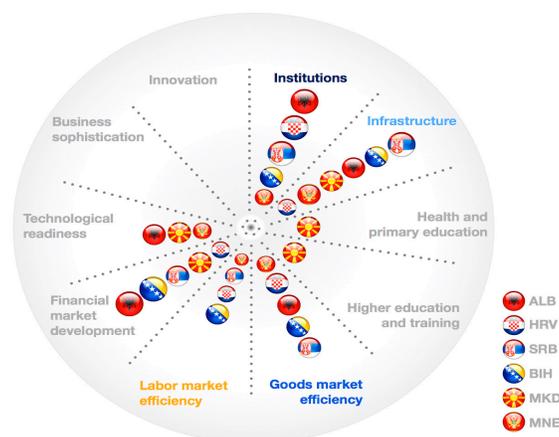
If all structural reforms were equally important for growth, the size of the reform gap would signal reform priorities. However, the growth impact of reform areas differs. The analysis of this study (see Annex 1.4) suggests that while reforms in all areas are expected to have a positive impact on growth, reforms in institutions, financial markets, and infrastructure have, on average, a larger impact on growth. Results also suggest that the growth impact of reforms varies with income levels— institutions and infrastructure are estimated to be relatively more important for lower- and middle-income countries, whereas innovation and business sophistication appear relatively more important for high-income countries.

Leaning on these findings by combining reform gaps and the relative importance of each reform area for growth, we can identify reform priorities. According to our methodology, the reform priority is higher the more important the specific

reform area is for growth and the larger the corresponding reform gap is. This derived structural reform map serves to provide an indicative overview of where reform priorities may be (Annex 1.4).<sup>6</sup>

Our results suggest that, compared to New Member States, reforms across the Western Balkans are particularly needed in the areas of institutions, infrastructure, goods market efficiency, labor market efficiency, and financial market development. Each of those areas is found to be among the top five

**Top 5 Reform Priorities for Each of the WB States**



Note: Reform priorities are assessed relative to the NMS in each of the 10 main pillars of the Global Competitiveness index. Larger bubbles represent reform areas that receive a higher rank ordering. Analysis for Kosovo not included as the relevant data are not available.

<sup>6</sup> The methodology is appealing in its simplicity and tractability, but with the caveat that the calculated impacts are only partial and not part of a fully elaborated equilibrium framework. While this approach does not make it possible to identify synergies between reform areas and does not say much about the timing of reforms, it is likely that improvements in institutions and parallel implementation of various reforms in other areas will lead to additional synergies.

reform priorities for at least four of the six Western Balkan states; infrastructure was identified as a top reform priority in all six countries.

In what follows, we apply the same approach used above to disentangle reform priorities at a more disaggregated level. Specifically, the subcomponents of the four most common broad reform areas discussed above are analyzed by looking at more granular reforms within institutions, infrastructure, goods market efficiency, and labor market efficiency (Box 1.2).<sup>7</sup>

### Box 1.2. Reform Gaps in Institutions, Infrastructure, Goods Market Efficiency, and Labor Markets

#### Institutional Reforms<sup>1</sup>

The **protection of property rights** is a common problem in most of the Western Balkan countries, particularly relative to the EU average, though to a lesser extent in FYR Macedonia.

Indicators related to **corruption and government inefficiency** also point to reform gaps in most countries. Compared to NMS, inefficient government spending appears to be an important constraint in Serbia, Albania, Croatia, and Bosnia and Herzegovina.

In Serbia, and to a lesser extent in Croatia, Bosnia and Herzegovina, Albania, and Montenegro, reform needs are large in areas linked to **corporate sector performance**. Specifically, this includes the strength of reporting standards, efficacy of corporate boards, and protection of minority shareholders.

Encouragingly, Albania, Bosnia and Herzegovina, FYR Macedonia, and Montenegro score relatively well in terms of **burden of government regulation**, even compared to the EU average. For Croatia and Serbia, however, the gaps in this area remain large.

#### Infrastructure<sup>2</sup>

The analysis of specific reform gaps within the broader infrastructure pillar suggests that the Western Balkan countries have had a mixed performance when assessed vis-à-vis their peers. In terms of **overall quality of infrastructure**, Croatia ranks better than its New Member State peers, while the largest overall quality gaps exist in Bosnia and Herzegovina and Serbia. All Western Balkan countries, except Croatia, lag behind the EU by a wide margin.

The gap analysis points to important reform potential in **railroad infrastructure** in Albania, FYR Macedonia, and Serbia. Compared to the average EU country, **road and air transport infrastructure** gaps are large in all countries, though to a lesser extent in Croatia.

#### Goods Markets Efficiency<sup>3</sup>

The results of the analysis suggest that the Western Balkan countries impose a relatively low **tax burden** on businesses. Total tax rates<sup>4</sup> are well below those of NMS and EU average in FYR Macedonia, Montenegro, and Bosnia and Herzegovina. Similarly, all countries but Bosnia and Herzegovina perform well or are broadly at par in terms of **procedures and time to start a business**.

Gaps in **competition policy**, measured by the intensity of local competition and the effectiveness of anti-monopoly policy, point to potential reform needs in this area, in line with the findings in Section B

<sup>7</sup> As Chapter 3 is devoted to financial market development, we abstract from this otherwise critical reform area in this section.

of this chapter.

Gaps in **trade barriers, tariffs, and impediments to foreign ownership and foreign direct investment (FDI)** are relatively moderate in most Western Balkan countries, but almost always negative. Rules on FDI and foreign ownership seem to be stricter in Croatia and Serbia.

**Agricultural policy cost** seems to be a significant burden for the economy in Croatia and Serbia, and to a lesser extent in Albania.

### Labor Market Efficiency<sup>5</sup>

Performance of regional labor markets, when benchmarked against New Member State peers, is relatively mixed, as measured by indicators on the **flexibility of setting wages, flexibility of hiring and firing**, and **redundancy costs**. All of the Western Balkans lag behind their peers in at least one of these three areas. Croatia has relatively more inflexible hiring and firing rules, and stronger tax disincentives to work but relatively more flexible wage setting. The labor tax wedge is also relatively large in Serbia. In contrast, Albania and Bosnia and Herzegovina score lower in terms of flexibility of wage setting.

Most of the Western Balkan countries (except Albania and Montenegro) compare less favorably to the New Member States in terms of retaining and attracting talent, contributing to skilled labor shortages. In these areas, as well as in **professional management** and **cooperation on labor-employer relations**, gaps tend to be larger vis-à-vis the EU. In other areas, differences with respect to the EU are less important, reflecting significant labor market rigidity in both sets of countries.

<sup>1</sup> See Annex Figure 1.4.3 in Annex 1.4.

<sup>2</sup> See Annex Figure 1.4.4 in Annex 1.4.

<sup>3</sup> See Annex Figure 1.4.5 in Annex 1.4.

<sup>4</sup> As defined in the World Economic Forum's *Global Competitiveness Report*, the total tax rate is "a combination of profit tax (% of profits), labor tax and contribution (% of profits), and other taxes (% of profits)."

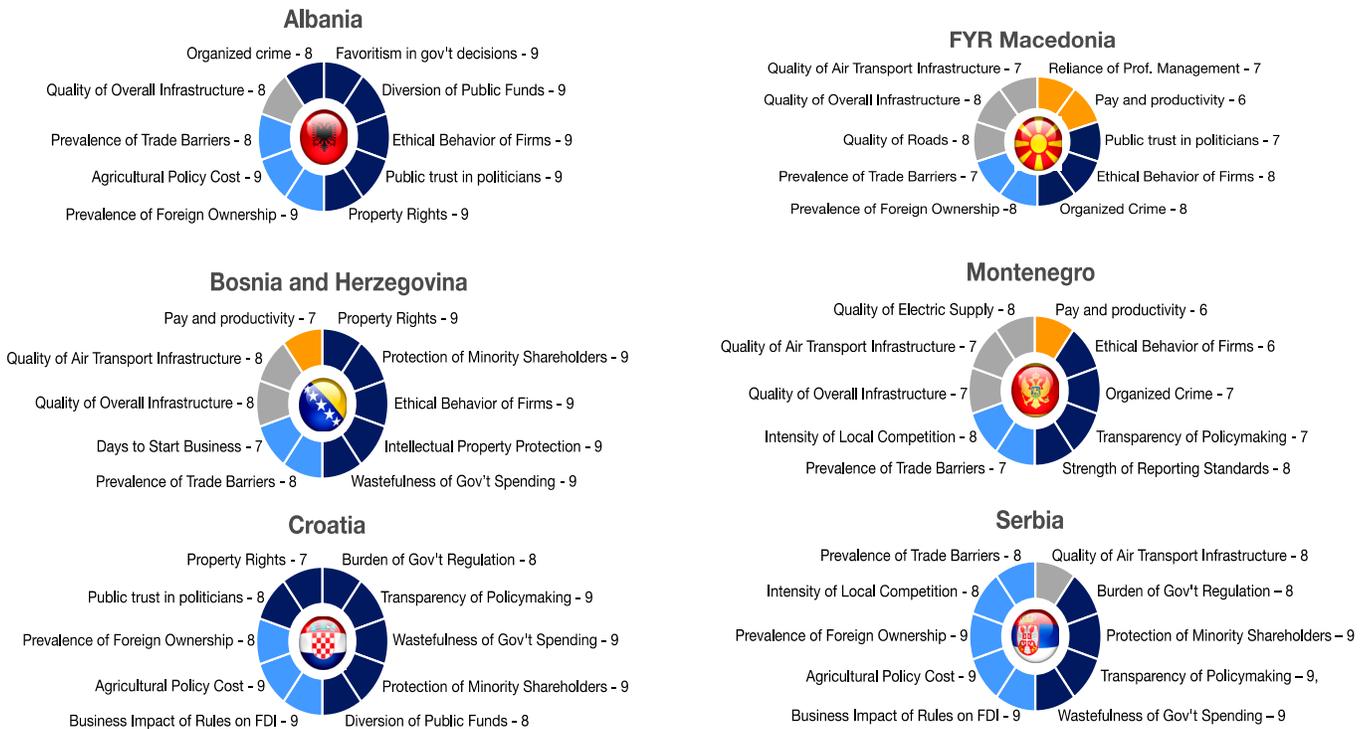
<sup>5</sup> See Annex Figure 1.4.4 in Annex 1.4.

To identify overall reform priorities at the more granular level, we combine the analysis of reform gaps with their estimated growth impact, focusing on the 10 most important reform priorities for four subpillars.<sup>8</sup> Reform priorities remain broadly the same whether New Member States or EU countries are taken as the comparator. In most countries reforms related to the quality of institutions dominate the priority list, followed by goods market efficiency and infrastructure. Of the labor market indicators, pay and productivity enters the top 10 reform priorities in half of the Western Balkan countries.

<sup>8</sup> The detailed analysis at the disaggregated level is indicative. Results at this level are more sensitive to the quality of data, potential measurement errors, estimation results, and the classification scheme.

### Top 10 Reform Priorities For Each of the WB States

■ Institutions   ■ Goods market efficiency   ■ Infrastructure   ■ Labor market efficiency



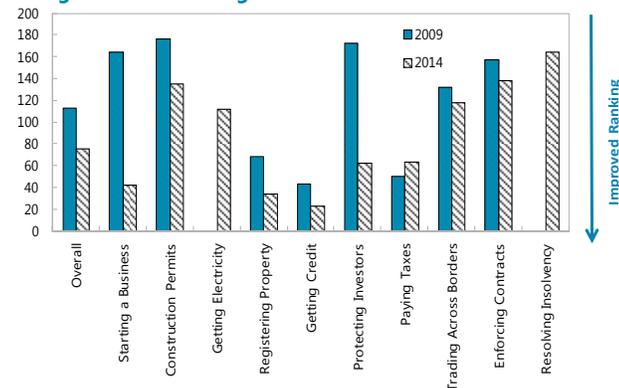
Note: Reform priorities are assessed relative to the NMS along four sub-pillars of the Global Competitiveness Index (Institutions, Goods Market Efficiency, Labor Market Efficiency and Infrastructure). Numbers indicate the priority, with 9 pointing to the highest priority (see Annex 1.4). Analysis for Kosovo not included as the relevant data are not available.

### Box 1.3. Structural Reform in Kosovo: Past Achievements and Future Priorities

Kosovo has undergone a significant economic transformation since 1999. Following the sequence seen elsewhere, one of the first major reforms was to liberalize previously administered prices in conjunction with the shift away from the Serbian dinar and towards a peg with the deutsche mark. Later, Kosovo embarked on widespread privatization. A key milestone in that regard was the privatization in 2006 of the Ferronkeli mining complex, which accounts for about half of Kosovo's exports and employs over 1,000 workers. More recently, with the shift towards a market economy well under way, Kosovo has focused on improving its business environment as well as its labor market regulations:

- Business environment:** In recent years, the authorities streamlined business regulations to reduce the cost of doing business, passed new laws to protect investors, and initiated projects to support the financial and technical needs of small and medium enterprises. These measures helped Kosovo move from 119th to 75th in the World Bank's Doing Business rankings (although it still lags most Western Balkan States). Kosovo has also improved some of its ratings in the World Bank's World Governance Indicators, including Rule of Law and Accountability, where it stands at about the 40th percentile for both.

Doing Business Rankings: Kosovo



Source: World Bank, Doing Business Indicators.

- Labor market measures:** The authorities have recently adopted a rules-based framework for setting minimum wages that should help to contain excessive labor cost increases.

Despite clear progress, the structural reform agenda is far from complete. Insufficient energy supply—the result of aging power plants and significant distribution losses—imposes a major constraint on growth.<sup>1</sup> A decision on a new power plant is forthcoming. In addition, significant assets remain under the umbrella of the privatization agency, but momentum for privatization has stalled due to well-organized vested interests as well as shifting political preferences. Finally, Kosovo will need to complement its de jure improvements in business regulations and the rule of law with de facto progress. Perceptions of weak governance remain widespread and continue to hamper private sector development.

<sup>1</sup> Energy imports are significantly more costly than domestic production even at lower global prices, hence the widespread use of power cuts to bridge demand and supply.

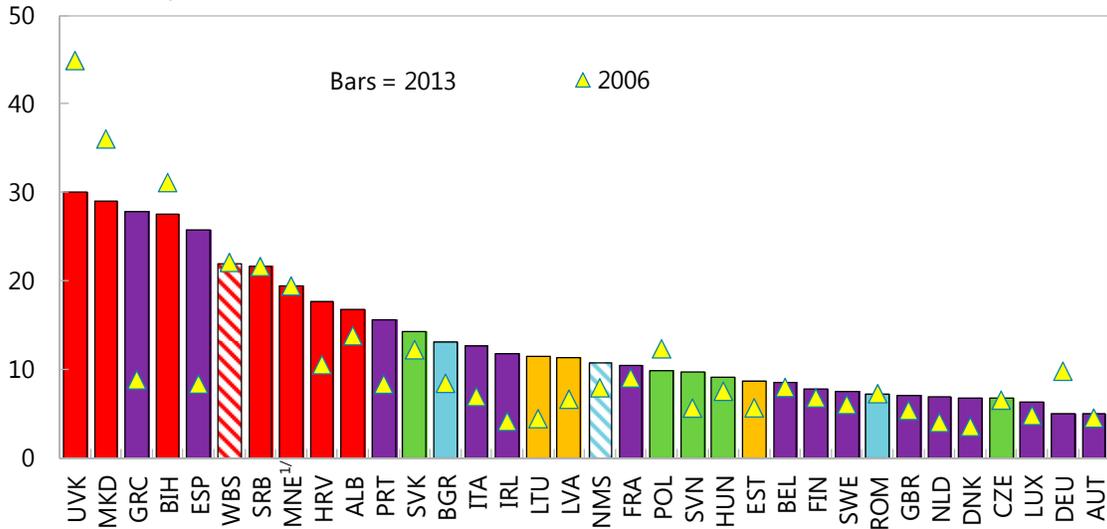
Given the critical importance of raising employment in the region, the next section turns to an in-depth examination of what policies would help improve labor market outcomes in the Western Balkans.

### D. The Quest for Jobs

In the Western Balkans, high rates of unemployment and low rates of employment predated the global financial crisis, pointing to deep structural problems.

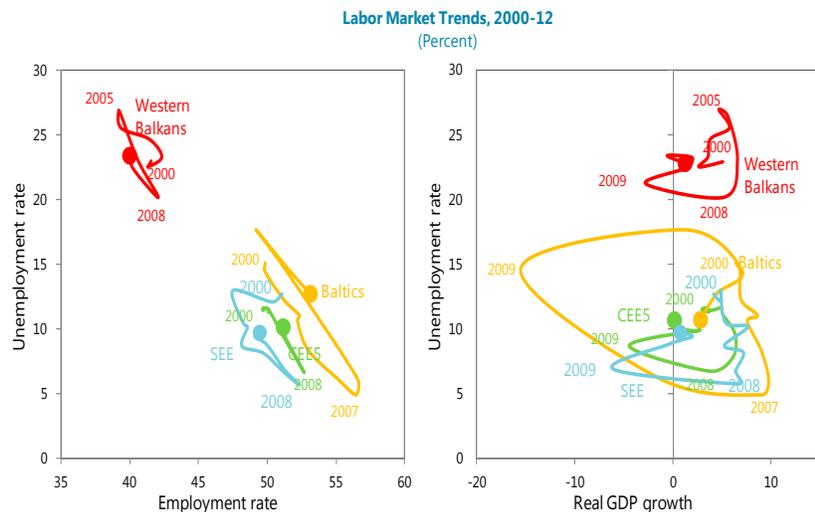
#### Unemployment Rate

(Unemployed as a percent of total labor force)



Sources: Country authorities; OECD; Haver; Eurostat; and IMF staff calculations.  
1/ 2007 data used in place of 2006 data.

The New Member States—and particularly the Baltics—experienced large cyclical swings of both employment and unemployment during the 2000s, but in a qualitatively different context of markedly lower unemployment and higher employment. In contrast, workers in the Western Balkans failed to significantly benefit from employment gains during the boom years, while still registering significant job losses in the aftermath of the crisis (ILO 2012).



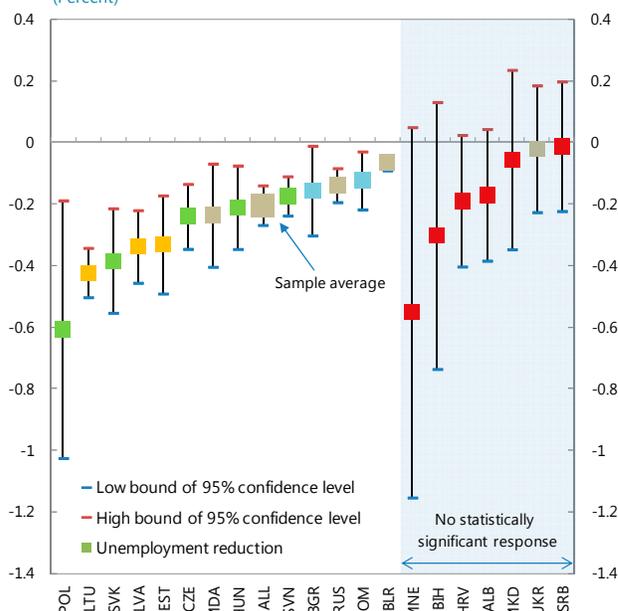
Source: IMF, World Economic Outlook.

The persistence of unemployment in the Western Balkans regardless of cyclical conditions is confirmed through econometric analysis of contemporaneous responses of the unemployment rate to changes in economic growth, which suggests that responses of labor market outcomes to swings in economic cycles are smaller and statistically insignificant. This is in sharp contrast with larger and statistically significant response coefficients found in most Central European and Baltic economies.<sup>9</sup> Looking ahead, this implies that unemployment is likely to persist in the Western Balkans even as economic growth picks up and output gaps close in the postcrisis period.<sup>10</sup>

So why have labor market outcomes been so much worse in the Western Balkans than elsewhere? One reason is that the Western Balkan countries are latecomers to the transition process, and hence FDI stocks, diversification from traditional sectors, and private sector job creation are still lagging compared with New Member States. At the same time, the countries have experienced very large emigration and brain drain, resulting in high remittance inflows that likely raise reservation wages, hamper external competitiveness, and contribute to long unemployment duration (Kovtun and others 2014; IMF 2013).<sup>11</sup>

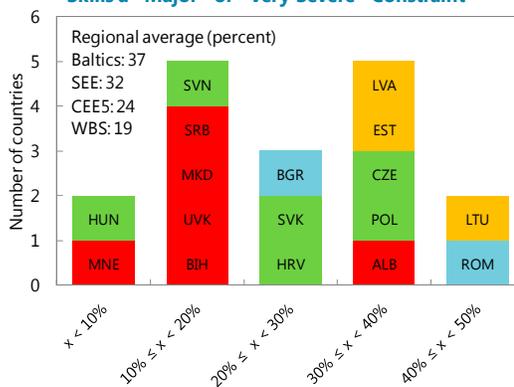
While significant, skill gaps were not as binding in the Western Balkans as in the New Member States, which are more integrated into European supply chains and

**Labor Market Cyclicity: Change in Unemployment Associated with 1 Percent Increase in Real GDP Growth<sup>1/</sup> (Percent)**



Source: IMF staff estimates.  
 1/ Values of the response coefficient of unemployment to 1 percent increase in economic growth estimated over country-level data from the period of 1993-2013.  
 Note: Data for Kosovo is unavailable. Added country codes are for Belarus (BLR), Moldova (MDA), Russia (RUS), Ukraine (UKR).

**Distribution of Firms that Consider Worker Skills a "Major" or "Very Severe" Constraint**



Sources: EBRD-World Bank, Business Environment and Enterprise Performance Surveys; and IMF staff calculations.

<sup>9</sup> It is important to recognize that high (structural) unemployment could coexist with relatively flexible labor markets (IMF 2013).

<sup>10</sup> In the postcrisis environment, sluggish responsiveness of job creation to growth is likely aggravated by weakened balance sheets affecting financing conditions (ILO 2013). Also, job creation is impaired by a need for firms to build up new collateral to finance their activities (Calvo, Coricelli, and Ottonello 2012), while concurrently, fiscal consolidation could have depressed aggregate demand (ILO 2014).

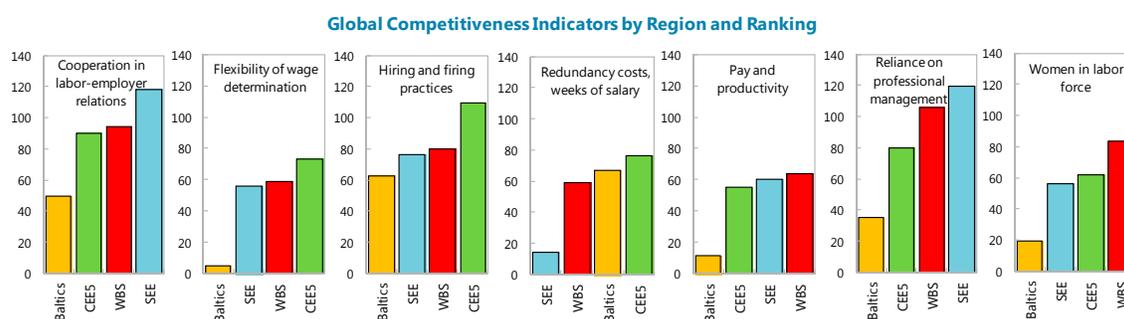
<sup>11</sup> Migration can also occur as a response to growth shocks, thus dampening their impact on unemployment. However, the remittance-reservation wage channel is likely to be dominant, because in contrast to the New Member States, most of the Western Balkans did not have easy formal access to labor markets in Advanced European economies for most of the sample period.

have a greater presence of large manufacturing firms. According to EBRD-World Bank Business Environment and Enterprise Performance Surveys (BEEPS), skilled labor shortages are considered a major or severe constraint by about one in five companies in the Western Balkan countries, just behind infrastructure and corruption. Nevertheless, anecdotal evidence from employer associations and individual companies seems to suggest that in the Western Balkans, skill mismatches, which existed prior to the recent global economic slowdown, have become more prominent in the aftermath of the global financial crisis.

Strong employment and social protection systems were important features of centrally planned economies.<sup>12</sup> These labor markets were shaped by the particular legacy of the “self-management” system for enterprises, and the existence of so-called “social ownership” (Kuddo 2013). This led to a high level of job protection for the “insiders” and to overall rigidity.<sup>13</sup>

Since the disintegration of the socialist economies, substantial labor market reforms have been undertaken, with the reform momentum having picked up since the middle of the 2000s, particularly in the areas of flexibility of wage determination and redundancy costs. Nonetheless, increased labor market flexibility in the Western Balkan countries is a recent phenomenon that will likely take some time to manifest itself in improved labor market outcomes.

In addition, the region still ranks less favorably—relative to its more dynamic peers—in terms of a number of competitiveness indicators capturing labor market flexibility. Specifically, as foreshadowed in Section C of this chapter, Western Balkan labor markets are characterized by feeble links between work compensation and labor productivity, as well as by low efficiency of using available talents, particularly in terms of low reliance on professional management and low female participation in the labor force.



Source: World Economic Forum Global Competitiveness Indicator database, 2014-15 edition.

Note: First four indicators assess labor market flexibility and last three indicators assess efficient use of talent. Lower rank means better competitiveness.

<sup>12</sup> See Kovtun and others (2014), World Bank (2008), and Gligorov and others (2008).

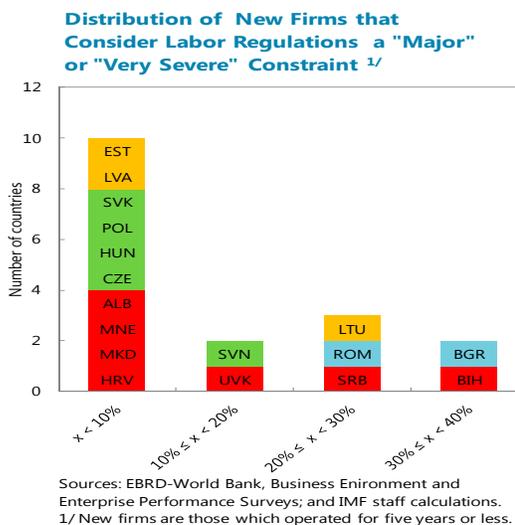
<sup>13</sup> These are particularly relevant to those with jobs in state-owned enterprises and the public sector in the form of strict rules for terminating employment and generous severance payments.

Rigid labor market regulations may constrain the development of new industries in some countries in the Western Balkans. Business surveys show that even prior to the global financial crisis, many younger and more vibrant firms considered existing labor market regulations a major or very severe impediment to their economic activity and growth, particularly in Bosnia and Herzegovina and Serbia, as well as in Romania and Bulgaria.

### Factors Driving Labor Market Outcomes

As discussed above, cyclical, structural, and institutional considerations all play a role in determining poor labor market outcomes in Western Balkan countries, but their interplay is far from clear. What are the key macroeconomic and country-level structural and institutional indicators that determine the overall labor force dynamics in the region? The empirical analysis in Annex 1.5 offers several important insights:

- The Western Balkan countries are fairly similar in terms of the importance of *demographic characteristics* of individuals for determining labor market transitions. For instance, previously unemployed persons are more likely to remain unemployed, and higher levels of education are generally associated with better chances of finding employment. There are, however, a few notable differences.<sup>14</sup> Specifically, younger people seeking employment face significant headwinds in all countries, but have a somewhat better chance of finding a job in FYR Macedonia and Serbia. Similarly, while females seeking employment appear to have a lower probability of finding a job in all countries, this seems to be particularly pronounced in Bosnia and Herzegovina and Kosovo.
- *Macroeconomic indicators* have an important bearing on the dynamics of labor market transitions. Higher real GDP growth and more buoyant investment-to-GDP ratios are generally associated with better chances of finding a job, but in the absence of other reforms improvements in either indicator yield fairly limited results.<sup>15</sup> Similarly, higher rates of private credit growth seem to encourage more people to seek employment, but the impact on the probability of employment is also rather muted. Fiscal stimulus (for example, higher general government fiscal deficits expressed as a percent of GDP) is associated with more people joining the labor force and with higher probabilities of finding employment, particularly if not associated with higher government-expenditure-to-GDP ratios, which offers evidence in favor of



<sup>14</sup> While cultural and religious factors may have a bearing on the variety of cross-country trends, these differences likely also reflect significant heterogeneity of labor market institutions observed across the region.

<sup>15</sup> The marginal impact of a 1 percent increase in either indicator is only 0.01 on the probability of employment.

a smaller role of the state in the economy.<sup>16,17</sup> Finally, there is strong evidence that higher remittance inflows discourage people from seeking employment and are associated with longer unemployment spans.<sup>18</sup>

- Stronger *labor market institutions* are critical for better outcomes. The analysis shows that a more decentralized wage bargaining processes, more flexible hiring-firing practices, and lower redundancy costs are all strongly associated with not only additional people joining the labor force but also with a greater probability of employment.<sup>19</sup> Similar results hold for an environment with greater reliance on professional managers chosen based on merit and qualifications. In contrast, our analysis confirms that an environment where pay is only weakly related to worker productivity is more likely to discourage people from seeking employment. Finally, as one would expect, higher female participation in the labor force is found to moderately increase competition among the job seekers.
- Broader *structural reforms* are also very important. The empirical evidence suggests that countries that are more advanced in overcoming the legacies of centrally planned economies and completing transition to a market-based economy are also the ones that generate significantly higher chances for job seekers of finding employment. This finding holds irrespective of whether the stage of transition to market-based economy is measured by the EBRD Transition Index or proxied by the per capita FDI stock.

### **No Silver Bullet**

What would it take to improve the labor market outcomes in the Western Balkans? The empirical model presented above offers an opportunity to design an illustrative counterfactual experiment that may help answer this question. We next simulate the cumulative impact of a number of policy changes on employment probabilities on a cross-country subsample of individuals holding university degrees and calculate the impact on the unemployment rate for each subsample. The findings include the following:

- **Enhancing labor market flexibility**—An improvement by 25 positions in relevant rankings in the World Economic Forum’s Global Competitiveness Indicators is likely to generate a notable decline in the probability of unemployment across all age groups and for both men and women, reducing the estimated sample unemployment rate by about 5 percentage points on average,

<sup>16</sup> One explanation for this finding could be that the fiscal impulse is picking up the statistical effect of a lower tax burden; higher fiscal deficits mean lower tax burdens for any given level of government expenditure. With low-tax countries shown to grow faster than high-tax countries (see Easterly and Rebelo 1993), this implies more employment opportunities for potential job seekers.

<sup>17</sup> Loosening the fiscal stance by 1 percent of GDP would increase employment probability and reduce the probability of being inactive by about 0.025 and 0.035, respectively.

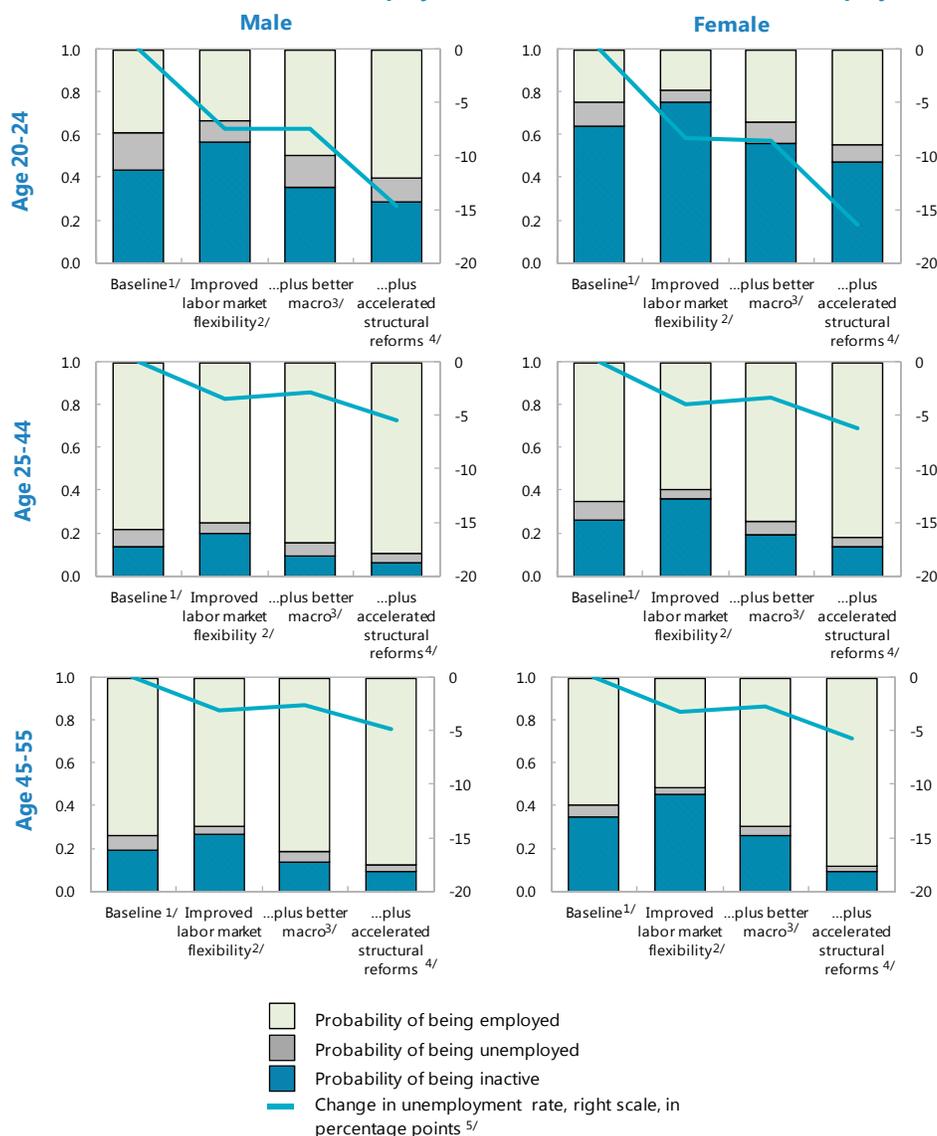
<sup>18</sup> Our analysis shows that 1 percent of GDP higher remittance inflows are associated with a 0.03 increase in probability of being inactive.

<sup>19</sup> A 25 position improvement in each of the corresponding Global Competitiveness Indicators is estimated to increase employment probability by about 0.05.

and notably more (about 8¼ percentage points) for young women. However, in the absence of other reforms, and particularly when not coupled with an improved macroeconomic environment that would support job creation, simulations show a simultaneous increase in the probability of inactivity (workers staying out of the labor force).

- **More supportive macroeconomic environment**—Should the general macroeconomic environment improve, with real GDP growth, credit, and investment rates returning back to their respective 2007 levels, both labor market participation and the probability of finding employment would rise, with the greatest gains accruing to young female workers.
- **Reigniting structural reform efforts**—If, in addition, structural reforms are advanced to the average level observed in Central Europe—as measured by the EBRD Transition Index—our model suggests that the probability of finding employment rises by about 20 points relative to the baseline for the most vulnerable groups, resulting in an average decline of almost 10 percentage points in the sample unemployment rate.

**Illustrative Effect of Reforms on Employment Outcome Probabilities and Unemployment Rate**



Sources: National Labor Force Surveys; and IMF staff estimates.  
 1/ Calculated for a married (if 25 or older) person with university degree; and with macroeconomic indicators, labor market characteristics, and EBRD transition indicators at Western Balkan average levels in 2013.  
 2/ Based on a 25 position improvement in the World Economic Forum's GCI ranking.  
 3/ Based on real GDP growth, credit, and investment rates as in 2007.  
 4/ Based on EBRD transition indicator as in CEE5 countries.  
 5/ Unemployment rate effects are calibrated by estimating frequencies of individual outcomes based on simulated probabilities.

**E. Lessons for Stronger Convergence**

Boosting employment and productivity, and ultimately converging to EU income levels are among the key objectives for policymakers in the Western Balkans. What will it take to achieve them, particularly in the current challenging external environment where demand from Advanced Europe is weak?

A qualitative and quantitative review of the structural reform landscape presents an extensive policy agenda. The wave of reforms that brought liberalization of prices and trade and foreign exchange systems, as well as privatization in all but a few industries, started the critical process of economic transformation. But the transformation is incomplete. Improvements in various areas, including, critically, the business environment, will help strengthen the role of the private sector. However, a sustained, comprehensive, and coordinated push is needed to complete the structural transformation process that began two decades ago. Momentum for structural reform is lacking; there is a sense that reforms have under-delivered, and that the benefits of growth have not been felt widely. However, it is the insufficiency of the reform process over the last 10 years, rather than the nature of the reforms undertaken, that seems to be holding the region back.

What elements should the near-term structural reform agenda in the Western Balkans contain? A disaggregated analysis of structural reform measures has helped identify the most critical country-specific reform area, where addressing large performance gaps would yield large payoffs to growth. Despite heterogeneity among the Western Balkan countries, a number of reforms emerge as clear regional priorities and may benefit from coordinated regional solutions, notably in infrastructure. Institutional reforms—particularly the protection of property rights, fighting corruption and government inefficiency, and improving corporate sector performance—rank high across much of the region.

One caveat to this approach to prioritization is that it does not make it possible to identify synergies *between* reform areas, nor does it offer guidance on sequencing of reforms. It is likely that parallel implementation of critical reforms will lead to additional synergies, and the overall positive impact should be larger than the sum of the effects of individual reforms. Indeed, the need for a comprehensive effort is nicely highlighted in the examination of policies that strengthen labor market indicators—partial reform along any of the key policy areas leads to only limited improvements in employment probabilities.

## Chapter 2: Macroeconomic Developments and Policies<sup>1</sup>

### BOOM, BUST, AND THE AFTERMATH

This chapter reviews macroeconomic developments in the Western Balkans over the past 15 years. The countries of the region underwent substantial changes as they made the transition toward a more market-oriented model. In terms of the external environment, the period is dominated by two events: the introduction of the euro in 1999, and the financial crisis that swept across the globe starting in 2007. The euro brought further integration of capital markets in advanced EU economies; the global financial crisis interrupted capital flows significantly. For the Western Balkans, which had substantial capital needs, both events were very significant.

The confluence of these domestic and external developments prompts a number of questions. Did the Western Balkans improve their macroeconomic situation during the 2000s compared with the turbulent 1990s? What was the experience in the Western Balkans before and after the global financial crisis? Did these economies experience the same capital-led booms and busts as the New Member States, or if not, how and why did their experiences differ? And what now is the right course for macroeconomic policy in these economies?

The Western Balkan economies came into the new century after a decade of conflict, tumult, and disruption. Macroeconomic stabilization was a priority. On those terms, the past 15 years—even including those following the financial crisis—have been manifestly better than the 1990s: growth rebounded, investment returned, and inflation was sharply reduced.

Like other Emerging European economies, the Western Balkans experienced strong growth before the global financial crisis, fueled by bank credit and direct foreign investment; growth then declined as the crisis caused tighter credit conditions (Chapter 3). Across Emerging Europe, postcrisis recovery has been slow. But the experiences notably differ in degree and timing. The scale of the boom and the severity of the bust were, for most of the Western Balkans, smaller than in most New Member States, especially the Baltic States. Across the Western Balkans, the boom peaked later and the recession was less severe. But the recovery has also tended to be feeble, and crisis legacies—high unemployment and nonperforming loans on banks' balance sheets—have yet to be addressed in this region.

Were the experiences in the Western Balkans different because of policies or fortune? To some extent, luck played a role: booms in the Western Balkans were mostly less intense because they started later, from a lower level of financial development, and were curtailed at an earlier stage. Up until about 2006, these economies were less reliant on the “hot” bank lending that funded many other Emerging European economies.

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<sup>1</sup> Prepared by Nina Budina, Chris Faircloth, Zsoka Koczan, Pamela Madrid Angers, Murad Omoev, Mikhail Pranovich, and Zaijin Zhan, under the supervision of Alasdair Scott.

Across Emerging Europe and including the Western Balkan economies, inflation was relatively subdued until 2006–08, though capital inflows were associated with widening current account deficits and rising domestic credit. As with most other Emerging European economies, buoyant public revenues in the Western Balkans facilitated greater spending; in hindsight, fiscal policies were not sufficiently tight.

The recovery from the crisis also differs notably. Although recessions were less severe in the Western Balkans than in the New Member States, recoveries have been weak, associated notably with sluggish export performance and leading to a greater degree of import compression. In this case, fiscal policy does not appear to have been the culprit: while procyclical, it was not more severe on average than in New Member States.

The weak recovery raises questions about policy frameworks going forward. Clearly, macroeconomic conditions in the Western Balkan economies are more stable than they were in the 1990s; hyperinflation is a thing of the past. However, the legacies of public and external debt have created pressures to reduce leverage. In countries where exchange rates are fixed, flexibility of the real economy is paramount—the comparative difficulty of the Western Balkan economies to adjust real exchange rates by adjusting real costs focuses attention on the need for further progress on structural reforms (see Chapter 1).

This chapter is structured chronologically. Section A recaps the steps that the Western Balkan economies took to achieve macroeconomic stabilization in the 1990s. Section B analyzes the experiences in the years before the global crisis. The aftermath of the financial crisis is presented in Section C, and Section D concludes with a discussion of lessons for future policies.

## A. Background and Context—Macroeconomic Stabilization in the 1990s

As with most Emerging European economies, the Western Balkan economies faced a huge challenge to modernize in the 1990s. But in the Western Balkans the task was tougher. Albania, for example, was nearly completely autarkic at the time it began to open up from its self-imposed isolation in 1991. Political fracturing of Yugoslavia, conflict (on the territories of today's Bosnia and Herzegovina, Croatia, Kosovo, and Serbia) and civil unrest (Albania, FYR Macedonia) dominated the decade. Some economies also faced sanctions (Yugoslavia) and blockades (FYR Macedonia).

The result, in macroeconomic terms, was that difficult starting positions became much worse. Sizable amounts of physical capital were destroyed, and trade—which had been large within the Yugoslav Federation—collapsed. Most economies experienced severe recessions at some stage: -28 percent in Albania in 1991, -8 percent in Croatia in 1993, -11 percent in Serbia in 1999, and -8 percent in FYR Macedonia in 1993.<sup>2</sup>

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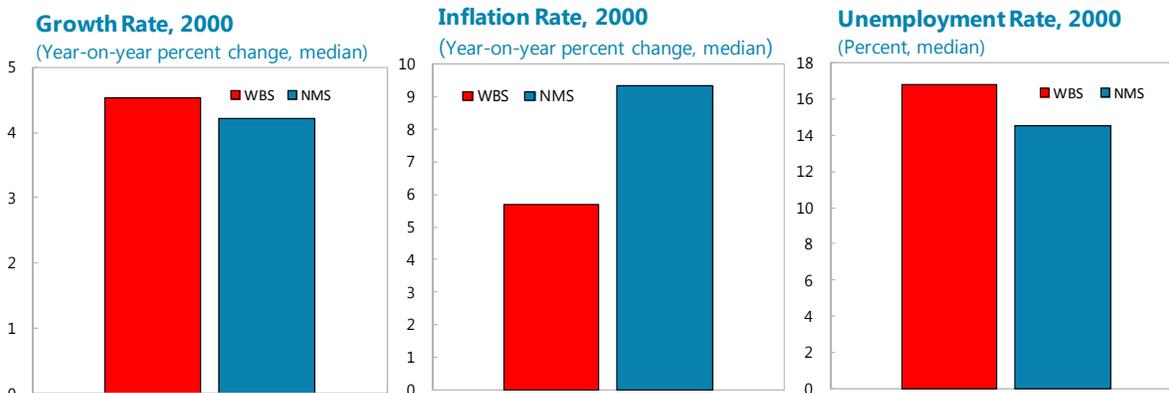
<sup>2</sup> These data are from the IMF's World Economic Outlook. Data are mostly incomplete; there may have been worse recessions during the 1990s for which there are no official data.

As in other transition economies, inflation rose quickly, following price liberalization, substantial increases in administered prices, exchange rate devaluations and, in some cases, passive monetary financing of growing fiscal deficits. Consumer price inflation reached over 225 percent in Albania in 1992; after hyperinflation earlier in the 1990s, it was still in high double digits in Serbia and Montenegro by the end of the decade.

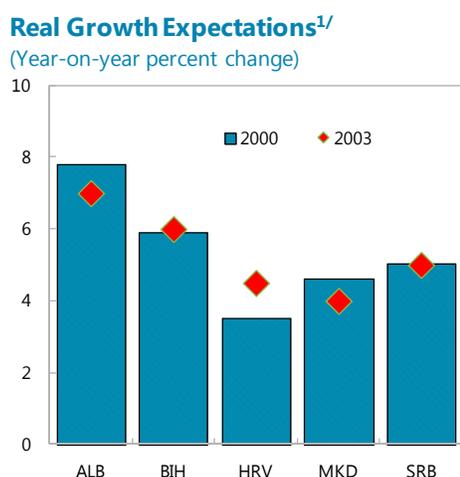
A key policy issue for the Western Balkan economies was the choice of monetary regime. Most adopted some form of fixed exchange rate regime—Croatia had a managed float; FYR Macedonia chose to peg, originally against the deutschmark; Bosnia and Herzegovina introduced a currency board; and Montenegro and Kosovo unilaterally adopted the deutschmark, and later the euro. The exceptions were Serbia, which lacked a clear monetary regime until the end of the decade, and Albania, which adopted a floating exchange rate, albeit with a deliberately tight money policy (McNeilly and Scheisser-Gachnang 1998).



By the start of the new millennium, the Western Balkan economies had stabilized considerably. Although behind in terms of transition reforms and income levels, median growth in 2000 was as high as in the New Member States, and median inflation was lower. Growth was expected to persist, at around 5½ percent in real terms. In addition to these “pull” factors, “push” factors also played a role: interest rates in Western Europe fell steeply with the introduction of the euro and created the conditions for capital inflows to emerging economies, including the Western Balkans.

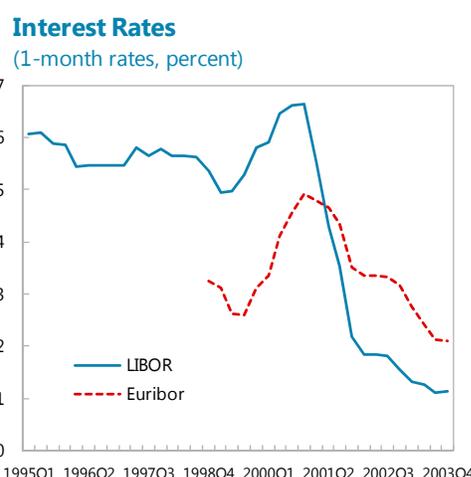


Source: IMF, World Economic Outlook.



Source: IMF staff estimates.

1/ Growth expectations from the IMF's October 2000 WEO.



Sources: Bloomberg and Federal Reserve Bank of St. Louis.

## B. Before the Global Financial Crisis: Optimism and Inflows

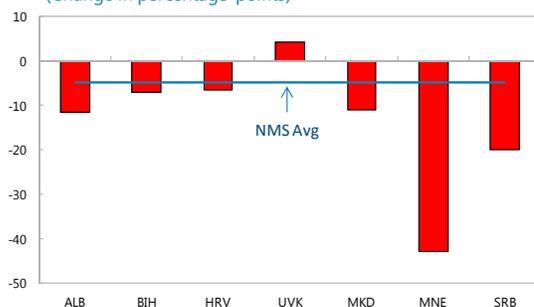
Once peace was restored in the region, the Western Balkans embarked on a period of economic transformation, growth, and convergence, as discussed in Chapter 1. The IMF was closely involved with this transformation (see Box 2.1). But the 2000s were also the years of global optimism and large capital flows to emerging markets around the world. How did this affect the macroeconomic performance of the Western Balkan countries?

In standard theory, capital account liberalization would allow more foreign inflows, investment, and rapid growth in the capital stock, ultimately raising living standards (Obstfeld and Rogoff 1996). But, as is well known, in practice sharp increases in capital inflows have often been associated with misdirected credit, absorption as consumption instead of investment, price and asset inflation, and deteriorating competitiveness (Kaminsky and Reinhart 1999). This section thus starts with the evolution of external balances in the Western Balkans, and then documents pressures and distortions.

## External Balances and Capital Inflows

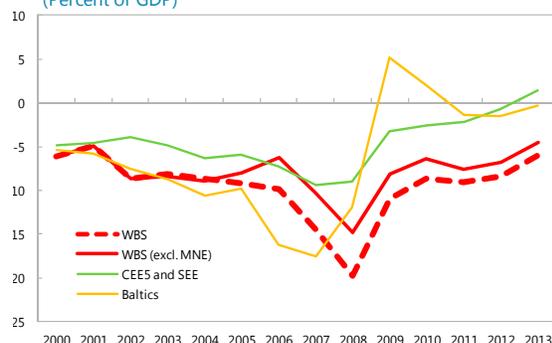
During the precrisis years, demand for new capital in Emerging Europe met a willing supply from Advanced EU economies, stimulated by declining interest rates, low global volatility, and the anticipation of rapid growth. In the case of New Member States, geographical proximity and relatively cheap labor allowed these economies to become part of an integrated cross-border production chain. From about 2003 onward, however, growth in most of these economies was driven increasingly by domestic demand, fueled by capital inflows. Capital flows through banks from Advanced EU economies were particularly important for intermediating bank credit (Chapter 3). The domestic demand boom was associated with widening current account deficits and, in later years, a pick-up in wage costs and inflation (IMF 2010b; Bakker and Klingen 2012).

**Current Account Balances in the Western Balkans, 2000-08**  
(Change in percentage points)



Sources: IMF, World Economic Outlook and IMF staff estimates.

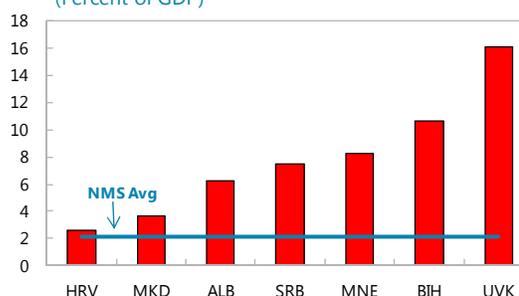
**Current Account Balances by Region**  
(Percent of GDP)



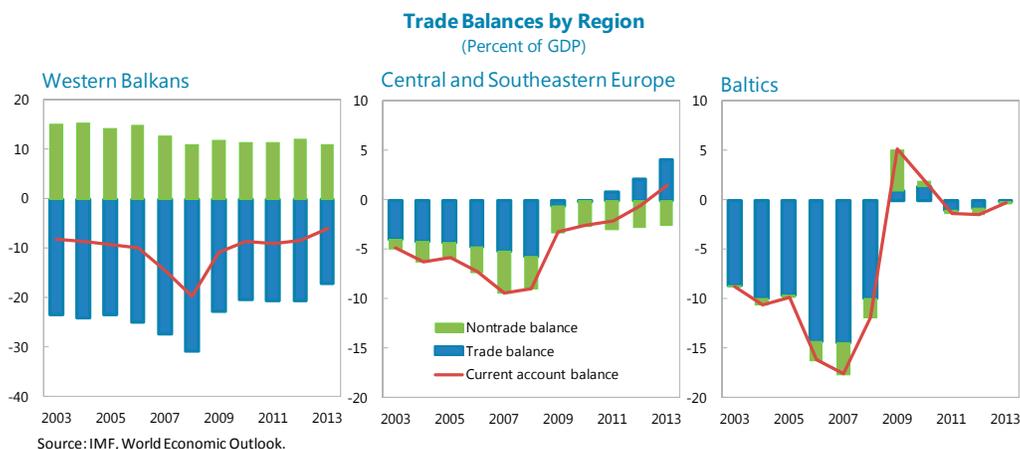
Sources: IMF, World Economic Outlook and IMF staff estimates.

Did the Western Balkans share the same experiences? Although they started with similar external imbalances as the New Member States in 2000, the Western Balkan economies experienced on average a much larger deterioration in their current account balances. This is true even excluding the exceptionally large deficits run up by Montenegro, which reached almost half the country's GDP in 2008. Nevertheless, the experience varied: for example, Kosovo modestly improved its current balance over the same period, benefiting mainly from increasing remittances from abroad.

**Remittances, 2013**  
(Percent of GDP)

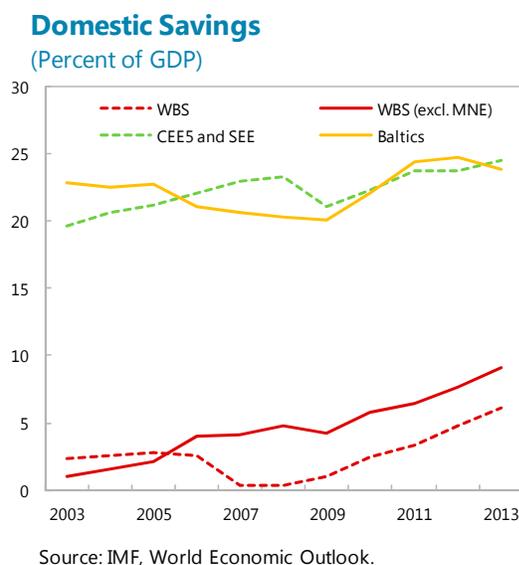
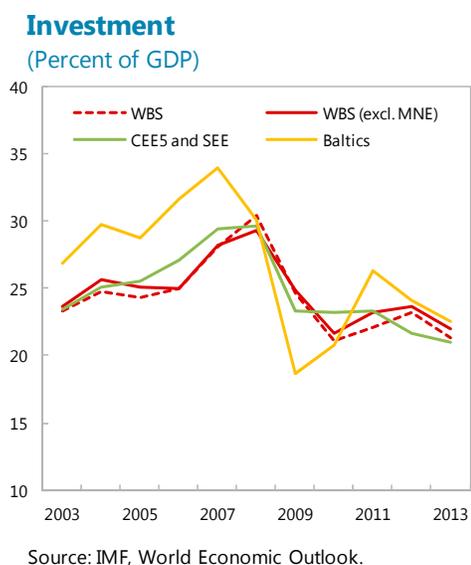


Sources: World Bank; national authorities; and IMF staff calculations.



Not only were current account deficits wider in the Western Balkans, their composition also differed from those of the New Member States. In particular, trade deficits were much larger than those in Central and Southeastern Europe. At the same time, steady surpluses in income and transfers balances, most notably remittances, partially mitigated current account deficits.<sup>3,4</sup>

What were the drivers of current accounts over this period? Investment in the Western Balkans as a share of GDP was similar to that in Central and Southeastern Europe, but savings were substantially lower, and fell even further prior to the onset of the global crisis. The combined effect was substantially worse savings-investment balances. Although difficult to prove, it seems plausible that the relatively limited savings could be explained by lower incomes, more liquidity-constrained



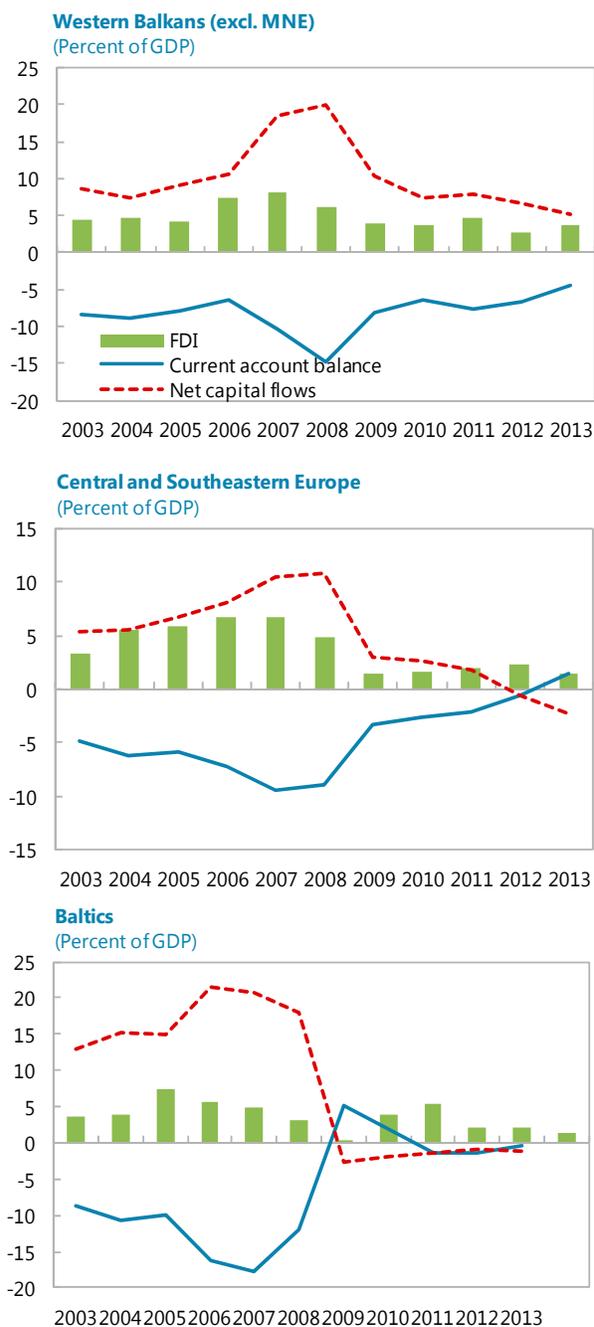
<sup>3</sup> Pissarides, Sanfey, and Tashchilova (2006) note that households that receive remittances spend more, especially on items such as clothing and footwear and hygiene goods, which are less likely to be import-intensive.

<sup>4</sup> One reason that the CEE5 had a consistently negative income balance is because many of these countries are part of the German-Central European supply chain, so profit remittances are sizable.

households, a larger share of informal economic activity, and a high degree of cash utilization in the Western Balkan economies (in line with the lower use of bank accounts by individuals—see Chapter 3). As a result, reported income was likely lower than actual income, reducing measured saving rates for a given level of consumption, and to a degree, errors and omissions in the balance of payments statistics. Income from high remittances may have also contributed to the underreporting of income and underestimation of savings rates.

The widening external imbalances of the Western Balkan countries were financed by increasing capital inflows, mainly FDI. But as studies suggest, the size of the capital inflows did not seem well correlated with capital scarcity (IMF 2010a).<sup>5</sup> In terms of composition of flows, foreign direct investment (FDI) dominated up until about 2006. However, during 2006–08 bank inflows gained importance as foreign bank networks became more prevalent in the Western Balkans (Chapter 3). This composition of inflows is consistent with patterns observed across Emerging Europe, which suggest that the share of FDI in capital inflows tends to be negatively correlated with the level of national income—that is, as economies mature and GDP growth rates slow, the share of FDI in overall inflows falls (IMF 2010a).

### Foreign Direct Investment, Current Account, and New Capital Flows



Source: IMF, World Economic Outlook.

Note: Direct Investment, net (BPM5); capital account, net (BPM5); and current account; all as a percent of GDP.

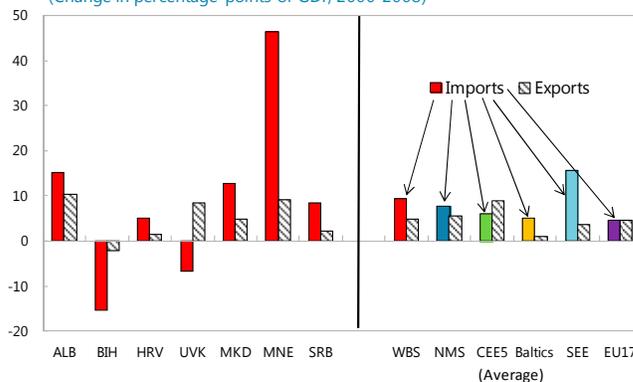
<sup>5</sup> For example, some countries with low capital-labor ratios (such as Bulgaria) did receive large capital inflows, but some (such as Albania) did not. This could be caused by other factors, such as the perceived country risk.

### Capital Inflows and Growth

Not surprisingly, rising capital inflows allowed the Western Balkan economies to achieve much faster economic growth than before, though still lower than other Emerging European economies. In addition, unemployment remained elevated (Chapter 1, Section D). These observations raise questions about whether capital inflows were used as efficiently as they could have been.

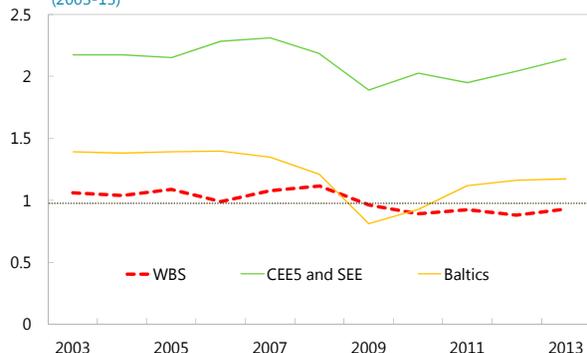
Capital inflows funded substantial increases in imports in the Western Balkans, which were only partly offset by growth in exports. In this respect, the Western Balkan economies followed the pattern of the Baltics. The fast growth in imports might have been appropriate, given the substantially lower capital stock in the Western Balkans than in the New Member States. But instead, much of the imports were absorbed as consumption rather than capital goods. Moreover, FDI inflows were directed into investment in nontradable sectors, such as financial services, real estate, and construction, rather than tradable sectors that can generate stronger export performance (Kinoshita 2011).<sup>6</sup>

**Imports and Exports**  
(Change in percentage points of GDP, 2000-2008)



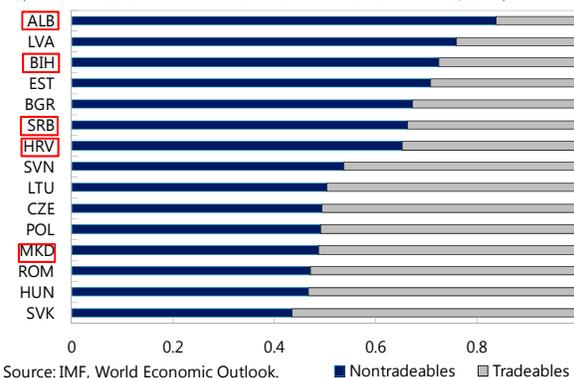
Source: IMF, World Economic Outlook.  
Note: 2003-2008 change for Montenegro.

**Ratio of Capital to Consumption Imports by Region**  
(2003-13)



Sources: UNCTAD; and IMF staff estimates.

**Foreign Direct Investment Flows by Sector**  
(Shares of FDI directed to tradables and nontradables sectors, 2007)

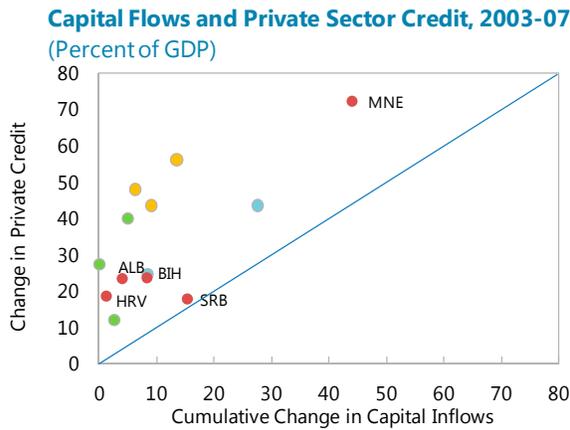


Source: IMF, World Economic Outlook.

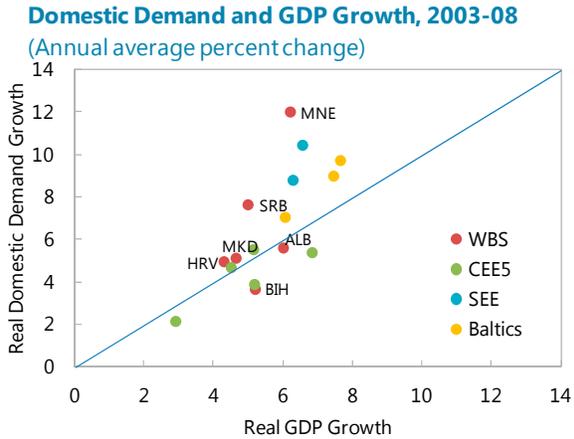
<sup>6</sup> Analysis in this paragraph should be treated with caution as this is based on UNCTAD data, which, due to coverage and methodology differences, are not fully consistent with balance of payments data from the IMF's World Economic Outlook database that underpin other analysis in this section.

### Capital Inflows and Domestic Prices

The substantial capital inflows affected the domestic economies of the Western Balkans in patterns similar to those observed in other emerging economies: growth in domestic credit (see also Chapter 3), as well as a sharp rise in domestic demand.

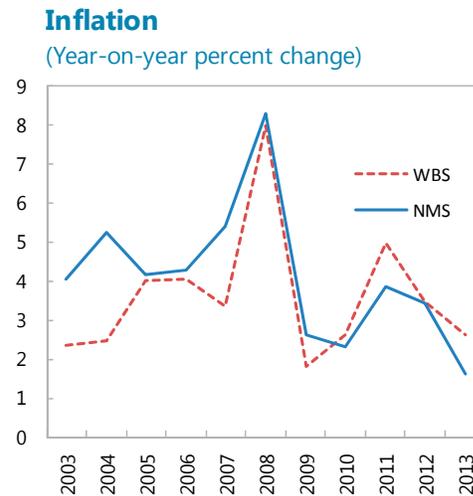
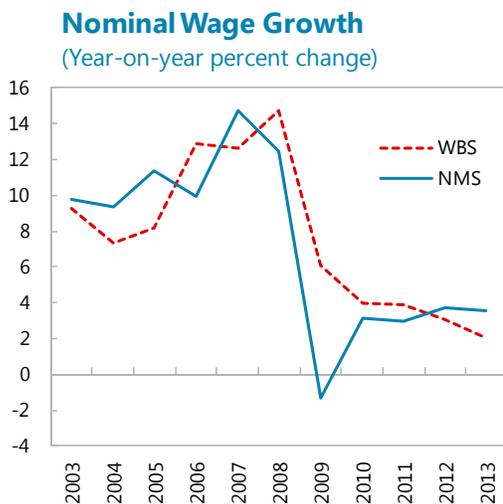


Source: IMF, World Economic Outlook.



Source: IMF, World Economic Outlook.

Domestic booms were, in turn, accompanied by strong wage growth and rising price inflation. Qualitatively, the pattern of wage growth in the Western Balkans was very similar to that of the New Member States, despite much higher and persistent unemployment in the former. Because wage inflation exceeded price inflation, real incomes rose substantially—consistent with the consumption boom mentioned above.

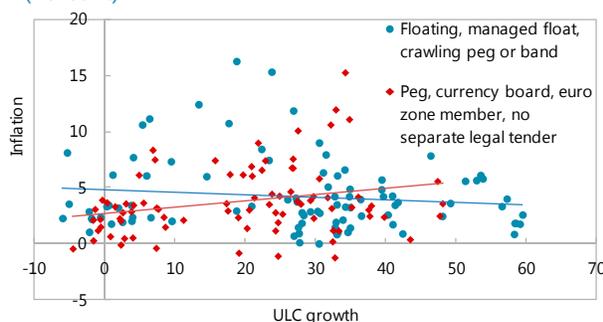


Sources: IMF, World Economic Outlook; national authorities; and IMF staff calculations.

It is useful to consider why inflation did not pick up earlier and faster in the Western Balkans, given the substantial capital inflows and increases in domestic credit. One reason is that demand for goods was accommodated by imports, mitigating pressure on domestic supply, albeit with the consequence of widening current account deficits. Furthermore, as noted in other empirical literature, inflation has not generally been a leading indicator of asset price crises, particularly with respect to the crisis of 2007 (Kannan, Rabanal, and Scott 2011).

What was the role of the exchange rate regime in controlling inflation? Certainly, within the Western Balkan economies, it is notable that, for very similar increases in unit labor costs over the precrisis period, Serbia (which had a crawling peg during the period) had much higher inflation than Montenegro (which had unilaterally adopted the deutschmark in 1999). An external anchor thus appears to have provided monetary policy credibility to countries with a history of deficit monetization. At the same time, Albania, with its floating lek, also had low inflation by the standards of the region, suggesting that monetary policy credibility can be established without pegging the currency. More formally (as seen in the scatter plot), across Emerging European economies there appears to be no evidence of any clear difference in the responsiveness of inflation to cost pressures between those economies with fixed exchange rates (pegs, currency boards, or unilateral adoption of the euro) and those with some form of floating exchange rates.

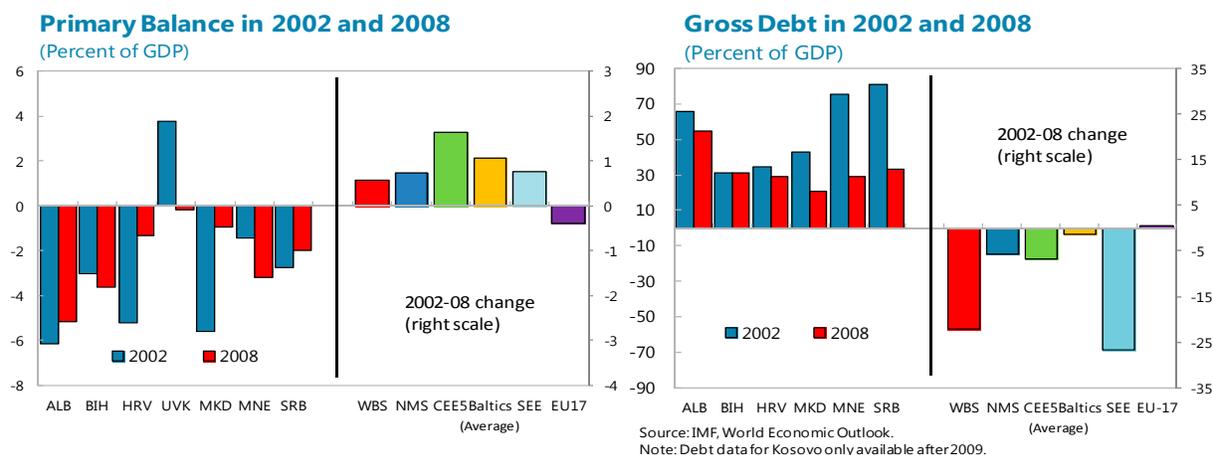
**ULC Growth and Inflation**  
(Percent)



Source: IMF, World Economic Outlook; national authorities; and IMF staff calculations.  
Note: The sample contains Western Balkans economies and New Member States, 2003-13.

### **Macroeconomic Policy and Aggregate Demand**

The choice of exchange rate regime was important nevertheless. Large capital inflows and the associated credit expansion made it difficult to control liquidity through monetary policy in all countries, but especially in those with fixed exchange rates. In circumstances of strong domestic demand, fiscal policy would ideally have offset domestic demand pressures and, indirectly, dampened credit demand. But rapid economic growth and the ensuing improvement in headline fiscal deficits gave the impression of an underlying strengthening of public finances, which, with the benefit of hindsight, turned out to be largely cyclical. Thus, as in most Emerging European economies, fiscal policy in the Western Balkans did not fully offset the domestic pressures associated with capital inflows. In fact, primary balances improved by less in the Western Balkans than in the New Member States.



Across the region, fiscal revenues rose even as a share of GDP—and despite discretionary cuts in tax rates—due to a combination of reasons. Cyclical factors included strong economic growth, booming consumption, and one-off privatization receipts, and were particularly sizable in Montenegro and Kosovo. At the same time, previously very high government debt in the Western Balkans fell sharply to levels comparable to New Member States by 2008, in part driven by debt forgiveness through Paris club debt reductions, as well as improvements in primary balances and rapid GDP growth.

Buoyant revenues and lower debt supported the appetite for higher public spending, especially in the run-up to elections, and particularly on public wages and pensions, and

ambitious infrastructure projects. Econometric analysis confirms that fiscal policy in the Western Balkans has a high degree of inertia, and is less responsive to business cycles than in the New Member States or Advanced EU economies. In addition, the component of spending that is not explained by inertia or the business cycle is somewhat larger in the Western Balkans, which may be picking up the effect of electoral cycles (Annex 2.1).

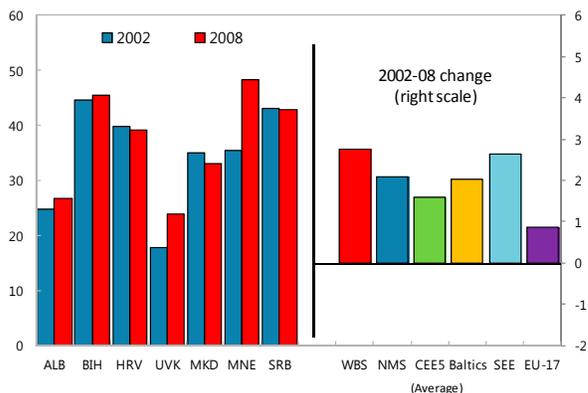
As discussed below, this combination of largely cyclical increases in revenues and rapid rises in mandatory spending led to accumulation of underlying fiscal vulnerabilities that came to the fore from the onset of the crisis and presented significant policy challenges in the postcrisis period.

#### Paris Club Debt Reductions after 1990

Country	Date of treatment	Type of treatment
Albania	December 1993	Classic
Albania	July 1998	Naples 50%
Albania	January 2000	Classic
Bosnia and Herzegovina	October 1998	Naples
Bosnia and Herzegovina	July 2000	Naples
Croatia	March 1995	Classic
FYR Macedonia	July 1995	Classic
FYR Macedonia	September 2000	Ad hoc
Serbia and Montenegro	November 2001	Ad hoc

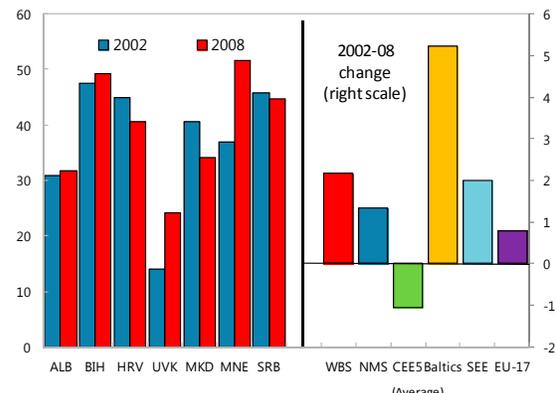
Source: Paris Club ([www.clubdeparis.org](http://www.clubdeparis.org)).

**Revenue in 2002 and 2008**  
(Percent of GDP)



Source: IMF, World Economic Outlook.

**Expenditure in 2002 and 2008**  
(Percent of GDP)



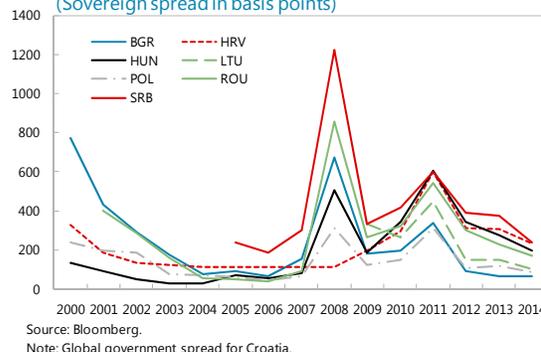
Source: IMF, World Economic Outlook.

### C. Recession and Recovery after the Global Financial Crisis

The onset of the global crisis and consequent contraction of external financing forced adjustment in the Western Balkans, as in the rest of Emerging Europe. In the global financial turmoil that followed the demise of Lehman Brothers, global risk aversion increased sharply and inter-bank markets dried up. Sovereign risk premia spiked across the region. Growth rates across Advanced and Emerging Europe fell sharply. The Western Balkan economies experienced recessions that were *less* severe than those of the New Member States. However, the postcrisis recoveries in the Western Balkans have been weak, similar to those in Central and Southeastern Europe, and the Western Balkan countries need to grow at a faster pace than their richer peers in order to converge to average income levels of Advanced EU economies (see also Chapter 1).

These observations raise a number of questions. Why were recessions less severe in the Western Balkans than in many New Member States at the peak of the crisis? And why has growth been lackluster since? We look at these questions first in terms of external and domestic factors separately, and then estimate their relative importance.

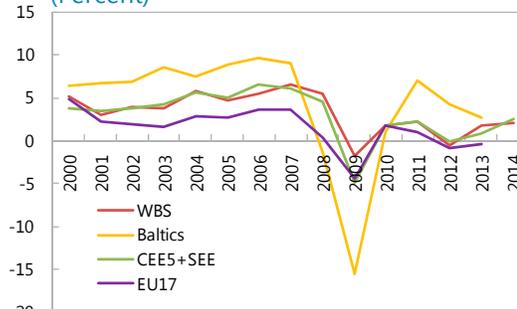
**EMBI Spreads**  
(Sovereign spread in basis points)



Source: Bloomberg.

Note: Global government spread for Croatia.

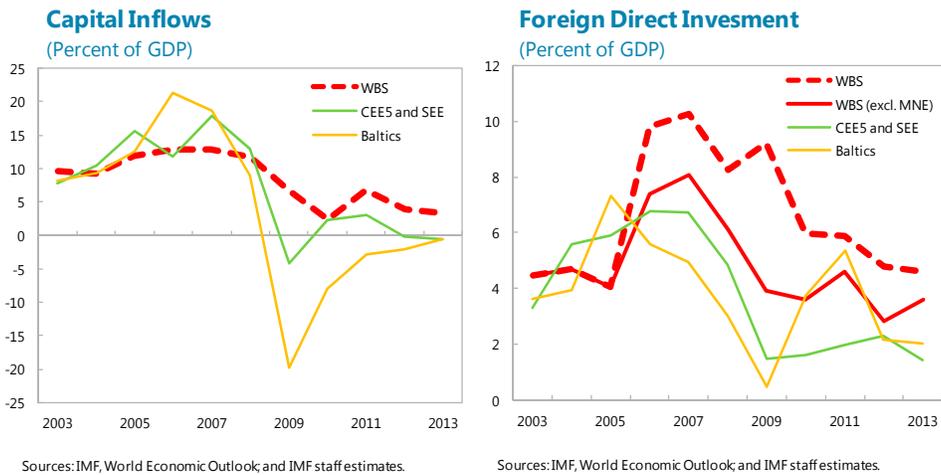
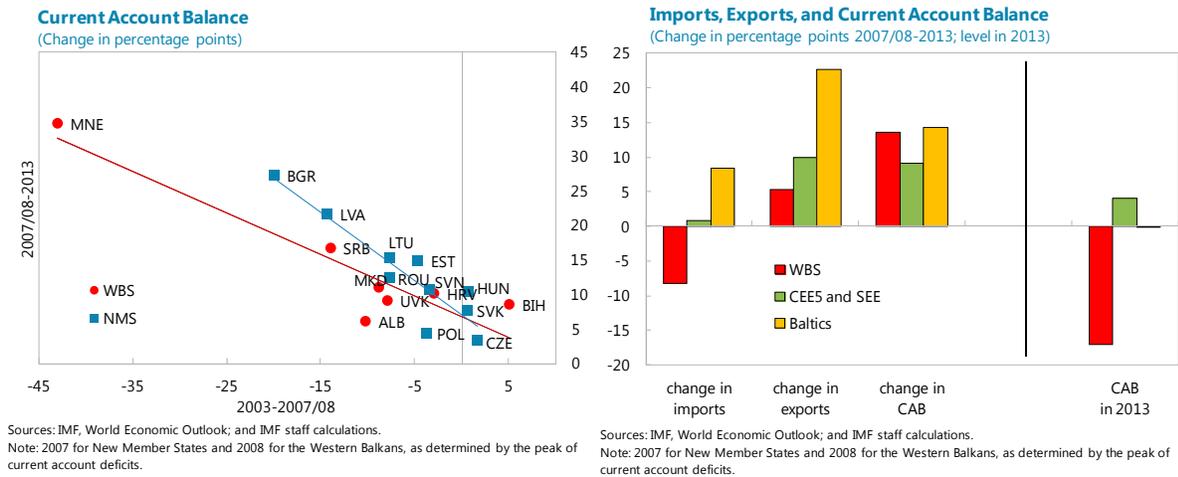
**Real GDP Growth**  
(Percent)



Source: IMF, World Economic Outlook.

**External Factors**

The onset of the global financial crisis triggered sizable current account adjustments across Emerging Europe, including in the Western Balkans. The reduction of the current account deficits of the Western Balkan countries was substantial and broadly similar to that in Central Europe, though smaller than in the Baltics. But the main difference was that the adjustment came predominantly through import compression in the Western Balkans, compared to the largely export-driven rebound in the New Member States. At the individual country level, the size of current account adjustment was highly correlated with the size of deterioration before the crisis.<sup>7</sup>



<sup>7</sup> Current account adjustment is measured as the change in the current account between 2007/8 and 2013 (2008 for the Western Balkans and since 2007 for New Member States, as determined by the peak of current account deficits).

What explains this lackluster trade performance in the Western Balkans? It seems plausible that it was related to two factors noted before: first, incomplete structural reforms, and second, capital that had been directed more at domestic consumption than investment. But importantly, the trade and current deficits remained relatively large in the Western Balkans during the postcrisis period, making these countries vulnerable to global volatility of capital flows.

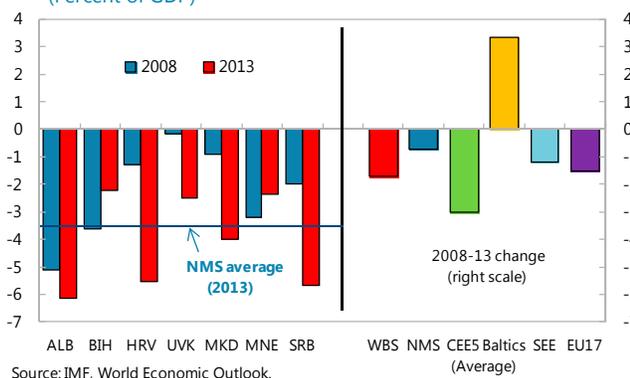
Fortunately, capital flows appear to have been more stable in the Western Balkans than in many other Emerging European economies in the postcrisis period. FDI continued to flow in, albeit at a lower level, and portfolio and other inflows remained positive and substantial as well. This was in contrast with the experience of the New Member States, which saw declining and eventually negative capital inflows. Capital flows dropped particularly sharply in the Baltics and Romania, where a large share of inflows during the boom years had been channeled to the real estate sector, either directly through FDI or capital inflows into banks (Mitra 2011). The relative stability of flows to the Western Balkans may have reflected the relative prevalence of non-real estate FDI in the region (with the exception of Montenegro), and the relatively smaller share of inflows to banks. The relative illiquidity of assets may have mitigated foreign investors' ability to withdraw capital quickly.

### Domestic Policy

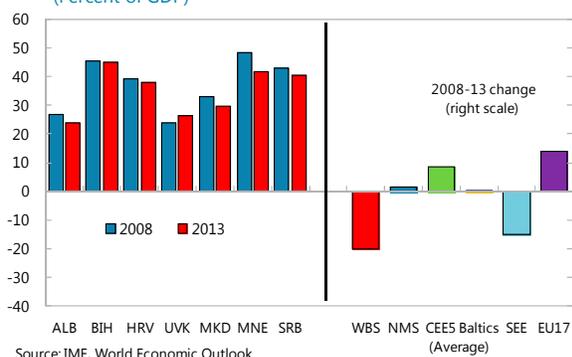
What role did domestic policies play since the onset of the crisis?

The Western Balkan economies lacked the fiscal space and the financing to accommodate falling revenues, and thus resorted to procyclical fiscal tightening. This took place in the form of restrained expenditures and/or increased tax rates, and exacerbated the adverse impact of the external shock on economic growth.

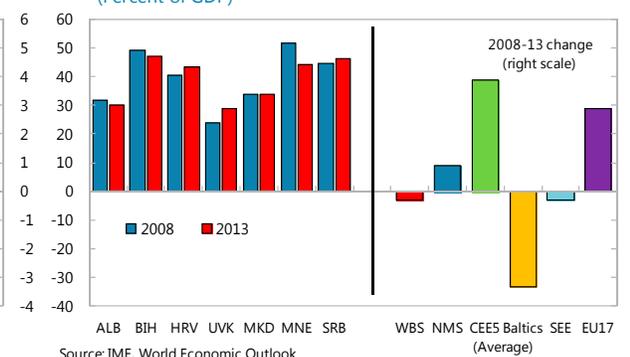
**Overall Fiscal Balances in 2008 and 2013**  
(Percent of GDP)



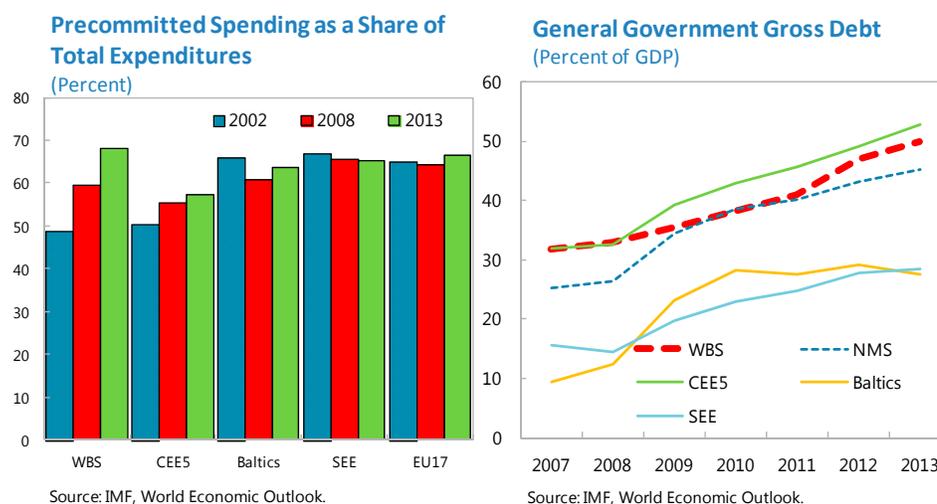
**Revenues in 2008 and 2013**  
(Percent of GDP)



**Expenditures in 2008 and 2013**  
(Percent of GDP)



In contrast to most of the New Member States, the Western Balkans experienced a persistent fall in revenues—mostly in taxes on goods and services and international trade and transactions—throughout the recovery period. At the same time, these economies struggled to cut public spending. Mandatory expenditures—particularly public sector wage bills and pensions—increased rapidly before the crisis and proved difficult to scale back (Box 2.2). Instead, capital spending was often cut, undermining growth potential. Overall, fiscal deficits in the Western Balkans remained relatively high, and public debt escalated rapidly—another unfortunate legacy of the crisis.



Most Western Balkan economies lacked independent monetary policy, and thus were unable to use it to support economic activity during the crisis. Countries that had unilaterally adopted other currencies, such as Kosovo and Montenegro, lacked the ability to provide liquidity altogether. But even in economies with flexible exchange rates and open capital accounts, such as Albania and Serbia, monetary policy was nonetheless constrained due to weak credibility and the need to avoid high exchange rate volatility (owing, for example, to unhedged foreign-currency denominated loans). In such circumstances, the burden of adjustment tends to fall on domestic prices. However, given widespread nominal wage rigidities, real exchange rates have not fallen by as much as in the New Member States. Consequently, as highlighted above, export growth has been weak and failed to drive the recovery in the Western Balkans.

### **External versus Domestic Factors**

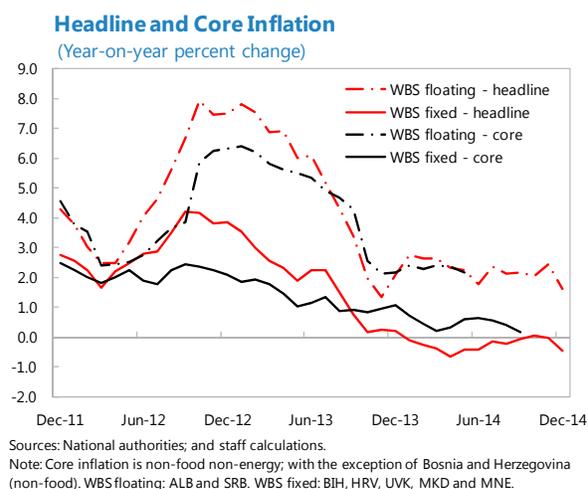
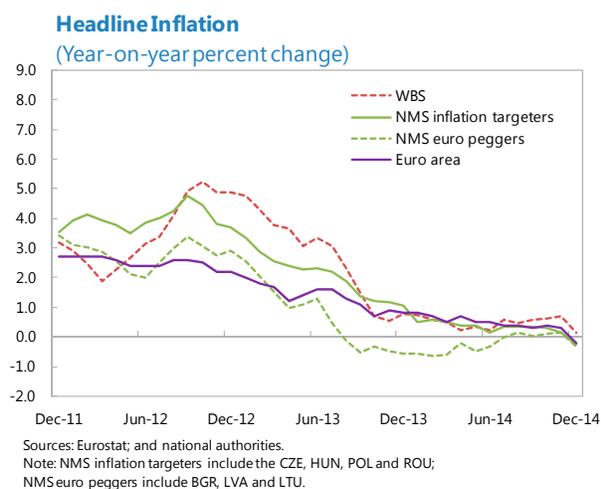
Which of the factors discussed above—external and domestic—were the most important in explaining economic developments after the global crisis?

The first issue is the **size of the recession at the height of the crisis**. This is examined by using a cross-sectional regression of the size of the peak-to-trough decline in real GDP on explanatory factors designed to measure the degree of overheating and imbalances in the boom period (Annex Table 2.2.1 in Annex 2.2). The results suggest that real GDP fell by more in economies that had larger current account deficits and fixed exchange rates, consistent with those economies lacking relative

price buffers. There is a highly significant dummy variable that indicates that the Western Balkan economies experienced a smaller recession than the New Member States, consistent with observed growth patterns. This may be due to the still-positive net inflows to the Western Balkans at the peak of the crisis, which alleviated the need for a sharper economic adjustment as observed in the other Emerging European peers.

The second issue is the ***growth recovery in the aftermath of the crisis***. A cross-sectional regression of real GDP growth since the trough indicates a significant role for export expansion (Annex Table 2.2.2). As discussed above, the Western Balkans fared relatively poorly in this area due to lingering competitiveness problems and narrow export bases. In addition, the results suggest that having a fixed exchange rate regime is also associated with stronger growth from the trough, likely reflecting the export-driven rebounds in the more open and diversified Baltic economies.

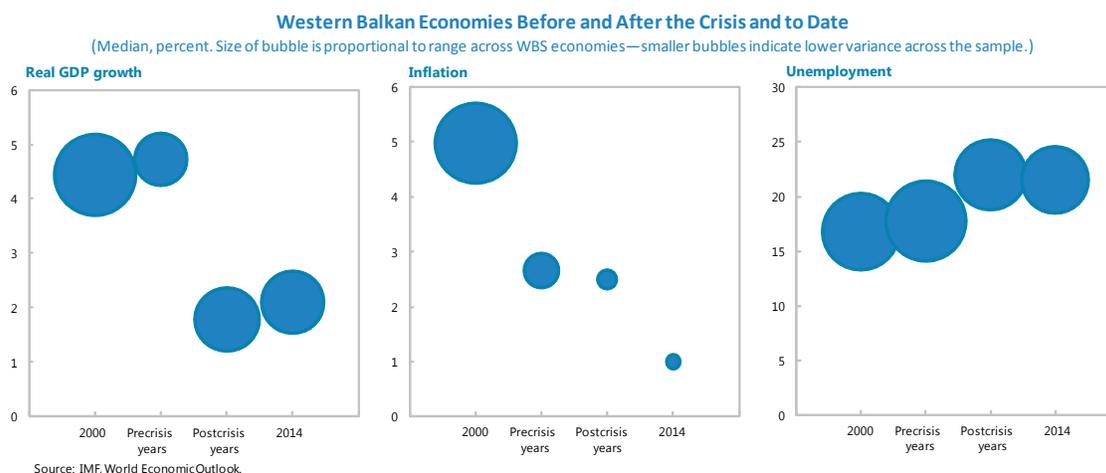
Going forward, recoveries in the Western Balkans face additional risks: first, from weak external demand (as discussed in Chapter 1) and, second, the threat of deflation spilling over from Advanced European economies. Together, these two forces would further weaken nominal demand. Given high levels of public debt and already-high levels of non-performing loans, an extended period of very low inflation or deflation would be damaging. Other Emerging European economies have already been facing downward price pressures. Western Balkan economies with fixed exchange rate regimes of some sort would likely be most affected; indeed, outright deflation in headline CPI has recently been seen in Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, and Montenegro. Although this has mainly been because of food and fuel prices, core inflation has been falling steadily. And even in Albania and Serbia, with their floating exchange rate regimes, inflation is currently below target.



## D. Lessons from the Crisis and Policy Challenges

Are the Western Balkan economies more stable than when they entered the new millennium? What lessons should be drawn from their precrisis and postcrisis experiences? And what are the implications for policies going forward?

Compared with the 1990s, the Western Balkan economies are certainly more stable. GDP growth rates have become more uniform across the region over time. In particular, extreme inflation is a thing of the past, and is much less variable across countries. But from a welfare point of view, the picture is more mixed. Growth, while recovering across the region, is lower for most countries than in 2000. Regrettably, unemployment rates have risen further to very high levels.



The recessions at the peak of the crisis were not as severe in the Western Balkans as in other Emerging European economies. To some extent, that reflects good luck: the credit booms driven by “hot” cross-border flows that caused much damage in other economies were generally late to arrive in the Western Balkan economies and were curtailed at an earlier stage. As noted above, capital flows, although diminished, held up surprisingly well after the crisis.

Two main legacies of the crisis are persistently weak growth and high unemployment. But underlying structural factors are also important. In particular, during the boom years the Western Balkan economies built economic foundations that were less conducive to a rebound from the crisis. This is because capital inflows were directed more at nontradable sectors and supported consumption, rather than at funding investment in tradable sectors.

What then are the lessons for policies in the Western Balkans?

The boom-bust experience of the Western Balkans since the turn of the millennium helps to highlight the implications of some form of fixed (or nearly-fixed) exchange rate. Western Balkan countries as a group showed a strong preference for fixed exchange rate regimes. In the early years of transition these regimes helped stabilize inflation and safeguard living standards, and thus presented an understandably attractive policy option. However, later on, countries with both fixed and more flexible rate regimes were equally successful in controlling inflation, and the costs of the policy choice to fix the exchange rate became more obvious, as countries with fixed exchange rates tended to experience bigger booms and larger imbalances (see also Chapter 3). Regardless of the exchange rate regime, the Western Balkan economies need to build up the flexibility of their real economies and buttress their ability to withstand shocks. This in turn places greater emphasis on fiscal and structural policies.

Clearly, having more countercyclical fiscal policies would have benefited most economies during the boom, and given them room to adjust more easily after the crisis. That most Western Balkan economies did not do so is not unusual. In real time during the boom years, most countries found it difficult to distinguish between cyclical and structural increases in revenues, and as a result fiscal policies were not sufficiently countercyclical. And when faced with the fiscal financing constraints at the onset of the crisis, most of the Western Balkans were forced to resort to procyclical tightening in the absence of adequate fiscal space. In particular, given rigid expenditure patterns, they often cut capital spending, further undermining growth. In light of this, the policy priorities for the region going forward include reducing high public debt ratios, tackling high mandatory spending, and increasing the resilience of public finances to future economic shocks (see also Annex 2.3).

The experiences before and after the crisis also point to the need for more progress in structural reforms, as the reform process in most of the Western Balkans countries remains incomplete (see Chapter 1). From a macroeconomic point of view, structural reforms should aim to diversify economic activity and increase export shares, which in turn requires attracting investment into tradable sectors—an area where the Western Balkans lag. This would help reduce the high trade and current account deficits across the region. At the same time, widening the range of savings instruments would help increase the share of formal savings in the economy and intermediate them to productive projects that would raise the capacity of the economy to produce and grow (Chapter 3). Finally, structural reforms in labor and product markets would help increase the real flexibility of the economies and enhance their ability to absorb shocks.

### Box 2.1. The Western Balkans and the IMF

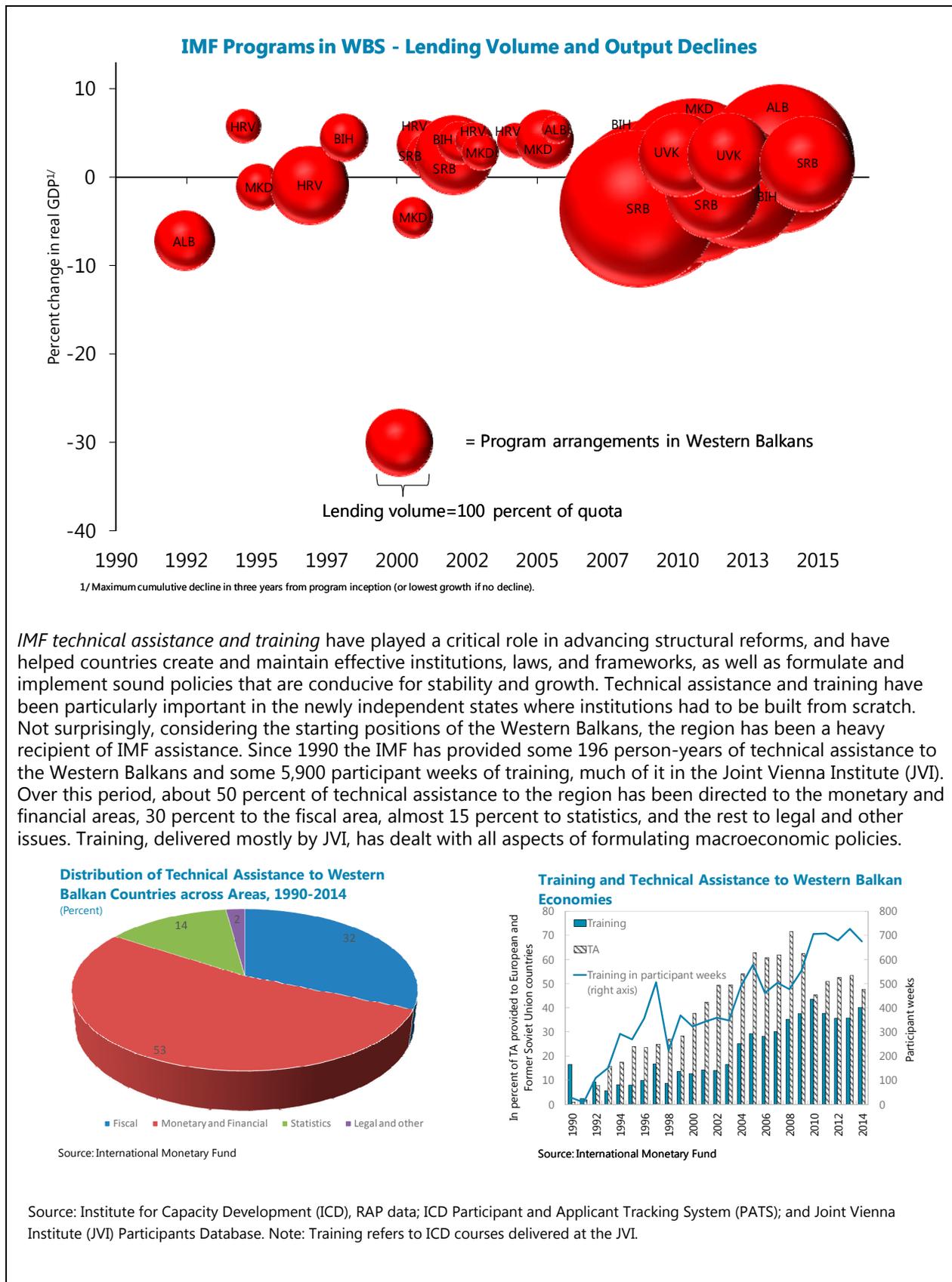
The International Monetary Fund has been a close partner of the Western Balkan States throughout the process of economic transformation. As early as the 1980s, the Fund provided financial and technical support for initial reform steps in Yugoslavia. Its activities in the region expanded substantially in the 1990s, following the collapse of socialism and the breakup of Yugoslavia.<sup>1</sup> In those days, the Western Balkan countries faced significant challenges to transition toward a market economy, often needing to set up institutions and frameworks from scratch. More recently, the IMF has been assisting with challenges related to the adverse effects of the global financial crisis and the unfinished structural reform agenda. The Fund's support has come in the form of its three main activities—surveillance, program lending, and training and technical assistance.

**IMF Surveillance** has provided policy advice to facilitate the economic transformation. In the initial stages of the transition, the focus was on policy paths needed to achieve macroeconomic stabilization and structural reforms to support the transformation to market economies. The modalities of involvement were wide ranging, including staff visits, Article IV consultations (which generally take place annually for most IMF member countries), and regional conferences and cross-country analysis. In addition, in the aftermath of the global financial crisis, cross-country policy initiatives, such as the Vienna I and Vienna II Initiative (Chapter 3), provided coordination between private and public stakeholders by bringing together parent bank groups from Advanced EU economies, home and host country authorities, and multilateral organizations.

**IMF program lending** has supported countries' economic stabilization and transformation programs through lending conditioned on implementation of key policy reforms. Since 1992, the Western Balkan countries have benefited from 29 IMF arrangements for a cumulative total of SDR 8.2 billion.

- **Systemic Transformation Facility (STF).** A number of Western Balkan countries had their first economic programs supported by this IMF transitional facility set up after the fall of the Berlin Wall—for example, the former Yugoslavia in 1990, Albania in 1992, FYR Macedonia in 1994, and Croatia in 1995. These early arrangements were not large in size (ranging between 25 and 80 percent of the countries' quota at the IMF), as financing under the STF was strictly limited, reflecting the risks involved and the limited repayment capacity.
- **Emergency postconflict assistance** supported several of the Western Balkan countries that emerged from conflicts and faced the daunting task of rebuilding their economies without losing control over their financial policies. Examples include Bosnia and Herzegovina in 1995, the Former Republic of Yugoslavia in 2000, and Albania in 1997–98. As is generally the case, IMF assistance also catalyzed additional financial and technical support by the international community.
- **Stand-by Arrangement (SBA), Extended Fund Facility (EFF), and the Precautionary Credit Line.** Over time, programs in the Western Balkan countries have moved to more traditional IMF instruments, reflecting both the political stability in the region and progress in the transition process. In most cases, the overarching goal of these programs has been to ensure fiscal and financial stability in the wake of the global financial crisis, and to advance the unfinished structural reform agenda. Specific examples include FYR Macedonia, which concluded a Precautionary Credit Line in 2011, and an SBA in Kosovo in 2012. In addition, Bosnia and Herzegovina and Serbia currently have an SBA, while Albania has an EFF arrangement, both with significant access.

<sup>1</sup> The expansion of IMF membership took place through the 1990s, with Albania joining in 1991, FYR Macedonia, Bosnia and Herzegovina, Croatia and the Federal Republic of Yugoslavia (FRY) in 1992, Montenegro in 2007, and Kosovo in 2009.



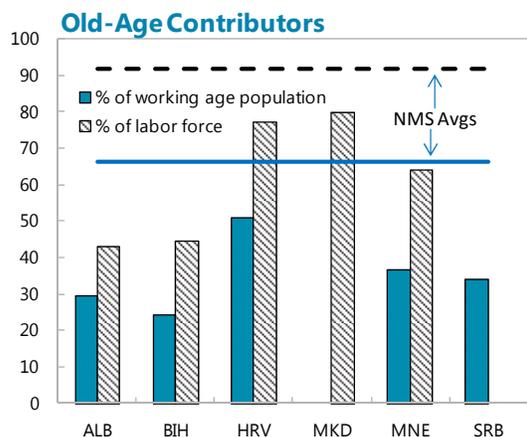
Recent IMF technical assistance and training to the region has had some tangible achievements:

- *Public finances.* Capacity-building has focused on putting in place or improving fiscal frameworks, budget planning and execution, revenue administration, and revenue and expenditure policies. There are many examples where IMF technical assistance has played a key role. For example, based on IMF assistance, Bosnia and Herzegovina adopted a budget law in late 2013 that covers all levels of government within the Federation. Since late 2013, the IMF helped Albania develop and implement a comprehensive strategy to prevent future arrears and clear current ones. It also advised Kosovo operationalize the fiscal rule in 2014.
- *Monetary policy.* In line with trends in emerging market countries elsewhere in the world, the IMF has closely assisted Western Balkan states transition and modernize their monetary policy frameworks. Notably, Albania, FYR Macedonia, and Serbia have been moving toward inflation targeting. IMF technical assistance in this area has focused on institutional and analytical factors, such as monetary policy instruments, developing local debt markets, enhancing transparency, and modeling.
- *Financial sector.* The aftermath of the global financial crisis has given rise to additional demands in the Western Balkan countries for IMF assistance in the areas of bank supervision and regulation, legal foundation and capacity-building for central banks, stress testing, developing government securities markets, and the resolution of problem banks. For example, with the help of IMF technical assistance, Kosovo recently revised its central bank law and introduced an emergency liquidity facility and a deposit insurance scheme. Separately, Serbia has recently revamped its bank resolution framework with guidance from the IMF.
- *Legal frameworks.* IMF technical assistance has supported the drafting of fiscal, tax, and central bank laws, laws on bank recapitalization, foreign exchange regulations, and debt restructuring plans, among others. The Joint Vienna Institute has hosted specialized training on domestic insolvency regimes, liquidation procedures, and options for out-of-court debt restructuring, with a special focus on small- and medium-sized enterprises.
- *Statistics.* Technical assistance and training have helped to address shortcomings in statistics related to national income accounts, balance of payments, and monetary and financial sectors. That Western Balkan countries follow internationally recognized standards for data dissemination today is a significant achievement. To strengthen real sector statistics, the IMF launched a technical assistance project in 2011 that has benefited most countries in the region. Looking ahead, guidance and assistance in collecting harmonized financial sector data will be a priority.

Going forward, the IMF expects to remain deeply engaged with the Western Balkan region. Whether through surveillance, IMF arrangements, or capacity development, the IMF stands ready to assist countries in raising their economic prospects.

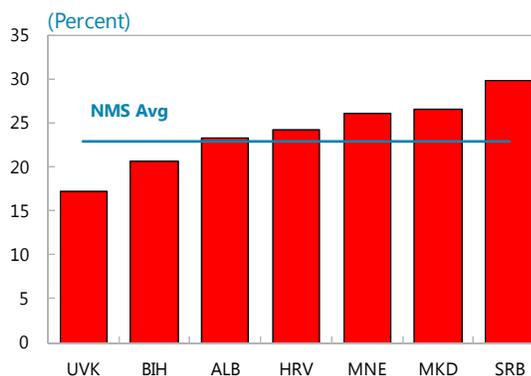
### Box 2.2. Public Pension Spending in the Western Balkans<sup>1</sup>

Pension spending in most of the Western Balkans is much higher than in New Member States, amounting to almost 10 percent of GDP and almost a quarter of total government expenditure. The dominant system is a public pension scheme with compulsory contributions on a pay-as-you-go basis (the first pillar), which covers all workers in the formal economy. However, aging populations, low employment and participation rates, and a large informal economy threaten the sustainability of such systems. The widespread practice of early retirement that has accompanied privatization and enterprise restructurings has further worsened the situation.



Source: International Labor Organization.  
Note: 2009-11, depending on data availability.  
NMS average excludes Romania due to lack of data.

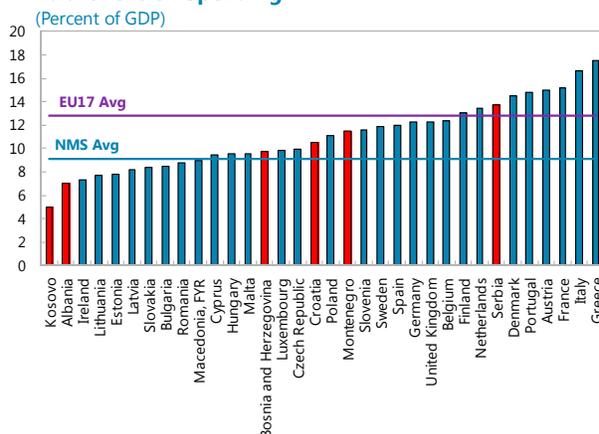
### Pension Spending as a Share of Total Government Expenditure, 2013



Source: National authorities.

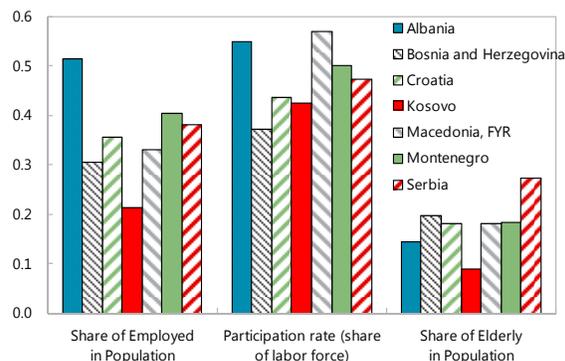
As a consequence of financing constraints, pensions across the region are low in relation to subsistence needs. Going forward, the Western Balkan economies should concentrate on increasing participation and employment rates, reducing informality, and supporting the development of second and third pillars to ensure long-term fiscal sustainability.

### Public Pension Spending



Source: Eurostat ; and national authorities.  
Note: Data refer to 2012/2013.

### Demographic and Labor Market Indicators

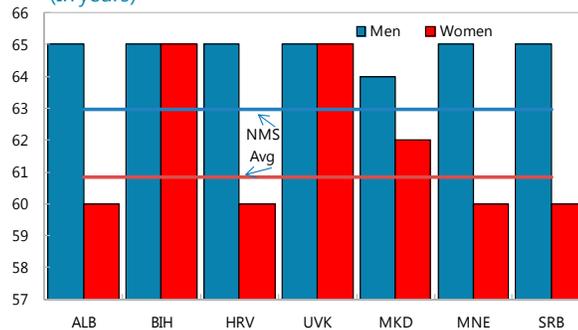


Sources: World Bank, The Atlas of Social Protection: Indicators of Resilience and Equity; and national authorities.  
Note: Using latest available data (2004-2011). The economic support ratio is defined as the ratio of contributors to pensioners.

Several countries have introduced pension system reforms, albeit with wide variation in their scope:

- Croatia and FYR Macedonia partly transformed the inherited redistributive universal pension systems into selective contributive systems, where the second pillar now replaces part of the first pillar social security pension. Third-pillar voluntary private pensions operate in Croatia, FYR Macedonia, Montenegro, and Serbia, but play only a small role.
- Serbia and Montenegro have instead focused on reforms to the existing pay-as-you-go system, changing indexation formulas, gradually increasing retirement ages and/or tightening eligibility criteria for early retirement, and reducing occupational and gender privileges. However, these reforms are unlikely to bring significant savings in the short run and the pension systems are still not sustainable.
- In Bosnia and Herzegovina, early reforms focused on harmonization between the two entities, and implementation of a new privileged pension law in the Federation is ongoing, focusing on reducing benefits, increasing the number of contributors, and raising the effective retirement age.
- Younger populations in Albania and Kosovo explain the relatively lighter pension burdens in these countries, though low employment rates and high levels of informality in these countries will contribute to increasing pressures as populations age. A combined first- and second-pillar system was created in Kosovo in 2002. In Albania contribution rate cuts, recent unfunded increases in benefits, and incentives for underreporting income led to an increase in the social insurance system deficit.

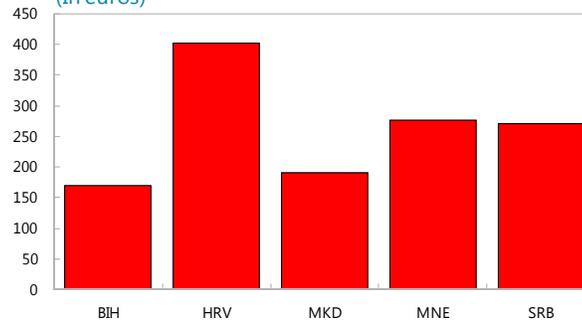
**Statutory Retirement Age, 2013**  
(In years)



Sources: National authorities.

Note: Does not show planned increases not yet fully in effect.

**Average Monthly Old-Age Pension, 2013**  
(In euros)



Source: National authorities.

Note: Data for Albania and Kosovo are unavailable. Does not show planned increases not yet fully in effect.

<sup>1</sup> See also Bartlett and Xhumari (2007); and ITUC-PERC (2012).

## Chapter 3: Financial Sector<sup>1</sup>

# DEEPENING, RESILIENCE, AND ONGOING CHALLENGES

In the years since 2000, transition and transformation in the Western Balkans have been particularly significant in the banking sector. These banking systems have undergone significant financial deepening, more so than did those of the New Member States at the same stage of economic transition. In the run-up to the global financial crisis, the banking systems of the Western Balkans relied less on fast-moving wholesale funding than did the New Member States (with the exception of Montenegro), which suggests that a significant part of the precrisis credit expansion in these countries was perhaps part of a long-term trend of financial deepening. But financial development in the Western Balkans over this period has also been uneven. While banking sectors have developed rapidly, growth of nonbank financial services has been lackluster, with equity, pension, and insurance markets remaining shallow and corporate debt markets largely nonexistent, even today.

The period of sustained expansion of bank credit in the Western Balkans also coincided with the global financial boom that ended in 2008. The subsequent sharp fall in credit growth in the aftermath of the global financial crisis raises the question: was there a credit boom-bust cycle at play, and was the precrisis growth of the banking sector unsustainable? The analysis here suggests that while credit growth in the Western Balkans was procyclical prior to 2008, and appears to have exceeded somewhat what could have been sustained by these economies' underlying structural characteristics, it was still milder, with the exception of Montenegro, than that in many of the New Member States, particularly the Baltic countries. The postcrisis credit correction in Western Balkan countries was not as severe as in the New Member States because the former relied more on expanding domestic deposit bases than did the latter.

But the fact that the credit cycle was milder has not meant that the Western Balkan countries were able to avoid the after-effects of the crisis. The fallout from the crisis and the subsequent economic sluggishness have resulted in a surge in nonperforming loans (NPLs) in most Emerging European countries. But tepid structural reforms in the Western Balkans to address these problems head on have left these countries with a legacy of higher level NPLs today than in their counterpart New Member States.

In the Western Balkans, households and firms do not have good access to credit and saving instruments; this is particularly true in lower-income countries in the region, such as Albania and Kosovo. The Western Balkan banking model has tended to rely on high interest margins, which is, among other things, an indicator of inefficiency and weak intermediation. While these margins have been on a declining trend and appear to be converging to New Member States levels, they remain

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<sup>1</sup> Prepared by Marc Gerard, Patrick Gitton, Ricardo Llaudes, and Pamela Madrid Angers, under the supervision of Nadeem Ilahi.

wide. The extent to which the Western Balkan banking systems are able to support sustained growth over the medium term will depend not only on further financial deepening, but also on improvements in financial access and efficiency—that is, the ability to reach traditionally underserved segments in a cost-effective manner.

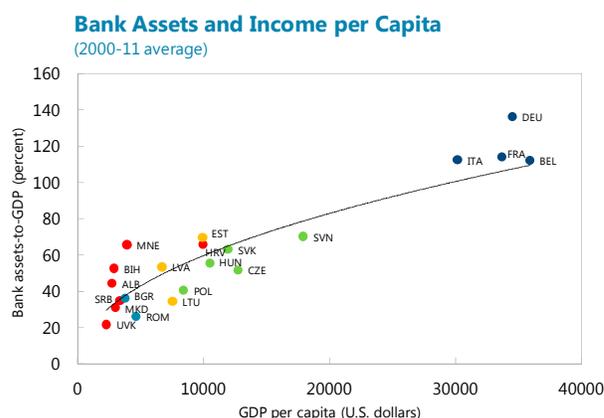
There is a sizable unfinished agenda of structural reforms in the financial sectors in the Western Balkans. While these countries have done relatively well in providing the infrastructure necessary for financial deepening, they have lagged their New Member State peers in strengthening the foundations of financial stability. Despite some attempts at reform, the regulatory and institutional environment in the Western Balkan countries, and the attendant enforcement, is not yet well suited for tackling what is arguably the most serious challenge today facing the region’s banking system—the NPL problem. These countries also lag on risk based supervision.

The global financial crisis of 2008 and the subsequent shocks emanating from Advanced EU economies have underscored the need for coordinated cross-border efforts to mitigate the particular financial risks to which Western Balkan countries are vulnerable. In this regard, the Vienna I and II Initiatives spearheaded by international financial institutions, including the IMF, have been useful, and continue to play an important role. IMF lending programs in the region have also helped.

A commonly-drawn lesson from the financial crisis is that to mitigate the risk of contagion from abroad, Emerging Europe’s banking systems should transition toward increased reliance on local-based funding and less reliance on foreign funding (IMF 2013). We note below that the share of foreign funding in Western Balkan banking systems—which also experienced a generally milder boom-bust cycle—was relatively small both before and after the global crisis. This, together with the relatively large investment needs that cannot be met by domestic financing alone, implies that the share of foreign financing, though not necessarily of banking systems, will actually need to increase in the Western Balkans. To attract the needed external financing, Western Balkan countries need to undertake significant structural reforms to improve access, reduce inefficiencies, and strengthen stability in their financial sectors. Foreign direct investment should form a large part of these external inflows, but there is also room for a sizable increase in foreign financing flows through the financial systems of these countries without making them overly reliant on foreign funding and the associated volatility.

## A. Financial Deepening from a Low Base

Deep financial systems support sustained economic growth and macro-financial stability mainly through efficient allocation of resources between savers and borrowers, and by allowing economic agents to smooth consumption and overcome risks (Levine 2005; IMF 2012). Financial depth indicates the amount of financial services



Source: World Bank Global Financial Development Database (GFDD).

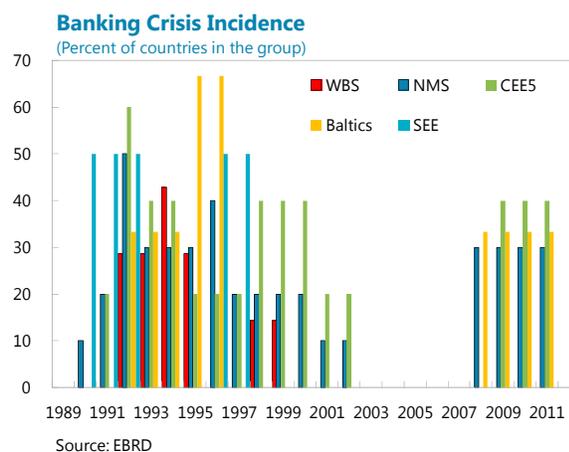
available in an economy, and is often proxied by the magnitude of assets or liabilities of financial institutions relative to the size of the economy. It tends to increase with economic growth and development, though it can also vary among countries at similar levels of income and market size, because of differences in macroeconomic stability, institutional strength, or the impact of past events, such as crises or wars.

Over the course of economic development, financial deepening first occurs through the spread of banking services, and then involves increasing use and provision of nonbank financial services—capital, pension, and insurance markets. Nonbank deepening begins to take place once challenges related to information, enforcement, and coordination are overcome and there is sufficient demand for sophisticated financial services (Pagnano 1993; De la Torre, Feyen, and Ize 2011).

The evolution of financial deepening in the Western Balkan countries so far appears to be following the standard pattern. These countries have advanced rapidly with bank deepening, perhaps more so than the New Member States at a similar stage of economic transition. However, the Western Balkan countries have lagged behind their peers in deepening their nonbank financial sector, as capital markets (equities and bonds), pensions, insurance, and other financial markets remain nonexistent or severely underdeveloped, except perhaps in Croatia. Box 3.1 discusses the state of nonbank financial deepening in the Western Balkan countries.

### ***A Rocky Start to Bank Credit Deepening***

The process of bank deepening in Emerging Europe in the 1990s was not smooth. Countries found it challenging to establish market-based financial systems because of the need to simultaneously undertake macroeconomic stabilization as well as financial and operational restructuring of banks and firms. New legal and institutional frameworks also had to be put in place (Barisitz 2009). As transition progressed, these countries began to open up their banking sectors through privatization, in many cases by applying liberal licensing criteria and insufficient supervision. Not surprisingly, the outcome was a wave of banking crises in a number of these countries (Roaf and others 2014; IMF 2013), with fewer but more costly crises in the Western Balkan countries than in the New Member States.<sup>2</sup> Nonetheless, one positive outcome of the turbulent 1990s was a round of banking consolidation and increasing penetration of foreign banks, which brought professionalism, know-how, and arm's length relations with borrowers. Not surprisingly, this set the stage for sustained financial deepening in the subsequent decade.



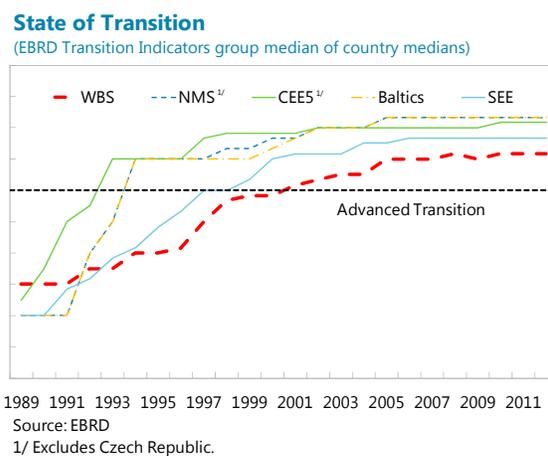
<sup>2</sup> See the data compiled by Laeven and Valencia (2012), which reports lower liquidity support, but higher NPLs and fiscal costs in percent of GDP for the Western Balkan countries than for the New Member States.

## Toward Advanced Transition and Bank Credit Deepening

How does the pace of credit deepening in the Western Balkans compare with that in the New Member States? Such a comparison requires controlling for the stage of economic transition. As the two sets of countries began transitioning to a modern economic system almost a decade apart, a comparison of their relative progress necessitates putting them on an appropriate timeline. We use the EBRD's transition index to determine when these countries reached a "fairly advanced stage of transition." This is defined as a country having achieved macroeconomic stability and

progressed with structural economic reforms—or reaching the EBRD transition level of 3 or above (see chart). Fairly advanced transition was broadly under way in the median New Member States by around 1994.<sup>3</sup> The Western Balkan countries reached a similar level of transition much later with a sizable intra-group variation. While advanced transition began prior to the 2000s in Croatia and FYR Macedonia, it began only in 2002 in the rest of the Western Balkan countries, after conflicts in the region had been settled. Our threshold analysis of comparing the evolution of financial deepening in the two sets of countries thus uses 1994 and 2002, respectively, as the starting years of advanced transition for the two country groups (i.e., for setting time  $t = 0$ ).<sup>4</sup> As can be seen in the text table, the median Western Balkan country had slightly lower domestic banking asset depth than the New Member States at the same stage of transition (excluding the Baltics), but also lower comparable GDP per capita (except Bulgaria and Romania).

Our transition threshold analysis suggests that the Western Balkan countries' banking systems deepened more rapidly than did those of the New Member States in the respective period following the beginning of advanced transition. The ratio of bank credit to the private sector as a percent of GDP, a widely-used measure of credit depth, grew relatively slowly in the New Member States in the



Key Statistics at Start of Advanced Transition<sup>1/</sup>

	WBS	NMS	Baltics	CEES	SEE
Year reached fairly advanced transition <sup>2/</sup>	<b>2002</b>	<b>1994</b>	<b>1994</b>	<b>1994</b>	<b>1994</b>
EBRD Transition Index <sup>3/</sup>	<b>3.2</b>	<b>3.5</b>	<b>3.5</b>	<b>3.5</b>	<b>2.1</b>
GDP per capita (constant 2000 U.S. dollars)	2,570	4,866	3,545	7,314	2,899
GDP per capita (current U.S. dollars)	1,827	2,410	1,903	3,891	1,236
Bank assets to GDP	28.2	33.0	16.5	36.5	96.0
Bank credit to the private sector to GDP	19.8	20.3	14.5	22.6	48.3
Bank deposits to GDP <sup>4/</sup>	39.0	30.9	17.0	44.6	44.6

Sources: EBRD Transition Indicators; and World Bank's Finstat and GFDD.

1/ Median for group.

2/ An index of over 3 is an indication of fairly advanced transition (EBRD).

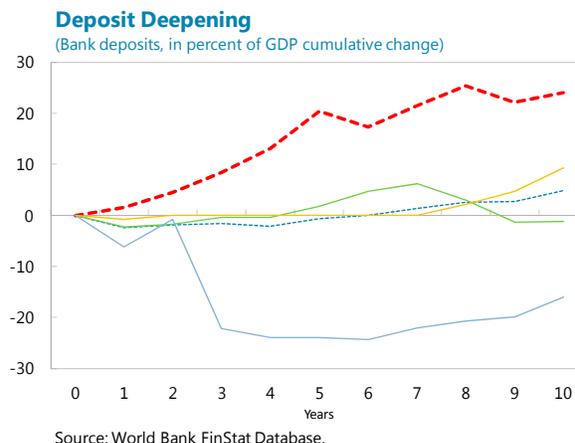
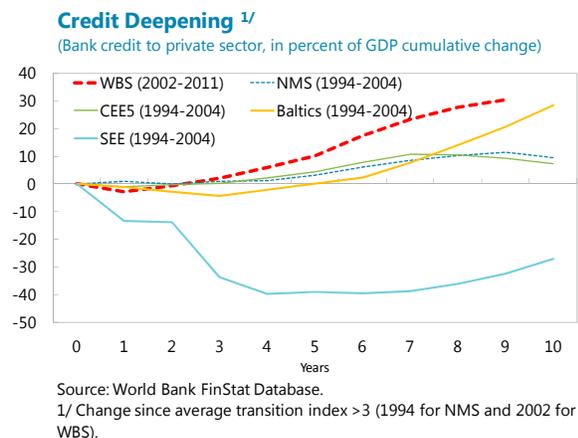
3/ Median of all indices.

4/ Excludes Kosovo and Montenegro.

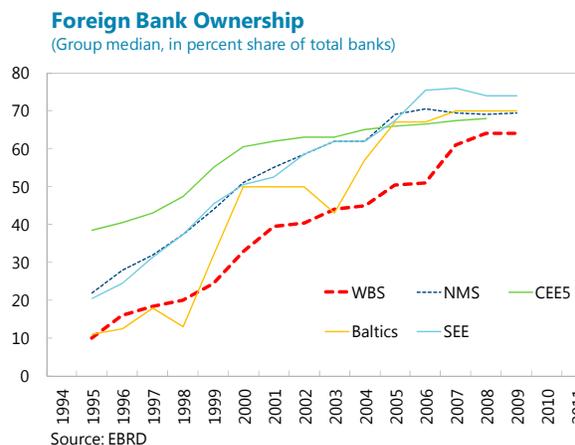
<sup>3</sup> Both Bulgaria and Romania were lagging, particularly the latter with a median of all transition indices below 3.

<sup>4</sup> Exogenous global factors in the 1990s and the 2000s complicate the comparison somewhat. The emerging market crises of the 1990s are likely to have exogenously dampened the pace of financial deepening in the New Member States, while the global credit boom in the post-2002 Great Moderation period may exaggerate the extent of financial deepening in the Western Balkans.

five years following the start of advanced transition (i.e., during 1994–99).<sup>5</sup> On the other hand, Western Balkan countries’ private credit-to-GDP ratio grew briskly after these countries had reached advanced transition and increased by a cumulative 30 percent of GDP in 10 years.



The rapid credit deepening in the Western Balkan countries also coincided with the global financial boom of the mid-2000s, which raises the question of whether credit growth was excessive and resulted in the buildup of vulnerabilities. A number of factors suggest that there was a lesser buildup of vulnerabilities and a milder boom-bust cycle in the Western Balkan countries than in the New Member States (the latter issue is discussed in fuller detail in the next section). First, much of the credit growth in the Western Balkans coincided with a rapid widening of the domestic deposit base—faster than what the New Member States experienced in the period following their advanced transition. Large inflows of remittances from abroad, as well as high real interest rates (except in Serbia) may partly explain the deposit growth.<sup>6</sup> More importantly, the rapid entry of foreign banks and the introduction of deposit insurance schemes during the 2000s likely helped boost the confidence of depositors in the local banking sectors, attracting new deposits.



<sup>5</sup> The 1996 banking crisis in Bulgaria was particularly severe. There were also banking crises in Lithuania and Latvia (1995) and the Czech Republic (1997). Romania had a currency crisis in 1997, and growth in many countries was also affected by the 1998 Russian crisis (IMF 2013).

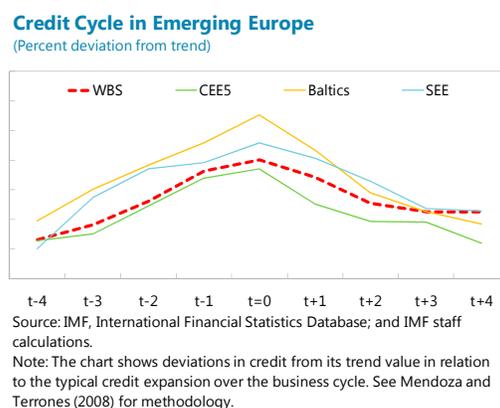
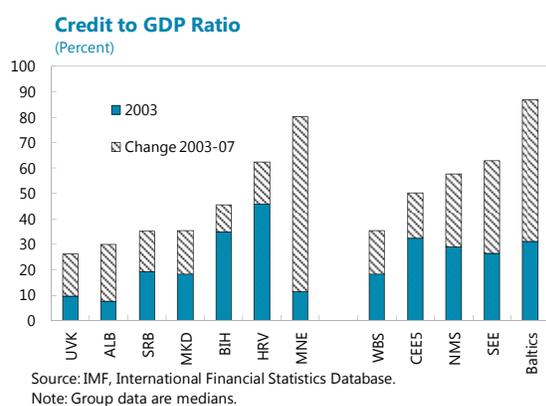
<sup>6</sup> The higher real interest rates in some Western Balkan countries were related to declines in inflation, which serve as a proxy for greater macroeconomic stability.

## B. Credit Swings and Financial Stability

Sustained expansion of credit is a sign of financial deepening, but the speed of this expansion also matters. Excessively fast credit growth—a credit boom—can lead to resource misallocation and macroeconomic imbalances through looser lending standards, excessive leverage, greater credit risk, and/or asset price bubbles, which in turn can trigger or exacerbate financial crises (Loayza and Ranciere 2006; Rousseau and Wachtel 2011; Barajas and others 2013). Credit busts are painful. They expose vulnerabilities built up in boom years, damage the balance sheets of corporates and households and reduce their ability to repay loans, and, as a consequence, spill over to banks' books. The fallout is more severe if it is accompanied by an asset price bust. Recovery from credit busts depends, among other things, on the quality of existing resolution frameworks and the forcefulness of the government's crisis response. Not surprisingly, credit busts often lead to protracted weakening in economic activity, and in some instances even a balance sheet recession (Koo 2011).

### **Credit Expansion Prior to the Global Crisis**

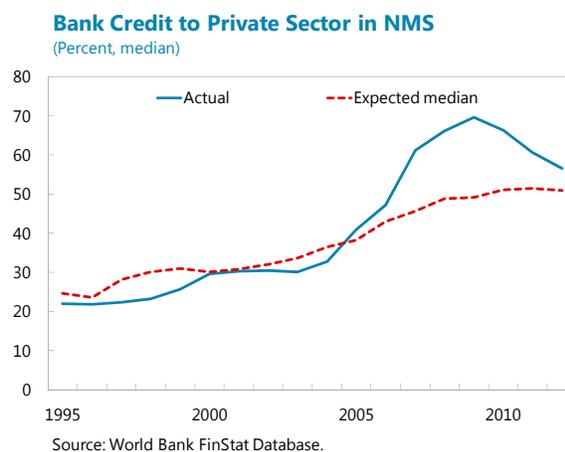
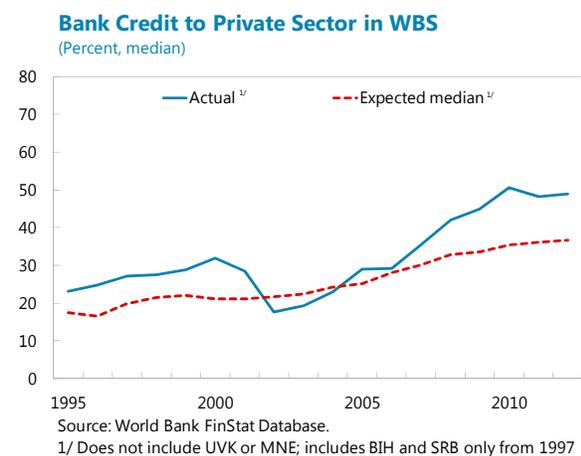
The existing evidence suggests that in the run-up to the global financial crisis in 2008, the Western Balkan countries' credit cycle was milder than that in New Member States. The increase in credit in the Western Balkans during 2003–07 was notably smaller than in the Baltic States, Bulgaria, and Romania. But credit expansion was not mild in all the Western Balkan countries. Countries with initially shallower credit bases—Montenegro, and to a lesser extent, Albania and Kosovo—experienced a significant and prolonged credit expansion, as measured by the change in the credit-to-GDP ratio while countries with relatively deeper credit bases at the outset—Croatia and Bosnia and Herzegovina—saw more moderate growth in credit. In this context, a number of Western Balkan countries undertook prudential measures to contain rapid credit growth, though with mixed success (see Box 3.2 for the case of Croatia).



We employ two approaches to assess the severity of the credit expansion. The first one defines a credit boom as an episode during which credit grows at a pace faster than what would be warranted by a cyclical economic expansion (Mendoza and Terrones 2008). It estimates deviations in credit

from its trend value and compares it to where credit would typically have been over the business cycle. We find that the deviation of credit growth from its long-run trend was smaller in Western Balkan countries than in the New Member States<sup>7</sup> at the peak of the credit boom (i.e., at  $t=0$ ) and in the quarters leading up to the peak. Of course, the latter are a heterogeneous group. The boom-bust in the Baltics was particularly severe, but the credit cycle in the five Central European countries resembled that in the Western Balkan countries. Kosovo, Montenegro and FYR Macedonia saw the largest credit boom in the Western Balkans, while Croatia and Serbia experienced the mildest.

The second approach in judging if credit growth was excessive in this period is to assess if it outstripped economic fundamentals and structural factors. This entails following an approach developed by the World Bank, which benchmarks credit developments for each country against the level of its economic development (proxied by GDP per capita), size of the economy, and other structural factors such as size, density, and age profile of the population. The results (also see Annex 3.1) suggest that after 2005 both Western Balkan countries and the New Member States saw private credit growth that was above the respective norms—that is, beyond what could have been sustained by these economies' underlying structural characteristics.<sup>8</sup> Again, as in the cyclical analysis, the excess expansion at its peak was substantially milder in the Western Balkan countries than in the New Member States, particularly the Baltics. There was sizable variation among the Western Balkan countries—the increase in the credit-to-GDP ratio in Albania and FYR Macedonia was twice or more than what is predicted by the model, while Serbia's credit growth appears to have been insufficient to meet the economy's development and growth needs during the period.



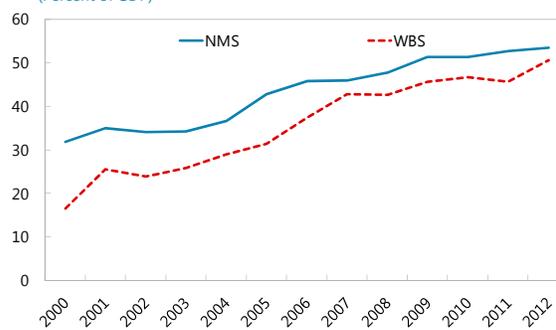
<sup>7</sup> The long-run credit growth trend is estimated with a Hodrick-Prescott (HP) filter using quarterly data and a smoothing parameter of 1600.

<sup>8</sup> The approach does not entirely control for endogenous factors, such as policies and institutional factors, changes in financial market structure, and regulatory environment (see Annex 3.1).

The degree of reliance of the pre-2008 credit growth on domestic deposits and foreign financing provides insights into whether credit developments in this period were sustainable or transitory. As discussed earlier, loan growth in the Western Balkan countries remained more dependent on expansion of the domestic deposit base than did loan growth in the New Member States. This was particularly so in Albania and Kosovo, while at the other end of the spectrum, Montenegro's credit expansion relied

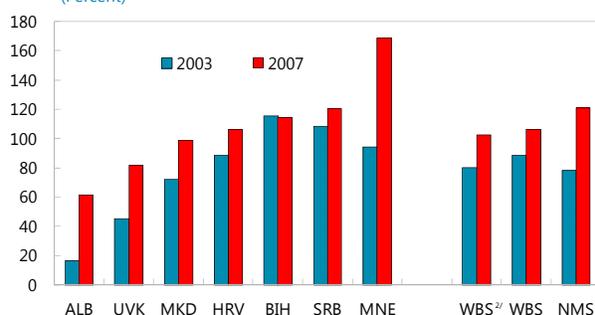
overwhelmingly on external sources. The rapidly growing presence of foreign banks in Western Balkan countries did allow for fast credit expansion that went beyond the available sources of domestic financing, as indicated by the increase in the loan-to-deposit ratio during the precrisis years, particularly so in the couple of years prior to the outbreak of the global financial crisis. But with the exception of Bosnia and Herzegovina, the external funding that financed credit expansion in the Western Balkans came largely from parent banks in the form of increasing capitalization of local banks, while in Croatia and Serbia it was also the result of policy action that induced banks to do so (see Box 3.2). On the other hand, in the Baltics, the relatively greater sophistication of domestic financial markets, as well as strong connectedness with parent banks and sources of wholesale funding allowed swift and heavy capital inflows through the banking systems (IMF 2013).

**Evolution of Deposits**  
(Percent of GDP)



Sources: World Bank FinStat Database; and IMF, International Financial Statistics.  
Note: Group data are medians.

**Loan-to-Deposit Ratio**  
(Percent)<sup>1/</sup>

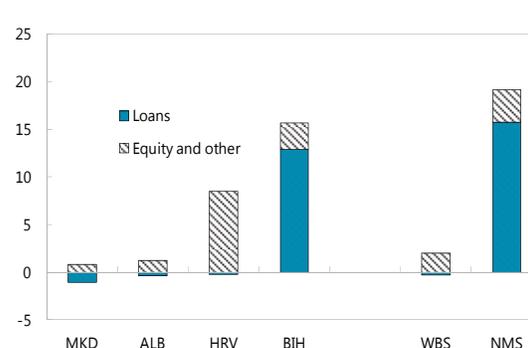


Source: IMF, International Financial Statistics Database.

1/ Group data are medians.

2/ Group excludes MNE.

**Nature of Foreign Banks Non-deposit Funding**  
(Percent of GDP, 2003-08)



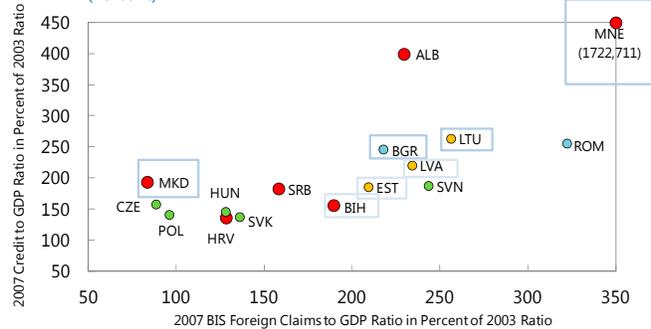
Source: BIS and IMF, World Economic Outlook Databases.

Exchange rate regimes appear to have mattered as well, both in the Western Balkan countries and in the New Member States. Economies with fixed exchange rates generally received larger bank flows than those with more flexible currencies—in particular Montenegro among the Western Balkan countries, and the Baltics and Bulgaria among the New Member States (Slavov 2009). The expectation of low currency risk attracted external flows into these economies. Albania saw an increase in external claims as well, but these were channeled through the banking system into its public debt market. In general, the more fixed the exchange rate regime, the bigger the credit expansion and buildup of financial vulnerabilities in the period immediately before 2007 (except in

FYR Macedonia). Economies with flexible exchange rates were better able to withstand the capital inflow pressures, and thus avoided building up excessive vulnerabilities.

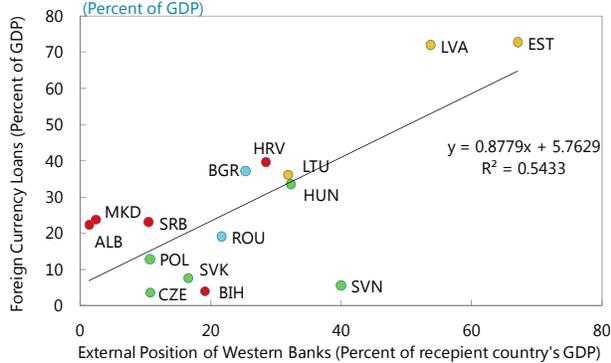
The extent of external exposure of the banking system is associated with the size of foreign currency lending in the economy. A positive cross-country association exists between foreign currency loans in relation to GDP extended by the local banks and the extent of exposure that the country's financial system has to banks from Advanced EU economies, also in relation to GDP. The Western Balkan countries, with their relatively low external exposure, also rank lower in terms of the size of foreign currency loans, though Croatia is a notable exception. Among the New Member States, there is a wide dispersion: at one end is the group of Baltic states—particularly Latvia and Estonia—with a heavy exposure to foreign banks and a high share of foreign currency loans, and at the other are the remaining countries that do not appear to differ much from the Western Balkans.

**Foreign Bank Financing and Private Sector Credit**  
(Percent)



Sources: BIS locational statistics and IMF, International Financial Statistics Database.  
Note: Montenegro data start in 2006. Blue boxes represent countries with fixed or pegged exchange rate regimes, or those using the euro. Countries in red circles represent Western Balkan states.

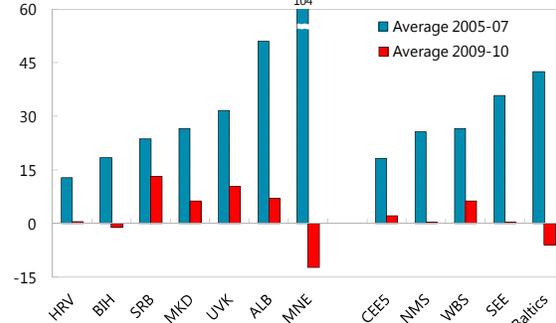
**Foreign Bank Exposure to Domestic Banks and Foreign Currency Lending, 2008**  
(Percent of GDP)



Source: IMF staff calculations.

**Real Credit Growth**

(Year-on-year-percent change)<sup>1/</sup>



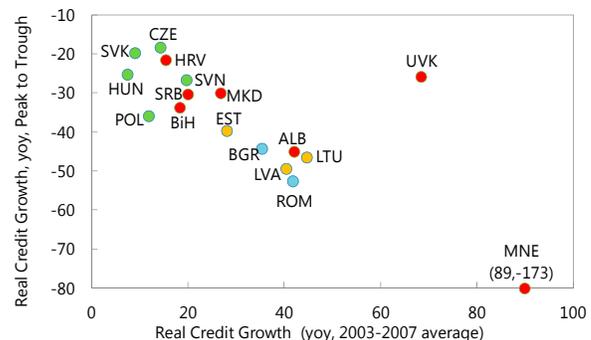
Source: IMF, International Financial Statistics Database.  
1/ Group data are medians.

**Postcrisis Credit Slowdown**

Credit growth slowed sharply across Emerging Europe in the aftermath of the 2008 global financial crisis and the subsequent economic troubles in Europe. However, the credit correction was generally milder in Western Balkan countries than that experienced by the New Member States. In the former, credit continued to grow in real terms at an

**Credit Boom and Credit Bust**

(Percent)



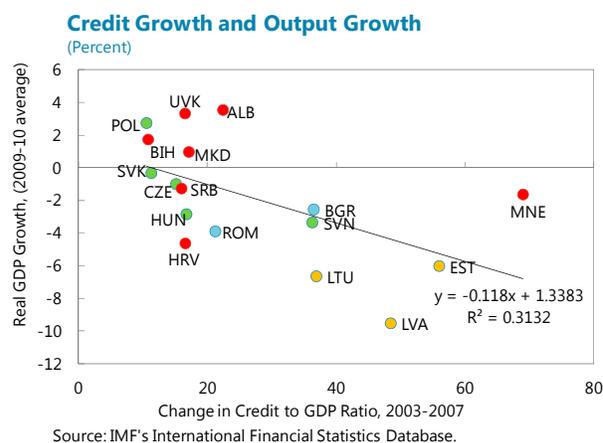
Sources: BIS and IMF, International Financial Statistics Database.  
Note: yoy = year-on-year percent change.

annual average of about 6½ percent, while in the latter it largely stalled, pulled down by a sharp contraction in the Baltic States.<sup>9</sup> The Central European economies experienced a moderate postcrisis correction, similar to the Western Balkans. Not all Western Balkan countries were identical, however. Montenegro, which underwent what was arguably the most severe credit boom in Emerging Europe, experienced one of the deepest falls in credit as well. In Croatia and Bosnia and Herzegovina credit growth stalled, while in Albania, Kosovo, and FYR Macedonia credit has continued to grow until recently.

In general, the drop in credit growth after the global financial crisis was closely linked to the magnitude of the precrisis boom—the larger the credit boom, the more severe the credit correction. We employed monthly data to get a granular feel of the severity of the fallout, as annual information tends to mask sharp intra-year movements. Our calculation of peak-to-trough decline in real credit growth reveals that, with the exception of Montenegro (and to some extent Albania), the drop in credit growth from precrisis peak to the postcrisis trough was less severe in the Western Balkan countries than in the New Member States.<sup>10</sup>

The sources of precrisis credit boom also seem to be relevant in explaining the postcrisis credit slowdown. Heightened global risk aversion in the aftermath of the 2008 crisis triggered a sharp reduction in capital inflows as parent banks deleveraged from the region. The funding shrinkage led to a large decline in credit growth in countries that had depended heavily on external funding inflows to finance their booms. Here again, the relatively mild after effects of the crisis in Western Balkan countries than in New Member States, particularly the Baltics, can be partly ascribed to the smaller precrisis exposure to fast-moving external financing in the former.

Not surprisingly the credit cycle also affected economic activity. The intensity of the postcrisis credit slowdown was closely associated with that in economic growth, largely because of demand effects. As funding dried up, risk aversion increased and credit conditions tightened, with the crunch in credit in some countries associated with severe demand contraction. Those countries that experienced a more intense boom-bust episode also endured sharper growth contractions. Western Balkan countries fared relatively well, as they saw relatively mild growth slowdown or contraction, with the exception of Montenegro and Croatia.



<sup>9</sup> Of course, the post-2008 slowdown in credit in the Western Balkans would have been sharper had these countries written off their NPLs as rapidly as the New Member States.

<sup>10</sup> The trough quarter in real credit growth in the postcrisis period (2009–10) is defined as the quarter in these two years when real credit growth was at its lowest.

### Nonperforming Loans: a Difficult Legacy of the Credit Cycle

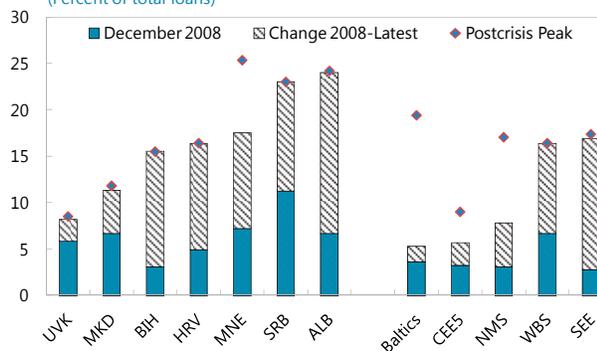
The post-2000 credit cycle in most of the Western Balkan countries was relatively moderate, but the aftermath of the global financial crisis and the subsequent economic slowdown has resulted in a high level of NPLs. Ample loanable funds, and relatively lax lending standards, particularly just prior to the outbreak of the 2008 global crisis, sowed the seeds of subsequent asset quality deterioration. NPLs have risen sharply in countries where the precrisis credit boom was intense and where the postcrisis economic slump was deep.

The postcrisis NPL surge was somewhat larger in the New Member States than in the Western Balkan countries—particularly in the Baltic States—but the former were also able to reduce NPLs substantially from the immediate postcrisis peak, particularly because of comprehensive reforms to address corporate NPLs. On the other hand, the Western Balkan countries have been largely unable to progress forcefully in this area. Where reforms have taken place—for example, recent improvements in the tax treatment of loan write-offs and steps to improve collateral execution in Albania—there has been little improvement on the ground to date because of weak enforcement. The use of factoring companies in Montenegro to offload bad loans from banks' books has also met with little success, as loan workouts have been few and corporate balance sheets remain weak. Not surprisingly, the median level of NPLs in Western Balkan countries has persisted at the postcrisis peak (see Box 3.3; and Liu and Rosenberg, 2013).

Unresolved NPLs tend to constrain economic activity of overextended borrowers and discourage resources from being allocated to productive uses. If the NPL problem in the Western Balkan countries continues to fester, it runs the risk of keeping credit sluggish and putting a drag on near- and medium-term investment and economic growth. Banks in the Western Balkans that are saddled with high NPLs have been risk-averse given the trouble with corporate balance sheets, and have been tightening credit conditions with the aim to avoid further deterioration in their loan portfolio. A recent bank lending survey confirms that high NPL levels are the biggest constraint on credit supply in the region, with the exception of Serbia, more so than the low availability of parent

#### Non-Performing Loans

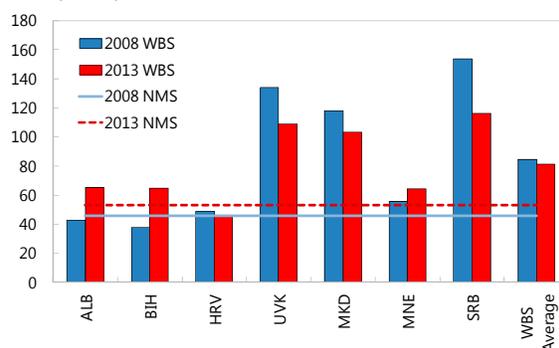
(Percent of total loans)



Sources: IMF, Financial Soundness Indicators Database; and country authorities. Note: Group medians. Definition of NPL may differ by country.

#### Bank Provisioning for NPLs

(Percent)<sup>1/</sup>



Sources: Financial Soundness Indicators (FSI); and IMF staff calculations. 1/Total provisions (specific plus general)/NPLs. Definition of NPL and coverage ratio may differ across countries. Horizontal lines indicate averages.

funding.<sup>11</sup> Experience from earlier financial crises suggests that a forceful clean-up of bank and corporate balance sheets and reduction in NPLs are needed for a lasting economic recovery.

Elevated levels of NPLs can also pose a threat to financial stability. Banks' earnings can suffer if eventual recovery rates on NPLs disappoint relative to provisioning. And outright losses can weaken banks' capital bases, potentially causing insolvency or illiquidity, and financial instability—if such problems become systemic. However, capital adequacy ratios in the Western Balkan countries are high—at the upper end of international spectrum (about 17 percent on average)—as is the provisioning for bad loans. Both factors provide buffers and mitigate some of the financial stability risks. Sensitivity analysis also suggests that elevated NPLs may not pose high financial stability risks in most Western Balkan countries (European Banking Coordination Vienna Initiative 2010). Low recovery rates on existing and recognized NPLs would generally be manageable.

### C. Financial Sector Inclusion and Efficiency

The financial deepening discussed above, as typically proxied by the credit-to-GDP ratio, overlooks some of the impediments that hinder financial development and thus economic growth over the medium and long term. It is therefore important to take into consideration financial inclusion and banking sector efficiency as well. Inclusive financial systems provide a broad spectrum of individuals and firms with access to financial services, allowing them to take advantage of saving and business opportunities and insure against risks (Beck, Demirguc-Kunt, and Honohan, 2008 and 2009). Efficient banking systems are solvent and profitable, with low costs and diversified income sources. They intermediate efficiently—that is, they collect savings and allocate funds for productive uses at low cost—and provide instruments to insure against risks. National savings rates and credit creation are crucially dependent on the efficiency with which the financial system provides services to enterprises or households, particularly the traditionally underserved, such as small businesses, low-income strata, rural inhabitants, older generations, and women (Karlan and Morduch 2009; World Bank 2013).

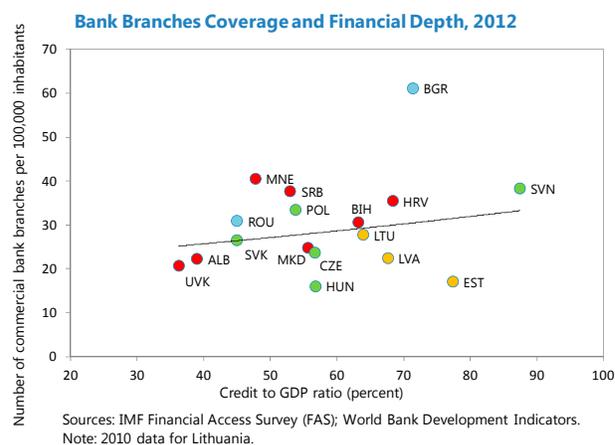
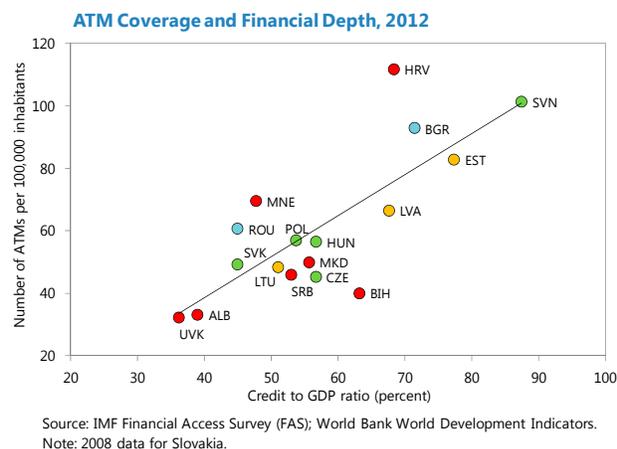
#### **Financial Inclusion**

The degree of financial inclusion is typically assessed through *provider-based* and *user-based* indicators. Provider-based indicators capture the existence and geographic dispersion of financial services infrastructure, measured by, for instance, the number of bank retail outlets and geographic density of ATM machines (Beck and others 2004; Beck, Demirguc-Kunt, and Martinez Peria 2006; CGAP 2012 and 2013). User-based indicators, typically constructed from surveys of households or enterprises, quantify difficulties in accessing financial services (Demirguc-Kunt and Klapper 2012).

Compared to the New Member States, Western Balkan countries appear under-endowed in financial services infrastructure, albeit with important variation across countries. An examination of provider-based indicators suggests that the Western Balkan countries have fewer ATMs relative to

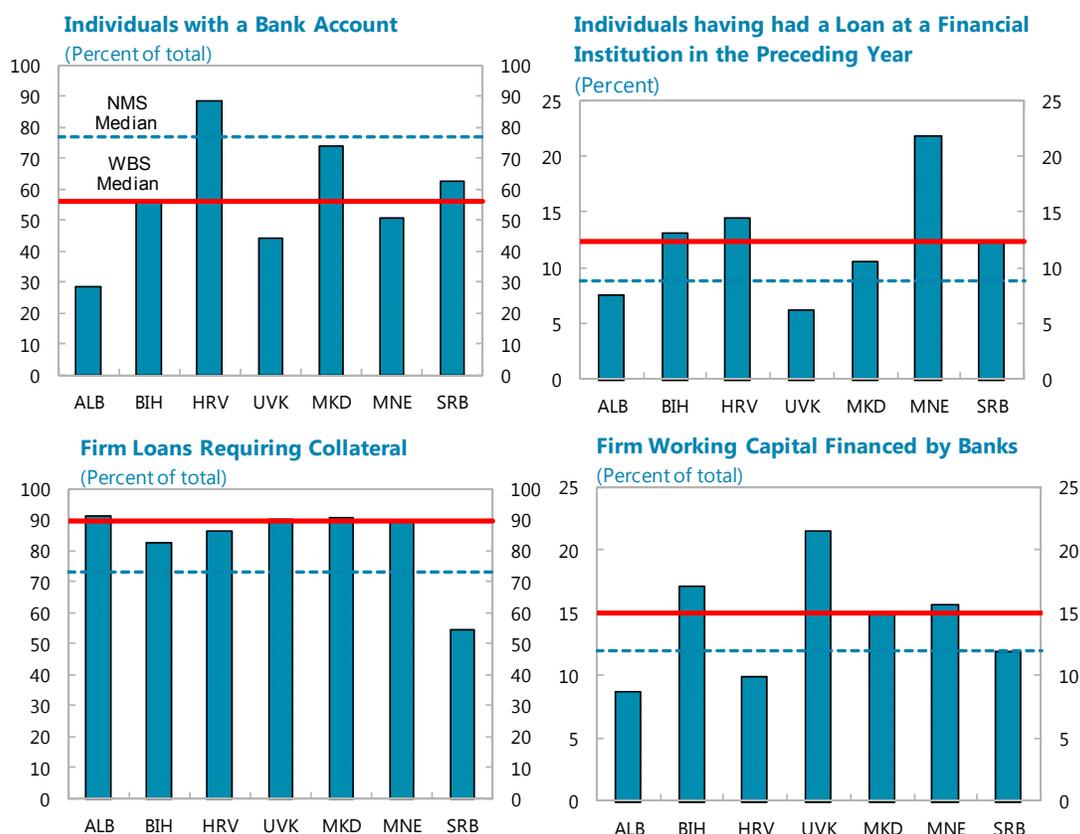
<sup>11</sup> See the European Investment Bank CESEE Bank Lending Survey, H1-2014. Banks in Albania, Bosnia and Herzegovina, Croatia, and Serbia participate in the survey (EIB 2014).

what would be expected given their financial depth (credit-to-GDP ratio), particularly in Bosnia and Herzegovina. On the other hand, the Western Balkan countries seem to be relatively well covered by bank branches, especially Montenegro, allowing a reasonable proportion of the population access to financial services.



Surveys indicate that individuals and households in Western Balkan countries have particularly limited access to saving and credit instruments compared to their counterparts in the New Member States. According to the World Bank's Global Financial Inclusion (Global Findex) database, the degree of individual financial penetration is relatively low in the Western Balkan countries, with only 57 percent of adults, on average, maintaining a bank account, against about 70 percent, on average, in New Member States (Demirguc-Kunt and Klapper 2013). While this partly reflects the lower savings rates in Western Balkan countries given their income level, it also points to a greater dearth of attractive formal instruments for long-term saving in these countries. Household access to bank credit in the Western Balkans appears in line with the average for the New Member States, except in Albania and Kosovo.

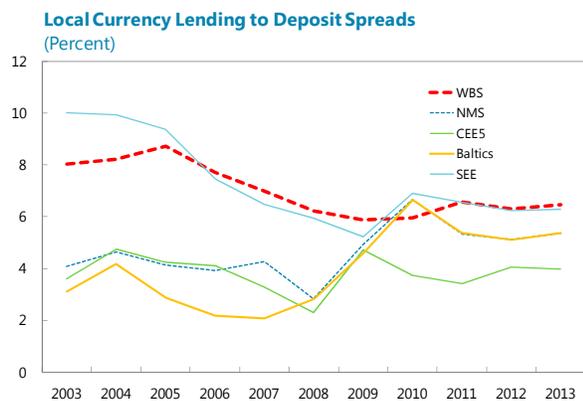
Firms' access to formal finance is an even more serious challenge in the Western Balkans. Access to credit for financing investments is more severely limited in Western Balkan countries than in New Member States, with firms in Croatia, FYR Macedonia, and Serbia falling below the New Member State average, and firms in Albania at about one-third of the level. High collateral requirements seem to be a major reason—they are significantly higher in Western Balkan countries than in the New Member States, except in Serbia. Banks do not appear to lend on the basis of business models and cash flow projections, but rather based on physical assets that can be pledged. Seemingly, the Western Balkans' oft-cited problems with accounting standards, judicial systems, and governance are to blame. Regardless, the share of working capital financed by bank loans is extremely low in the Western Balkan countries.



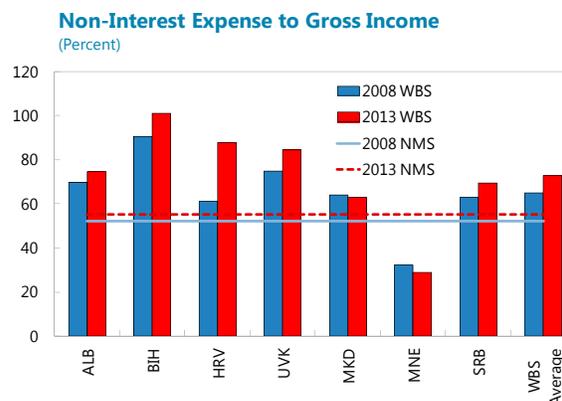
Sources: Global Financial Inclusion (Global Findex) database; World Bank, Enterprise Survey; and IMF staff calculations.

### **Banking Sector Efficiency**

Two commonly used indicators of bank inefficiency are interest rate margins and noninterest costs (see Kalluci 2010 for Albania). The Western Balkan banking model has traditionally relied on high interest margins. This could be the outcome of a low degree of income diversification, which has also left Western Balkan banks vulnerable to upward pressures on funding costs, but also high reserve requirements (Gerard and Tieman 2013) and noninterest costs associated with NPLs. Over 2003–13, banks in the Western Balkans maintained wide lending-to-deposit spreads, averaging some 2.5 percentage points higher than in the New Member States, though these ratios have been on a downward trend in the Western Balkans. Western Balkan banks also have significantly higher noninterest costs of operation than do their counterparts in the rest of Emerging Europe.



Sources: IMF International Financial Statistics; and staff calculations.



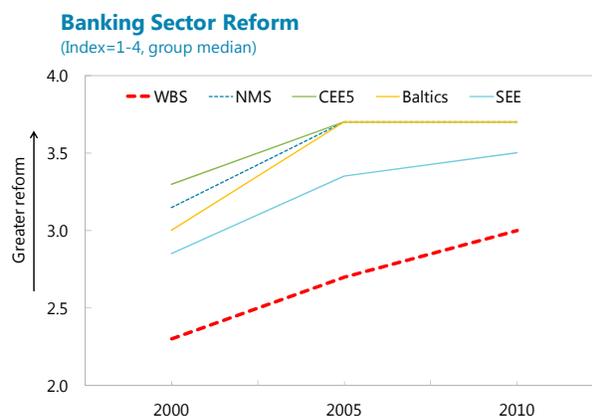
Sources: Financial Soundness Indicators (FSI); and IMF staff calculations.

## D. The Unfinished Institutional Reform Agenda and International Cooperation

As this report has shown, the Western Balkan financial systems need to deepen further and broaden access to financial services while preserving and enhancing financial system stability. Reforms are needed to reduce market imperfections and information asymmetries, and to allow for efficient intermediation of credit to finance investment. While Western Balkan countries have done relatively well over the last 15 years in providing the infrastructure necessary for financial development more generally and credit deepening in particular, they have lagged their New Member State counterparts in strengthening the foundations of financial stability.

### Improving Institutions for Financial Deepening

At the beginning of the 2000s, the Western Balkan countries trailed their Emerging Europe counterparts in reform of financial institutions by a large margin, as seen through the EBRD's Banking Reform Index (which is compiled largely to assess progress in banking sector liberalization in Emerging Europe). However, since then reforms in the Western Balkan countries have progressed in a sustained manner, including through the period of the global financial crisis and its subsequent fallout.



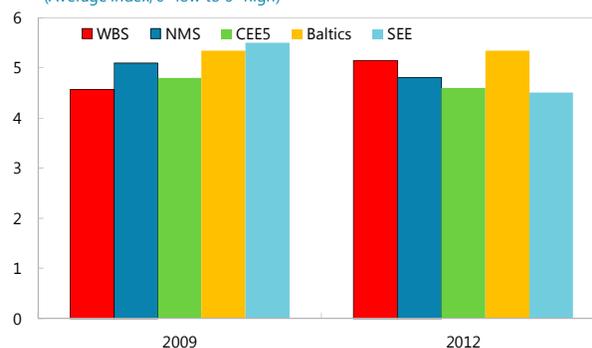
Sources: EBRD; and IMF staff calculations.

Reforms have particularly helped with credit market development. Dissemination of information in the credit market is an area where the Western Balkan countries have done well, even better than their New Member State counterparts. The World Bank's Credit Depth Information Index captures the rules affecting the scope, accessibility, and quality of credit information available through credit registries. Prior to 2009, many of the Western Balkan countries—namely, FYR Macedonia, Albania,

Montenegro, Serbia, and Croatia—were undertaking effective reforms, as captured by the index. By 2009, the Western Balkans as a group stood ahead of many New Member States. Further, the Western Balkan countries have shown considerable improvement in the period following the global and European crises. But while Western Balkan countries have done well in strengthening public credit registries, they have lagged their peers in developing private ones.

### Quality of Credit Information

(Average index, 0=low to 6=high)



Source: World Bank, *Global Financial Development Report*, 2013.

### ***Institutions for Financial Stability***

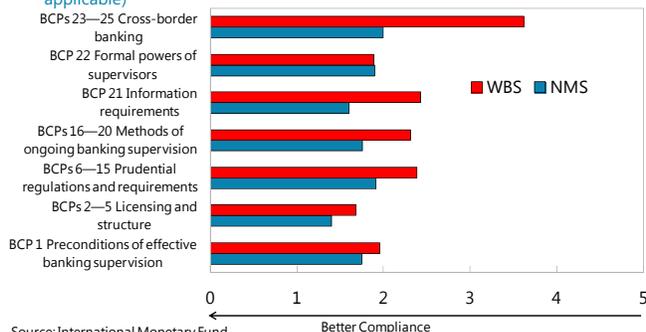
The performance of Western Balkan countries in developing and strengthening institutions that maintain financial stability has generally not kept pace with that of the New Member States. This is apparent in the areas of supervision of financial institutions, crisis resolution and financial safety nets, and the introduction of the Basel Framework.

For a comparison of how the two groups have fared on compliance with supervisory standards, we put them on a common timeline, and assess the findings of the first assessments of compliance with such standards (the Basel Core Banking Supervision Principles or BCBS Principles).<sup>12</sup> The divergence of the Western Balkan countries with their New Member State counterparts is particularly stark when it comes to supervision associated with cross-border banking (particularly in Albania, Bosnia and Herzegovina, Croatia, and Kosovo), consolidated accounting (Albania, Bosnia and Herzegovina, Croatia, Kosovo, and FYR Macedonia) and to a lesser extent on information requirements. Governance and risk-management practices in Western Balkan countries, as well as legal protection of supervisors (Bosnia and Herzegovina, Croatia, Kosovo, and Montenegro) and enforcement power, are also weak. There is also considerable scope in both the Western Balkan countries and other Emerging European countries to enhance governance and supervisory infrastructure in the nonbank area, particularly in insurance, which is a growing sector.

<sup>12</sup> First assessments of New Member States were done in the early 2000s, and of Western Balkan countries around mid-2000s.

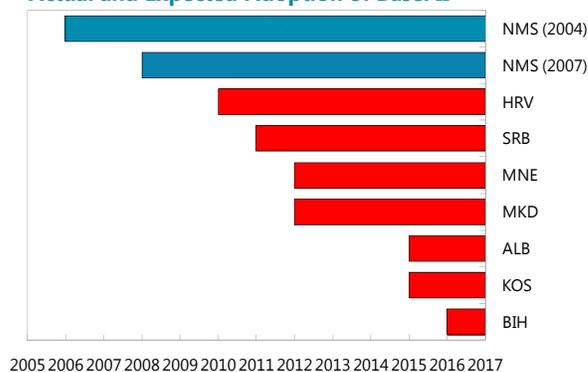
### Compliance with Basel Core Principles

(First assessment<sup>1/</sup>; Average rating; 1=compliant to 5= not assessed / not applicable)



Source: International Monetary Fund.  
 1/ EST, HUN, CZE, SVN, POL (2000), BGR, LVA, LTU, HRV (2001), SVK (2002), ROU, MKD (2003), ALB, SRB, BIH (2005), MNE (2006), KOS (2013)  
 Note: BCP methodology has changed over time.

### Actual and Expected Adoption of Basel II

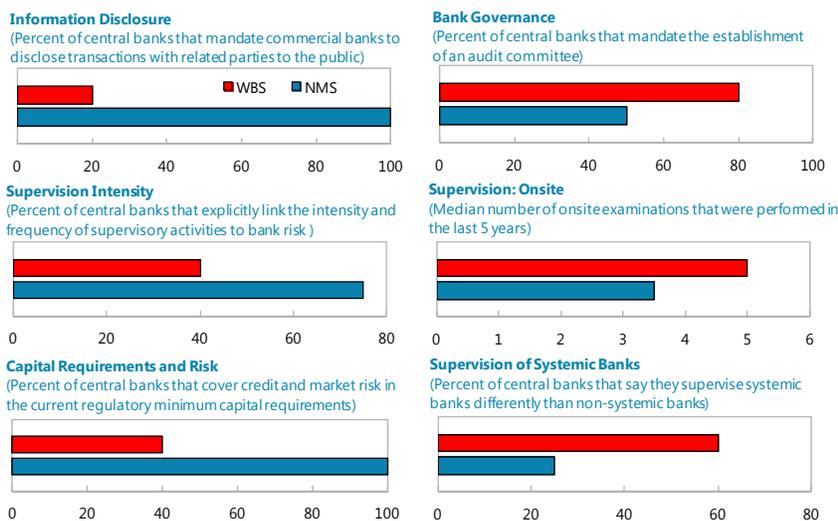


Sources: Financial Stability Institute (2014); and IMF country reports.  
 Note: NMS (2004): CZE, HUN, POL, SVK, SLV, EST, LTV and LTU; and NMS (2007): ROM and BGR.

Reforms to improve the credit and operational risk environment in Western Balkan countries have also not kept pace with those in the New Member States. While most of the latter adopted Basel II Framework in the mid-2000s, most of the Western Balkan countries did so only during the past four years. Though Croatia was an early adopter, it was driven by the need to align with the EU Capital Requirements Directive. Notwithstanding the delays, the adoption of Basel II frameworks should aid corporate governance, risk management, capital management, and transparency in the financial sectors in these countries.

A granular look at the practices associated with regulation and supervision reveals a picture where Western Balkans countries do well on enacting regulations, but lag on risk based regulatory and supervisory practices. More specifically, explicitly tying the intensity and frequency of supervisory activities to the riskiness of banks, linking regulatory capital requirements to commercial banks' market and credit risk, and requiring commercial banks to disclose information about transactions with related parties are generally weaker in the Western Balkans than in the New Member States.

### Bank Regulation and Supervision <sup>1/</sup>



Source: World Bank, *Bank Regulation and Supervision Survey* (database), 2011  
 1/ Data are for 2011 except for that of onsite supervision which are 2006-10.  
 Note: The WBS group excludes Albania and Kosovo. The NMS group excludes Czech Republic and Poland.

Not all the relative weaknesses in the reform drive in the Western Balkan countries can be attributed to domestic factors. The catalytic role played by the EU accession process in accession countries—which are now New Member States, and, more recently, Croatia—should not be discounted. This is particularly the case when it comes to improvements in financial regulations and institutional frameworks. As most Western Balkan countries have only recently moved to EU candidate status, with the exception of FYR Macedonia, the EU accession process in the coming years should help strengthen financial regulations in the period ahead.

### ***International Coordination and Support***

In the immediate aftermath of the 2008 global financial crisis, the international financial institutions launched the Vienna I Initiative to ensure a coordinated response and prevent a sudden withdrawal of Advanced EU economies' parent bank funding from Emerging Europe. This initiative brought together home and host country authorities, parent banking groups, and multilateral organizations, including the IMF. Home authorities provided assurances that any public support for parent banks would not discriminate between their domestic and foreign operations, while parent banking groups committed to maintaining their exposure in host countries and recapitalizing their subsidiaries, if needed in the five countries with IMF-supported programs (Bosnia and Herzegovina, Hungary, Latvia, Romania, and Serbia). In retrospect, the initiative proved successful in that it avoided a generalized or local shock being transmitted to the host country financial systems. This initiative lapsed in line with the expiration of IMF and EU programs.

The Vienna II Initiative of 2012, spearheaded again by international financial institutions including the IMF, put the Western Balkan countries under greater focus, largely because there was a risk that these countries would not be covered under the forthcoming Europe-wide financial stability umbrella. The initiative acknowledged that the standpoint of home and host authorities can differ when assessing systemic risk of financial institutions, especially when a subsidiary accounts for only a minor part of the parent group's balance sheet but could be systemic in a host country. These concerns were even more material in non-EU countries where EU-based banks are important. Vienna II has had strong participation of all of the Western Balkan countries, and its salient contribution has been the initiation of home-host country cross-border banking forums that allow host country authorities to interact with the systemically important banks, their parents, and the parents' regulators. Vienna II is also an appropriate forum to assess possible adverse spillovers from EU regulatory changes on host countries' banking and macroeconomic environment.

Vienna II has also called for an increasing focus on addressing the lingering problem of NPLs—a particularly acute issue in the Western Balkan countries, as seen in this report—through market-based solutions. This has entailed establishing a legal framework conducive to debt resolution (such as strengthening insolvency laws and improving law enforcement), removing tax impediments and

<b>Host Country Cross-Border Banking Forums</b> (Hosted meetings as of November 2014)							
WBS							NMS
HRV	ALB	SRB	MNE	BIH	MKD	KOS	SVN
●	●	●	●	●			●
●	●						

Source: International Monetary Fund.

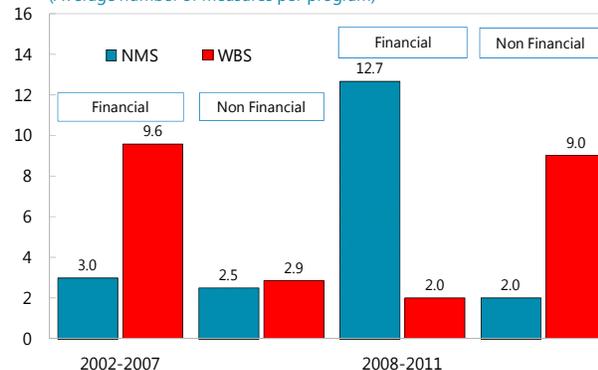
regulatory obstacles (valuation and control-taking of collateral, asset classification and provisioning rules), and improving out-of-court restructuring frameworks. The lack of progress on the ground largely reflects weak domestic buy-in for NPL reforms (see Box 3.3).

In addition to playing a key role in spearheading the Vienna Initiatives, the IMF has also provided financial support to Emerging European countries, including the Western Balkan countries, to withstand shocks emanating from global and regional events. The IMF-supported programs put in place since 2008 have given priority to strengthening financial sector regulation and supervision. However, the relatively simple nature of Western Balkan countries' financial systems, and their lesser reliance on fast-moving financial capital compared to their

New Member State peers, has meant that these countries faced fewer banking system shocks in the crisis and its aftermath. Subsequently, there was more limited need for direct government action or support from international financial institutions. Not surprisingly, financial sector reforms supported by IMF programs have not made up a large share of overall reforms supported by IMF programs in most of the Western Balkan countries. On the other hand, the relatively sophisticated and complex nature of financial systems in the other Emerging European countries, notwithstanding the more advanced state of financial supervision in these countries, meant that financial sector reforms figured more prominently in their IMF programs in the post-2008 period.

### Structural Conditionality in IMF-Supported Programs

(Average number of measures per program)



Source: IMF MONA database.

## E. Cross-Border Finance and the Future of Western Balkan Banking

As discussed earlier in this report, bank deepening in the Western Balkans since the early 2000s came about on the back of the increasing presence of foreign banks. Western Balkan countries also benefited from the positive effects of foreign bank ownership, including greater professionalism and efficiency. Not surprisingly, foreign banks appear to have brought stability to the region's banking systems, which had suffered from weak public confidence prior to 2000. At the same time, the Western Balkan states were less affected by the foreign bank-related fallout than many of the New Member States, largely because foreign ownership in Western Balkan countries (except in Montenegro) did not result in as much fast-moving capital inflows in the boom years, as it did in the New Member States. As things stand today, financial development still has a long way to go in the Western Balkan countries, and there is a significant potential for expanding financial intermediation. Nonbank financial services and capital markets need to be built, from scratch in many cases. Without bridging the gap of financial development, Western Balkan countries would find it challenging to ensure economic convergence with the rest of Europe.

A new paradigm of cross-border banking in Emerging Europe has been gaining ground recently (IMF 2013). It draws lessons from the experience of Emerging Europe, particularly the Baltics, and

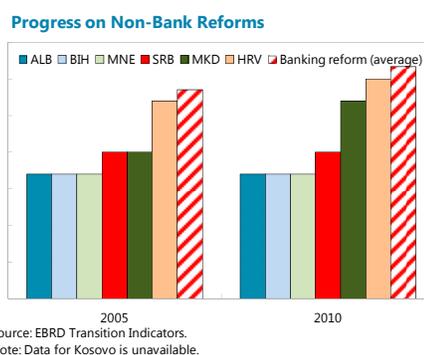
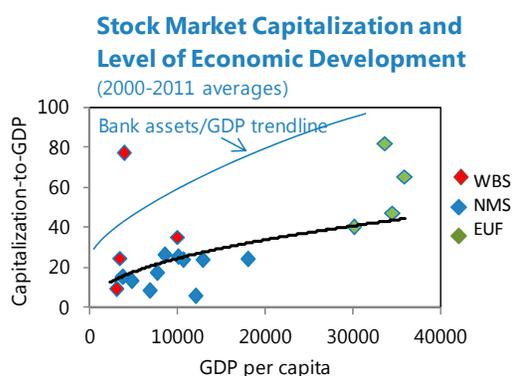
argues that the sharp boom-bust cycle in these countries was magnified by the reliance of banks on foreign funding, and that the postcrisis financial and economic contraction in the host countries was exacerbated by the withdrawal of foreign bank funding. It concludes that home authorities and regulators, as well as banks themselves, should seek to gradually reduce reliance on foreign funding and expand the share of domestic deposits and funding. In essence, the new paradigm espouses a gradual transition to lesser parental-based and more local-based (host country) financing. In fact, since the fall of 2008, parent banks operating in Emerging Europe have done exactly that—that is, they have been shifting away from international banking to multinational banking by rebalancing local activities toward local sources.

The characteristics and recent experience of the Western Balkan countries, however, suggest a somewhat different role for foreign funding over the medium term. As elsewhere, continued reliance on domestic funding is essential. But as the income levels of these countries are far below those of Advanced EU economies, domestic savings and deposits alone are unlikely to be sufficient to finance the credit, investment, and GDP growth that will be needed to enable the Western Balkan countries to converge to EU income levels (see Chapter 2). Thus, there is scope for an increased share of foreign funding in the Western Balkans, both because it is much lower in these countries than in New Member states, and because the overall scope for financial deepening is greater in the Western Balkans than in the New Member states, where it is already high.

While access to foreign funding over the medium and long term would be critical for financial development in the Western Balkan countries, there should be little doubt that continued deepening, improvement in access, and maintenance of stability of these financial sectors will require significant structural reforms by host governments and greater forcefulness of government policies in responding to the crisis. The Western Balkan countries need to make progress in resolving their NPLs in order to improve the creditworthiness of their private sectors and boost demand for credit. Recovery from the recent credit slowdown will require improving the quality of resolution frameworks. Reforms should also aim to reduce market imperfections and information asymmetries, as well as allow efficient intermediation of credit to finance investment. Central banks and other nonbank public institutions have to adequately regulate and supervise increasingly sophisticated private financial firms. Moreover, these firms are operating in an uncertain environment subject to external shocks. In this respect, the development and application of macro-prudential policy frameworks, still at a nascent state in Western Balkan countries, will help limit financial stability risks in the region.

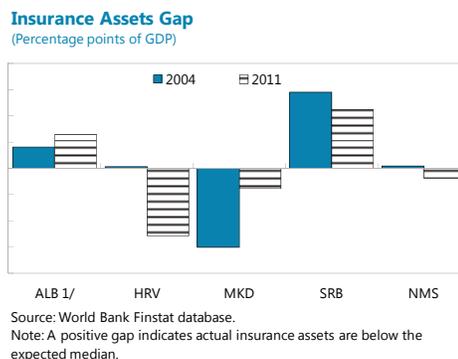
### Box 3.1. Nonbank Financial Deepening in the Western Balkans

Nonbank financial intermediaries and capital markets in Western Balkan countries are shallow and sometimes nonexistent, reflecting the countries' low income levels and lagging institutional development. The lower depth of nonbank intermediaries, equity, and bond markets compared to that of banking is generally consistent with the pattern observed in other countries, whereby these more sophisticated financial markets tend to take root at higher levels of economic development. This is largely because it takes time to develop the necessary institutions to overcome higher transactions costs, reflecting agency (information and enforcement) and collective action problems (De la Torre, Feyen, and Ize 2011). Nevertheless, progress has been slow in the Western Balkan countries because reforms of legal and supervisory frameworks—critically needed to support development of capital market and nonbank financial institutions—have tended to take longer. With the exception of Kosovo and FYR Macedonia, Western Balkan countries have also lagged in the pace of privatizing the nonbank financial sector and opening it to foreign investors.<sup>1</sup>



Sources: EBRD Structural Change Indicators; World Bank Global Financial Development Database; and IMF staff calculations.  
 Note: EUF includes BEL, FRA, DEU, and ITA.

Insurance markets have deepened in the past decade in those Western Balkan countries that have strengthened their institutional frameworks, although most are still further away from their potential than the New Member States. Many Western Balkan countries have passed new insurance laws since the mid-2000s and are enhancing regulatory frameworks and supervision—for example, by transferring supervision from the Ministry of Finance to an independent supervisor. This has led to consolidation in some countries where insurance depth has been high, such as Bosnia and Herzegovina and FYR Macedonia. In Serbia, where high inflation and poor claims payment have tended to hamper insurance demand, there has been progress on the structural front, as enhancements in supervision and regulatory standards since 2004 have put insurance market development on an upward trend, although it remains below its expected benchmark. Overall, insurance depth varies from 1 percent (Albania) to 10 percent (Croatia), which is the New Member State average. Further, unlike in Advanced EU countries, where life insurance is a key source of long-term savings and insurance companies are important institutional investors, in the Western Balkan countries, as in the New Member States, the insurance industry remains dominated by non-life business. However, in the latter, insurance depth appears to be more in line with their level of economic development and market size.



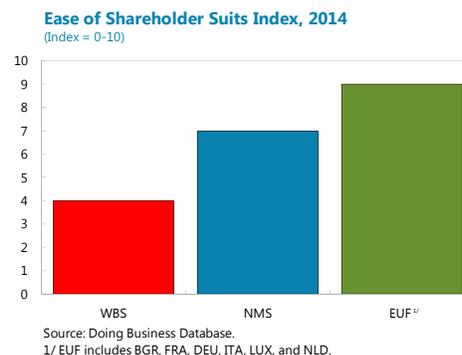
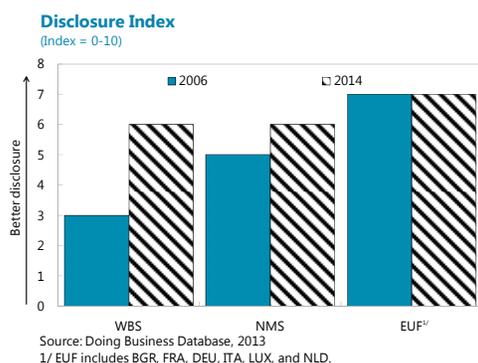
The development of other nonbank financial institutions that intermediate long-term savings has also been below par.

The development of other nonbank financial institutions that intermediate long-term savings has also been below par.

*Pensions:* Only the pension industries in Croatia and FYR Macedonia have seen persistent deepening over time, largely because of significant pension reforms. Serbia passed a law on voluntary pensions in 2006, but further reform on mandatory pensions (Pillar I) is needed to spur development in this area. The recent passage of the Albanian pension law holds promise for the development of insurance industry in that country.

*Mutual funds:* These financial institutions have been prominent in Bosnia and Herzegovina and Croatia, spurred by the use of voucher privatizations. However, there has been little progress in developing these institutions in other countries. The recent rapid expansion of nonbank investment funds in the government bond market in Albania, particularly at the longer end of maturity, is a welcome development but needs an attendant strengthening of the liquidity and regulatory environment.

*Equity and corporate bond markets:* These institutions are much shallower in Western Balkan countries, than in the New Member States and other parts of Europe. Stock markets do exist in all of the Western Balkan countries, except Albania and Kosovo, but the value traded is minimal. Corporate bond markets are largely nonexistent—except for small ones in Croatia and Montenegro—largely because of a lack of liquid secondary government securities markets and weak bankruptcy frameworks.<sup>2</sup> Insufficient investor protection (such as the ease of shareholder suits) and weak regulatory frameworks hamper both corporate debt and equity markets.<sup>3</sup>



<sup>1</sup>Even in Croatia, a major insurance company remains to be privatized.

<sup>2</sup>See IOSCO (2011).

<sup>3</sup>Less reliance on external finance could also reflect greater concentration in banking in Europe versus the United States (Dewatripont and Maskin (1995).

### Box 3.2. Croatia's Defense against the Boom<sup>1</sup>

The Western Balkan credit boom was relatively mild partly because some countries actively employed macroprudential and other prudential and capital control measures to lean against the wind. A good example is Croatia, which actively introduced such measures while pursuing a path to accession to the European Union (eventually acceding in 2013).

During 2000–08 Croatia attracted large capital inflows, spurred by sustained economic growth, looming EU accession, and, of course, easy global financial conditions. The inflows were largely in the form of foreign direct investment (FDI), but banks, which had been acquired by European parents, also increased foreign borrowing. This was aided by a legacy of high structural liquidity in the system, and a stable exchange rate. Not surprisingly, unhedged foreign currency credit shot up during the period. Bank foreign exchange-linked liabilities and assets made up as much as three-fourths of balance sheets.

The measures implemented from 2004 onward, which aimed to restrain credit growth and the foreign borrowing that was financing it by raising the cost of foreign borrowing and local lending, included the following:

- A marginal reserve requirement (MRR) was introduced, and gradually increased, on banks' new foreign borrowing.
- To close a loophole, a special reserve requirement (SRR) was introduced at the rate of 55 percent on increases in banks' liabilities arising from issued debt securities in 2006.
- Credit controls required banks to purchase low-yield central bank bills for half of the increase in credit growth exceeding the allowed limit, which was increased to 75 percent in 2008.
- Banks were also required to comply with a monthly 1 percent sublimit on credit growth.
- The liquidity ratio of 32 percent for assets maturing in three months was extended to foreign-exchange-indexed instruments,
- The general reserve requirement was reduced in steps, but remained high at 17 percent until end-2008.

The measures appear to have achieved some success. Banks' external borrowing started falling in 2006, credit growth decelerated, and the share of foreign exchange loans declined. Following the introduction of the MRR, the loans and advances Croatian banks owed to nonresident banks declined by 10 percent. Introduction of the SRR was followed by a close to 20 percent drop in capital inflows. The measures also led to some disintermediation. To avoid the reserve requirements, the corporate sector resorted to direct borrowing from abroad. The high MRR also encouraged parent banks to fund Croatian subsidiaries by beefing up their equity (FDI inflows), rather than by debt financing. This raised bank capital buffers, which paid off during the crisis, and also enabled the banks to continue lending.

Empirical analysis in Kraft and Galac (2011) also points to some success of the measures. Vector autoregression results suggest that the MRR and SRR dampened the overall volume of inflows and contributed to exchange rate depreciation for about two quarters. In addition, the prudential (including macroprudential) measures reduced capital inflows for one quarter and led to a short-lived minor depreciation. The prudential measures also increased monetary independence marginally, for about a year.

<sup>1</sup> Based on IMF (2010) and Kraft and Galac (2011).

### Box 3.3. Nonperforming Loans in the Western Balkans: Why Has Progress Been So Limited?

The pace of resolution of nonperforming loans (NPLs) in the Western Balkan countries has been slow. Domestic factors are important in explaining the lack of progress on the ground despite considerable efforts by banks. The sale of problem loan portfolios and the outsourcing of collection remain relatively rare in the Western Balkan countries. A few countries such as Latvia, Romania, Moldova, Russia, Estonia, and Poland, along with Serbia in the Western Balkans, have strived to overhaul corporate or household insolvency regimes or encouraged out-of-court restructurings. External factors have also affected progress.

A long list of obstacles in the legal, judicial, tax, and regulatory areas is holding up NPL resolution. A survey by the European Banking Coordination Vienna Initiative (2012) of international institutions and banks operating throughout the region has identified the following issues, which, of course do not necessarily apply to every country:

- Collateral enforcement takes a long time and relies heavily on cumbersome judicial processes, in the form of multiple auctions with prescribed minimum bidding prices and troubled property rights regime.
- Underdeveloped frameworks for going-concern restructurings mean that potentially viable firms end up in lengthy liquidation, with low loan recovery.
- Out-of-court restructuring as a speedy and cost-efficient tool to settle debt is underutilized in the Western Balkan countries. Latvia and Romania have reformed their systems since the outbreak of the crisis.
- Corporate insolvency frameworks in the Western Balkan countries are particularly weak, whereas Latvia, Lithuania, Estonia, and Romania have reformed their systems under the umbrella of IMF programs and technical assistance.
- Most Western Balkan countries and many countries in the rest of Emerging Europe lack an insolvency framework for natural persons, disallowing financially responsible individuals from getting a “fresh start” and allowing their debt to linger on banks’ books.
- Weakness and inefficiencies in the legal institutional framework delay NPL resolution. Overloaded court systems, lengthy and costly judicial proceedings, and inconsistent and unpredictable court decisions are key obstacles.
- Tax deductibility of loan loss-provisions and write-downs of loans are often limited, though some Western Balkan countries, such as Albania, have recently passed laws to overcome these weaknesses.
- Finally, underdeveloped markets for distressed assets limit the scope for NPL resolution, despite recent attempts by some Western Balkan countries governments (e.g., Montenegro) to facilitate this market.

## Annex 1.1. Growth Accounting

A standard growth accounting analysis can shed light on key drivers of growth in the Western Balkans relative to those in the New Member States. Growth accounting, based on a standard Cobb-Douglas production function, allows for decomposing real GDP growth into contributions of human capital, physical capital and total factor productivity:<sup>1</sup>

$$Y_t = A_t K_t^\alpha H_t^{*(1-\alpha)} \quad (1) \quad \text{and} \quad H_t^* = h_t L_t^* \quad (2)$$

where  $Y_t$  represents domestic output in period  $t$ ,  $K_t$  the physical capital stock,  $L_t$  the employed labor force,  $h_t$  the index of human capital per worker, and  $A_t$  total factor productivity. The analysis uses Penn Tables 8.0 data on capital stocks; country-specific measures of the labor share in GDP; and an index of human capital per person, based on years of schooling (Barro and Lee 2010) and returns to education (Psacharopoulos 1994; and Inklaar and Timmer 2013).<sup>2</sup> Using (1), real GDP growth is decomposed into the contribution of physical capital accumulation, employment growth, and accumulation of human capital per worker. Total factor productivity (TFP) growth is the residual, that is, output growth not explained by either growth in capital, growth in adjusted labor, or:

$$\widehat{Y}_t = \alpha \widehat{K}_t + (1 - \alpha) \widehat{L}_t + (1 - \alpha) \widehat{h}_t + \widehat{A}_t \quad (3)$$

Gains in TFP and capital accumulation have been major drivers of growth in the Western Balkans over the past decade. Growth in TFP, reflecting more efficient use of inputs, has long been recognized as an important source of improvements in income and welfare. Cross-country differences in income levels and growth rates are mostly due to differences in productivity (Klenow and Rodriguez-Clare 1997); and Easterly and Levine 2001). Results indicate that gains in TFP in the region—the residual in the growth accounting analysis—explain about half of annual average growth, comparable to New Member States (Annex Figure 1.1.1), in line with other studies on transition economies (Campos and Coricelli 2002; IMF 2009; and EBRD 2013). This TFP improvement has likely reflected the effects of transition to a market economy, including enterprise restructuring and privatization, and increased technology transfer from the European Union.

Physical investment has also expanded rapidly and contributed to solid growth performance over the past decade. For example, the massive buildup of productive capacity in Bosnia and Herzegovina—financed by foreign direct investment and an externally financed credit boom—on average accounted for about 60 percent of the observed output growth over 2001–08. Similarly, capital accumulation accounted on average for about 40 percent of the observed output growth in Montenegro and FYR Macedonia, and about 30 percent in Croatia and Albania. The contribution of capital accumulation to Western Balkan state growth is comparable, on average, with that of New Member States.

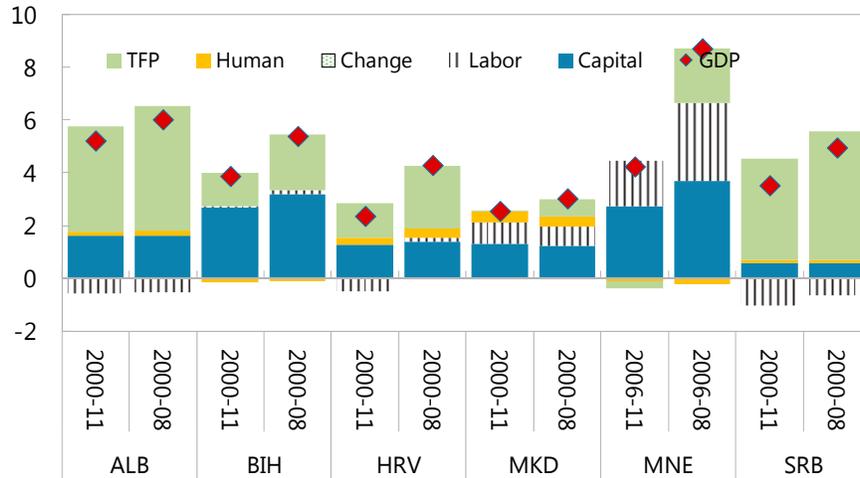
The low contribution of human capital accumulation—employment growth, adjusted for schooling—constitutes a key difference between the Western Balkans and the New Member States. The contribution of human capital accumulation to growth was more significant only in FYR Macedonia and Montenegro and negative for Albania and Serbia. In Bosnia and Herzegovina and Croatia, human capital accumulation

<sup>1</sup> Growth accounting exercises are commonly based on two simplifying assumptions: (i) the form of the production function (a Cobb-Douglas with unitary elasticity of substitution being the norm) and (ii) the elasticities of output with respect to labor and capital. Due to this, caution is required when interpreting results. First, any measurement errors in factor inputs are automatically attributed to TFP growth—the residual between measured output growth and growth of factors of production. Moreover, estimates of TFP growth are also sensitive to production function assumptions, and the interpretation of measured TFP growth can be problematic as it can reflect factors other than purely technical change—for example, increasing returns to scale or markups due to imperfect competition.

<sup>2</sup> For Bosnia and Herzegovina, FYR Macedonia, and Montenegro, human capital is estimated based on UNDP data on educational attainment and on the methodology from Barro and Lee (2010).

was positive in the boom years, but since 2009 this increase was more than offset by employment losses associated with the global crisis.

**Annex Figure 1.1.1. Western Balkans: GDP Growth and Contributions**  
(Percent)



Sources: Inklaar and Timmer (2013); and University of Groningen Growth and Development Centre.  
Note: Kosovo data is unavailable. For Bosnia and Herzegovina, FYR Macedonia and Montenegro employment growth, human capital per worker is estimated based on UNDP dataset on educational attainment and on the methodology from Barro and Lee (2012).

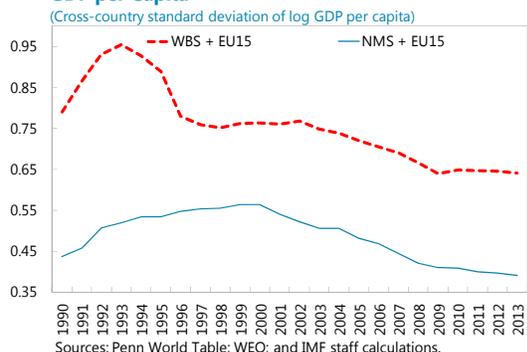
## Annex 1.2. Convergence Analysis

Convergence is most commonly understood as the process of decreasing differences in income per capita across economies over time. Convergence happens because, in theory, poor countries should grow faster than rich countries due to decreasing returns on capital and increasing costs of productivity advancement for countries already on the production frontier. In reality, however, various structural factors may hinder convergence.

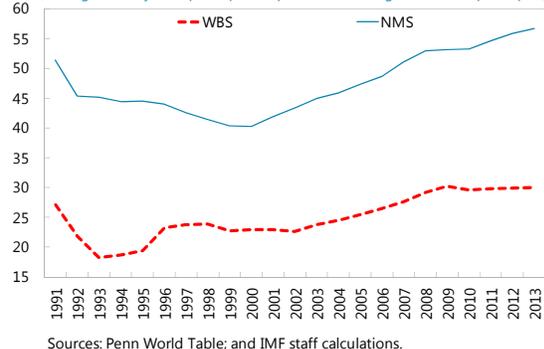
There are two commonly-used ways to test the existence of convergence among a group of countries: (1) calculating whether the dispersion of income per capita across countries is decreasing over time (Annex Figure 1.2.1); and (2) regressing GDP growth on initial income levels to see whether poorer countries grow faster than richer countries (Annex Figure 1.2.2). The literature has emphasized that the two approaches measure different phenomena (Quah 1996). We apply both methods to examine the convergence performance of Western Balkan States (WBS) and compare it with that of the New Member States (NMS).

The first method shows that the dispersion of GDP per capita across the Western Balkans and advanced EU countries (EU15) has steadily declined since 1993, especially during the second half of the 1990s and the boom years in the 2000s. Since the global crisis, however, the decline has mostly stopped. In contrast, the New Member States have continued to close the economic gap with advanced EU economies since the crisis, albeit at a slower pace than during the boom years. As a result, the gap between the Western Balkans and the New Member States has increased.

**Annex Figure 1.2.1. Dispersion of the Logarithm of GDP per Capita**



**Annex Figure 1.2.2. Catching up with Advanced Europe**



For the second approach, we estimate the following equation with NMS, WBS, and EU15 in the sample:

$$growth_{i,t} = \beta_0 + \beta_1 dist_{i,t-1} + \beta_2 dist_{i,t-1} \times WB + \beta_3 dist_{i,t-1} \times NMS + \beta_4 WB + \beta_5 NMS + \beta_6 GEO + u_{i,t},$$

where  $growth_{i,t}$  is the GDP per capita growth rate for Country  $i$ ;  $dist_{i,t-1}$  is the GDP per capita gap between the average level of EU15 and country  $i$  from the previous period;  $WB$  and  $NMS$  are dummy variables for the Western Balkan and NMS regions; and  $GEO$  is the physical distance of Country  $i$  to advanced EU economies (proxied by the distance of the capital of country  $i$  to Berlin). A larger coefficient for  $dist_{i,t-1}$  and its interactions means poorer countries have grown faster than richer countries, that is, it provides evidence of convergence.

The regression results indicated strong convergence for the WBS during 1990–2000 due to the bounce-back and reconstruction after the regional conflict subsided, while there was little convergence during that period in the NMS (Annex Table 1.2.1). For 2000–2007, however, the convergence coefficient was small and insignificant for the WBS. This was due to the fact that the poorer countries in the region,

such as Albania and Bosnia and Herzegovina, actually grew more slowly than the richer ones, such as Croatia, during this period. In contrast, the convergence coefficient was positive and highly significant for the NMS during the period. For the period since the onset of the global crisis, the convergence coefficient is positive and significant for the WBS, though it is smaller than that for the NMS.

**Annex Table 1.2.1. Speed of Convergence: Western Balkan States versus New Member States**

	(1)	(2)	(3)	(4)
	1991-2013	1991-2000	2000-2007	2008-2013
<i>dist</i>	0.013 (0.02)	0.036 (0.04)	-0.023* (0.01)	0.020 (0.02)
<i>dist</i> × <i>WB</i>	0.073*** (0.02)	0.090** (0.04)	0.015 (0.02)	0.031 (0.02)
<i>dist</i> × <i>NMS</i>	0.024 (0.02)	0.009 (0.04)	0.050*** (0.02)	0.057** (0.02)
<i>W B</i>	-0.124*** (0.02)	-0.220*** (0.03)	0.037* (0.02)	-0.045* (0.02)
<i>N M S</i>	-0.032** (0.01)	-0.076*** (0.03)	0.017 (0.01)	-0.034** (0.01)
cons	-0.012 (0.02)	0.033 (0.02)	-0.016** (0.01)	0.031*** (0.01)
<i>N</i>	733	310	217	186
<i>r</i> <sup>2</sup>	0.220	0.271	0.338	0.206
Average distance to frontier:				
Balkans	1.46	1.65	1.47	1.25
New Member States	0.86	0.88	0.84	0.63

Note: Standard errors in parentheses. \*:  $p < 0.1$ , \*\*:  $p < 0.05$ , \*\*\*:  $p < 0.01$ .

Next, we examine if structural factors can affect the speed of convergence in WBS and NMS (Annex Table 1.2.2). For this purpose, we adapt the convergence regression to the following:

$$growth_{i,t} = \alpha_0 + \alpha_1 dist_{i,t-1} + \alpha_2 dist_{i,t-1} \times factor_{i,t-1} + \alpha_3 factor_{i,t-1} + \alpha_4 controls_{i,t} + v_{i,t}$$

where  $factor_i$  is the structural factor under examination. If a factor facilitates convergence, we shall expect the associated estimate for  $\alpha_2$  to be positive, and vice versa. The regression is estimated using data of nonoverlapping five-year intervals after 2000. The following are the structural factors we examined and their data sources:<sup>1</sup>

- Quality of governance (World Bank Governance Indicators)

<sup>1</sup> We also looked at factors such as FDI and government capital expenditure. We only included factors that show a significant effect on convergence in the table.

- Development of market-oriented institutions (EBRD Transition Indicator)
- Level of human capital (Human capital indicator from the Penn World Table)
- Government's share in GDP (Penn World Table)
- Unemployment rate (IMF, World Economic Outlook, cyclically adjusted)
- Financial development level (credit to GDP ratio, IFS, cyclically adjusted)

The results show that high-quality governance, market-oriented institutions, a strong human capital base, and a more developed financial system facilitate catching-up by poorer countries. In contrast, dominance of the public sector in the economy and high unemployment hinder the catching-up process.

**Annex Table 1.2.2. The Impact of Structural Factors on Convergence**

(Dependent variable: relative growth to EU 15)

	<i>factor</i> = governance		<i>factor</i> = market institution		<i>factor</i> = human capital	
<i>factor</i>	0.096*	-0.144**	0.067*	-0.306**	-0.097*	-0.467***
	(0.06)	(0.06)	(0.04)	(0.15)	(0.05)	(0.16)
<i>dist</i> × <i>factor</i>		0.187***		0.286**		0.547**
		(0.03)		(0.11)		(0.22)
<i>dist</i>	0.107	0.050	0.065	-0.840**	0.050	-1.612**
	(0.08)	(0.05)	(0.04)	(0.36)	(0.07)	(0.67)
<i>N</i>	45	45	39	39	37	37
r2	0.430	0.617	0.459	0.516	0.414	0.550

	<i>factor</i> = government consumption		<i>factor</i> = unemployment		<i>factor</i> = financial development	
<i>factor</i>	0.006***	0.017***	-0.004***	0.013***	-0.025	-0.274***
	(0.00)	(0.01)	(0.00)	(0.00)	(0.04)	(0.05)
<i>dist</i> × <i>factor</i>		-0.009**		-0.011***		0.159***
		(0.00)		(0.00)		(0.03)
<i>dist</i>	-0.044	0.162	0.099*	0.188***	0.049	-0.557***
	(0.03)	(0.11)	(0.05)	(0.04)	(0.05)	(0.11)
<i>N</i>	45	45	45	45	44	44
r2	0.456	0.498	0.448	0.521	0.303	0.466

### Annex 1.3. Trade Linkages

The strength of regional integration can be inferred from the augmentation of a standard gravity model that relates cross-border trade flows to population, economic size, and geographical distance. In particular, we follow (Paas and Tafenu 2005) and augment a standard gravity model with an indicator variable that takes the value 1 when the country pair belongs to the Western Balkans (WBS) group of countries. We also test the strength of linkages between Western Balkan and New Member States, as well as the Western Balkan States and main euro zone partners. We expect the coefficient on the dummy to be positive, indicating that belonging to the WBS group increases the size of cross-border trade.<sup>1</sup>

The following model is estimated:

$$T_{ijt} = \alpha + \beta_1 GDPpc_{it} + \beta_2 GDPpc_{jt} + \beta_3 POP_{it} + \beta_4 POP_{jt} + \beta_5 dist_{ij} + \beta_6 I(WB)_{ij} + \epsilon_{ijt}, \quad (1)$$

where  $T$  denotes bilateral trade (exports and imports, respectively) imports in U.S. dollars,  $GDPpc$  nominal GDP per capita in U.S. dollars,  $POP$  populations,  $dist$  distance between capitals and  $I(WB)$  the Western Balkans dummy. All variables are in log form. Because the distance between countries does not vary within the panel unit, we use fixed-effects between estimators for our regressions.

Econometric estimates do not reject the hypothesis that the particular strength of linkages between WB economies is an additional explanation for the size of their cross-border trade. While similar results hold for the links between WBS and NMS, or WBS and eurozone countries, those ties appears weaker. This seems plausible given the improvement of intra-regional relations since 2000 that has led to an increase in intraregional trade on the back of historically similar institutional frameworks and languages, in addition to the growing integration into euro area supply chains.

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<sup>1</sup> Data are taken from various sources: DOTS, CEPII, and IMF, WEO; the coverage includes EU27 and selected OECD countries and a time span of 2000–13.

**Annex Table 1.3.1. Dependant Variable: Nominal Bilateral Trade (Exports)**

	Fixed effects, between estimator					
	Coef	p-value	Coef	p-value	Coef	p-value
Population_country	1.22	0.00	1.22	0.00	1.21	0.00
Population_partner	0.91	0.00	0.92	0.00	0.90	0.00
Nominal GDP per capita_country	1.16	0.00	1.18	0.00	1.14	0.00
Nominal GDP per capita_partner	0.82	0.00	0.84	0.00	0.81	0.00
Distance between capitals	-1.48	0.00	-1.47	0.00	-1.49	0.00
D (WBS) 1/	1.19	0.00				
D (WBS & NMS)			0.34	0.00		
D (WBS & Eurozone core) 2/					0.39	0.04
Constant	-37.28	0.00	-37.84	0.00	-36.70	0.00
Nobs	18,995		18,995		18,995	
Adjusted R2	0.84		0.84		0.83	
F-stat on joint significance of panels	1,191		1,181		1,175	

1/ WBS: excluding Kosovo  
2/ Eurozone core: Germany, Italy

**Annex Table 1.3.2. Dependant Variable: Nominal Bilateral Trade (Imports)**

	Fixed effects, between estimator					
	Coef	p-value	Coef	p-value	Coef	p-value
Population_country	0.99	0.00	0.99	0.00	0.98	0.00
Population_partner	1.12	0.00	1.12	0.00	1.11	0.00
Nominal GDP per capita_country	0.82	0.00	0.84	0.00	0.80	0.00
Nominal GDP per capita_partner	1.07	0.00	1.09	0.00	1.05	0.00
Distance between capitals	-1.39	0.00	-1.38	0.00	-1.41	0.00
D (WBS) 1/	1.36	0.00				
D (WBS & NMS)			0.40	0.00		
D (WBS & Eurozone core) 2/					0.47	0.01
Constant	-36.63	0.00	-37.35	0.00	-35.99	0.00
Nobs	19,072		19,072		19,072	
Adjusted R2	0.85		0.85		0.85	
F-stat on joint significance of pan	1,306		1,289		1,280	

1/ WBS: excluding Kosovo  
2/ Eurozone core: Germany, Italy

## Annex 1.4. Structural Reform Gaps and Economic Growth

### A. Estimating Reform Gaps

For a number of indicators we estimate country-specific reform gaps by comparing Western Balkan countries with the New Member States and an average EU country, taking into account some other country-specific characteristics. For each indicator, the reform gap—the distance of the indicator's value for country  $X$  from the NMS or the European Union average—is derived first by estimating the following regression:

$$I_i^k = \alpha + \beta X_i + \epsilon_i, \quad (1)$$

where  $I_i^k$  is indicator  $k$  in country  $i$ ;  $X_i$  is the set of controls—GDP per capita, geographical location (dummy for the sub-Saharan region), common history (Emerging Europe dummy), and a dummy for resource-richness.

The structural reform indicator  $gap\ k$  in country  $i$  is then simply defined as the difference between the actual indicator in country  $i$  and its predicted value for the NMS or EU average from the estimated regression (1):

$$gap_i^k = I_i^k - \hat{\alpha} - \hat{\beta} X_i \quad (2)$$

To make comparisons of indicators between countries possible, each gap is weighted by the inverse of its standard deviation. Therefore, if a  $k$ -gap in country  $i$  is  $Z$ , the indicator  $k$  in country  $i$  is  $Z$  standard deviations from the average of the comparator.

### B. Ranking Structural Reforms by Their Importance for Economic Growth

To rank structural reforms in terms of their importance for economic growth, we use the results of growth regressions. The methodology does not identify the causal effect of reforms on growth and does not allow for quantifying the magnitude of the difference between reforms. However, it provides an indicative guide for government reform priorities. Ranking the reforms helps governments align the biggest policy gaps with the most important policies.

For simplicity, suppose the true data generating process for the economic growth is:

$$g_i = \alpha + \beta_0 X_i + \beta_1 \Delta I_i^1 + \dots + \beta_K \Delta I_i^K + \epsilon_i, \quad (3)$$

where  $g_i$  is GDP per capita growth in country  $i$  over a certain period and  $X_i$  is a set of structural macroeconomic controls at the beginning of the period: GDP per capita, stance of structural reform (Global Competitiveness Index score), geographical location (e.g., a dummy for the sub-Saharan region), common historical past (e.g., Emerging Europe dummy), resource-richness. Progress ( $\Delta$ ) in all structural indicators  $I_i^1, \dots, I_i^K$  is assumed to affect growth positively (or at least non-negatively).

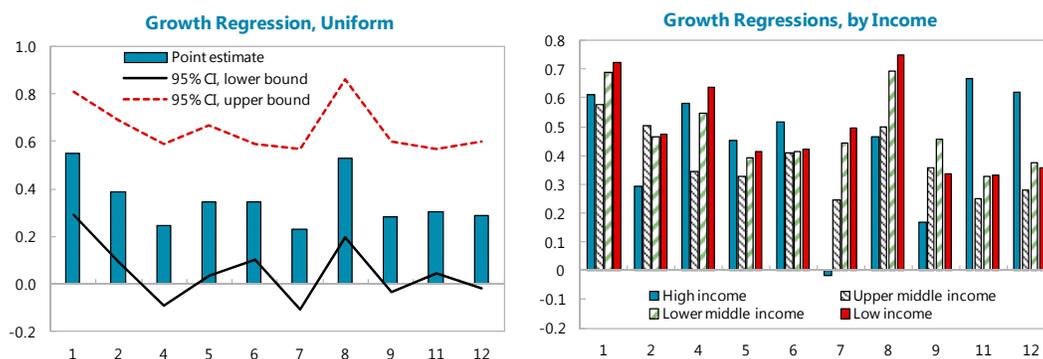
Ideally, we would like to run regression (3) and estimate  $\beta_1, \dots, \beta_K$ , which would give guidance analyzing the reform cost-benefit ratio. However, estimating (3) is not possible, in particular because of the very large number of indicators, and potentially omitted variables. Instead, a separate growth regression for each indicator is estimated:

$$\tilde{g}_i = \beta_k \Delta \tilde{I}_i^k + \epsilon_i, \quad (4)$$

where a tilde over  $g$  and  $l$  means that the variables were adjusted for constant and  $X_i$ .<sup>1</sup> Each  $\tilde{l}^k$  is also adjusted for the inverse of its standard deviation. Hence, the interpretation of each  $\beta_k$  is the effect on growth in GDP per capita of a reduction of one standard deviation in the structural indicator gap. Another feature of adjusted  $\tilde{l}^k$ s, which we will use later, is that they all have the same variance. Data availability limits the estimation period to 2006–13. Regression (4) is estimated as a cross-section for 131 countries. It is estimated for all countries and subgroups, that is, countries with similar income—plus and minus one income category according to the World Bank classification. For example, for an upper-middle-income economy, we take all high-income, upper-middle-income and lower-middle-income countries.

Results suggest that reforms in all areas have a positive impact on growth. Reforms in institutions, financial markets, and infrastructure tend to have a somewhat higher growth impact than reforms in other areas. In addition, there is some variability in the estimated impact on growth among different income groups of countries (Annex Figure 1.4.1). While the estimates of  $\beta_k$  may be biased because of omitted variables, the figures show under which assumption it is possible to use the estimates of  $\beta_k$  to rank reforms according to their growth impact.

**Annex Figure 1.4.1. Results of Growth Regressions: Estimates of Growth Coefficients**



Sources: World Economic Forum; and IMF staff calculations.  
 Note: Global Competitiveness Report Pillars: 1 - Institutions, 2 - Infrastructure, 4 - Health and Primary Education, 5 - Higher Education and Training, 6 - Goods Markets Efficiency, 7 - Labor Markets Efficiency, 8 - Financial Markets Development, 9 - Technological Readiness, 11 - Business Sophistication, 12 - Innovation. Excluded are Macroeconomic Environment (pillar 3) and Market Size (pillar 10).

Sources: World Economic Forum; and IMF staff calculations.  
 Note: Global Competitiveness Report Pillars: 1 - Institutions, 2 - Infrastructure, 4 - Health and Primary Education, 5 - Higher Education and Training, 6 - Goods Markets Efficiency, 7 - Labor Markets Efficiency, 8 - Financial Markets Development, 9 - Technological Readiness, 11 - Business Sophistication, 12 - Innovation. Excluded are Macroeconomic Environment (pillar 3) and Market Size (pillar 10).

**Proposition 1.** Let  $\hat{\beta}_l$  and  $\hat{\beta}_m$  be the ordinary least square (OLS) estimates of (4) for indicators  $l$  and  $m$  correspondingly, where  $\beta_l$  and  $\beta_m$  are the true parameter values from (3). Then:

$$> \beta_m \leftrightarrow \text{plim}_{n \rightarrow \infty} \hat{\beta}_l > \text{plim}_{n \rightarrow \infty} \hat{\beta}_m, \tag{5}$$

using the following assumption:

<sup>1</sup> "Adjusted" means that we use the residuals from regressions of  $g$  and  $\Delta l$  on constant and  $X_i$ . With that adjustment, beta in regression A1 is numerically equivalent to the coefficient on  $\Delta l$  in a regression of  $g$  on constant,  $X$  and  $\Delta l$ .

**Assumption 1:** Structural reform indicators that are more growth-enhancing (higher beta) are more correlated with other growth-enhancing indicators. Assumption 1 will be formulated in mathematical terms further in the proof of the proposition.

### Proof of the Proposition 1

To simplify notation, and without loss of generality, let us take  $l=1$ , and  $m=2$ . From (3) it follows that both  $\hat{\beta}_1$  and  $\hat{\beta}_2$  are biased and inconsistent, because regressions of type (4) do not include other indicators, which are almost certainly correlated with both GDP growth and  $\tilde{I}^1$  or  $\tilde{I}^2$ .

From the standard OLS algebra it follows that:

$$\begin{aligned} \text{plim}_{n \rightarrow \infty} \hat{\beta}_1 &= \beta_1 + \beta_2 \gamma_{12} + \beta_3 \gamma_{13} + \dots + \beta_K \gamma_{1K}, \quad \text{and} \\ \text{plim}_{n \rightarrow \infty} \hat{\beta}_2 &= \beta_2 + \beta_1 \gamma_{21} + \beta_3 \gamma_{23} + \dots + \beta_K \gamma_{2K}, \end{aligned} \quad (6)$$

where  $\gamma_{ij}$  is the probability limit of OLS coefficient in a regression of  $\tilde{I}^j$  on  $\tilde{I}^i$ . All of the terms in identities (6) except for the first ones constitute the bias.

Now, since all indicators are adjusted and have the same variance:

$$\gamma_{ij} = \frac{\text{cov}(\tilde{I}^i, \tilde{I}^j)}{\text{var}(\tilde{I}^i)} = \frac{\text{cov}(\tilde{I}^i, \tilde{I}^j)}{\text{var}(\tilde{I}^j)} = \gamma_{ji} = \text{corr}(\tilde{I}^i, \tilde{I}^j) \quad (7)$$

Using (7) we get:

$$\text{plim}_{n \rightarrow \infty} \hat{\beta}_1 - \text{plim}_{n \rightarrow \infty} \hat{\beta}_2 = (\beta_1 - \beta_2)(1 - \text{corr}(\tilde{I}^1, \tilde{I}^2)) + \sum_{i=3}^K \beta_i (\text{corr}(\tilde{I}^i, \tilde{I}^1) - \text{corr}(\tilde{I}^i, \tilde{I}^2)) \quad (8)$$

Now, in mathematical terms Assumption 1 states that:

$$\beta_1 > \beta_2 \leftrightarrow \sum_{i=3}^K \beta_i (\text{corr}(\tilde{I}^i, \tilde{I}^1) - \text{corr}(\tilde{I}^i, \tilde{I}^2)) > 0, \quad (9)$$

that is indicator 1 is more correlated with the indicators, which correspond to higher betas, that is, those that are more important for growth.

Since correlation between any two random variables is bounded between -1 and 1, the two terms of the sum on the right hand side of (8) are either both negative or both positive. Hence, we get (5).

Under assumption 1, which seems to hold for most indicators in our dataset, it is possible to rank structural reforms by running simple regressions like (4) and then comparing the OLS estimates. However, it is not possible to identify the true betas or the true difference between betas, because the last term in (8) is not identified.

### Classification of Reforms into Priority Classes

We classify reform areas into three classes of priorities: high, medium and low. The classification rule is based on two criteria—how large the reform gap is and how important the reform is for growth. Annex Table 1.4.1 guides our selection according to the criteria outlined below.

On the vertical axis of the table are the reform gaps (measured in standard deviations from the mean of the peer group), sorted from large negative gaps (bad) to large positive gaps (good). On the horizontal axis the reforms are sorted by their importance for growth, that is, by the point estimate  $\beta_k$  of corresponding growth regression.

**Annex Table 1.4.1. Classification of Reform Priorities**

		Importance of reforms				
		Minor	Minor/ Medium	Medium	Major	
		<0.2	0.2...0.35	0.35...0.5	>0.5	
<b>Gaps</b>	Large -	<-0.5	MEDIUM	HIGH	HIGH	HIGH
	Medium -	-0.5...-0.1	MEDIUM	MEDIUM	HIGH	HIGH
	Small	-0.1...0.1	LOW	MEDIUM	MEDIUM	HIGH
	Medium +	0.1...0.5	LOW	LOW	MEDIUM	MEDIUM
	Large +	>0.5	LOW	LOW	LOW	MEDIUM

Source: IMF staff calculations.

Reforms that we classify as high priority range from reform areas with large negative gaps but minor/medium importance for growth to reform areas where the gap is small but improving the reform area matters a lot for growth. In the lower left corner are reform areas where the country performs better than its peers (a positive gap) and reforms in this area have a low importance for growth.

Reported scores correspond to reform priorities. We have assigned scores to the gaps (from 1 (large positive gap) to 5 (large negative gap) and to the importance of reforms for growth (from 1 (minor) to 4 (major)). The maximum would thus be 9 (a large negative gap (5) plus major importance for growth (4)). Annex Tables 1.4.2a and b report the sum of the two scores. Scores from 7-9 are classified as high priority, from 5-6 as medium priority, and 1-4 as low priority.

To classify reforms by the importance for growth we use estimates from the income-specific growth regressions (see above for details). We also did the exercise with the estimates from the uniform regression. The difference to our main results is minor.

**Annex Table 1.4.2a. Reform Priorities in Western Balkan Countries: Compared to NMS Average, 2013**

	<i>Institu- tions</i>	<i>Infra- structure</i>	<i>Health and primary education</i>	<i>Higher education and training</i>	<i>Goods market efficiency</i>	<i>Labor market efficiency</i>	<i>Financial market develop- ment</i>	<i>Techno- logical readiness</i>	<i>Business sophi- stication</i>	<i>Innova- tion</i>
Albania	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
BIH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MEDIUM
Croatia	HIGH	HIGH	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	MEDIUM	MEDIUM	MEDIUM
Macedonia	HIGH	HIGH	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	MEDIUM	HIGH
Montenegro	HIGH	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM	LOW
Serbia	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MEDIUM

Sources: World Economic Forum; and IMF staff calculations.

Note: Analysis for Kosovo not included as the relevant data are not available.

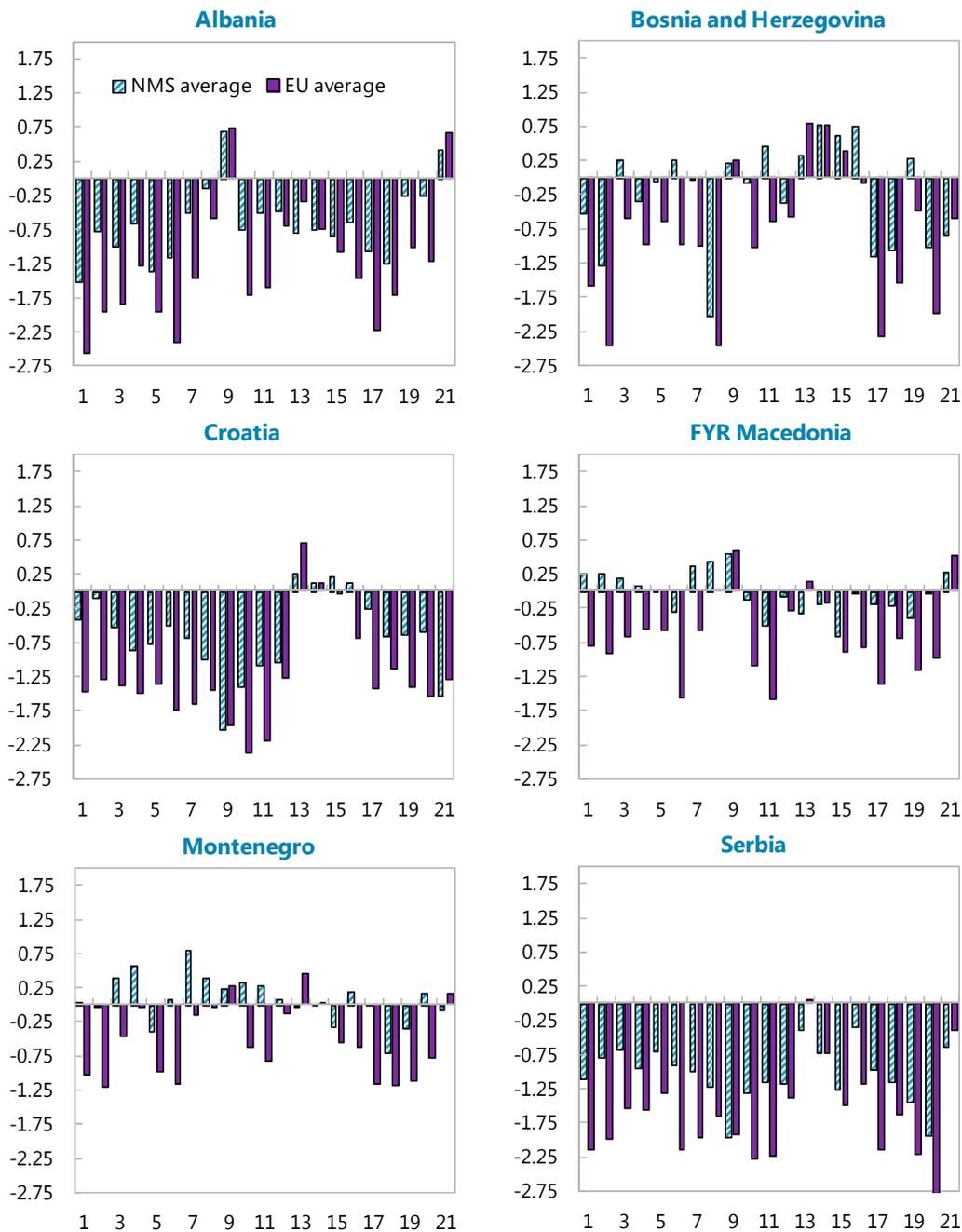
**Annex Table 1.4.2b. Reform Priorities in Western Balkan Countries: Compared to EU Average, 2013**

	<i>Institu- tions</i>	<i>Infra- structure</i>	<i>Health and primary education</i>	<i>Higher education and training</i>	<i>Goods market efficiency</i>	<i>Labor market efficiency</i>	<i>Financial market develop- ment</i>	<i>Techno- logical readiness</i>	<i>Business sophi- stication</i>	<i>Innova- tion</i>
Albania	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
BIH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Croatia	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Macedonia	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Montenegro	HIGH	HIGH	MEDIUM	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH
Serbia	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

Sources: World Economic Forum; and IMF staff calculations.

Note: Analysis for Kosovo not included as the relevant data are not available.

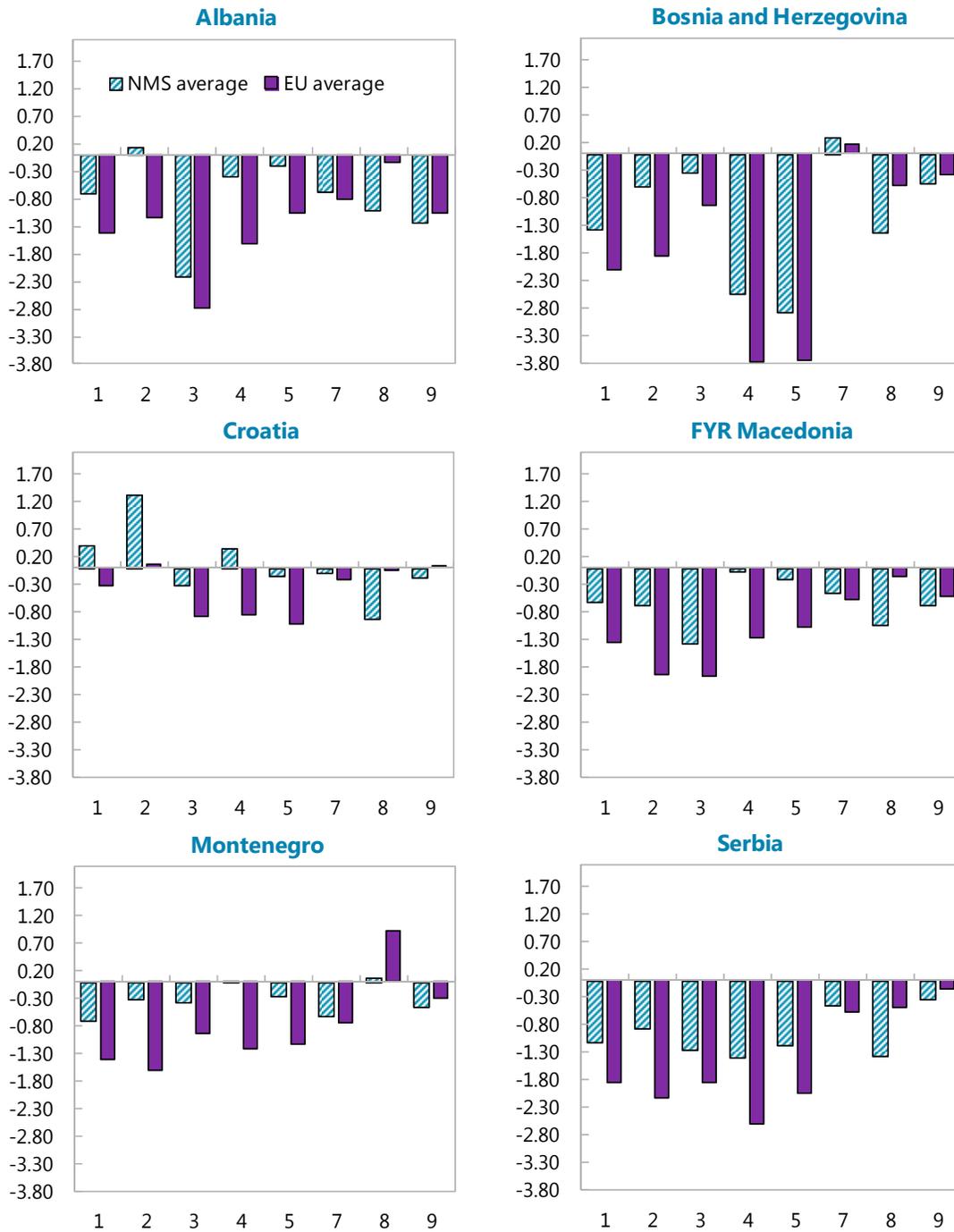
**Annex Figure 1.4.2. Reform Gaps: Institutions**  
(Standard deviations)



Sources: World Economic Forum; and IMF staff calculations.

Note: Kosovo data is unavailable. Global Competitiveness Report, sub-indicators of pillar "Institutions": 1 - Property rights, 2 - Intellectual property protection, 3 - Diversion of public funds, 4 - Public trust in politicians, 5 - Irregular payments and bribes, 6 - Judicial independence, 7 - Favoritism in gov't decisions, 8 - Wastefulness of gov't spending, 9 - Burden of gov't regulation, 10 - Efficiency in settling disputes, 11 - Efficiency in challenging regs, 12 - Transparency of policymaking, 13 - Business cost of terrorism, 14 - Business cost of crime, 15 - Organized crime, 16 - Reliability of police, 17 - Ethical behavior of firms, 18 - Strength of reporting standards, 19 - Efficacy of corp. boards, 20 - Protection of minority shareholders, 21 - Strength of investor protection.

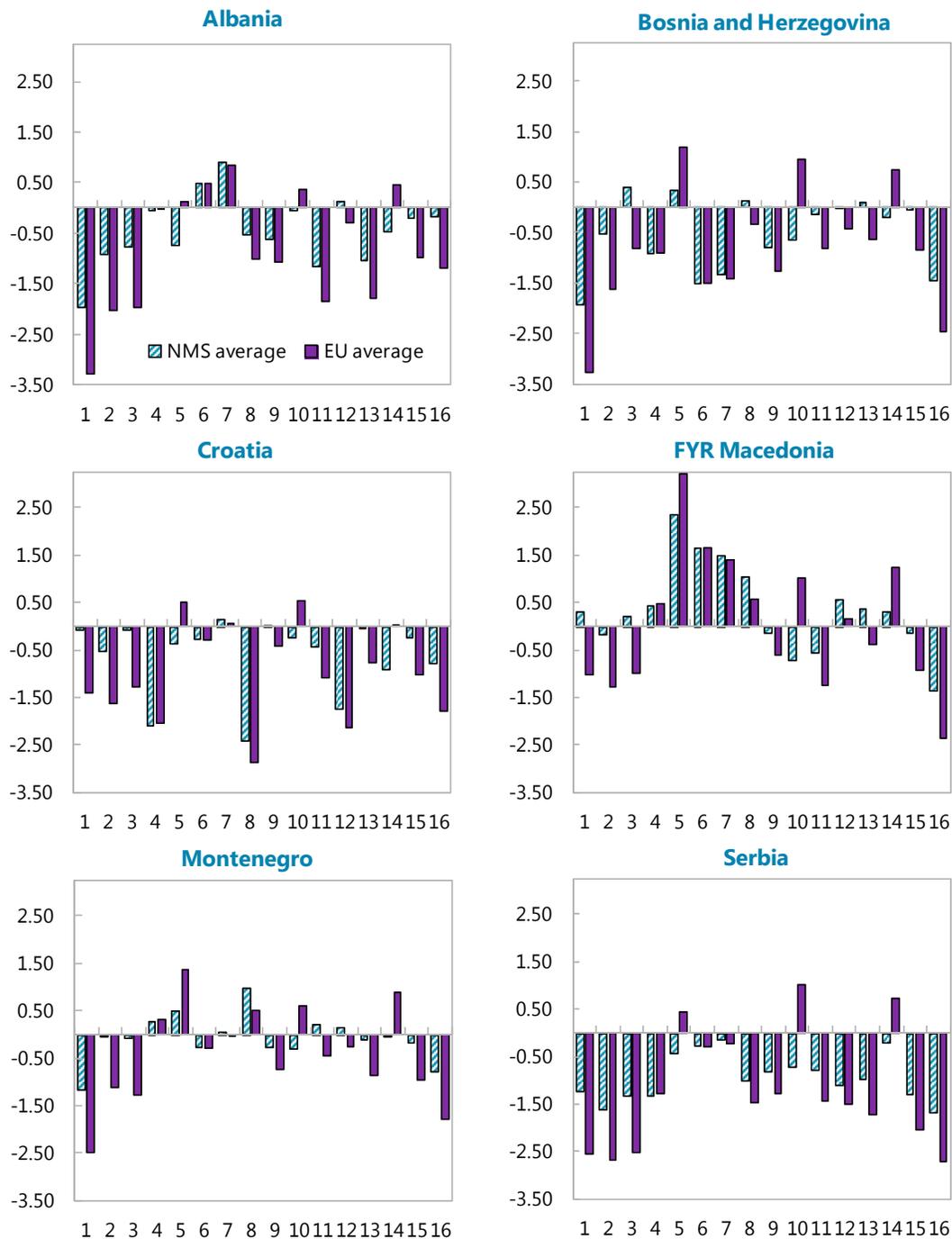
**Annex Figure 1.4.3. Reform Gaps: Infrastructure**  
(Standard deviations)



Sources: World Economic Forum; and IMF staff calculations.

Note: Kosovo data is unavailable. Global Competitiveness Report, sub-indicators of pillar "Infrastructure": 1 - Quality of overall infrastructure, 2 - Quality of roads, 3 - Quality of railroad, 4 - Quality of ports, 5 -Quality of air transport infrastructure, 7 - Quality of electricity supply, 8 - Mobile telephone subscriptions, 9 - Fixed telephone lines. Excluded is sub-indicator 6 - "Availability of airline seats", as it is related to the size of a country.

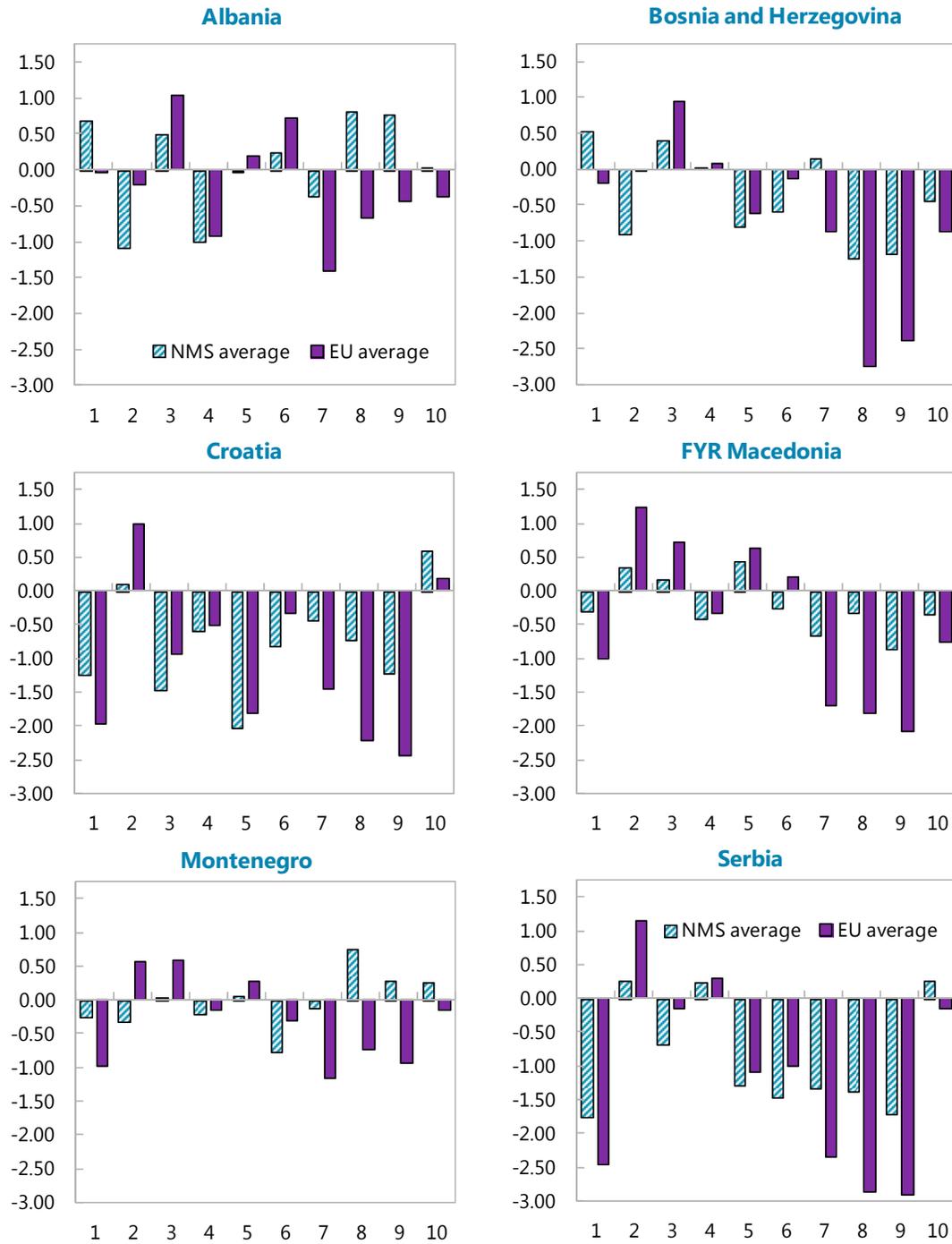
**Annex Figure 1.4.4. Reform Gaps: Goods Market Efficiency**  
(Standard deviations)



Sources: World Economic Forum; and IMF staff calculations.

Note: Kosovo data is unavailable. Global Competitiveness Report, sub-indicators in pillar "Goods Markets Efficiency": 1 - Intensity of local competition, 2 - Extent of market dominance, 3 - Effect of anti-monopoly pol., 4 - Effect of taxation on incentives to invest, 5 - Total tax rate, 6 - # of proc. to start business, 7 - # of days to start business, 8 - Agricultural policy costs, 9 - Prevalence of trade barriers, 10 - Trade tariffs, 11 - relevance of foreign ownership, 12 - Business impact of rules on FDI, 13 - Burden of customs procedures, 14 - Imports, %GDP, 15 - Degree of customer orientation, 16 - Buyer sophistication.

**Annex Figure 1.4.5. Reform Gaps: Labor Market Efficiency**  
(Standard deviations)



Sources: World Economic Forum; and IMF staff calculations.

Note: Data for Kosovo is unavailable. Global Competitiveness Report, sub-indicators in pillar "Labor Market Efficiency": 1 - Cooperation in labor employer relations, 2 - Flexibility of wage determination, 3 - Hiring and firing practices, 4 - Redundancy costs, 5 - Effect of taxation on incentives to work, 6 - Pay and productivity, 7 - Reliance on professional management, 8 - Country capacity to retain talent, 9 - Country capacity to attract talent, 10 - Women in labor force.

### Annex 1.5. Labor Market Outcomes—Regression Analysis

Our empirical analysis links labor market outcomes at the individual level with a number of key macroeconomic and country-level structural and institutional indicators. Specifically, transitions between employment, unemployment, and non-participation in the labor force are linked by means of a micro-econometric multinomial logit model to various *demographic characteristics of the labor force* (age, disability, education, and marital status, as well as employment status from a year ago), *macroeconomic factors* (overall economic growth rate, investment level, credit growth, as well as indicators of fiscal stance, public expenditures, and remittances inflows), and *structural factors* (indicators of institutional rigidities in the labor market and those reflecting the country's stage of transition to market economy). The micro-level data are derived from labor force surveys of four Western Balkan countries (Bosnia and Herzegovina, Kosovo, FYR Macedonia, and Serbia) as well as Bulgaria, Poland, and Romania for 2006–13, thus covering periods of the precrisis boom, the crisis bust, and the postcrisis recovery for a diverse group of countries in the region.

Annex Table 1.5.1. Determinants of Labor Market Outcomes: Multinomial Logistic Regression Estimates

Employment status	BGR	POL	ROU	BIH	SRB	MKD	UKV	Pooled data 2/				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>0=Inactive</b>												
Constant	0.216 ***	1.495 ***	2.091 ***	3.52 ***	-0.1 **	-1.167 ***	2.012 ***	2.864 ***	7.437 ***	8.289 ***	5.947 ***	10.504 ***
<b>Micro characteristics</b>												
Age ≤ 20	2.461 ***	2.027 ***	1.068 ***	0.438 ***	2.037 ***	2.208 ***	0.88 ***	1.541 ***	1.556 ***	1.554 ***	1.545 ***	1.557 ***
20 < Age ≤ 25	1.015 ***	0.277 ***	0.587 ***	-0.06	0.745 ***	0.677 ***	-0.003	0.379 ***	0.414 ***	0.429 ***	0.426 ***	0.432 ***
45 < Age ≤ 55	0.219 ***	0.018	0.512 ***	0.523 ***	0.927 ***	0.544 ***	0.142 ***	0.507 ***	0.528 ***	0.533 ***	0.537 ***	0.53 ***
Age > 55	3.049 ***	2.546 ***	3.022 ***	2.467 ***	3.624 ***	3.019 ***	1.424 ***	2.98 ***	3.04 ***	3.037 ***	3.044 ***	3.041 ***
Married	...	0.082 ***	-0.09 ***	-0.248 ***	-0.102 ***	-0.27 ***	0.243 ***	-0.028 **	-0.035 **	-0.023 **	-0.027 **	-0.023 **
Female	0.542 ***	0.504 ***	0.447 ***	0.506 ***	0.65 ***	1.293 ***	0.728 ***	0.519 ***	0.545 ***	0.554 ***	0.555 ***	0.555 ***
Disabled	...	1.03 ***	3.402 ***	2.06 ***	...	...	4.755 ***	1.491 ***	1.527 ***	1.528 ***	1.519 ***	1.539 ***
Education: below high school	0.449 ***	-0.003	0.649 ***	-1.111 ***	0.351 ***	0.597 ***	0.051	-0.003	0.125 ***	0.182 ***	0.196 ***	0.182 ***
Education: university 1/	0.243 ***	-0.548 ***	-0.762 ***	-2.021 ***	-0.238 ***	-0.477 ***	-0.961 ***	-0.633 ***	-0.554 ***	-0.52 ***	-0.521 ***	-0.513 ***
Education: graduate	0.576	...	0.037	-1.629 ***	0.44 **	4.597 ***	-0.9 ***	...	...	...	...	...
Status one year ago: unemployed	...	-2.659 ***	-3.761 ***	-3.248 ***	-2.339 ***	...	-2.649 ***	-2.911 ***	-2.928 ***	-2.951 ***	-2.963 ***	-2.952 ***
<b>Macroeconomic indicators</b>												
Real GDP growth	...	...	...	...	...	...	...	0.113 ***	0.139 ***	0.067 ***	0.061 ***	0.055 ***
Investment	...	...	...	...	...	...	...	0.035 ***	0.015 ***	0.024 ***	0.029 ***	0.032 ***
Private sector growth	...	...	...	...	...	...	...	-0.031 ***	-0.053 ***	-0.045 ***	-0.043 ***	-0.039 ***
General government fiscal balance	...	...	...	...	...	...	...	0.015 ***	0.089 ***	0.145 ***	0.136 ***	0.117 ***
General government expenditures	...	...	...	...	...	...	...	-0.048 ***	-0.071 ***	-0.108 ***	-0.1 ***	-0.099 ***
Remittances	...	...	...	...	...	...	...	0.058 ***	0.171 ***	0.197 ***	0.194 ***	0.146 ***
<b>Structural indicators</b>												
<b>Labor market: flexibility</b>												
Cooperation in labor-employer relations	...	...	...	...	...	...	...	...	-0.011 ***	-0.01 ***	-0.008 ***	-0.012 ***
Flexibility of wage determination	...	...	...	...	...	...	...	...	-0.006 ***	-0.007 ***	-0.007 ***	-0.006 ***
Hiring and firing practices	...	...	...	...	...	...	...	...	-0.005 ***	0.005 ***	0.004 ***	0.008 ***
Redundancy costs	...	...	...	...	...	...	...	...	-0.039 ***	-0.03 ***	-0.029 ***	-0.022 ***
<b>Labor market: efficient use of talent</b>												
Pay and productivity	...	...	...	...	...	...	...	...	...	0.02 ***	0.019 ***	0.02 ***
Reliance on professional management	...	...	...	...	...	...	...	...	...	-0.02 ***	-0.017 ***	-0.02 ***
Women in labor force	...	...	...	...	...	...	...	...	...	0	0.001	0.001 *
<b>Stage of transition</b>												
EBRD transition index	...	...	...	...	...	...	...	...	...	...	0.388 ***	...
FDI per capita	...	...	...	...	...	...	...	...	...	...	...	-0.401 ***
<b>1=Unemployed (base outcome)</b>												
<b>1=Employed</b>												
Constant	2.376 ***	2.818 ***	3.633 ***	2.29 ***	1.809 ***	0.558 ***	3.843 ***	3.843 ***	7.149 ***	7.575 ***	0.687 **	2.877 ***
<b>Individual characteristics</b>												
Age ≤ 20	-1.457 ***	-1.791 ***	-2.128 ***	-2.105 ***	-1.443 ***	-0.905 ***	-2.486 ***	-1.893 ***	-1.902 ***	-1.903 ***	-1.924 ***	-1.908 ***
20 < Age ≤ 25	-0.826 ***	-1.057 ***	-0.878 ***	-0.625 ***	-0.753 ***	-0.667 ***	-0.833 ***	-0.929 ***	-0.925 ***	-0.926 ***	-0.932 ***	-0.931 ***
45 < Age ≤ 55	0.153 ***	0.142 ***	-0.027	0.148 ***	0.283 ***	0.233 ***	0.303 ***	0.144 ***	0.135 ***	0.135 ***	0.146 ***	0.139 ***
Age > 55	0.186 ***	-0.216 ***	0.366 ***	-0.13 **	0.656 ***	0.17 ***	-0.472 ***	0.219 ***	0.24 ***	0.253 ***	0.262 ***	0.258 ***
Married	...	0.603 ***	0.304 ***	0.446 ***	0.465 ***	0.471 ***	0.51 ***	0.501 ***	0.49 ***	0.483 ***	0.475 ***	0.482 ***
Female	-0.014	-0.327 ***	-0.269 ***	-0.518 ***	-0.306 ***	-0.088 ***	-1.447 ***	-0.302 ***	-0.295 ***	-0.293 ***	-0.296 ***	-0.295 ***
Disabled	...	-0.863 ***	-1.836 **	-0.547 **	...	...	1.566 **	-0.667 ***	-0.618 ***	-0.601 ***	-0.628 ***	-0.62 ***
Education: below high school	-0.998 ***	0.039	0.457 ***	0.233 **	-0.12 **	-0.378 ***	-1.373 ***	0.053 ***	0.14 ***	0.15 ***	0.175 ***	0.142 ***
Education: university 1/	0.752 ***	0.298 ***	0.097 **	0.462 ***	0.284 ***	0.418 ***	-0.474 ***	0.268 ***	0.375 ***	0.384 ***	0.376 ***	0.361 ***
Education: graduate	1.531 **	...	1.361	0.617 **	1.148 ***	2.172 ***	0.191	...	...	...	...	...
Status one year ago: unemployed	...	-3.427 ***	-4.67 ***	-3.668 ***	-2.594 ***	...	-3.868 ***	-3.498 ***	-3.57 ***	-3.591 ***	-3.618 ***	-3.591 ***
<b>Macroeconomic indicators</b>												
Real GDP growth	...	...	...	...	...	...	...	0.06 ***	0.101 ***	0.07 ***	0.058 ***	0.103 ***
Investment	...	...	...	...	...	...	...	0.043 ***	0.006 **	0.014 ***	0.023 ***	-0.003
Private sector growth	...	...	...	...	...	...	...	-0.014 ***	-0.028 ***	-0.021 ***	-0.016 ***	-0.034 ***
General government fiscal balance	...	...	...	...	...	...	...	-0.058 ***	-0.041 ***	-0.041 ***	-0.07 ***	-0.006
General government expenditures	...	...	...	...	...	...	...	-0.051 ***	-0.083 ***	-0.105 ***	-0.082 ***	-0.126 ***
Remittances	...	...	...	...	...	...	...	-0.042 ***	-0.001	-0.008 *	0.016 ***	0.088 ***
<b>Structural indicators</b>												
<b>Labor market: flexibility</b>												
Cooperation in labor-employer relations	...	...	...	...	...	...	...	...	0.005 ***	0.002 ***	0.008 ***	0.006 ***
Flexibility of wage determination	...	...	...	...	...	...	...	...	-0.008 ***	-0.009 ***	-0.009 ***	-0.013 ***
Hiring and firing practices	...	...	...	...	...	...	...	...	-0.008 ***	-0.004 ***	-0.008 ***	-0.012 ***
Redundancy costs	...	...	...	...	...	...	...	...	-0.019 ***	-0.014 ***	-0.016 ***	-0.027 ***
<b>Labor market: efficient use of talent</b>												
Pay and productivity	...	...	...	...	...	...	...	...	...	0.009 ***	0.004 ***	0.009 ***
Reliance on professional management	...	...	...	...	...	...	...	...	...	-0.005 ***	0.004 ***	-0.006 ***
Women in labor force	...	...	...	...	...	...	...	...	...	0.003 ***	0.004 ***	0.001 **
<b>Stage of transition</b>												
Combined EBRD transition index	...	...	...	...	...	...	...	...	...	...	1.242 ***	...
FDI per capita	...	...	...	...	...	...	...	...	...	...	...	0.825 ***
Log likelihood	-123,043	-247,047	-215,371	-90,141	-141,478	-266,987	-64,837	-700,709	-690,966	-688,909	-688,041	-687,798
Pseudo R <sup>2</sup>	0.310	0.352	0.303	0.368	0.279	0.294	0.316	0.339	0.348	0.350	0.351	0.351
Number of observations	211,110	443,760	380,783	198,279	209,568	382,562	106,296	1,232,390	1,232,390	1,232,390	1,232,390	1,232,390
Years	2006-12	2006-12	2006-12	2006-13	2008-13	2006-12	2006-09, 2012					2006-13, depending on availability

Sources: National Labor Force Surveys; and IMF staff estimates.

1/ This variable includes graduate education in cross-country regressions.

2/ Excludes Bulgaria.

## Annex 2.1. Estimating the Determinants of Expenditure Policy

This annex examines how responsive expenditure policy is to the business cycle, how much of spending is determined by inertia (for instance, on account of mandatory spending), and how much remains unexplained after accounting for these factors. This residual—an unexplained component—could for instance reflect the political business cycle rather than economic considerations. We focus here on the expenditure side because, with the exception of discretionary tax rate changes and lump-sum receipts, revenues generally reflect their cyclical tax bases (Coricelli and Fiorito 2013).

We extract this unexplained component of fiscal policy by estimating a fiscal policy rule, quantifying the unexpected variation in fiscal policy. In line with the work of Fatás and Mihov (2003, 2006), Afonso, Agnello and Furceri (2010), and Agnello, Furceri, and Sousa (2013), we estimate the following rule for each country  $i$  ( $i = 1, \dots, N$ ):

$$g_{it} = \theta_i + \lambda_i g_{it-1} + \beta_i \Delta y_{it} + \gamma_i \Delta y_{it-1} + \Gamma_i X_{it} + \varepsilon_{it}, \quad (1)$$

where  $g$  is the logarithm of real government spending,  $y$  is the logarithm of real GDP and  $X$  is a set of controls including inflation and the logarithm of real public debt. We then examine how much of government spending is explained by persistence (captured using lagged spending), how responsive it is to the business cycle (captured using current and lagged GDP growth), inflation and the level of debt, and how much of it remains unexplained. Thus  $\lambda_i$  is a measure of persistence;  $\beta_i$  and  $\gamma_i$  gauge the responsiveness of fiscal policy to the business cycle; and  $\varepsilon_{it}$  is the unexpected variation in fiscal policy that could capture the impact of, for example, elections. We include country fixed effects to account for the impact of country-specific factors. We use a panel dataset including 34 countries (Western Balkans, EU).

Across all countries, government spending exhibits a high degree of persistence, with lagged expenditure explaining most of the variation in current expenditure. Current GDP growth has a negative impact on spending, possibly capturing effects through lower revenues requiring corresponding spending cuts. Debt has a significant constraining impact on spending only in the Advanced EU economies and the Baltics, but not in the Western Balkans and Central Europe. The Western Balkans appear to be less responsive to the business cycle than the New Member States or Advanced EU economies. In fact, the unexpected variation appears to be somewhat larger for the Western Balkans, as less of the variation in spending over time for a given country is explained by cyclical factors and inertia.

Annex Table 2.1.1. Fiscal Policy Responsiveness, Persistence and Discretion

	Full sample	WBS	CEES	Baltics	EU15
<i>Log real expenditure (lagged)</i>	0.911***	0.872***	0.919***	0.898***	0.935***
	-0.012	-0.037	-0.035	-0.046	-0.015
<i>Change in log real GDP</i>	-0.843***	-0.336	-0.523**	-0.984***	-1.140***
	-0.07	-0.267	-0.177	-0.127	-0.107
<i>Change in log real GDP (lagged)</i>	0.172*	0.203	0.189	0.333*	0.068
	-0.068	-0.212	-0.175	-0.148	-0.106
<i>Inflation</i>	-0.005***	-0.004***	-0.007**	-0.005**	-0.007***
	-0.001	-0.001	-0.002	-0.002	-0.002
<i>Log real debt</i>	-0.031***	-0.012	-0.013	-0.062*	-0.043***
	-0.007	-0.033	-0.014	-0.026	-0.008
<i>Constant</i>	0.491***	0.498*	0.363*	0.435*	0.518***
	-0.063	-0.214	-0.147	-0.191	-0.082
<i>Number of obs.</i>	631	95	119	49	336
<i>Number of fixed effects (countries)</i>	34	7	7	3	15
<i>R-sq within</i>	0.935	0.902	0.948	0.966	0.942
<i>R-sq between</i>	0.899	0.993	0.995	0.877	0.631
<i>R-sq overall</i>	0.909	0.974	0.950	0.911	0.847

Note: The dependent variable is log real expenditure. Standard errors in parentheses, \* denotes significant at the 5 percent level, \*\* at the 1 percent level, \*\*\* at the 0.1 percent level.

## Annex 2.2. Estimating the Determinants of the Recession and the Recovery

We estimate a cross-sectional regression of the size of the peak-to-trough decline in real GDP on explanatory factors designed to measure the degree of overheating and imbalances in the boom period (Annex Table 2.2.1).<sup>1</sup> We find that having a fixed exchange rate (captured by using a dummy variable) is associated with a larger decline in growth. Wider current account deficits in the boom years are also associated with bigger recessions. Higher precrisis capital inflows, however, appear to moderate the drop, possibly reflecting the beneficial effects of predominately foreign direct investment inflows during the early boom years. The regression does not yield significant coefficients on the variables for fiscal policies, wage growth, and credit.<sup>2</sup> Western Balkan economies experienced a smaller fall than New Member States (as captured using a dummy variable), even with other conditioning factors.

We also examine the determinants of postcrisis recovery using a cross-sectional regression of real GDP growth since the trough (Annex Table 2.2.2).<sup>3</sup> A fixed exchange rate is found to support the recovery, as does stronger export performance. Surprisingly, stronger deleveraging also appears to be associated with stronger growth. Discretionary fiscal policy (as constructed in Annex 2.1) again does not have a significant effect, and neither do capital inflows.

**Annex Table 2.2.1. Determinants of the Size of the Recession**

<b>Dependent variable: Size of peak to trough fall in real GDP growth</b>	<b>Coef.</b>	<b>Std. Err.</b>
<i>Fixed exchange rate</i>	8.26**	2.46
<i>Primary deficit (2006-2008 avg)</i>	0.52	0.56
<i>CA deficit (2006-2008 avg)</i>	0.6*	0.23
<i>Wage growth (2006-2008 avg)</i>	0.07	0.21
<i>Increase in credit (as % of GDP, 2008 rel. to 2003)</i>	0.02	0.06
<i>Capital inflows (2006-2008 avg)</i>	-1.09***	0.25
<i>Western Balkans</i>	-7.01***	1.76
<i>Number of obs</i>	16	
<i>R-squared</i>	0.89	

Source: World Economic Outlook, national authorities and staff calculations.

Note: Sample includes Western Balkans and New Member States. Constant not reported, robust standard errors.

\*\*\* denotes significant at 0.1% level, \*\* at 1%, \* at 5%. Export boost is defined as the increase in exports as a share of GDP, comparing the 2009-2013 average with the 2006-2008 average (positive if exports as a share of GDP are higher after the crisis). Import compression is defined as the fall in imports as a share of GDP, again comparing the 2009-2013 average with the 2006-2008 average (positive if imports as a share of GDP are lower after the crisis).

**Annex Table 2.2.2. Determinants of the Recovery**

<b>Dependent variable: Trough to 2013 increase in real GDP growth</b>	<b>Coef.</b>	<b>Std. Err.</b>
<i>Fixed exchange rate</i>	6.87***	1.21
<i>Change in credit (as % of GDP, 2013 rel. to 2008)</i>	-0.26***	0.06
<i>Capital inflows (2009-2013 avg)</i>	-0.31	0.25
<i>Extent of import compression</i>	-0.05	0.15
<i>Extent of export boost</i>	0.37*	0.14
<i>Discretionary fiscal policy (2009-2013 avg)</i>	1.43	2.32
<i>Western Balkans</i>	-1.81	1.56
<i>Number of obs</i>	16	
<i>R-squared</i>	0.95	

Source: World Economic Outlook, national authorities and staff calculations.

Note: Sample includes Western Balkans and New Member States. Constant not reported, robust standard errors.

\*\*\* denotes significant at 0.1% level, \*\* at 1%, \* at 5%. Export boost is defined as the increase in exports as a share of GDP, comparing the 2009-2013 average with the 2006-2008 average (positive if exports as a share of GDP are higher after the crisis). Import compression is defined as the fall in imports as a share of GDP, again comparing the 2009-2013 average with the 2006-2008 average (positive if imports as a share of GDP are lower after the crisis).

<sup>1</sup> The year of the trough is 2009. Peak years (2006, 2007, or 2008) vary by country.

<sup>2</sup> Note, however, that wage growth and credit growth are significantly negatively correlated with the size of the peak to trough decline (that is, the stronger wage and credit increases, the more severe the downturn that followed) and are also correlated with current account deficits. Hence, the current account variable is effectively “knocking out” the wage and credit variables in the regression, but that does not imply that wages and credit were not *economically* significant. Primary deficits are uncorrelated with the size of the subsequent downturn.

<sup>3</sup> The sample period is 2009 to 2013 across all countries.

### Annex 2.3. Fiscal Policies in the Western Balkans

Looking forward, the Western Balkan countries face important structural challenges as they strive to adjust to a postboom environment. Annex Table 2.3.1 summarizes some of the challenges and presents policy recommendations. Efforts aimed at containing deficits and debt levels are also needed in light of aging populations, which over time will add to expenditure pressures. And while in some countries substantial adjustment has already taken place, additional consolidation would be needed to achieve further deficit reduction. Crucially, fiscal consolidation should be complemented by compositional changes, reducing in particular the share of current expenditures. Controls in the broader public sector should also be improved as off-budget operations and the legacy of social and subsidy spending continue to complicate budget planning in several Western Balkans countries. In most countries revenue measures should be seen as a complement to adjustment on the expenditure side. Structural fiscal reforms should focus on broadening the tax base and fighting the grey economy.

**Annex Table 2.3.1. Challenges and Policy Recommendations for the Western Balkan Countries**

	Challenges	Policy Recommendations
<b>Albania</b>	High debt and financing needs, heavily dependent on banks	Fiscal consolidation largely through revenue measures and phasing out energy subsidies
<b>Bosnia and Herzegovina</b>	Balance the need for further fiscal consolidation with supporting growth; composition of spending	Contain current, non-disaster related spending, notably wages and benefits; improve the quality and targeting of public spending; continue on-going efforts to improve revenue collection and administration
<b>Croatia</b>	High fiscal deficits, rapidly increasing public debt and elevated risk spreads	Emphasis on revenue measures in near term in view of already fragile growth; gradual switch to expenditure consolidation in subsequent years
<b>Kosovo</b>	Safeguard fiscal sustainability, arrest the worsening composition of the budget	Wage and benefit moderation; improve tax compliance; shift tax policy gradually towards domestically collected taxes
<b>Macedonia, FYR</b>	Rebuild buffers and safeguard sustainability of public finances and the exchange rate peg	Fiscal consolidation embedded in a comprehensive spending review
<b>Montenegro</b>	High and rising debt, preserving market access	Fundamental expenditure reform, including on the pension system and public sector wages
<b>Serbia</b>	High debt, increasing debt dynamics	Ambitious and sustained fiscal adjustment through curtailing mandatory spending (wages and pensions), reducing state aid to weak state-owned enterprises

High persistence reflects a common practice of incremental budgeting with a one-year time horizon. Longer budgeting horizons and fiscal rules can help contain spending pressures during good times and a medium-term strategy would also facilitate the planning of large investment projects. Empirical studies suggest that fiscal rules have been generally associated with improved fiscal performance (IMF 2009), though of course they are only successful if there is sufficient political commitment to adhere to them. While some countries in the region have recently adopted fiscal rules (Croatia, Kosovo, Montenegro, and Serbia), enforcement is weak in some of them. It should be acknowledged that running large surpluses during boom times may be politically difficult, in particular in catch-up economies, with large demands for improvements in infrastructure (particularly Albania, Kosovo, FYR Macedonia, and Montenegro).

Fixed exchange rates and a high dependence on external financing make fiscal consolidation even more crucial. Fiscal consolidation and fiscal buffers are particularly important in the context of unilaterally euroized economies (Montenegro, Kosovo), currency boards (Bosnia and Herzegovina) and exchange rate pegs (Croatia, FYR Macedonia). The prospect of tighter global financing conditions ahead could increase vulnerabilities in countries with a high reliance on external financing.

### Annex 3.1. Benchmarking Financial Development and Explaining Gaps

When comparing levels of financial development across countries, it is useful to take into account the level of economic development and structural characteristics, regardless of the policies or institutions of a country (Beck and others, 2008). In particular, structural characteristics such as income per capita, population (or market) size, population density and age profile, and whether the country is a transition economy, fuel exporter or offshore financial center, have generally been found to be associated with indicators of financial development.<sup>1</sup>

Controlling for these structural, or policy-invariant, variables in a regression provides us with a country's structural "benchmark," that is, an expected average (if using least-squares regressions) or median (or other percentile, if using quantile regressions). The World Bank's Finstat database provides estimates of these benchmarked indicators for 183 countries. The pooled regression assumes a common path of development (as financial systems fulfill similar functions and face similar frictions) and includes time dummies to control for the effect of global conditions on all countries.

The empirical estimates for bank deposit and private credit depth show a positive relationship between income per capita (though it levels off at high income levels) as well as size of market. In contrast, age dependency (i.e., in particular a relatively greater share of young people in population), and being a transition economy tends to be associated with lower depth. Population density is associated with higher deposit depth but lower credit depth.

**Annex Table 3.1.1. Median Regression Results for Bank Depth Indicators**

Statistically significant coefficients in bold (p-value<0.1)										
	Log GDP per capita	Log GDP per capita squared	Log Population size	Log Population density	Log Age Dependency, young	Log Age Dependency, old	Offshore dummy	Transition dummy	Fuel exporter	Pseudo R2
Domestic Bank Deposits/GDP	<b>0.990</b>	<b>-0.0485</b>	<b>0.0360</b>	<b>0.0965</b>	<b>-0.484</b>	-0.0461	<b>0.378</b>	<b>-0.736</b>	-	0.45
Private Credit/GDP	<b>0.628</b>	<b>-0.0228</b>	<b>0.0304</b>	0.0109	<b>-0.573</b>	<b>0.119</b>	<b>0.404</b>	<b>-0.744</b>	-	0.47

Source: Feyen and Kibuuka, *FinStat 2013*.

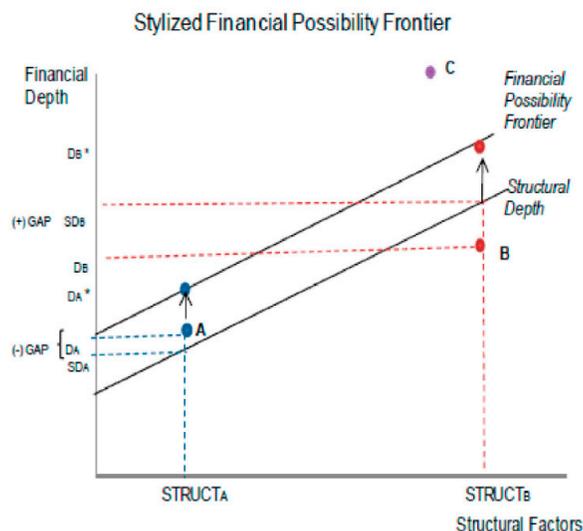
It is important to note that that the structural depth is not the "frontier,"<sup>2</sup> as it does not take into account institutional and other long-term policy variables that can affect depth either positively or negatively. Rather, the gap between actual and benchmark levels of financial depth can be compared to institutional and policy factors to see if these explain either an overperformance or underperformance gap.<sup>3</sup> Thus, it may be possible to assess why a county has an overperforming gap even though it has a lower absolute level of an indicator than another country—for example compare Country A, at point A, with Country B, at point B.

<sup>1</sup> See Beck, Feyen, Ize, and Moizezowicz (2008). Maximizing model fit was used as a criterion to select the final set of controls from the large set of potential controlling factors.

<sup>2</sup> The frontier would be the constrained optimum at which there would be a trade-off between more depth and less financial stability, or vice versa. See Beck and Feyen (2013).

<sup>3</sup> Including institutional factors directly into the benchmarking regression would raise the issue of endogenous variables.

Annex Figure 3.1.1. Stylized Financial Possibility Frontier



Source: Barajas and others (2013).

The position of B (underperformance) may be because of policy (macroeconomic) instability or institutional weaknesses (for example, the result of weak information or protection for creditors). In contrast, the position of A may indicate a relatively stronger macroeconomic or market structure environment. However, if there is a very large gap that cannot be well explained by policies, then this gap could indicate an "excess" or "boom" that may eventually be followed by a bust (for example point C in Annex Figure 3.1.1 above).

Recent work has found that gaps, or changes in them, can be affected by *macro-financial variables* (such as inflation rates, remittances, and growth) as well as by the enabling or institutional environment, including *market structure* (such as foreign bank entry and competition) in addition to *regulatory factors* (such as strength of banking regulation and supervision) and *institutional factors*, particularly creditor rights and enforcement costs.

**Annex Table 3.1.2. Impact of Macro and Enabling Environment on Private Credit  
Depth and Depth Gap**

Authors	Cottarelli and others (2003) <sup>1</sup>	De la Torre, Feyen, and Ize (2011) <sup>2</sup>	Barajas and others (2013) <sup>3</sup>
Country coverage/observations	24 nontransition countries	118 observations	57 observations <sup>2</sup>
Data range	1973-96	1980-2008	2003-07
Estimation	Random effects GLS	Median regression on cross-sectional averages	OLS regression
<i>Macro-financial</i>			
Public debt to GDP	-0.164***		
Inflation rate <sup>4</sup>	-0.843***		-35.095*
High inflation dummy	-0.064***		
High inflation dummy*inflation rate	0.843***		
GDP growth <sup>5</sup>		7.1***	-2.232*
Credit crash/banking crisis <sup>6</sup>		-111.3***	0.964
Exchange rate regime			2.437** <sup>7</sup>
Remittances			-1.411
Gross capital inflows			0.028*** <sup>8</sup>
<i>Enabling/institutional environment</i>			
Liberalization index <sup>9</sup>	0.189***		
Bank entry requirements <sup>10</sup>	-0.031		-9.404**
Accounting	0.008***		
German legal origin	0.266**		
Lerner index (competition)			-59.488* <sup>11</sup>
Financial reform			-54.371** <sup>12</sup>
Institutional risk			0.326 <sup>13</sup>
Enforcement costs		-4.6*** <sup>14</sup>	
Creditor rights		2.1***	-6.872** <sup>15</sup>
Creditor information		0.8	
Property rights		0.0	
<i>Trend</i>	0.003		
<i>Constant</i>	-0.759***		-7.321
Fit	0.61	0.57	0.343

Source: Compiled by staff from papers cited above.

Note: \*, \*\*, \*\*\* shows whether variables were significant at the 10, 5 or 1 percent level.

<sup>1</sup> Estimate of depth.

<sup>2</sup> Looks at factors affecting gap between actual and benchmark (as estimated in Finstat). Thus a positive gap signifies overperforming gap.

<sup>3</sup> Gap, measured as benchmark minus actual; thus a negative gap signifies overperforming. Specification 1 reported unless otherwise noted.

<sup>4</sup> For Barajas and others (2013), the inverse of inflation.

<sup>5</sup> For De la Torre, Feyen, and Ize (2011), average annual growth over the sample period. For Barajas and others (2013), lagged GDP growth over the previous five years.

<sup>6</sup> For De la Torre, Feyen, and Ize (2011), fraction of sample years in which a country experienced an annual decline in domestic private credit to GDP of 20 percent or more; For Barajas and others (2013), banking crisis dummy (1 if had a crisis in the last decade).

<sup>7</sup> Index ranges from 0 (hard peg) to freely floating (8)

<sup>8</sup> Specification 6 reported, which is similar to specification 8. Other specifications exclude it or it does not appear as significant.

<sup>9</sup> Domestic financial system and capital account liberalization.

<sup>10</sup> For Cottarelli and others (2003), index of stringency of specific legal requirements for obtaining a license to operate a bank. For Barajas and others (2013), foreign entry restrictions index.

<sup>11</sup> Other specifications for market structure/competition variables show that foreign entry restrictions decrease the gap, while government ownership increases the gap, and the asset concentration and foreign bank share are not significant.

<sup>12</sup> Other specifications for regulatory variables show privatization and supervision decrease the gap, while other variables (e.g., geographic diversity requirements and credit controls) are not significant.

<sup>13</sup> Other specifications for institutional variables find credit rights decreases the gap, while financial, political and economic risk indexes are not significant.

<sup>14</sup> Index is principal component of Doing Business Indicators on contract enforcement costs, number of days to enforce a contract (in logs), and number of procedures to enforce a contract.

<sup>15</sup> Specification 6.

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