International Monetary Fund

Central, Eastern, and Southeastern Europe

Regional Economic Issues

OCT 13

FASTER, HIGHER, STRONGER—RAISING THE GROWTH POTENTIAL OF CESEE

October 2013

EXECUTIVE SUMMARY

As in other emerging market regions, **financial markets in Central, Eastern, and Southeastern Europe (CESEE) have been under pressure** since the spring. Countries with weaker fundamentals and those that had larger previous inflows have been affected more. Preparation for renewed turmoil, which could translate into considerable financing pressure for some countries, is essential.

The turmoil also poses risks to the recovery. CESEE is starting to come out of its second downturn in four years, benefiting from the pickup in the euro area. Disappointing growth would widen the small output gap that has opened in recent years. However, policy space for countercyclical policies is limited in many countries, as fiscal deficits are still elevated, public debt is on a rising trend, and pressure on exchange rates may limit the room for monetary policy.

Weak growth is not a recent problem. In the past five years, growth in CESEE has fallen far short of earlier expectations. GDP grew by only ½ percent a year on average, well below the 5 percent forecast made in the spring of 2008. The sluggish performance stemmed mostly from much lower potential growth due primarily to much weaker investment by firms, because of lower demand for their products, less financing availability, and a need to adjust balance sheets in the aftermath of an unsustainable pre-crisis investment boom.

Looking ahead, **headwinds to output growth are substantial**, which will make it harder to reduce unemployment and bring public debt ratios back to more comfortable levels. Capital flows, particularly from Western European parent banks, will likely stay low, growth in CESEE's trading partners is projected to remain modest, and the decline of the working age population is set to accelerate.

Thus, achieving "Faster, Higher, Stronger" growth is essential, and it will require decisive steps to:

- **Address crisis legacies.** A healthy financial sector is critical to provide credit and promote growth. Reducing obstacles in the legal, judicial, tax, and regulatory areas to the resolution of nonperforming loans will facilitate industrial restructuring and bank balance sheet clean-up. Rebuilding fiscal buffers will reduce risk premia and borrowing costs, with salutary effects for the private sector.

- **Boost the tradable sector.** Better balanced growth would enhance growth prospects. Empirical work shows that more open economies have grown faster. Closer integration into global supply chains will bring more rapid technology transfer and accelerated income convergence.

- **Improve the investment climate.** Simplifying regulation and strengthening competition, investor protection, and contract enforcement are priorities in many countries. In some, restructuring and/or privatization of large, loss-making state-owned enterprises and enhancing governance and transparency are also critical.

- **Ensure a well-functioning labor market.** High unemployment has a large structural component, which has been an issue since the early transition period. Enhancing active labor market policies will improve employee retraining and redeployment. Reform of vocational training and higher education may also be needed, as well as better targeting of unemployment benefits and social programs, to enhance labor market outcomes.

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I. RISKS FROM GLOBAL MARKET TURMOIL

Financial markets in emerging market countries (EMCs) have been in turmoil since mid-May. The turmoil was triggered by U.S. Federal Reserve Chairman Bernanke's testimony on May 22nd that was perceived as suggesting that the Fed could soon start to scale back its asset purchases, and was further exacerbated by concerns that growth in major emerging market countries was slowing.

Financial markets in CESEE have also been under pressure (Figure 1).[1] Stress was most evident in large outflows from country bond funds. Sovereign spreads, which had reached post-crisis lows in the first quarter of 2013, rose as did long-term bond yields. The stress was most intense in June.

Not all countries in CESEE were equally affected. The impact was largest on Serbia, Turkey, and Ukraine, while other countries were much less affected. Turkey was particularly hard hit with a sharp increase in long-term interest rates, a large drop in the stock market, and a significant depreciation of the currency (Annex Table A1). Several factors explain these differences:

- **Previous inflows.** Spreads increased the most and outflows were the largest in CESEE countries that had experienced the largest inflows and spread compression since the summer of 2012.

- **External fundamentals.** Countries with large external financing needs—proxied by current account deficit—saw much sharper increases in spreads than others. These countries had previously seen large inflows, which had helped sustain or even widen external deficits.

- **Domestic factors and vulnerabilities.** In Turkey, the stock market decline was exacerbated by political unrest. In Serbia, the increase of the already high fiscal deficit contributed, while in Ukraine the difficult political situation played a role.

CESEE countries have been generally less affected than other emerging market regions, likely reflecting lower capital inflows and less scope for growth disappointments.

- In CESEE, capital flows have been low since the 2008/09 crisis, when the large inflows of the pre-crisis boom years suddenly stopped. Bank flows in particular, have been negative, although this was partly offset by portfolio inflows (Figure 2). By contrast, capital flows to Latin America and emerging Asia *accelerated* after the crisis, and in 2010–11 were well above pre-crisis levels.

- Growth in CESEE had already slowed sharply compared with the pre-crisis boom years, and forecasts had been for modest growth all along. The risk of growth disappointments would therefore seem to be lower in CESEE.

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[1] CESEE refers to Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Rep., Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovak Rep., Slovenia, Turkey, and Ukraine.

Figure 1. Taper Talk Triggers Turmoil

Outflows spiked ...

CESEE bond funds flows: ETFs/mutal funds
(Billions of US dollars)

... particularly where previous inflows were large

Bond funds flows
(Percent of GDP)

Flows between May 22 and August 27, 2013

SVK
CZE
BIH
RUS
ROU
TUR
UKR
POL
SRB
HRV
LTU
HUN

y = -0.3611x - 0.0353
R² = 0.9145

Flows between August 1, 2012 and May 22, 2013

Spreads widened where previous compressions were large ...

EMBIG spreads
(Basis points)

Change between May 22 and August 27, 2013

BLR
UKR
SRB
TUR
HRV
HUN
RUS
LTU
POL
ROU
BGR

y = -0.8393x - 32.606
R² = 0.5583

Change between August 1, 2012 and May 22, 2013

... and current account deficits high.

Change in EMBIG spreads between May 22 and August 27, 2013 (basis points)

UKR
IDN
IND
TUR
SRB
ZAF
BRA
CHL
ROU
MEX
HRV
RUS
POL
LVA LTU
HUN
MYS
ARG
BGR

y = -13.147x + 58.96
R² = 0.439

Current account in 2013 (percent of GDP)

The impact varied ...

Turkey: 10-year government bond yield
(Percent)

... across the region.

Poland: 10-year government bond yield
(Percent)

Sources: Bloomberg; Haver Analytics; and IMF, World Economic Outlook database.
Note: Data end at October 8th for CESEE bond funds flows, and at October 1st for the
10-year government bond yields of Turkey and Poland.

Figure 2. More Turmoil: What Are the Risks?

Inflows have been low...

Capital flows to CESEE excl. Russia and Turkey
(Billions of USD dollars)

- FDI
- Portfolio investment
- Other investment
- Total

... including to banks.

External positions of BIS-reporting banks vis-à-vis CESEE
(Index, 2008:Q3 = 100)

- Emerging Asia
- Emerging Europe
- Latin America/Carribean

But renewed turmoil could accelerate deleveraging ...

Change of external positions of BIS-reporting banks
(Percent of 2012 GDP)

- CESEE, gross
- CESEE excl. Russia and Turkey, gross
- CESEE, net*
- CESEE excl. Russia and Turkey, net*

... exacerbated by portfolio outflows.

Average annual capital flows in 2011 and 2012
(Percent of GDP)

- FDI
- Portfolio investment
- Other investment
- Total

MDA MNE SRB TUR ALB POL MKD UKR HRV CZE ROU SVK LTU LVA BGR HUN SVN RUS EST BLR BIH CESEE CESEE ex. RUS & TUR

With low growth ...

Real GDP growth
(Percent)

- Growth 2003-08
- Growth 2011-12
- Growth 2013-15

CESEE excl. Russia and Turkey   Developing Asia   Latin America

... and fiscal gaps, many would feel the pressure.

Public debt in 2013 (percent of GDP)

HUN SVN SRB POL SVK HRV LTU BLR CZE UKR TUR MKD BGR

Fiscal financing needs in 2014 (percent of GDP)

Sources: BIS, Locational Banking Statistics; Haver Analytics; and IMF, World Economic Outlook database.
* Net of liabilities vis-à-vis banks.

The decision by the Fed in September to postpone tapering its bond purchase program provided a relief to EMCs. It prompted a broad-based rally in EMCs, including in CESEE. Countries regained some of their summer losses in bonds, stocks and currencies, and a number of sovereigns decided to issue bonds taking advantage of improved market conditions.

Nevertheless, countries need to prepare for a renewed intensification of the turmoil, as this could translate into considerable financing pressures. Some countries in CESEE have received large portfolio bond inflows since 2010, the share of domestically issued debt held by foreigners has increased significantly, and international issuance has been high. Higher funding costs or loss of market access would especially affect countries with still large fiscal deficits and fiscal financing needs as well as countries with a high foreign presence in the domestic bond market.

Market turmoil could also intensify funding reductions of western banks vis-à-vis CESEE. The second wave of external funding reductions that started in mid-2011 was triggered by the deterioration of market sentiment that resulted from the intensification of the euro area crisis. The importance of supply factors diminished in the second half of 2012 when supportive actions by major central banks improved market sentiment and reduced risk aversion, but renewed market pressures could well reverse this process.

A return of market turmoil could jeopardize the region's growth recovery. CESEE is recovering from the second downturn in four years. Year/year GDP growth picked up in the first half of 2013, for the first time since late 2011 (Figure 3). Just as the slowdown was exacerbated by spillovers from the euro area crisis—the combined effect of parent bank funding reductions and a slowdown of exports—the turnaround is benefitting from spillovers from the recovery in the euro area (Figure 4). Only three countries (Czech Republic, Croatia, and Slovenia) are expected to remain in recession this year, down from nine in 2012. The recovery has been further helped by the improvement in weather,

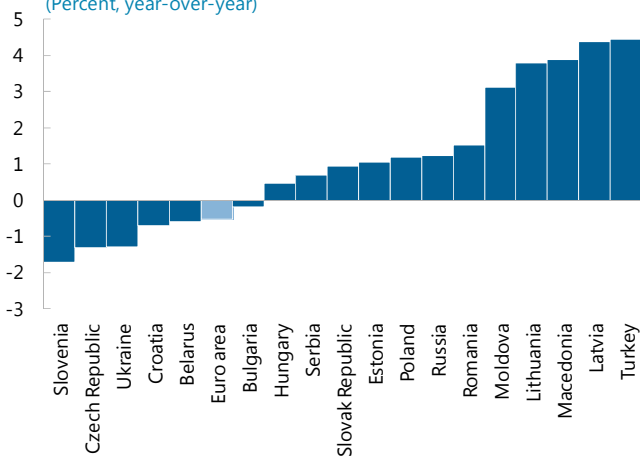**Figure 3. GDP Growth Positive in 2013:Q2**
(Percent, year-over-year)

Source: Haver Analytics.

Figure 4. GDP Growth Tangos with Euro Area Performance
(Percent, year-over-year)

Sources: Haver Analytics; and IMF, World Economic Outlook database.
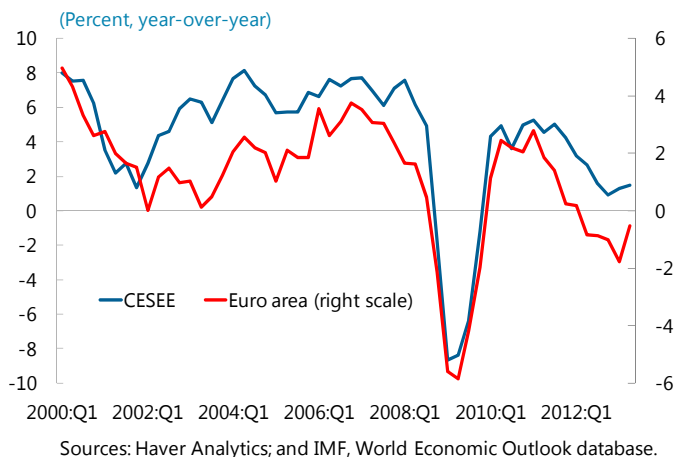
particularly in SEE where last year a very cold winter was followed by a severe drought in summer.[2] Growth in Turkey, which slowed sharply last year is rebounding this year on the back of a stronger domestic demand and accelerating credit growth.

Full-year GDP growth is now projected at 1.7 percent in 2013 and 2.7 percent in 2014, compared with 2.0 percent in 2012 (Annex Table A2). Growth for the region as a whole is weaker this year, as two of the largest countries (Poland and Russia), where growth had held up relatively well, slowed further. In Russia growth is held back by increasingly binding supply constraints, while in Poland robust domestic demand that held up growth even during the 2008/09 global crisis is now tapering off.

Policy Challenges

Given the more risk-averse external environment, the region needs to make headway in addressing the legacies of the 2008/9 crisis. Public debt has increased significantly in most CESEE countries since 2008, with much of the increase in foreign currency-denominated and/or external debt. The crisis and preceding credit boom have also saddled banks' balance sheets with a large stock of non-performing loans (NPLs). Reducing vulnerabilities should pay off in terms of sustained market access and lower spreads and financing costs.

Slower growth would widen the small output gap that has opened last year (Figure 5). On current projections, the regional output gap will be around -1 percent this year, much narrower than the output gap in the 2009 downturn, and also than that in the euro area and the United States. In terms of subregions, output gaps are larger in SEE and Central Europe, but only in the latter has there been a significant widening since 2011, reflecting stronger trade links with the euro area.

Figure 5. A Small Output Gap Has Reopened
(Percent of potential output)
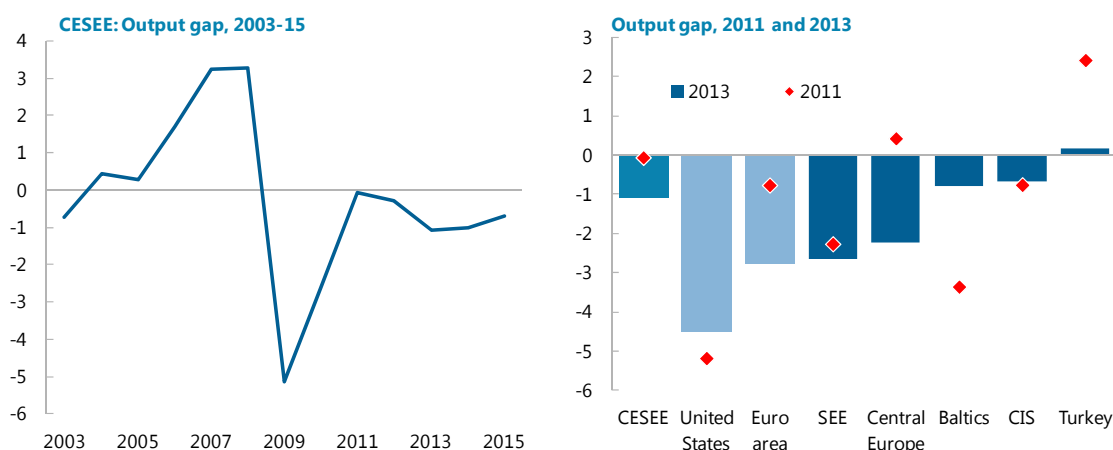
Source: IMF, World Economic Outlook database.

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[2] SEE includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Romania, and Serbia.

However, policy space for countercyclical policies is limited in many countries. Limited space is particularly an issue for fiscal policy: more than a third of CESEE countries still have headline deficits of over 3 percent of GDP (Annex Table A4), which are in large part structural, and debt levels are still on a rising trend. For countries with floating exchange rates, monetary policy remains the main line of defense, although pressure on exchange rates may limit the room for policy easing.

Most importantly, policies will need to aim at boosting potential growth. Low growth is to a large extent a structural problem, as potential GDP growth in the region has slowed substantially since the crisis (Figure 6). Potential GDP growth in 2012 was only 2.3 percent, down from 5.3 percent in 2007.

Figure 6. CESEE: Real and Potential GDP Growth
(Percent)

Source: IMF, World Economic Outlook database.
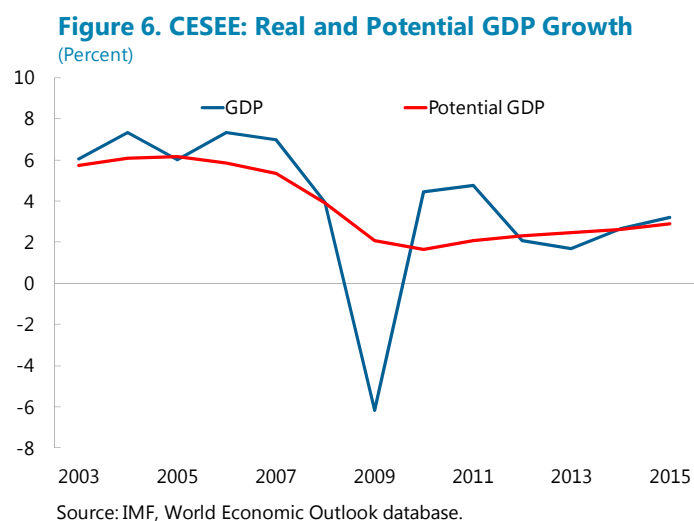
II.   THE POTENTIAL OUTPUT SLOWDOWN

In the past five years, growth in CESEE has fallen far short of earlier expectations. By 2008, the region had experienced a decade of strong growth, which was widely expected to continue. The IMF's Spring 2008 World Economic Outlook projected average growth for the region of 5 percent between 2008 and 2013, roughly the pace of the previous 5 years. In the event, the region as a whole grew by only ½ percent a year on average and most countries saw very large growth shortfalls (Annex Table A5).

Growth has also disappointed elsewhere, but in no region has the shortfall been as severe as in CESEE. In three quarters of CESEE countries, the level of real GDP in 2013 was more than 20 percent lower than had been expected; in almost a third it was more than 30 percent lower.

Disappointing growth was partly a cyclical phenomenon, but more important has been the slowdown in potential output growth itself. Potential output grew by only 1.7 percent annually between 2008 and 2012, down from 5.1 percent in 2003–08. The slowdown of potential growth in CESEE countries has been large compared to other emerging markets (Figure 7). As a result, potential growth in CESEE is now well below that in other EMCs.

A.   The Post-Crisis Decline

Potential output growth is a measure of the "growth potential" of the economy at a particular moment in time. Potential output is commonly defined as the highest level of real GDP that can be sustained without triggering overheating. If actual GDP rises and stays above potential, then inflation tends to pick up as demand for factors of production exceeds supply. The difference between actual and potential output—the output gap—is thus a measure of cyclical imbalances.[3] Over the long term growth rates are determined by potential output growth. Output cannot grow faster than potential output indefinitely, as eventually the level of output would exceed potential and the economy would start overheating.

Figure 7. Potential Output Slowdown
(Percent, average growth)
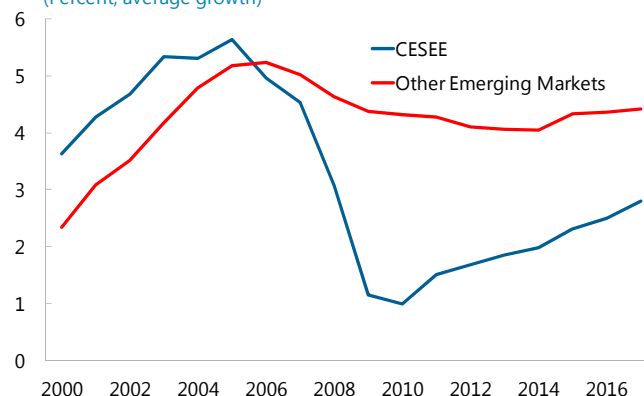
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: "Other Emerging Markets" includes Argentina, Brazil, Chile, India, Indonesia, Malaysia, Mexico, South Africa, and Thailand.

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[3] It should be acknowledged that this is a somewhat narrow indicator of imbalances, as it ignores other macro-financial indicators such as the current account deficit and asset price inflation. See Borio et al. (2013), Alberola et al. (2013) for a discussion of how to better integrate these other indicators of imbalances in a measure of "sustainable" output.

Potential and actual GDP growth are not completely independent of each other. Potential GDP is similar to an economy's production *capacity*, while GDP is actual production. Firms will not expand production capacity if there is little demand for their products and they have a lot of spare capacity. Prolonged periods of low growth are likely to result in fewer factories and lower productivity—not just a larger output gap. Similarly, a drop in investment will not only affect actual GDP, but also potential GDP, through its impact on the capital stock.

Estimates of potential output growth are uncertain, and previous estimates sometimes get revised significantly. A key problem is that as potential output is not directly measurable, estimates and forecasts of potential output vary depending on methodological choices. Another problem is that boom-bust cycles make it harder to distinguish the underlying growth rate. Thus, potential output growth tends to get overestimated during booms and underestimated during busts.

IMF staff estimates suggest that potential output growth has dropped sharply since 2008. In the past five years, potential output growth was only a third of its pre-crisis level[4] (Table 1). Other organizations have come to similar conclusions. Estimates of *pre-crisis* potential output levels and growth rates have been revised down as well, although this is of secondary importance compared with the slowdown in potential growth since 2008 (Figure 8). It should be acknowledged, however, that these estimates of the drop in potential output growth may in due course prove to be too somber, for the reasons noted above.

Growth accounting suggests that the key contributor to the slowdown was a sharp reduction in the growth rate of the capital stock (Figure 9).[5] Investment, which had been booming

Table 1. CESEE: Potential Output Growth
(Annual average, percent)

	2003-07	2008-12	2013-17	2013-17 minus 2003-07 (Percentage points)
Ukraine	6.6	0.1	1.4	-5.3
Latvia	7.7	-1.1	3.6	-4.2
Russia	7.1	2.2	3.1	-4.0
Slovak Republic	6.4	2.9	2.4	-4.0
Bulgaria	5.6	2.0	1.7	-3.9
Romania	5.3	1.6	2.0	-3.3
Slovenia	3.2	1.0	0.0	-3.2
Lithuania	6.4	1.4	3.3	-3.1
Croatia	4.1	-0.7	1.1	-2.9
Estonia	5.6	1.5	3.0	-2.6
Czech Republic	3.5	2.0	1.3	-2.1
Poland	4.4	3.6	2.5	-1.9
Hungary	2.5	0.1	0.8	-1.7
Bosnia and Herzegovina	3.9	2.4	2.2	-1.7
Turkey	5.4	3.8	4.2	-1.2
Moldova	4.8	3.9	4.2	-0.6
CESEE average	5.2	1.7	2.3	-2.9

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

Figure 9. Decomposing the Potential Growth Slowdown from 2007 to 2010-12
(Percentage points)
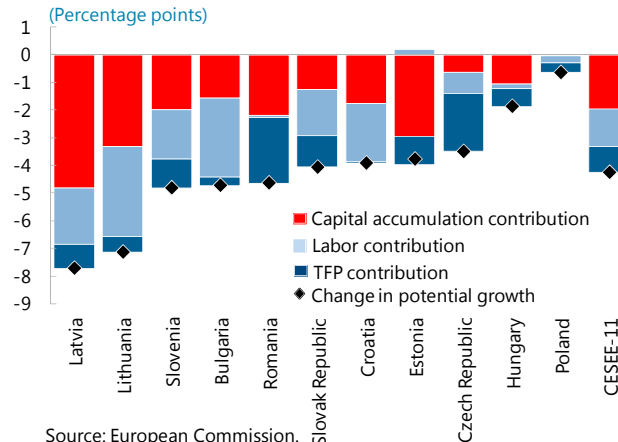
Source: European Commission.

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[4] Estimates of potential output reflect calculation by country teams using a diverse set of methods. While most country teams rely on a production function approach, other methods are also used, including structural VARs and statistical filtering techniques (e.g. Hodrick-Prescott, Baxter-King, and Beveridge-Nelson filters).

[5] The growth accounting exercise breaks down potential output growth into three components, i.e. capital stock, potential employment, and trend total factor productivity (trend TFP). The exercise was done using data of the

(continued)

Figure 8. Estimates of Real and Potential GDP

(Index, real GDP in 2007 = 100)

- - - - - GDP, 2008 Apr WEO   - - - - - GDP, 2013 Apr WEO

——— Potential GDP, IMF projection in 2007/08   ——— Potential GDP, 2013 Apr WEO

Estonia

Hungary

Romania

Turkey

Sources: IMF, Article IV consultation reports; and IMF, World Economic Outlook database.

European Commission (EC). The EC estimates potential output using a production function approach, and therefore constructs estimates of the three components as building blocks for the potential output series.

during the pre-crisis years, dropped sharply when the global crisis hit the region. Trend TFP growth had already slowed during the boom years, and eased only modestly further after 2007. The slowdown during the boom years was most pronounced in countries where investment rates were very high—including, for example, Latvia (Figure 10).

Figure 10. Decomposition of Potential Growth Rate in Selected Countries
(Percentage points)

■ TFP contribution   ■ Labor contribution
■ Capital accumulation contribution   ◆ Potential growth*
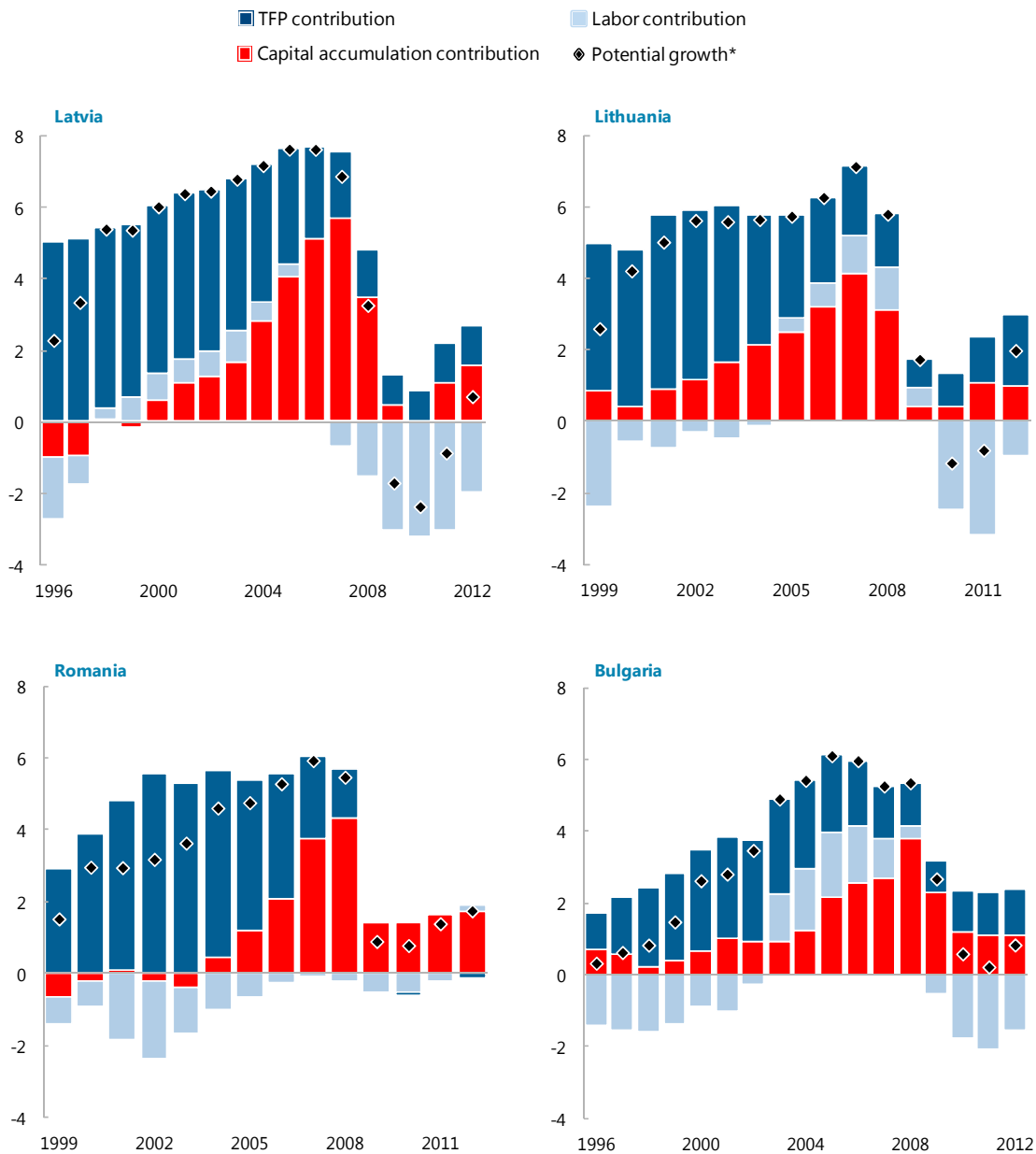
Source: European Commission.
Note: * in percent.

The decline in investment was partly the result of lower demand for the region's products, in both domestic and export markets. The end of the boom in the nontradable sector after years of exuberance clearly was an important factor in the drop in investment. But the weakness in CESEE's trading partners played a role as well. Indeed, investment ratios dropped more sharply in countries where partner country growth fell more (Figure 11).

Figure 11. Investment and Partner Country Growth

y = 2.1145x + 5.1116
R² = 0.6666

Change in partner country GDP growth between 2003-07 and 2008-12, weighted by trade openness (percentage points)

Source: IMF, World Economic Outlook database.

The decline in available financing also played a role. Capital flows fell sharply, particularly those from Western European parent banks. As a result, credit conditions tightened significantly. Firms needed to close the large saving-investment gaps which had emerged in the run up to the crisis, which they did by reducing investment and cutting costs.

B. Potential Growth Prospects

Going forward it is likely that potential output growth will remain subdued, held back by tight credit supply, low capital flows, tepid growth in trading partners, and demographic pressures. IMF staff projections for 2013–17 suggest potential output growth will reach only 2¼ percent on average (Table 1). These estimates have a large degree of uncertainty, and it should be acknowledged that in due course they may prove to be too somber, as potential output growth picks up more than currently expected.

Tight credit supply is likely to hold back investment. Bank lending standards have remained tight, leading to a restrained credit supply in most countries, which in turn has forced liquidity constrained companies to cut back on investments.

- **Tight credit supply is partly the result of a shift in the funding model of banks in CESEE.** Western banks that played a major role in channeling foreign capital to the CESEE economies during the boom cut back their financing significantly since the onset of the crisis, which has been a headwind for potential growth in the region. As discussed in IMF (2013b), this reflects a shift toward a decentralized funding model of Western European banks' subsidiaries, whereby credit is increasingly financed from domestic deposits rather than through parent funding.

- **Credit supply is also constrained by the large stock of NPLs.**[6] NPL ratios have risen sharply in many countries[7] since the onset of the crisis and now average 14 percent in the region.[8] The rise

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[6] According to findings of the Vienna Initiative working group on NPLs, a 10 percentage point increase in the NPL ratio reduces loan growth by 4 percent, before considering any dynamic effects or feedbacks running through GDP growth. This effect is confirmed by survey evidence. A March-April 2013 European Investment Bank survey of banks

(continued)
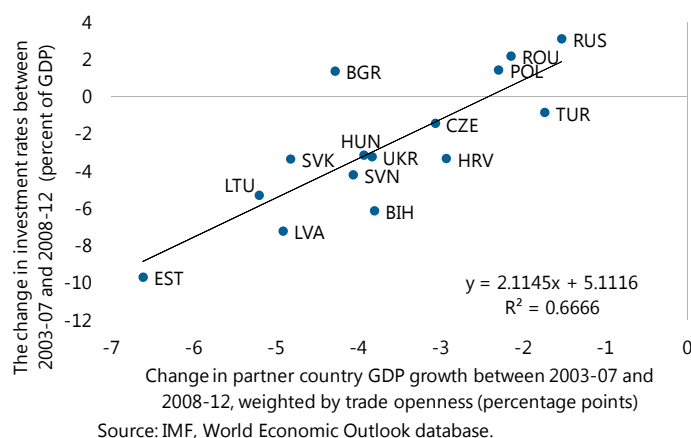
in NPLs followed very strong credit growth during 2003–08 which ended abruptly with the global financial crisis of 2008/09 (Figure 12).

Sizeable portfolio inflows, which had partly compensated for low capital flows from banks in recent years, are likely to be weaker going forward. As discussed in IMF (2013d), accommodative monetary policies in advanced economies had propelled inflows into emerging market bond markets beyond their long-term trend. Monetary policy normalization in the United States may signal the beginning of a more challenging external financing environment.

Tepid external demand growth will also restrain investment. Current WEO forecasts only envisage a modest rebound of partner country growth during 2013–17 (Table 2). Based on estimates by Schadler et al. (2006) using a panel of advanced and emerging market countries, a change in partner country growth by one percentage point increased own growth by 0.6 percentage point. Thus, the projected improvement in export markets over the medium-term would only add about 0.8 percentage point to growth in CESEE.[9]

A drop in working age population will be another headwind for potential GDP growth. The decline in the size of the working age

Figure 12. Much of CESEE Still Plagued by High Non-Performing Loans
(NPLs in percent of total loans)

Sources: IMF country desks; and national authorities.
Note: Data are not fully comparable across countries due to differences in national classification practices.

Table 2. CESEE: Partner Country Growth
(Percent)

	2003-07	2008-12	2013-17	2013-17 minus 2008-12 (Percentage points)
Ukraine	6.5	2.8	3.3	0.5
Turkey	5.4	2.1	2.8	0.7
Czech Republic	3.5	1.0	1.8	0.8
Russia	4.9	1.7	2.5	0.8
Kosovo	2.9	0.3	1.3	0.9
Hungary	3.9	0.9	1.9	1.0
Slovak Republic	3.6	0.6	1.6	1.0
Romania	3.6	0.7	1.8	1.1
Poland	3.6	0.6	1.7	1.1
Moldova	5.8	1.2	2.4	1.2
Slovenia	3.6	0.5	1.8	1.2
Croatia	3.8	0.6	1.9	1.2
Macedonia	4.1	0.8	2.1	1.3
Belarus	6.4	1.4	2.7	1.3
Serbia	4.2	0.4	1.9	1.4
Bulgaria	4.3	0.7	2.1	1.5
Bosnia and Herzegovina	3.6	-0.2	1.3	1.5
Lithuania	5.5	0.9	2.4	1.5
Albania	3.0	0.0	1.6	1.6
Latvia	5.8	1.0	2.6	1.6
Estonia	4.9	0.5	2.3	1.8
Montenegro	3.6	-1.0	1.3	2.3
CESEE average	4.4	0.8	2.0	1.3

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

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active in the region found that NPLs at the subsidiary level was one of the key factors constraining credit supply, together with the local market outlook, local regulation, and local bank capital constraints. See Vienna Initiative, CESEE Deleveraging Monitor, April 30, 2013 (Available: http://vienna-initiative.com/).

[7] Turkey is a notable exception.

[8] Data deficiencies and possible underreporting of bad loans in some countries might mean that the true NPL problem is even bigger than official statistics suggest (see Vienna Initiative (2012)).

[9] This order of magnitude is confirmed by Culiuc (forthcoming) who finds that the trading partner growth elasticity in recent years has increased to around 0.8.

population is expected to accelerate (Figure 13). In the period between 2010 and 2025, the decline is expected to be especially large in Ukraine, Moldova, and Bulgaria. The only country where working age population is still expected to grow significantly is Turkey. The drag on potential growth could however be partly compensated by increasing labor force participation rates.

Emigration is exacerbating adverse demographic trends (Figure 14). In some countries emigration has accelerated in recent years in response to the dramatic drop in employment during the 2008–09 crisis. Other countries (e.g. Albania, Belarus, Bosnia and Herzegovina, Moldova, and Serbia) have seen very high emigration rates already since the early 2000s. Emigration not only has a direct effect on the size of the labor force; it also has a negative impact on fertility rates because the propensity to migrate is higher among younger population cohorts.[10]

Figure 13. Working Age Population Decline Set to Deepen
(Percent, annual average growth)
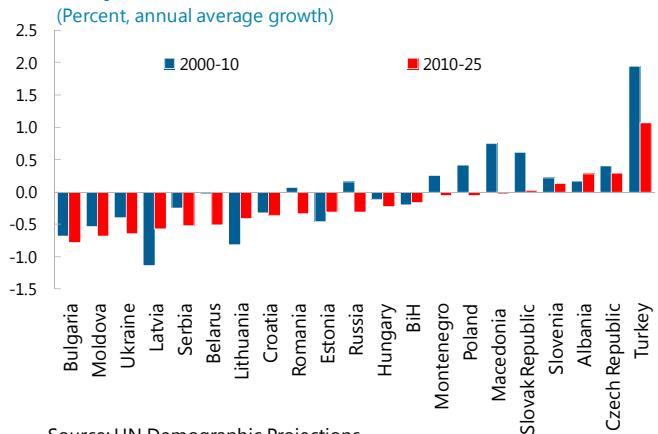
Source: UN Demographic Projections.

Figure 14. Emigration is a Further Headwind
(Per thousand population, annual average net migration rate, 2000-10)
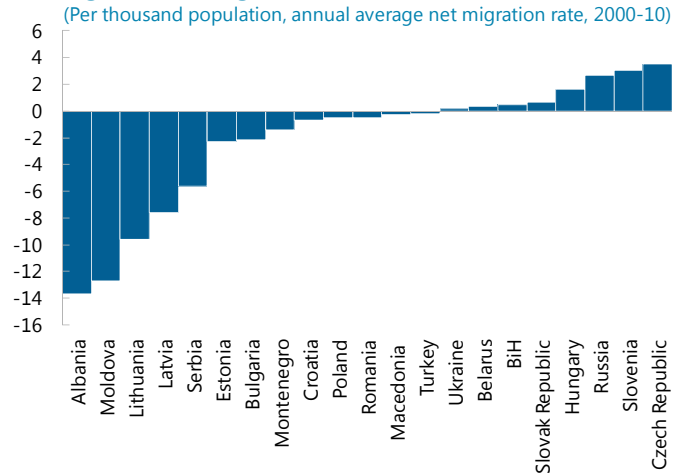
Source: UN Demographic Projections.

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[10] However, the impact of migration on potential growth is more complex than just the direct impact on the labor force and may not be as negative overall. As explained in Heinz and Ward-Warmedinger (2006) migrants from the CESEE countries may return to their home countries with upgraded skills, which may offset the initial losses caused by the brain drain. Returning migrants can also give a boost to economic growth by using capital, skills and new ideas acquired abroad.

III. THE RISE IN UNEMPLOYMENT

Since 2008, many countries have experienced large employment losses. Low growth will make it harder to reduce high unemployment, a substantial part of which is structural.

A. Post-Crisis Employment Losses

In many countries, large employment losses led to sharp increases in unemployment rates after 2008 (Figure 15). By 2012 most countries had unemployment rates well above their pre-crisis levels, with the exception of Macedonia, Turkey, and some CIS countries.

Weak growth was a key factor behind employment losses, but it explains only a part. Differences in real GDP growth explain about 40 percent of the cross-country variations in employment decline between 2008 and 2012 (Figure 16).[11] However, in some countries, including Bulgaria and Serbia, employment losses far exceeded what would be expected given their real GDP growth.

Corporate balance sheet adjustment may have further contributed. Bakker and Zeng (2013) found that the large differences among EU countries in post-crisis employment performance were to a large extent driven by the need to adjust corporate balance sheets, which had greatly deteriorated during the boom years in some countries. To close the large gaps between saving and investment,

Figure 15. Unemployment has Increased in Most Countries

(Percent)
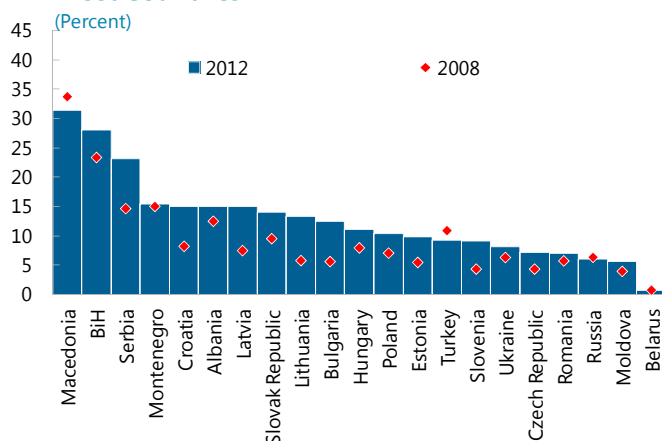
Sources: IMF, World Economic Outlook database; and national authorities.

Figure 16. Weak Growth has Led to Employment Losses

(Percent, 2008-12)

$y = 0.5557x - 4.0206$
$R^2 = 0.3761$

Sources: Haver Analytics; IMF, World Economic Outlook database; national authorities; and IMF staff caculations.

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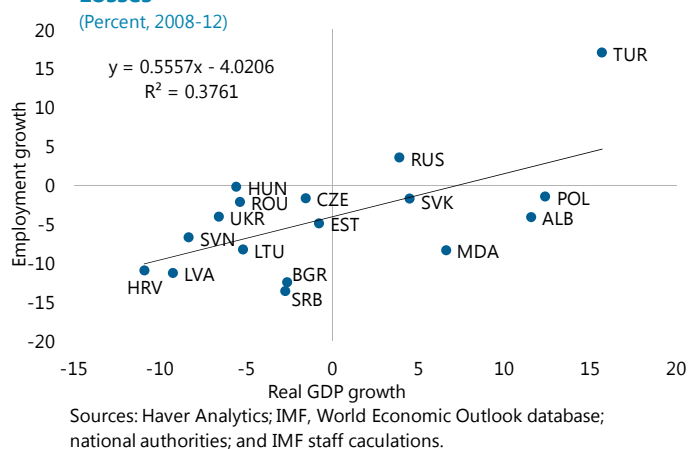
[11] A few countries are excluded from the analysis in this sub-section: Belarus, Bosnia and Herzegovina, Macedonia, and Montenegro. Belarus is excluded because of the very different nature of its economy. Bosnia and Herzegovina, Macedonia and Montenegro are excluded because of their extremely high structural unemployment rates, which are discussed in the next sub-section. Another reason for excluding Montenegro is problems with national saving data.

firms reduced investment and cut costs to boost profits. With much of the cost adjustment falling on firms' wage bills, employment losses were the largest in countries under the most intense pressure to improve corporate profitability and with limited wage flexibility due to labor market duality. Corporate balance sheet adjustment may also have been important in CESEE, as in many countries there has been a very sharp reduction in the private saving–investment gaps since 2008 (Figure 17).[12] All countries, except Turkey, improved their private saving-investment balances between 2008 and 2012, and the higher the initial imbalance, the larger the subsequent adjustment.

Labor market rigidities may also have played a role. In cutting the wage bill, there is a trade-off between a reduction in wages and in employment—the more wages adjust, the less employment has to. It is likely that poorly functioning labor markets will see relatively large adjustments of employment rather than wages.

The above three factors explain a good deal of the employment losses during the post-crisis period. Together, real GDP growth, pre-crisis saving-investment imbalances, and labor market rigidities—proxied by the long-term average of unemployment in the pre-crisis period—can account for 75 to 85 percent of the differences in CESEE countries' post-crisis employment growth (Table 3).

B. Is High Unemployment Structural?

High unemployment is not only a cyclical issue, nor is it a recent problem. Staff calculations indicate that unemployment rates in many CESEE countries would remain elevated even if their output gaps were to close (Figure 18).[13] High

Figure 17. Initial Imbalances and Subsequent Adjustments

$$y = -0.818x + 1.2191$$
$$R^2 = 0.6917$$
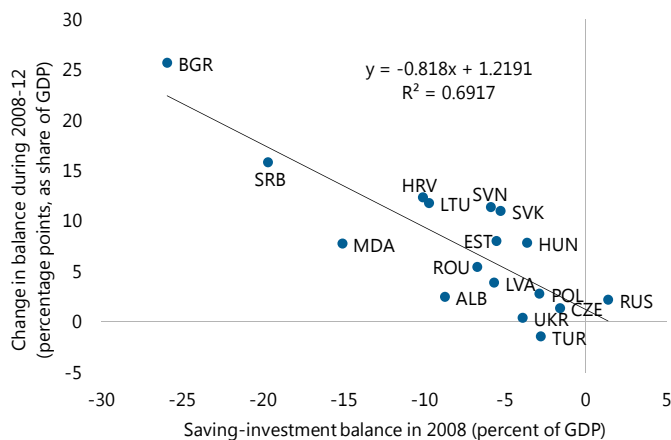
Sources: Haver Analytics; and IMF, World Economic Outlook database.

Table 3. CESEE: Determinants of Employment Growth

Dependent variable: Employment growth, 2008-12 (percent)	All countries	Excl. Turkey and Moldova
Real GDP growth, 2008-12 (percent)	0.56*** (0.14)	0.45*** (0.12)
Saving-investment balance, 2008 (percent of GDP)	0.49** (0.17)	0.36*** (0.11)
Long-term average of pre-crisis unemployment rate (percent)	-0.54* (0.33)	-0.61** (0.24)
Observations	17	15
R-squared	0.75	0.85

Source: IMF staff calculations.
Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.15.

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[12] Ideally, we would have used the corporate rather than *private* saving-investment imbalances. However, in many countries this breakdown is not available, while in some countries where it is available, there are data problems with the breakdown.

[13] For each country, the elasticity of unemployment to output gap is estimated from Okun relationship, *unemployment rate_t = α + β × output gap_t + ε_t*, using annual data between 2000 and 2012. Since the output gaps for most countries are small in 2012, the picture would not change much even if a unit elasticity were used instead.

Figure 18. High Unemployment is Mostly Structural, Reflecting Post-Transition Losses

CESEE: unemployment rate
(Percent)

Bulgaria and Hungary: employment
(Index, 1988 = 100)
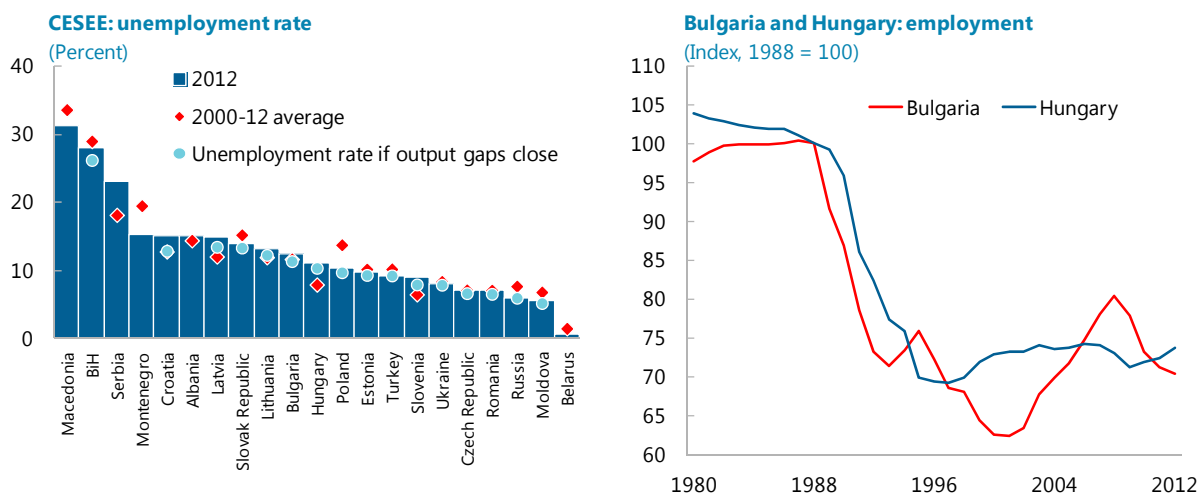
Sources: Haver Analytics; IMF, World Economic Outlook database; and IMF staff estimates.

unemployment has been a long-standing feature in the CESEE region, the result of large employment losses in the immediate post-transition period. Indeed, unemployment rates in CESEE in 2012 were below or near the long-term average in most countries.

High unemployment reflects factors that go beyond the labor market. This is particularly the case in the Western Balkan countries, which suffer from deep structural problems in terms of an unfinished transition process, a poor investment climate, and low FDI inflows (Box 1).

Yet labor markets often do not work well either. Some suffer from real wage rigidity—wages do not adjust even when unemployment is high. Others suffer from high NAIRUs.[14] For example, in the Baltic countries, wages are very responsive when unemployment rises. However, real wage growth starts to accelerate when unemployment falls below 10 percent (Figure 19).

In several countries, policies and institutions may have driven up labor costs and prevented downward

Figure 19. Estonia: Wage Pressure Emerges at High Unemployment Levels
(Percent)

Sources: Haver Analytics; and IMF, World Economic Outlook database.

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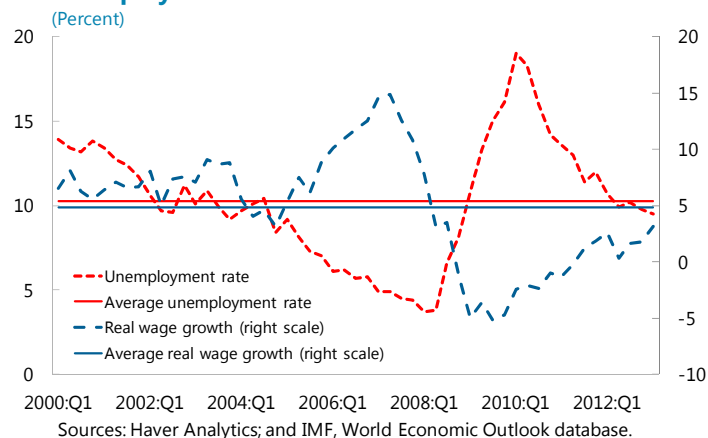
[14] The NAIRU is the "Non-Accelerating Inflation Rate of Unemployment"—the unemployment rate at which inflation is stable.

adjustment. Factors that may have played a role include minimum wages that were set at a relatively high level compared to average wages, and wage bargaining structures (Box 1; Kovtun et al (2013)), although not all factors were relevant for all countries. In addition, emigration of workers to Western Europe may also have driven up wages through two channels. First, competition from better-paid outside opportunities may have driven up domestic wages. Second, remittance inflows from abroad may have raised the reservation wages of those out of jobs. The latter may have been particularly relevant in the Balkan countries, where remittance inflows are quite high.

Skill mismatches are another problem afflicting labor markets in CESEE. Skill mismatches do not only arise because workers' education levels do not match job requirements, but also because workers' education has been in a different field from where the jobs are. The latter is a particularly acute problem in CESEE countries that have undergone rapid industrial restructuring (Figure 20). Workers laid off from declining industries have a hard time finding jobs in fast-growing new industries because they do not have the needed expertise. A related issue is the high degree of informal employment, which may trap workers in low productivity activities.

Reducing structural unemployment in the region thus requires a combination of continued structural reforms and labor market specific policies. Countries where the unemployment rate is the highest are also those where the transition process is lagging behind. This suggests a need for continued efforts to improve market institutions and governance. While many labor market institutions in the region generally do not appear out of line relative to Western European peers, there is scope for active labor market policies to improve the redeployment and retraining of workers, particularly in rural areas (see Box 2). Where skill mismatches are significant, deep reviews of high school and vocational schools curricula as well as better incentives for the provision of in-house training programs for young workers could make a difference.[15]

Figure 20. Skill Mismatches
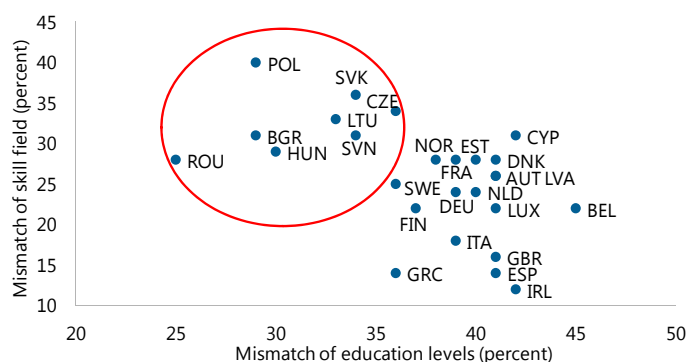
Source: SEO Economic Research and Randstad (2012).
Note: Each axis shows the share of workers facing that type of skill mismatches. Mismatch of education levels happens when the education level of a worker (e.g. high school) does not match the job requirements (e.g. university). Mismatch of skills field refers to cases where the worker's field of education (e.g. engineering) does not match the job requirements (e.g. medicine).

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[15] See Arandarenko and Bartlett (2012).

Box 1. Labor Market Challenges in the Western Balkans[1]

Western Balkan countries—Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia—face severe problems in their labor markets. Low rates of employment reflect both low activity rates and high unemployment rates. This is a key social concern, and a challenge for policymakers in terms of lost potential output and additional fiscal cost. The very high youth unemployment rate constrains the accumulation of human capital, and increases dependency on social support. These problems have persisted even during the boom years of the 2000s (top left panel). To what extent are these outcomes the result of labor market institutions, cost factors, or broader structural problems of the economy?

Labor costs may be contributing to high unemployment. Unit labor costs (ULCs) rose rapidly during the pre-crisis period, as wages outpaced productivity growth (top right panel). Since the onset of the crisis, ULCs have generally continued to rise, albeit at a slower pace (middle left panel). This was due to downward nominal wage rigidities, partly due to relatively high minimum wages (the minimum-to-average-wage ratio exceeds the 1/3 rule of thumb in most Western Balkans countries), which creates a disincentive to hire low-skilled and young workers. In addition, social insurance contributions remain high, thereby adding to labor taxation, which may also help explain the relatively large informal economies in the region.

Institutional factors, such as employment and social protection systems, do not generally appear to be out of line with those in other European countries. Unemployment benefits in the Western Balkans fall below the cross-country average, and their duration largely follows the standard 12-month limit (except in Macedonia). Given the prevalence of long-term unemployment, the benefits have likely expired for a large share of the unemployed. Social benefits are mostly below the cross-country average (except in Bosnia and Herzegovina and Montenegro) and they appear to be relatively well targeted (except in Bosnia and Herzegovina). Redundancy costs and rules appear to be in line with the New Member States of the EU (NMS) with the possible exceptions of Albania and Serbia (where severance payments are based on the length of life-time employment and therefore may discourage dismissing/hiring workers with many years of service). However, implementation may be lagging behind legislative rules.

Structural factors appear to be the main obstacle to job creation. The Western Balkan countries are latecomers to the transition process, and core structural reforms such as privatization, enterprise restructuring, business environment improvements are less advanced than in the NMS (middle right panel). This has held back FDI inflows, diversification from traditional sectors, and private sector job creation (bottom left panel). At the same time, the Western Balkan countries have experienced very large emigration and brain drain, which have resulted in high remittances. These remittances act as a form of unemployment insurance thereby likely raising reservation wages and contributing to the long unemployment duration (bottom right panel).

To foster job creation in the Western Balkans, policies should focus on completing the structural reforms which would help modernize the economies, attract FDI inflows and reduce structural

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[1] Prepared by Dmitriy Kovtun, Alexis Meyer Cirkel, Zuzana Murgasova, Dustin Smith, and Suchanan Tambunlertchai, and based on their chapter in Schindler et al (forthcoming).

unemployment. These efforts should be complemented with reforms that address rigidities in labor market institutions and in cost factors in individual countries.

Western Balkans: Labor Market Challenges

Even though unemployment has been very high in the Western Balkans ...

Unemployment rate (Percent)

■ 2012
• 2006

... wages grew faster than productivity during the boom ...

Contributions to ULC during the boom, 2004-08 (Percent, year-over-year)

■ Productivity growth ■ Wage growth • ULC growth

... and have kept rising during the bust.

Contributions to ULC during the bust, 2008-11 (Percent, year-over-year)

■ Productivity growth ■ Wage growth • ULC growth

Labor markets in the region suffer from an incomplete transition ...

Ease of doing business , 2012 (Percentile rank, higher number is better)2/

... which has deterred foreign direct investment ...

FDI stock per capita, 2011 (Thousands of US dollars)

... while large remittances inflows boost reservation wages.

Unemployment rate vs. remittances inflows, 2011

Sources: Doing Business 2012, 2012 EBRD Transition Report; Eurostat; Haver Analytics; IMF, World Economic Outlook Database; National authorities; and IMF staff calculations.
1/ Registered unemployment used in place of labor force data.
2/ The percentile rank of the Ease of Doing Business score is the percentage of scores in its frequency distribution that are the same or lower (i.e. worse) than it.

Box 2. Structural Unemployment in Poland and the Baltics[1]

Unemployment in Poland and the Baltic countries remains high, and a cause for concern. For the Baltics, the unemployment rate has remained in double digits since the 2008/09 crisis, which hit the region especially hard. While Poland managed to avoid a recession in 2008/09, the economy has slowed down since the middle of 2012 and the unemployment rate has increased. The youth unemployment rate in these countries—at more than 20 percent—is particularly high, and more than 50 percent of the unemployed have been so for more than one year. High unemployment rates not only bring about significant social and macroeconomic costs, but—if sustained over longer periods—may also give rise to hysteresis effects—the unemployed may lose valuable skills and gradually become less suited for employment, transforming cyclical unemployment into structural unemployment.

This raises the question of whether high unemployment in Poland and the Baltic countries is mostly cyclical or structural, and whether structural unemployment has increased since the crisis. Addressing the problem of chronic joblessness requires a better understanding of the respective roles for structural reforms and short-term cyclical policies.

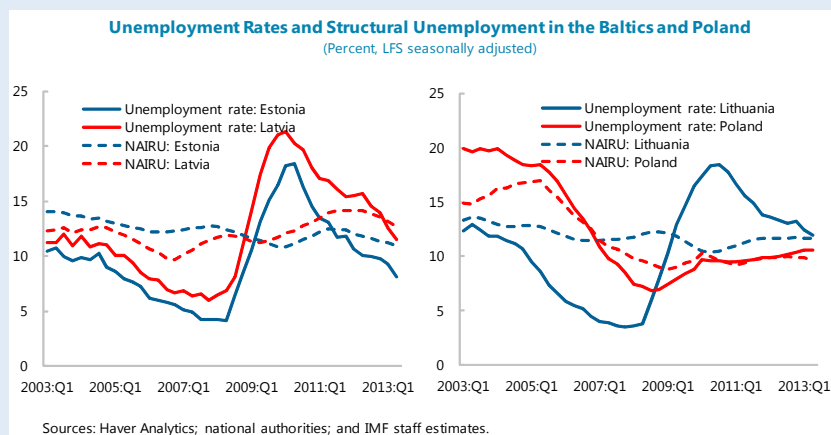**Staff estimates suggest that structural unemployment is high, but has not increased significantly since the crisis.** Following Laubach (2001), Gianella et al. (2008) and IMF (2013a), we estimate the time-varying NAIRU by means of the Kalman filter, using an augmented Phillips curve equation, for the period 1998:Q1–2013:Q2.[2] The results indicate that for the three Baltic countries, structural unemployment hovered around 10–12 percent over most of the estimation period, which implies that the structural component of unemployment is very high and that limited cyclical unemployment remains in the Baltics. Moreover, the NAIRU in the Baltics has been remarkably stable, and there is no strong evidence that NAIRU has risen

significantly after the 2008/09 crisis. For Poland, the NAIRU dropped sharply in the mid-2000s (from about 14 percent), but has remained relatively stable since then. During the recent recession, the widening of the output gap has been associated with a concomitant increase in the unemployment gap mainly due to cyclical factors (first figure).

Unemployment Rates and Structural Unemployment in the Baltics and Poland
(Percent, LFS seasonally adjusted)

Sources: Haver Analytics; national authorities; and IMF staff estimates.

_____

[1] Prepared by Christian Ebeke and Greetje Everaert. Bartek Augustyniak provided outstanding research assistance in gathering the regional economic data used in the analysis.

[2] Because the unemployment gap and the NAIRU are assumed to follow AR(1) and random walk processes respectively, this method has the advantage that the NAIRU is inferred not only on the basis of inflationary pressures but also on the basis of the unemployment rate dynamics, captured by the AR(1) process. Another advantage is that this technique avoids the end point problem that is common to simple statistical filters such as the HP filter.

High structural unemployment coexists with relatively flexible labor markets, in contrast with traditional explanations of high structural unemployment. Minimum wages and unemployment benefits are not excessively high, employment protection legislation is on par with the OECD average, and tax wedges are close to OECD averages (second figure). Moreover, flows in and out of unemployment are relatively high (Ebeke and Everaert, forthcoming), indicating a relatively high degree of micro-flexibility in Poland and the Baltics that is well above levels observed in most countries of continental Europe.
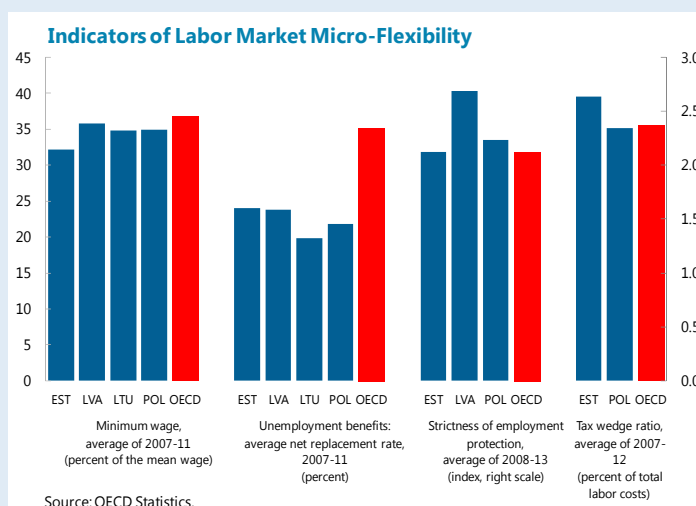
However, regional disparities in unemployment are wide, and appear to contribute to high structural unemployment. The urban-rural differential in unemployment rates (rural unemployment being far higher) is striking, and the difference for the past five years is statistically significant, especially in larger countries such as Poland and Lithuania. Moreover, the

Indicators of Labor Market Micro-Flexibility

Source: OECD Statistics.

Heterogeneity in the Okun's Beta
(Coefficients derived from panel fixed-effects models using regional data)

Source: IMF staff estimates.
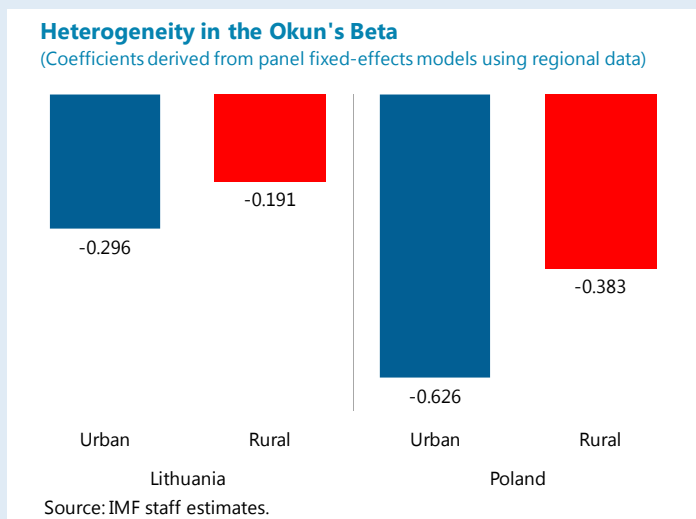
prevalence of youth and long-term unemployment is generally very high in rural areas. Using an Okun-type equation, staff analysis shows that the estimated responsiveness of urban unemployment to GDP is particularly high (above average ranges estimated by IMF, 2010), consistent with the high degree of labor market flexibility. However, this coefficient is much lower in rural areas, suggesting that greater rigidities in rural areas are at play (third figure).

Other factors support the potential for persistent rural-urban divides in unemployment, with more inflexibility in rural areas. First, there may be structural features characterizing the rural labor force (older population, lower level of education or vocational training, higher share of agriculture which can provide informal earnings in the midst of fewer formal employment opportunities, and geographic remoteness). For example, in Lithuania, employment and activity rates in rural areas are 10 percentage points lower than those in urban regions, while in Latvia, they are 5 percentage points lower. Second, there may be barriers for migration to urban-based jobs, such as the higher cost of living in urban areas, incentives in the welfare system to remain unemployed, and beneficial tax regimes for the farming community.

Some of these factors are particularly acute for the youth. Disparities in education are pervasive among the youth—in Lithuania for example, the completion rate of upper secondary education level by the youth is 10 percentage points lower in rural areas than in urban regions. This can exacerbate hysteresis effects. Indeed, unemployed youth are more likely to stay unemployed for a longer period of time compared with older job seekers. Regional divergence may be further aggravated by the inefficient functioning of traditional mechanisms of regional equalization (labor mobility, wages and investment).

The results have important economic policy implications going forward. Active labor market policies, especially in those rural areas where chronic unemployment is critical, should be strengthened. Vocational training and other policies aimed at fostering the inclusion of the youth in the labor market should be pursued. In this vein, targeting a portion of EU structural funds toward fighting chronic and structural unemployment, especially in rural areas, should be part of the agenda in the years to come. Finally, policies that may facilitate migration toward urban jobs may be beneficial as well.

IV.   LOW GROWTH: A CHALLENGE FOR FISCAL POLICY

While considerable fiscal adjustment has taken place since 2009, public debt has increased beyond comfortable levels in many countries and in some cases is continuing to rise. As revenue growth is likely to remain modest, further fiscal adjustment will necessitate additional spending cuts, tax increases, or a broadening of the tax base.

Headline fiscal balances have generally improved since 2009, but remain high in many countries. The deep crisis in 2009 led to a sharp deterioration of the public finances in CESEE. After 2009, fiscal consolidation and economic recovery led to a turnaround. However, despite the consolidation, in 8 out of 22 countries, fiscal deficits are still above 3 percent of GDP in 2013 (Figure 21).

Moreover, public debt has increased significantly since the onset of the crisis, and is still on an upward trend (Figure 22). On average, debt has increased by about 20 percentage points, but a number of countries have seen a much sharper increase. The steep rise in CESEE compares unfavorably to other emerging market countries (Figure 23). Current projections suggest that public debt will increase further in the next five years.

In well over one half of the CESEE countries, public debt now exceeds 40 percent of GDP. Debt levels are particularly high in Hungary, Slovenia, Serbia, and Albania. Previous research, including by the IMF, has found that sustainable public debt levels for emerging market countries tend to be lower than those for advanced countries, and most studies come up with thresholds of 25–50 percent of GDP beyond which public debt vulnerabilities weigh significantly on the growth outlook and/or are associated with substantially higher crisis risk.[16]

Figure 21. Deficits Still High in Many Countries
(Percent of GDP)
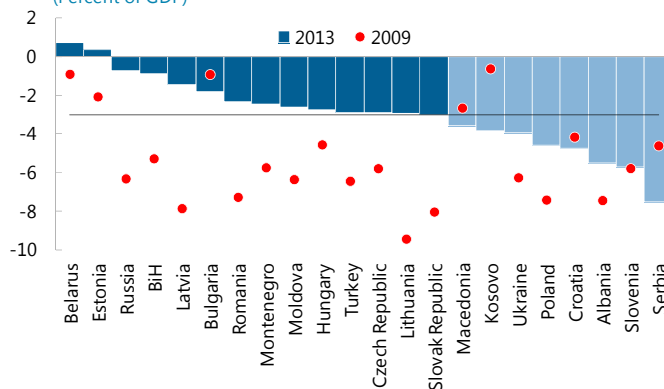
Source: IMF, World Economic Outlook database.
Note: Fiscal deficits are general government overall balance where available; general government net lending/borrowing elsewhere.

Figure 22. Public Debt has Risen Sharply
(Percent of GDP)
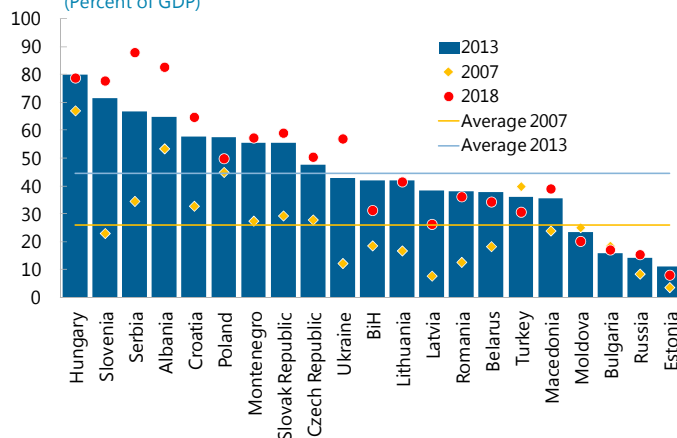
Source: IMF, World Economic Outlook database.

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[16] IMF (2003), for example, finds thresholds in the 25-50 percent of GDP range.

To stop public debt ratios from increasing, and—in some countries—bring them back to safer levels, fiscal deficits will need to be reduced further. This would also help create buffers, as future shocks to growth, or contingent liabilities could easily ratchet up debt even further. Thus, expenditure cuts or revenue increases through a broader tax base and/or higher taxes will be necessary.

Figure 23. The Rise in Public Debt Compares Unfavorably with Other Regions
(Percent of GDP)
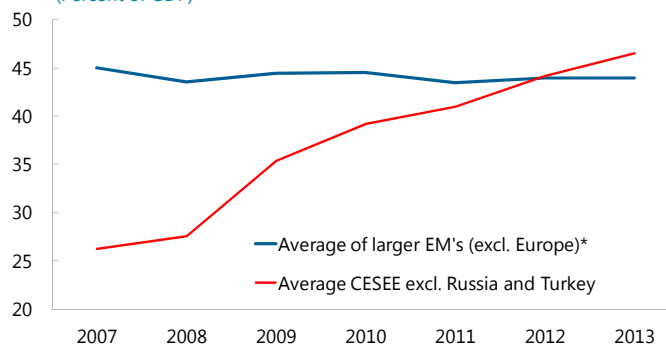
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: *Average of Argentina, Brazil, China, Colombia, India, Indonesia, Mexico, and South Africa.

V. POLICIES FOR RENEWED CONVERGENCE

The past five years have been a setback in convergence with Western Europe (Table 4). Region-wide, convergence stagnated and relative per capita income even dropped marginally. In a number of countries, relative per capita income fell substantially—most notably in Slovenia, Croatia, Estonia, Hungary, and Latvia. The stagnation is particularly striking given the very rapid convergence that took place in the preceding five years.

Income differentials with Western Europe are still large, reflecting both lower factor inputs and lower TFP (Figure 24):

* As of 2011, the region's per capita capital stock was only about 35 percent of that in Western Europe, suggesting that high investment ratios will continue to be an important factor behind the region's future catch-up.

* Employment to population ratios are also lower, which partly reflects higher unemployment rates but also lower labor force participation rates—including in the 15–24 year-old range.

* TFP levels are also well below those in advanced countries.

Table 4. CESEE: GDP Per Capita in PPP Terms
(Percent of German GDP per capita)

	1997	2002	2007	2012	1997-2002	2002-07	2007-12	1997-2012
					(Change in percentage points)			
Lithuania[1]	32	37	53	55	5	16	3	23
Belarus	17	21	32	40	4	10	8	23
Estonia	34	44	61	56	10	17	-5	22
Latvia	26	34	51	47	8	17	-4	20
Slovak Republic	44	46	59	62	3	13	3	19
Russia	28	32	43	45	4	11	2	17
Poland	37	40	47	53	4	7	6	17
Bulgaria	23	27	35	36	4	8	1	14
Czech Republic	60	62	73	70	2	11	-3	10
Albania	12	16	18	21	4	2	2	9
Slovenia	63	71	81	72	8	10	-9	9
Romania	26	26	33	33	0	7	0	7
Hungary	44	50	54	50	6	5	-4	7
Ukraine	13	15	20	19	2	6	-1	6
Turkey	33	29	37	38	-4	7	2	5
Bosnia and Herzegovina[1]	16	18	21	21	2	3	0	5
Croatia	41	45	52	46	4	7	-6	4
Macedonia	23	23	26	27	0	3	1	4
Serbia	24	24	28	28	-1	5	0	3
Moldova	6	6	8	9	1	1	1	3
Average	30	33	42	41	3	8	0	11

Source: IMF, World Economic Outlook database.
1/ The earliest year is 1999 for Lithuania and 1998 for Bosnia and Herzegovina.

Figure 24. CESEE: Room to Raise Factor Inputs and Productivity

Per capita capital stock is only a fraction of that in advanced Europe
(2011, thousands of PPP 2005 US dollars)

TFP level is lower than in advanced Europe
(Ratio to 2011 USA TFP level at current PPP prices)

Labor force participation is lower than in advanced Europe
(2012, percent, 15-64 year-olds)
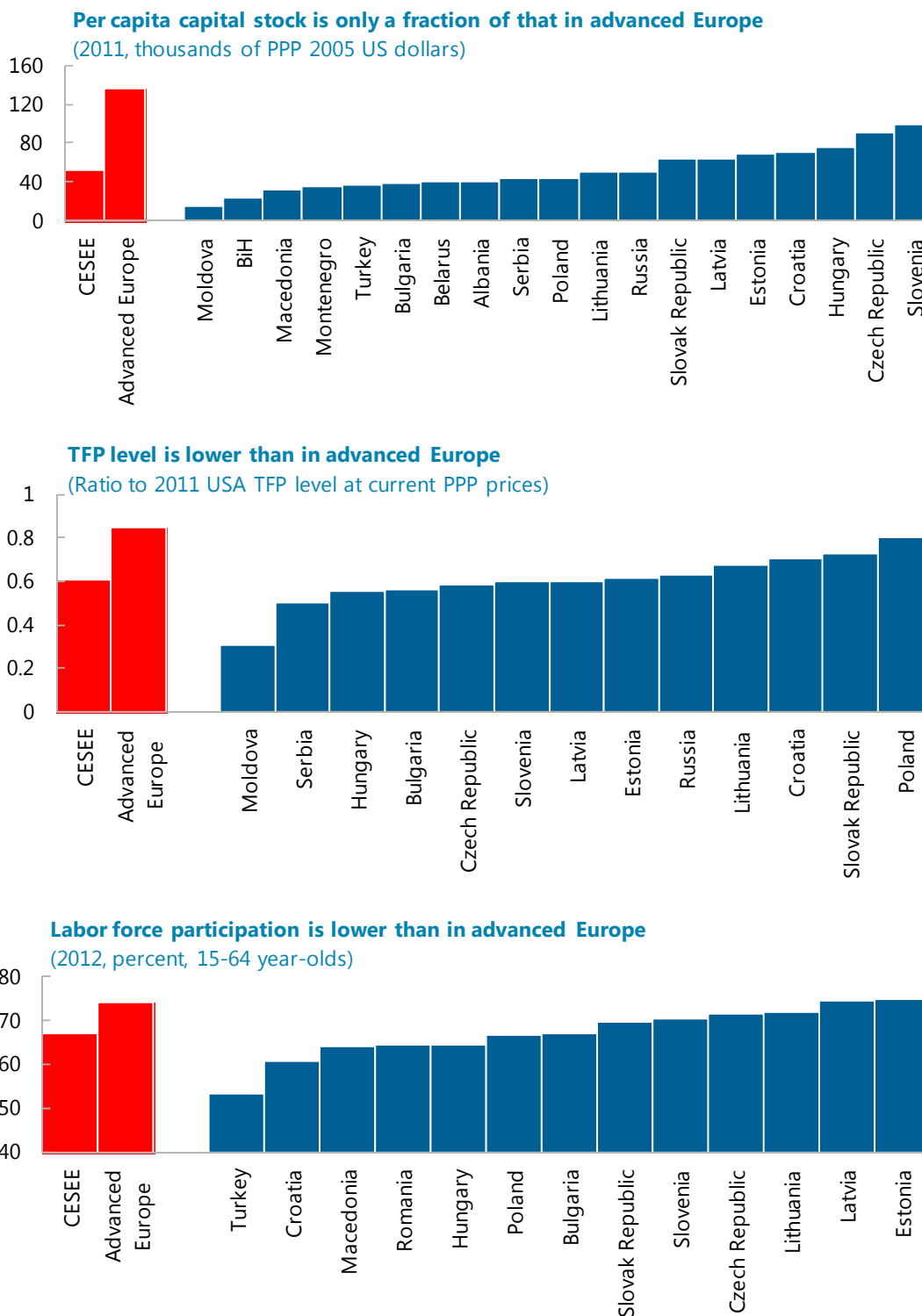
Sources: Eurostat; Penn World Table 8.0; and IMF staff caculations.

Reinvigorating the pace of convergence will require decisive steps to address crisis legacies that are holding back growth, and shifting toward more externally-oriented and better-balanced growth.

A. Addressing Crisis Legacies

One lesson from the literature is that timely addressing crisis legacies can have a strong impact on the path of potential output following crisis episodes. Often quoted examples are that of Finland and Sweden in 1991 (e.g. European Commission, 2009). Both countries experienced a short-lived recession following a financial crisis that did not lead to a reduction in their potential output. Rapid resolution of banking sector problems, industrial restructuring, and policies to support innovation and TFP growth greatly helped the adjustment in both cases.

Addressing the existing stock of NPLs will be crucial to breaking the vicious circle of high NPLs and low growth. High NPLs partly reflect the deep recession and the tepid economic recovery. Slow growth has hindered the recovery in asset valuations—a key disincentive for banks to actively engage in work-outs and asset disposals. But there is also a long list of obstacles in the legal, judicial, tax, and regulatory areas which have held up NPL resolution (Vienna Initiative, 2012).

Rebuilding fiscal buffers would help contain risk premia. Going forward, global financial conditions facing EMCs are likely to be less benign than they have been in recent years. In such an environment, lower vulnerabilities and larger buffers are likely to be reflected in lower risk premia and financing costs, and will be critical in preparing for renewed turbulence in global markets.

B. Boosting the Tradable Sector

In the pre-crisis boom years, growth in many countries was driven by the booming property and financial sectors. In many countries exports-to-GDP ratios dropped, as investing in the nontradable sector was more profitable. The rapid growth contributed to large current account deficits and was ultimately unsustainable. More balanced growth, with a larger contribution of the tradable sector would be more sustainable for many countries in the region.

Greater external orientation should enhance growth prospects. More open economies have seen higher growth over the past decade and a half (Figure 25). Other empirical work also confirms a strong connection between economic openness, particularly export performance, and growth performance (IMF 2011, Chapter 3). Exports-

Figure 25. Openness Fosters Growth

$$y = 0.189x + 2.3255$$
$$R^2 = 0.2095$$

Change in per capita income relative to Germany, 1997–2012 (percentage points)

Exports-to-GDP ratio, 1997-2012 average (percent) [1]

Source: IMF, World Economic Outlook database.
1/ For Montenegro, data of exports-to-GDP ratio starts in 2003.
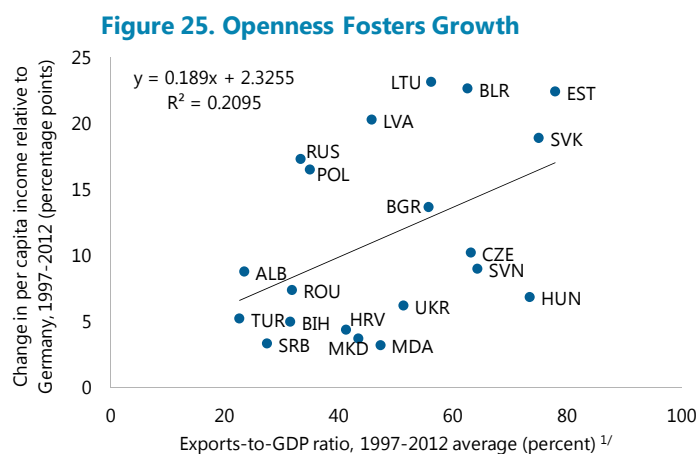
to-GDP ratios are particularly low in Southeastern Europe[17] (Figure 26), suggesting that those economies have the most to gain from an increased role of the tradable sector.

Attracting FDI inflows into manufacturing could help the tradable sector grow faster.[18] FDI inflows would not only boost capital formation, but also lead to advanced technology transfer, knowledge spillovers, better managerial skills, and innovative product designs. Enterprise level evidence has linked foreign ownership of firms with higher productivity. (Gill and Raiser, 2012, Chapter 4). Kinoshita (2011) shows that higher FDI in the tradable sector is linked to higher export growth and lower external imbalances. Econometric work done for this REI also suggests that FDI in manufacturing contributes strongly to GDP growth in CESEE (Table 5).

Creating an environment more conducive to investment will attract FDI and foster increased integration:

- **For many countries with low export ratios, it is paramount to complete the transition agenda.** These countries will need to overcome significant gaps in institutions and infrastructure to be able to take full advantage of the still sizable advantages in labor cost differentials. Priority reform areas

Figure 26. SEE and CIS Can Open up More
(Exports in percent of GDP)

Source: IMF, World Economic Outlook database.
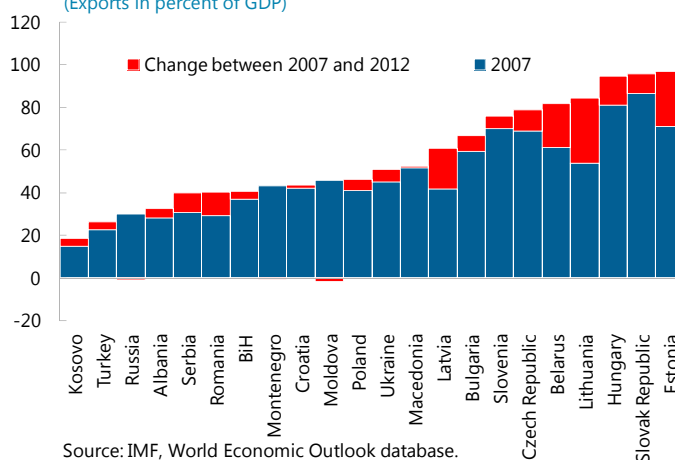
Table 5. GDP Growth and FDI Growth, Estimation Results[1/]

Explanatory Variables	(1)	(2)
g_{t-1}	0.36***	0.36***
	(0.05)	(0.04)
FDI_growth_t	1.88*	1.21*
	(1.14)	(0.73)
FDI_growth_{t-1}	1.71	
	(1.80)	
Constant	1.56***	1.81***
	(0.40)	(0.28)
Observations	102	115
Number of countries	12	12
R-Squared	0.17	0.14

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

1/ Dependent variable is real GDP growth, g_t. Explanatory variables include growth in FDI stock (current and previous period) and g_{t-1} (GDP growth in previous period). Sample includes all CESEE countries for which data are available during 2000-12. Results are from random effects panel estimation. Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

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[17] Bulgaria is an exception in that respect.

[18] Recent economic literature has highlighted the special role of manufacturing in economic development. Rodrik (2010) argues that globalization has further increased the manufacturing sector's unique role in promoting growth. Johnson, Ostry, and Subramanian (2007) examined the cases of sustained growth accelerations and found that nearly all these cases took place in the midst of a rapid increase in the share of manufactures in total exports.

include: a) increasing the role of the private sector and accelerating the restructuring of large, loss making SOEs including through privatization; and b) improving governance and transparency (Figure 27).

- **Most CESEE countries will also benefit from further reforms toward a more business-friendly environment** (Figure 28). These reforms include simplifying regulations (including registration, zoning restrictions, tax

Figure 27. Governance Still a Matter of Concern in Many CESEE Countries

(2011, higher number is better)

■ Control of corruption
■ Rule of law
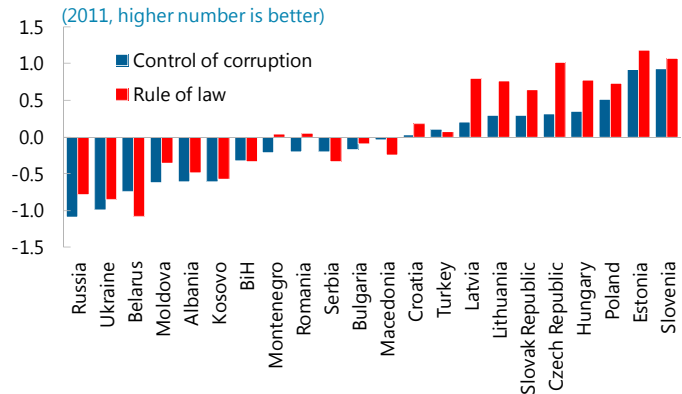
Source: World Bank, The Worldwide Governance Indicators Database.
Note: Score ranges from -2.5 (weak) to 2.5 (strong).

Figure 28. CESEE: How Business Friendly?

(2013 world ranking; lower number is better)

Overall Ranking

Resolving Insolvency

Protecting Investors

Paying Taxes
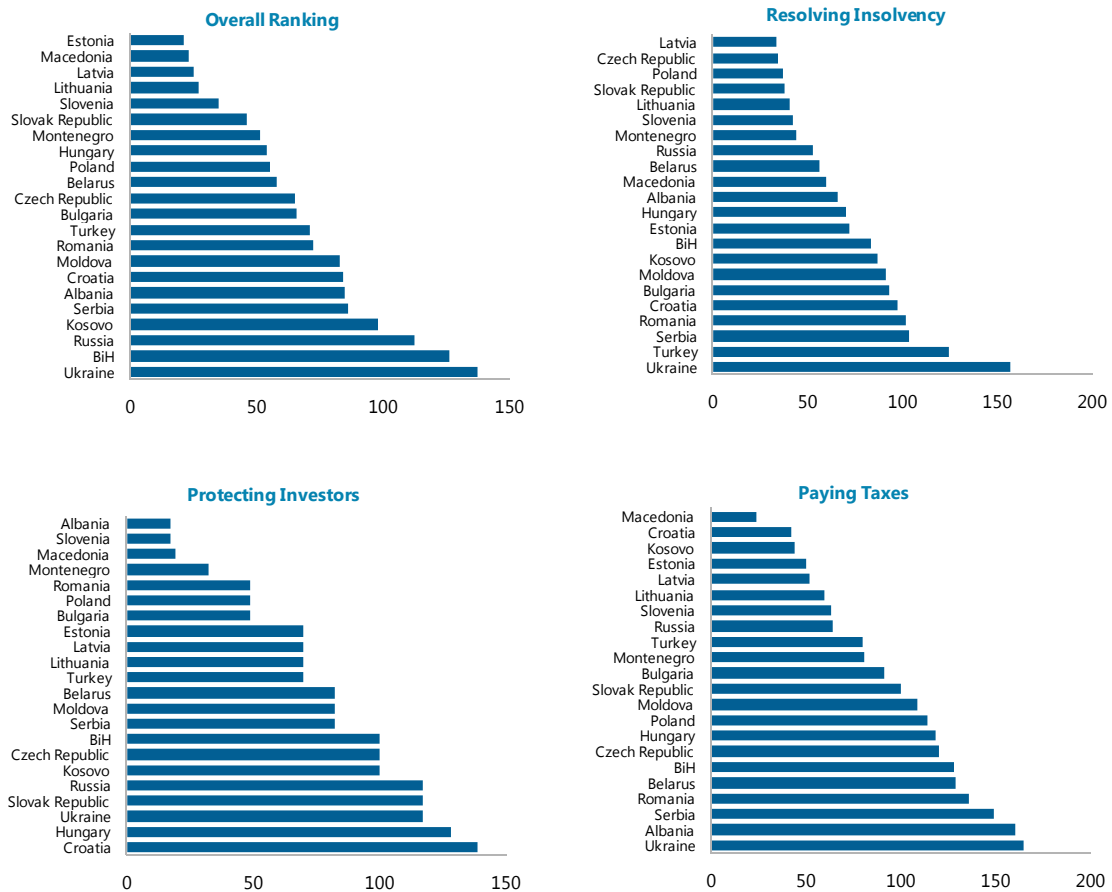
Source: World Bank Doing Business Report, 2013.

administration etc.), reducing barriers to entry, strengthening competition, and improving the functioning of labor markets. Countries would also benefit from strengthening investor protection and contract enforcement, as well as making insolvency procedures shorter and less costly.

More integration into global supply chains would also help—particularly for SEE and CIS countries. Most countries with a large exports sector—the CEE and Baltics—have been integrated into Western Europe's supply chains. These countries have enjoyed strong export growth benefiting from these links (see Rahman and Zhao, 2013). For CEE countries, participation in the German-Central European Supply Chain has also brought faster technology transfer and accelerated income convergence (IMF, 2013b). By contrast, SEE and CIS countries, which generally have much lower export ratios, have yet to be integrated in the global supply chains. They have also seen less increase in "economic complexity"—an indicator associated with future growth prospects (Hausmann et al, 2010).[19]

For countries that are already integrated into regional or global supply chains, the challenge is to move up the value ladder into more diversified and more sophisticated products. This will require efforts to maintain competitiveness and raise the share of knowledge-intensive goods and services in exports by shifting to more technologically-sophisticated sectors. In this regard, policies that enhance investment in knowledge industries (such as IT) and research and development are important. Promoting innovation by reforming higher education would also help.

For many CESEE countries that are EU members, higher EU funds absorption will help improve infrastructure gaps (Figure 29). Boosting absorption capacity may require streamlining administrative procedures, reforming public procurement laws, and creating sufficient fiscal space for co-financing EU funded projects.

Figure 29. Infrastructure Still Deficient in Many CESEE Countries

(2011 world ranking; lower rank is better)

Sources: World Economic Forum; and Global Competitiveness Report (2012-13).

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[19] Economic complexity is the ability of an economy to produce a wide range of products, including products with high knowledge content.

ABBREVIATIONS

Abbreviation	Full Name
ALB	Albania
ARG	Argentina
AUT	Austria
Balkans	Balkan countries
BEL	Belgium
BGR	Bulgaria
BIH	Bosnia and Herzegovina
BLR	Belarus
BRA	Brazil
CHL	Chile
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DNK	Denmark
ESP	Spain
EST	Estonia
FIN	Finland
FRA	France
GBR	United Kingdom
GRC	Greece
HRV	Croatia
HUN	Hungary
IDN	Indonesia
IND	India

Abbreviation	Full Name
IRL	Ireland
ITA	Italy
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MDA	Moldova
MEX	Mexico
MKD	Macedonia
MNE	Montenegro
MYS	Malaysia
NLD	Netherlands
NMS	New Member States
NOR	Norway
POL	Poland
ROU	Romania
RUS	Russia
SRB	Serbia
SVK	Slovak Republic
SVN	Slovenia
SWE	Sweden
TUR	Turkey
UKR	Ukraine
ZAF	South Africa

ANNEX TABLES

Table A1. CESEE Market Turmoil: Changes in Financial Indicators between May 22 and August 27, 2013

	Stock market	CDS spread	EMBI Global spread	Euro per currency	Total Score
	(Percent)	(Basis points)	(Basis points)	(Percent)	
Turkey	-29.7	124.2	160	-12.9	8
Russia	-10.8	70.0	67	-8.8	6
Serbia	-5.5	113.5	133	-3.1	6
Ukraine	2.9	311.5	256	-3.5	5
Hungary	-6.2	52.4	60	-3.9	4
Belarus	...	...	...	-6.8	2
Croatia	-2.3	50.8	77	0.2	2
Poland	-0.2	12.4	57	-1.6	2
Romania	7.0	26.5	55	-2.0	2
Slovenia	4.8	81.5	...	0.0	2
Moldova	...	...	...	-3.8	1
Albania	...	...	...	0.6	0
Bosnia and Herzegovina	-1.4	...	...	0.0	0
Bulgaria	9.0	18.7	2	0.0	0
Czech Republic	-3.8	7.8	...	1.6	0
Estonia	3.5	6.2	...	0.0	0
Latvia	13.3	25.6	...	-0.3	0
Lithuania	5.1	35.2	47	0.0	0
Macedonia	...	...	...	-0.4	0
Montenegro	-1.9	...	...	...	0
Slovak Republic	7.2	7.9	...	0.0	0

Source: Bloomberg.

Notes: The meaning of the colour scheme:

- Stock markets: decline over 10% - red (score 2), 5-10% - yellow (score 1), below 5% - green (score 0).

- CDS and EMBI spread: increase over 100 bps - red (score 2), 51-100 bps - yellow (score 1), below 51 bps - green (score 0) from the two spread indicators the one with larger score was taken with double score.

- EUR/currency: decrease by more than 5% - red (score 2), 2-5% - yellow (score 1), below 2% - green (score 0).

Table A2. CESEE: Growth of Real GDP, Domestic Demand, Exports, and Private Consumption, 2011–14
(Percent)

	Real GDP Growth				Real Domestic Demand Growth				Real Exports Growth (goods and services)				Real Private Consumption Growth			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Baltics[1]	6.6	4.2	3.2	3.4	8.4	1.7	3.8	4.0	15.7	9.1	5.5	5.7	5.3	5.0	4.3	3.4
Estonia	9.6	3.9	1.5	2.5	10.9	6.3	4.3	3.3	23.4	5.6	6.1	5.2	3.8	4.9	5.1	3.5
Latvia	5.5	5.6	4.0	4.2	11.3	2.4	3.9	4.4	12.4	8.3	4.6	5.5	4.8	5.4	4.8	3.9
Lithuania	5.9	3.6	3.4	3.4	5.6	-0.7	3.5	4.0	14.1	11.2	5.7	6.0	6.4	4.7	3.7	3.1
Central Europe[1]	3.3	0.6	0.7	1.9	2.0	-1.7	-1.3	1.4	8.3	3.4	4.1	4.9	1.5	-0.6	0.1	1.0
Czech Republic	1.8	-1.2	-0.4	1.5	-0.1	-2.7	-0.1	1.0	9.5	4.0	2.1	5.7	0.5	-2.7	1.1	1.0
Hungary	1.6	-1.7	0.2	1.3	0.1	-3.7	-1.1	0.6	6.3	2.0	2.9	3.5	0.4	-2.0	-0.3	0.6
Poland	4.5	1.9	1.3	2.4	3.6	-0.2	-1.4	2.1	7.7	2.8	5.4	5.3	2.6	0.8	0.2	1.4
Slovak Republic	3.2	2.0	0.8	2.3	1.4	-3.1	-1.9	1.3	12.7	8.6	3.9	4.2	-0.5	-0.6	0.2	0.9
Slovenia	0.7	-2.5	-2.6	-1.4	-0.3	-6.4	-6.4	-3.7	7.0	0.6	1.4	2.1	0.8	-4.8	-4.0	-2.7
Southeastern Europe-EU[1]	1.7	0.3	1.2	1.9	1.5	1.1	0.0	2.0	9.3	-1.8	5.4	5.6	1.0	0.7	0.4	1.5
Bulgaria	1.8	0.8	0.5	1.6	0.3	3.5	-0.9	1.5	12.3	-0.4	7.4	5.5	1.5	2.6	-0.4	1.0
Croatia	0.0	-2.0	-0.6	1.5	-0.3	-3.0	-0.3	2.1	2.0	0.4	-1.7	2.5	0.2	-3.0	-0.8	1.2
Romania	2.2	0.7	2.0	2.2	2.5	1.4	0.4	2.1	10.3	-3.0	6.6	6.4	1.1	1.1	1.0	1.8
Southeastern Europe-non-EU[1]	2.2	-0.5	1.7	2.3	3.3	-1.1	0.8	2.3	4.8	0.1	8.5	7.9	1.2	-1.4	0.5	1.8
Albania	2.8	1.6	1.7	2.1	3.5	-2.8	-0.2	3.9	3.7	-3.4	7.2	2.5	2.8	-0.9	-0.1	4.2
Bosnia and Herzegovina	1.3	-0.7	0.5	2.0	1.4	-0.8	1.6	2.6	3.3	-7.5	6.7	9.3	3.2	-1.2	1.5	2.2
Kosovo	5.2	2.3	2.6	4.2	...	...	...	...	...	...	...	...	...	...	...	...
Macedonia	2.9	-0.3	2.2	3.2	5.3	2.0	3.0	4.3	10.4	0.0	3.9	10.5	4.0	-1.2	1.9	3.9
Montenegro	3.2	-0.5	1.5	2.2	-0.2	0.9	0.5	2.7	14.6	-0.9	2.6	3.1	4.2	2.2	2.9	1.7
Serbia	1.6	-1.7	2.0	2.0	3.8	-1.6	0.3	0.9	3.4	4.5	11.5	8.8	-1.1	-1.9	-0.3	0.2
European CIS countries[1]	4.5	2.9	1.4	2.8	8.8	5.0	2.1	4.1	2.4	0.8	2.9	6.9	7.1	7.2	5.2	4.2
Belarus	5.5	1.5	2.1	2.5	3.4	3.7	4.8	3.8	30.4	10.1	-5.2	1.0	2.3	10.8	6.0	4.0
Moldova	6.8	-0.8	4.0	4.0	7.2	0.5	3.4	5.2	27.4	2.3	11.6	8.4	9.4	1.0	3.4	5.1
Russia	4.3	3.4	1.5	3.0	8.8	5.3	2.1	4.3	0.3	1.4	4.8	7.8	6.2	6.5	5.6	4.4
Ukraine	5.2	0.2	0.4	1.5	11.0	4.0	0.5	2.5	4.2	-7.7	-8.3	2.3	15.6	11.6	2.0	2.4
Turkey	8.8	2.2	3.8	3.5	9.5	-1.8	4.8	3.3	7.9	16.7	5.2	5.9	7.7	-0.6	3.8	3.1
CESEE[1,2]	4.7	2.0	1.7	2.7	6.6	1.8	1.6	3.1	5.6	4.2	4.0	6.2	5.3	3.3	3.3	3.0
Emerging Europe[1,3]	4.9	2.2	1.9	2.8	7.2	2.2	1.9	3.3	5.1	4.1	4.1	6.3	5.7	3.8	3.5	3.2
New EU member states[1,4]	3.2	0.8	0.9	2.0	2.3	-0.8	-0.7	1.7	9.0	2.6	4.5	5.1	1.7	0.0	0.5	1.3
Memorandum																
Euro Area[1]	1.5	-0.6	-0.4	1.0	0.7	-2.2	-1.2	0.5	6.4	2.5	2.0	4.6	0.3	-1.4	-0.7	0.5
European Union[1]	1.7	-0.3	0.0	1.3	0.8	-1.5	-0.8	0.8	6.4	2.1	2.3	4.3	0.4	-0.7	-0.2	0.8

Source: IMF, World Economic Outlook database.

[1] Weighted average. Weighted by GDP valued at purchasing power parity.

[2] Includes Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Turkey, and Ukraine.

[3] CESEE excluding Estonia, Czech Republic, Slovak Republic, and Slovenia.

[4] Includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

Table A3. CESEE: CPI Inflation, Current Account Balance, and External Debt, 2011–14

(Percent)

	CPI Inflation (Period average)				CPI Inflation (End of period)				Current Account Balance to GDP				Total External Debt to GDP			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Baltics[1]	4.4	3.1	1.6	2.2	3.7	2.7	2.1	2.0	-1.9	-1.2	-0.6	-1.0	98.0	97.8	91.7	86.4
Estonia	5.1	4.2	3.5	2.8	4.1	3.8	3.2	2.8	1.8	-1.8	-0.7	-0.2	96.1	90.8	81.7	71.1
Latvia	4.2	2.3	0.7	2.1	3.9	1.6	1.8	1.1	-2.1	-1.7	-1.1	-1.3	136.3	139.8	138.1	131.3
Lithuania	4.1	3.2	1.3	2.1	3.5	2.9	1.7	2.2	-3.7	-0.5	-0.3	-1.2	73.5	73.3	66.8	65.0
Central Europe[1]	3.7	3.9	1.7	2.1	4.0	2.8	2.0	2.1	-3.1	-1.7	-1.0	-1.0	68.6	78.2	75.3	71.8
Czech Republic	1.9	3.3	1.8	1.8	2.4	2.4	1.9	2.0	-2.8	-2.4	-1.8	-1.5	43.6	52.1	50.5	49.5
Hungary	3.9	5.7	2.3	3.0	4.1	5.0	3.0	3.0	0.8	1.7	2.2	2.0	125.5	130.3	112.8	102.8
Poland	4.3	3.7	1.4	1.9	4.6	2.4	1.9	2.0	-4.9	-3.5	-3.0	-3.2	62.2	74.4	73.4	69.3
Slovak Republic	4.1	3.7	1.7	2.0	4.6	3.4	1.6	2.1	-2.1	2.3	3.5	4.2	71.2	77.2	78.6	78.3
Slovenia	1.8	2.6	2.3	1.8	2.1	2.5	2.4	1.5	0.4	3.3	5.4	7.0	79.7	89.9	89.9	91.5
Southeastern Europe-EU[1]	4.6	3.1	3.5	2.5	2.7	4.4	2.6	2.7	-3.0	-2.6	-0.9	-1.6	79.6	86.5	80.6	79.3
Bulgaria	3.4	2.4	1.4	1.5	2.0	2.8	1.0	2.0	0.1	-1.3	1.2	0.3	89.1	97.2	92.0	91.5
Croatia	2.3	3.4	3.0	2.5	2.0	4.7	2.3	2.5	-1.0	0.1	0.4	-0.7	96.1	104.5	97.8	92.7
Romania	5.8	3.3	4.5	2.8	3.1	5.0	3.3	3.0	-4.5	-3.9	-2.0	-2.5	71.2	77.3	71.8	71.4
Southeastern Europe-non-EU[1]	7.2	4.8	5.2	3.6	4.6	7.4	3.5	3.5	-9.7	-9.8	-8.5	-7.9	58.6	66.9	64.3	62.2
Albania	3.4	2.0	2.2	2.7	1.7	2.4	2.5	3.0	-12.2	-10.5	-9.3	-10.5	33.6	38.3	38.9	38.0
Bosnia and Herzegovina	3.7	2.0	1.8	1.8	2.7	2.0	1.8	1.8	-9.5	-9.7	-8.7	-7.9	47.2	52.6	51.4	51.5
Kosovo	7.3	2.5	2.1	1.8	3.6	3.7	1.5	1.7	-13.8	-7.6	-10.5	-8.7	...	...	...	...
Macedonia	3.9	3.3	2.8	2.1	2.8	4.7	2.2	2.0	-3.0	-3.9	-5.8	-6.2	65.1	70.7	67.2	64.7
Montenegro	3.1	3.6	2.8	2.9	2.8	5.1	2.8	2.3	-17.7	-17.9	-16.7	-16.2	96.1	111.2	113.1	113.6
Serbia	11.1	7.3	8.5	5.0	7.0	12.2	5.0	4.8	-9.1	-10.5	-7.5	-6.5	74.1	88.1	82.2	78.5
European CIS countries[1]	10.6	7.2	6.5	5.7	11.0	6.5	5.9	5.5	3.8	2.5	1.8	1.3	33.4	33.2	32.3	32.1
Belarus	53.2	59.2	17.5	14.8	108.7	21.8	12.0	15.5	-9.7	-2.9	-8.3	-6.7	57.7	55.1	53.0	48.7
Moldova	7.6	4.6	4.4	4.3	7.8	4.0	4.1	5.0	-11.3	-7.0	-7.6	-8.8	77.6	84.6	85.9	87.0
Russia	8.4	5.1	6.7	5.7	6.1	6.6	6.2	5.3	5.1	3.7	2.9	2.3	28.7	28.6	27.6	27.6
Ukraine	8.0	0.6	0.0	1.9	4.6	-0.2	0.8	2.3	-6.3	-8.4	-7.3	-7.4	77.2	76.6	79.0	77.7
Turkey	6.5	8.9	6.6	5.3	10.4	6.2	8.0	6.0	-9.7	-6.1	-7.4	-7.2	39.3	42.8	46.4	47.7
CESEE[1,2]	7.6	6.3	5.1	4.4	8.3	5.4	5.0	4.5	-1.1	-0.5	-0.9	-1.1	47.6	49.8	48.9	48.0
Emerging Europe[1,3]	8.0	6.5	5.3	4.7	8.8	5.6	5.2	4.7	-1.0	-0.5	-1.0	-1.3	46.7	48.5	47.6	46.8
New EU member states[1,4]	3.9	3.7	2.1	2.2	3.7	3.2	2.2	2.2	-3.0	-1.9	-1.0	-1.1	72.9	81.3	77.6	74.5
Memorandum																
European Union[1]	3.1	2.6	1.7	1.7	3.1	2.3	1.6	1.7	0.4	0.9	1.5	1.6	...	...	...	...

Source: IMF, World Economic Outlook database.

[1] Weighted average. CPI inflation is weighted by GDP valued at purchasing power parity, and current account balances and external debt are weighted by U.S. dollar GDP.

[2] Includes Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Turkey, and Ukraine.

[3] CESEE excluding Estonia, Czech Republic, Slovak Republic, and Slovenia.

[4] Includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

Table A4. CESEE: Evolution of Public Debt and General Government Balance, 2011–14[1]

(Percent of GDP)

	General Government Balance				Public Debt			
	2011	2012	2013	2014	2011	2012	2013	2014
Baltics[2]	-4.1	-2.0	-2.2	-1.8	40.5	42.3	44.1	42.6
Estonia	1.7	-0.2	0.3	0.2	6.0	9.7	11.0	10.4
Latvia[3]	-3.2	0.1	-1.4	-0.5	37.5	36.4	38.4	34.6
Lithuania	-5.5	-3.3	-2.9	-2.7	39.4	41.1	42.0	42.3
Central Europe[2]	-3.4	-3.8	-3.9	-3.2	54.7	56.2	58.9	55.7
Czech Republic	-3.3	-4.4	-2.9	-2.9	41.0	45.9	47.6	48.9
Hungary[4]	4.8	-1.6	-2.3	-2.4	81.4	79.2	79.8	80.0
Poland	-5.0	-3.9	-4.6	-3.4	56.2	55.6	57.6	50.0
Slovak Republic	-5.1	-4.3	-3.0	-3.8	43.3	52.1	55.3	57.5
Slovenia[3]	-6.2	-4.3	-7.1	-3.8	46.9	52.8	71.5	75.3
Southeastern Europe-EU[2]	-4.1	-2.4	-2.7	-2.5	33.6	37.6	38.0	39.2
Bulgaria[3]	-2.0	-0.5	-1.8	-1.7	15.4	17.6	16.0	19.0
Croatia[3]	-5.2	-3.8	-4.7	-4.7	47.2	53.7	57.8	60.7
Romania	-4.3	-2.5	-2.3	-2.0	34.4	38.2	38.2	38.1
Southeastern Europe-non-EU[2]	-3.9	-5.0	-5.1	-4.7	46.4	54.3	57.1	59.0
Albania[3]	-3.5	-3.2	-5.5	-6.3	59.4	61.4	64.8	68.3
Bosnia and Herzegovina	-2.4	-2.3	-0.9	-1.2	40.4	44.3	42.1	39.4
Kosovo[3]	-1.8	-2.6	-3.8	-3.0	...	...	...	...
Macedonia[3]	-2.5	-3.9	-4.2	-3.4	27.9	34.0	35.5	35.0
Montenegro[3]	-5.2	-4.3	-2.3	-3.2	46.0	51.9	55.5	54.3
Serbia[3]	-5.1	-7.6	-7.5	-6.5	49.5	61.8	66.6	71.3
European CIS countries[2]	1.1	0.0	-1.0	-0.7	27.3	23.2	21.0	31.5
Belarus[3,5]	-2.9	0.5	-0.1	-2.9	45.9	41.9	37.9	34.3
Moldova[3]	-2.4	-2.1	-2.7	-3.1	23.1	23.9	24.0	24.5
Russia[3]	1.5	0.4	-0.7	-0.3	11.7	12.5	14.1	14.6
Ukraine[3]	-2.8	-4.5	-4.3	-5.1	36.8	37.4	42.8	48.1
Turkey[3]	-0.9	-2.1	-2.8	-2.9	39.1	36.2	36.0	34.9
CESEE[2,6]	-1.4	-1.9	-2.4	-2.7	30.5	30.1	31.7	31.2
Emerging Europe[2,7]	-0.6	-1.2	-2.0	-1.8	29.5	28.7	30.1	29.5
New EU member states[2,8]	-3.5	-3.3	-3.5	-2.9	48.7	50.6	52.6	50.5
Memorandum								
European Union[1]	-4.5	-4.2	-3.4	-2.9	82.6	86.8	89.5	90.0

Source: IMF, World Economic Outlook database.

[1] As in the WEO, general government balances reflect IMF staff's projections of a plausible baseline, and as such contain a mixture of unchanged policies and efforts under programs, convergence plans, and medium-term budget frameworks. General government overall balance where available; general government net lending/borrowing elsewhere.

[2] Average weighted by GDP in US dollars.

[3] Reported on a cash basis.

[4] Fiscal surplus in 2011 reflects revenue from rollback of pension reform. Assets of 11 percent of GDP are transferred from private-sector to public pension funds.

[5] General government balance: the measure reflected augmented balance, which adds to the balance of general government outlays for banks recapitalizations and related to called guarantees of publicly-guaranteed debt.

[6] Includes Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Turkey, and Ukraine.

[7] CESEE excluding Estonia, Czech Republic, Slovak Republic, and Slovenia.

[8] Includes Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

Table A5. Increase of Real GDP between 2008 and 2013 according to Various WEO Vintages

(Percent)

	Spring 2008 WEO	Fall 2013 WEO	Difference (Percentage points)
CESEE economies			
Croatia	25.4	-11.4	-36.9
Bulgaria	32.1	-2.1	-34.2
Slovenia	22.9	-10.9	-33.8
Romania	30.4	-3.1	-33.5
Lithuania	30.5	-1.9	-32.4
Ukraine	26.5	-6.2	-32.8
Serbia	31.3	-0.8	-32.1
Moldova	40.2	10.9	-29.3
Russia	33.3	5.4	-27.9
Bosnia and Herzegovina	25.9	-1.2	-27.1
Montenegro	27.2	0.7	-26.5
Slovak Republic	31.3	5.4	-25.9
Macedonia	31.9	6.9	-25.1
Hungary	19.4	-5.5	-24.9
Czech Republic	22.8	-2.0	-24.8
Estonia	26.4	1.9	-24.6
Albania	35.1	13.9	-21.2
Belarus	32.2	18.1	-14.1
Latvia	7.4	-5.6	-13.0
Poland	26.3	13.9	-12.4
Turkey	26.8	19.9	-6.9
Kosovo	…	18.0	…
Other EU countries			
Greece	18.6	-23.3	-41.9
Cyprus	21.1	-11.0	-32.0
Ireland	20.4	-4.7	-25.1
Spain	16.8	-6.8	-23.5
Portugal	10.9	-7.1	-18.1
Luxembourg	19.2	1.2	-18.0
Finland	12.1	-4.3	-16.4
United Kingdom	14.5	-1.0	-15.4
Netherlands	10.8	-3.7	-14.5
Italy	4.5	-7.5	-12.0
France	12.2	0.7	-11.5
Malta	14.3	4.3	-10.1
Belgium	10.6	1.2	-9.4
Austria	11.1	1.9	-9.2
Denmark	5.3	-3.4	-8.7
Sweden	13.7	6.1	-7.6
Germany	9.2	3.3	-5.9
Selected other countries			
Thailand	33.2	15.7	-17.5
South Africa	25.1	9.9	-15.2
India	46.8	36.6	-10.2
Korea	25.4	16.1	-9.3
United States	14.6	5.9	-8.6
China	61.0	52.8	-8.2
Brazil	21.9	13.9	-8.0
Chile	28.6	22.1	-6.5
Japan	8.6	2.2	-6.5
Indonesia	37.5	32.4	-5.1
Switzerland	8.2	5.7	-2.5
Peru	31.3	31.3	0.0
Argentina	17.6	26.4	8.7

Source: IMF World Economic Outlook databases.

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