

# South East Europe Regular Economic Report

## Main Report

### Focus notes:

Skills, Not Just Diplomas  
R&D and Innovation

November 15, 2011



Poverty Reduction and Economic Management Unit  
Europe and Central Asia Region



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Focus note #1 Skills, Not Just Diplomas is prepared by Lars Sondergaard and Focus note #2 R&D and Innovation by Paulo Correa and Dragana Pajovic.

SEE6 refers to Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro and Serbia.

## SUMMARY

**The recovery of global growth that started in 2010 began to weaken in 2011.** During the first half the falloff was linked to the Tohoku nuclear disaster in Japan and high oil prices, but by the end of July, temporary effects from Tohoku were starting to fade and global industrial production was rising. However, since August the global economy has come under increasing stress from the sovereign debt problems in Europe, anemic growth in the US, and a slowdown in China and other main emerging markets. The latest leading indicators and forecasts point to a further slowdown in growth in Europe. Meanwhile, risks remain of a double-dip recession in the US and sharper slowdown in the large emerging economies.

**Near term developments for SEE6<sup>1</sup> depend critically on factors that are largely beyond the control of SEE6 governments.** As this is being written, leaders of the major EU countries are still seeking to implement a set of credible policies to establish an orderly process for managing sovereign debt in Greece, to prevent risks from spreading to other economies in the euro zone, to recapitalize banks affected by likely sovereign debt write downs, and to establish a more unified and effective fiscal framework for euro zone (EZ) states. Uncertainty over their ability to successfully conclude this process, as well a series of ratings downgrades, stock market volatility and uncertainty over US deficit policies have shaken investor and business confidence and kept consumers wary. Most forecasters have already reduced their projections for global growth in the US and the EU by a percent or more. Our projections are for SEE6 growth of 2.5 percent in 2011 and 2.1 percent in 2012, well below the pre-2008 rates of 6-10 percent. Even these modest growth projections assume that European leaders are able to resolve the crisis in a manner that does not involve a disorderly default and avoids contagion effects. However, should the policy makers fail and the crisis worsen, SEE6 performance, and the rest of world's, could be much worse.

**Table 1: SEE6 GDP real growth rates (%)**

	2007	2008	2009	2010 Est.	2011 Proj.	2012 Proj.
Albania (ALB)	6.0	7.7	3.3	3.5	3.0	2.0
Bosnia and Herzegovina (BIH)	6.8	5.7	-3.1	0.8	2.0	1.0
Kosovo (KOS)	6.3	6.9	2.9	4.0	5.3	5.0
FYR Macedonia (MKD)	6.1	5.0	-0.9	1.8	3.0	2.5
Montenegro (MNE)	10.7	6.9	-5.7	2.5	2.9	2.0
Serbia (SRB)	5.4	3.8	-3.5	1.0	2.0	2.0
SEE6	6.8	5.9	-1.7	2.0	2.5	2.1

*Source:* SEE6, National Statistics Offices and WB staff projections. EU10 and EU15

**The effects of a further global slowdown and the deepening EZ crisis will be communicated to the SEE6 through several channels.** The EU, and EZ countries in particular, are the largest trade partners of all the SEE6, countries: trade with the EU is equivalent to between 30 percent and almost half of the SEE6 GDPs. Beyond trade, the EU is also the largest aggregate FDI provider to the region, with net FDI inflows worth over 2 percent of the SEE6 GDP. The presence of foreign banks creates another channel of potential transmission of the EZ crisis to the SEE6: not only is the share of foreign banks in the total assets of the regions' banking system very large (at around 89 percent of the total), but this foreign

<sup>1</sup> SEE6 are Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro and Serbia.

presence in some cases involves substantial foreign funding of subsidiary operations. The EU is also a significant source of remittances to the region. All these transmission channels would be affected by deeper EU/EZ economic and financial tensions.

**At the moment, banking systems in SEE6 countries appear resilient, with high liquidity and significant capital buffers, but this could change abruptly, especially for specific banks.** The SEE6 region is characterized by a comparatively high share of Greek- and Italian-owned banks. Austrian banks also have a significant presence in the region although these banks face less risk in their own sovereign debt market. In tandem with EU-wide calls to increase leading banks' capital, further stress on their respective parent banks' funding may put pressure on their local subsidiaries to provide liquidity or dividends to their parents. Moreover, starting in 2009, there was a rapid increase in non-performing loans (NPLs) throughout the SEE6 countries. NPLs have since stabilized in some, but not all of the countries, and they remain significantly above pre-crisis levels. These factors could potentially cause another credit crunch in the region. On the other hand, local subsidiaries currently appear liquid and well capitalized. In addition, most of these banks are subsidiaries, rather than branches and are thus subject to monitoring and regulation by local SEE6 regulators so that rapid unwinding of their positions is not likely. Also the overall level of dependence on foreign funding of SEE6 banks is less than in EU10 countries<sup>2</sup>. This in part reflects the reliance of foreign-owned banks in SEE6 on domestic deposits for funding. There is currently no indication of a run on deposits of the sort that accompanied the 2008 turbulence, although the situation needs careful monitoring. However, foreign financing is an important source for banks' funding of real sector lending, as direct foreign borrowing by the real sector in SEE6 amounts to about 18 percent of GDP. FDI and portfolio flows typically constitute a more stable funding source. However, FDI to SEE6 has slowed down since the second half of 2008, and is now at about 60 percent of the pre-crisis levels.

**The fiscal situation remains fragile and the authorities need to rebuild fiscal buffers and be prepared for further expenditure consolidation should revenue forecasts not be fulfilled as a result of worsening global conditions.** During the last few years, SEE6 countries exhausted the modest buffers created in the pre-crisis period of high growth and buoyant revenues. With the exception of Kosovo, no country has sizable deposits to draw down. In addition, the domestic capital markets are shallow and while banks appear to have strong liquidity at the moment, this may rapidly change in case of a sharper slowdown in economic activity. Moreover, access to external financing markets will remain difficult for SEE6 countries in the period ahead. This means few SEE6 countries still have room to accommodate a worsening of the crisis through fiscal stimulus or even through allowing automatic stabilizers to operate and several countries should accelerate fiscal consolidation, especially reforms to enhance longer-term fiscal sustainability. Monetary policy is also constrained in several SEE6 countries by virtue of the exchange regimes they have adopted.

**It is important to keep in view the fact that, despite recent turbulence, the growth model based on deeper integration with the EU in terms of finance, trade, labor markets and institutions remains the best one for SEE6 over the longer term.** There are two basic lessons to be learned from the recent events that will enable the SEE6 to better exploit the benefits of this growth model. The first is that future growth will need to be driven more by investment and improvements in productivity that enhance competitiveness and productive capacity, and less by the externally financed consumption and investment in real estate and other bubble assets that characterized the pre-2009 period. The second is that there remains in most of the SEE6 countries a lengthy unfinished agenda of structural reforms. These urgently need to be addressed in order to take advantage of the access to markets, and to FDI, bank finance and remittances that the integration-based growth model offers.

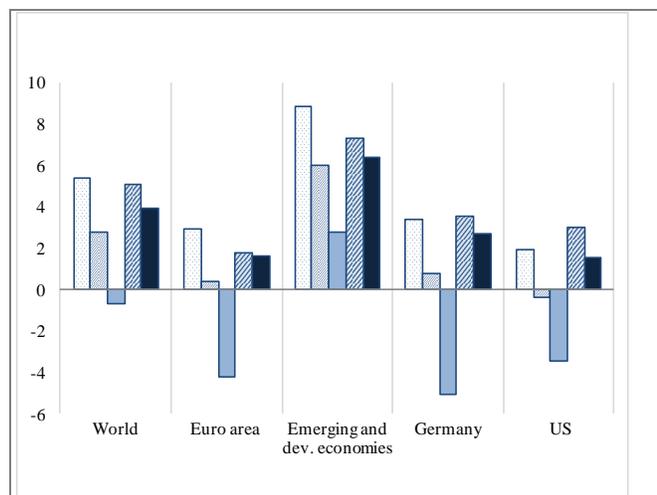
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<sup>2</sup> New member states of the European Union

## 1. GLOBAL DEVELOPMENTS

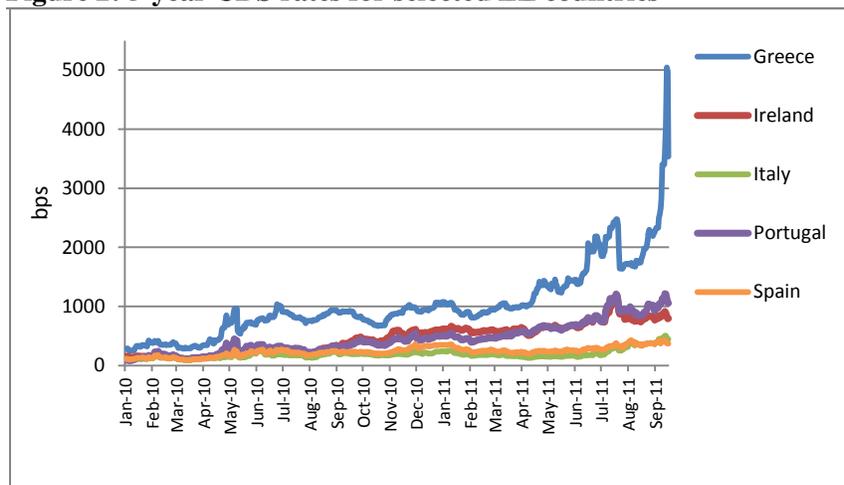
The recovery of global growth that started in 2010 began to weaken in 2011. During the first half the falloff was linked to the Tohoku disaster in Japan and high oil prices but by the end of July, temporary effects from Tohoku were starting to fade and global industrial production was rising. However since August the global economy has come under increasing stress from the sovereign debt problems in Europe, anemic growth in the US, and a slowdown in China and other main emerging markets. The latest leading indicators and forecasts point to further slowdown in growth in Europe. Meanwhile, risks remain of a double-dip recession in the US and sharper slowdown in BRICs.<sup>3</sup> In emerging Europe, growth is also generally expected to weaken in 2012.

Figure 1: World growth rates 2007-2011 (%)



Source: IMF World Economic Outlook, September 2011.

Figure 2: 5-year CDS rates for selected EZ countries



Source: Bloomberg.

In the euro-zone, the crisis in confidence has now clearly spread beyond Greece, Ireland and Portugal, with credit default swap (CDS) spreads in Italy and Spain increasing substantially in recent weeks. While the balance sheet problems of Greece, Ireland and Portugal are large for these countries they are small for the euro-zone (with their public debt equal to 6 percent of euro-zone GDP). By contrast, public debt in Spain and Italy amounts to 27 percent of euro-zone GDP.

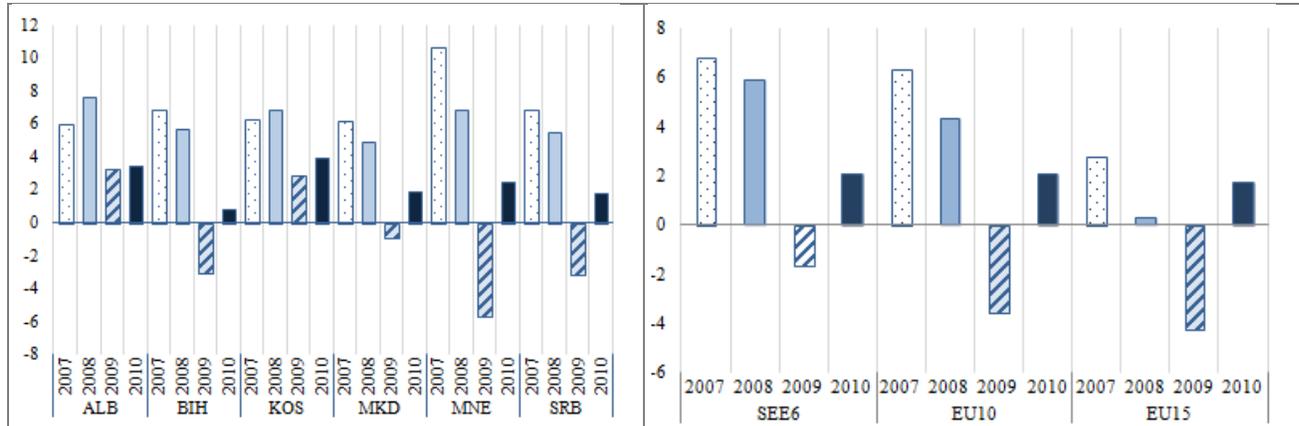
With these growing uncertainties the likelihood is that global growth will be less in 2011 and 2012 than was expected at mid year when the World Bank released its most recent official forecasts. For the purposes of this report we assume growth in the euro zone of 1.6 and 0.5 for 2011 and 2012 respectively.

<sup>3</sup> Brazil, Russia, India and China.

## 2. GROWTH IN SEE6<sup>4</sup>

**I**n SEE6 pre-crisis growth relied on booming domestic demand financed from abroad (Figure 5). In 2008, domestic demand - primarily consumption and to a lesser extent investments - contributed 7.6 percentage points of the overall 5.1 percent growth. Consequently, net exports contributed negatively to growth (-2.9 percentage points).

**Figure 3: Real GDP growth in SEE6 countries (%)** **Figure 4: Real GDP growth in SEE6, EU10, and EU 15 (%)**



Source: National Statistics Offices.

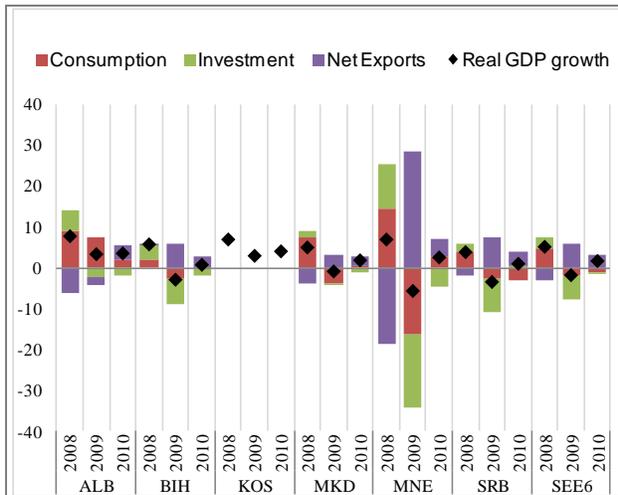
Source: National Statistics Offices and Eurostat.

**With the onset of the 2009 crisis domestic demand contracted and net exports became the only source of growth.** Domestic demand fell sharply principally because of a reduction of investment. This led to a contraction of imports which slowed more than exports leading to a positive contribution of net exports to growth (5.8 percentage points). As a region, SEE6 experienced a recession in 2009 of 1.7 percent of GDP or a drop of 7.6 percentage points from the pre-crisis growth in 2008. Not all countries were affected equally – Albania and Kosovo managed to avoid a recession and FYR Macedonia experienced a modest growth slowdown, while Montenegro, Serbia, Bosnia and Herzegovina experienced a sharp recession.

**Growth resumed in 2010, albeit at a much slower rate than before the crisis (1.6 percent vs. 5.1 percent).** While the region experienced a modest recovery in 2010 (1.6 percent GDP growth), net exports continued to be the source of growth contributing 3.1 percentage points while domestic demand continued to be a drag on growth (-1.7 percentage points).

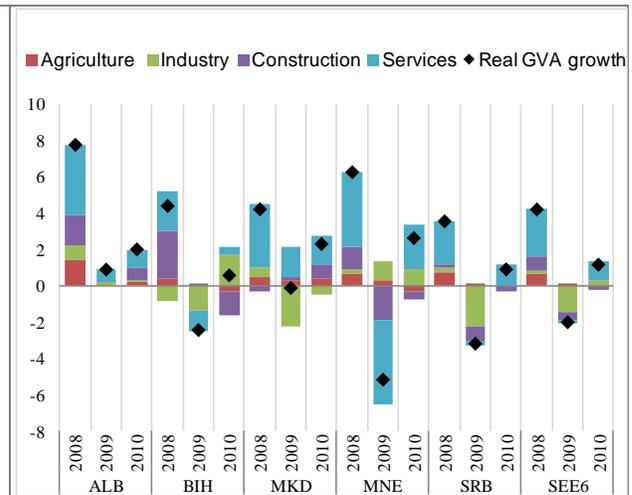
<sup>4</sup> SEE6 are Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro and Serbia.

**Figure 5: Contributions to real GDP Growth (%)**



Source: National Statistics Offices and WB staff calculations.

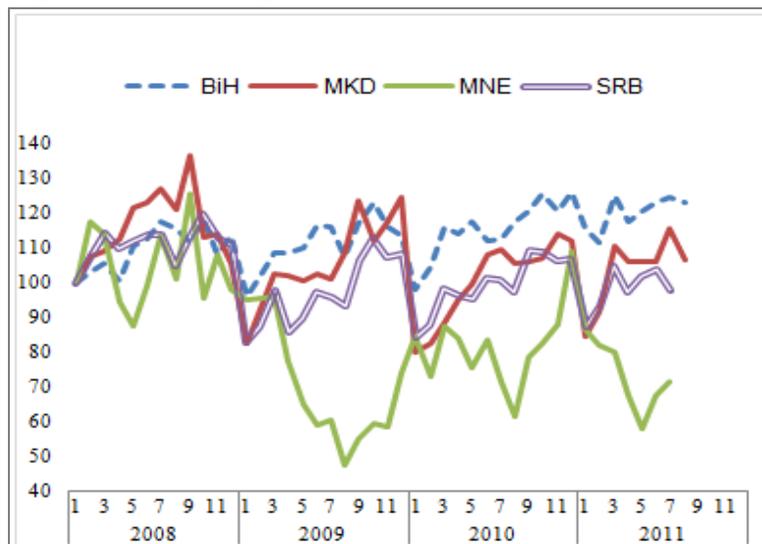
**Figure 6: Contributions to real GVA growth (%)**



Source: National Statistics Offices and WB staff calculations.

On the production side (Figure 6), pre-crisis performance was characterized by a strong contribution of the service sector and construction, which contributed a combined 3.4 percentage points with industry and agriculture making up the rest for a total of 4.2 percentage points growth in Gross Value Added (GVA). However, during the recession, industry and construction were hit hardest declining 1.9 percentage points and accounting almost entirely for the region’s negative growth of GVA. Construction continued to decline in the aftermath of the property boom while the service sector (1 percentage point) and industry (0.3 percentage points) made positive contributions to the total 1.2 percent growth in GVA.

**Figure 7: Industrial production, (Jan. 2008 = 100)**



Source: National Statistics Offices and World Bank staff calculations.

The countries of SEE6 are susceptible to the effects of a further global slowdown and a deepening euro area (EA) crisis through several channels: trade, FDI, foreign banks, and remittances. The EU countries and EZ countries in particular, are the largest trade partners of all the SEE6, which are on

average rather open economies: trade with the EU is equivalent to between 30 percent and almost half of the SEE6 GDPs. Those strong trade relations are also underpinned by a network of “Stabilization and Association Agreements” with the EU that significantly liberalized their trade access to the EU. Beyond trade, the EU is also the largest aggregate FDI provider to the region, with net FDI inflows worth over 2 percent of the SEE6 GDP.<sup>5</sup> Foreign-owned banks represent another significant channel of potential transmission of the euro area crisis to the SEE6: not only is the share of foreign banks in the total assets of the region’s banking system very large (at around 89 percent of the total), but this foreign presence is largely an EZ one. The EU is also a significant source of remittances to the region. All these transmission channels would be affected by deeper EU/EA economic and financial tensions.

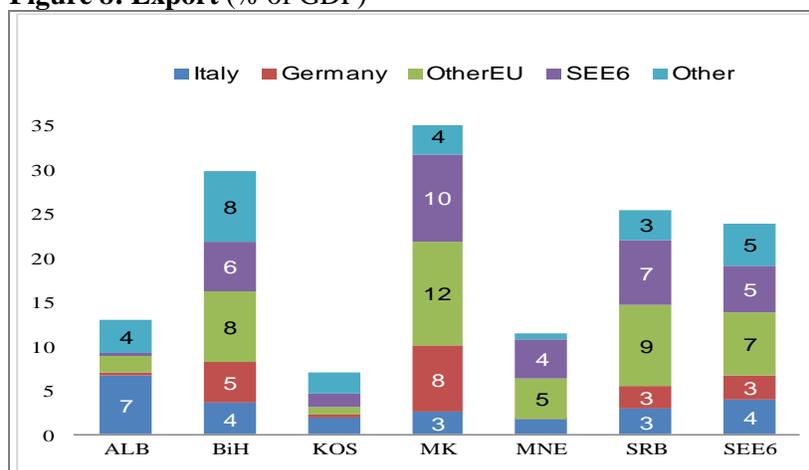
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<sup>5</sup>The EU also provides the equivalent of around 1 percent of the SEE6 GDP in official assistance flows, albeit those are not affected by cyclical developments.

### 3. TRADE AND EXTERNAL DEVELOPMENTS

**P**rogressive integration of SEE6 economies with those of the EU means trade with the EU is a key driver of SEE6 export performance and overall economic growth. The EU is the main export market for SEE6 (Figure 8) accounting for 58.2 percent of total exports (2010) with the lion's share going to Italy and Germany. Intra-regional trade accounts for about 22 percent of exports of SEE6 economies and is especially important for Serbia and Montenegro.

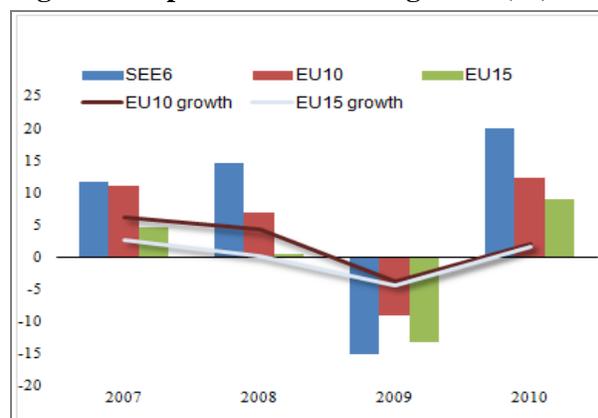
**Figure 8: Export (% of GDP)**



Source: SEE6 central banks and UNCTAD.

The swings in export performance during the 2009 crisis were much more marked in SEE6 than was the case for the EU10. After strong pre-crisis growth performance in 2007 and 2008, exports fell by 14.7 percent in 2009 as compared to 9 percent for the EU10. The recovery in exports in 2010 was robust: SEE6 exports grew by 20 percent, compared to 12.3 percent for the EU10 (Figures 9). The swift increase was driven by increased demand and higher commodity prices, especially for metals. By the third quarter of 2010 exports had recovered to pre-crisis levels. Export growth peaked in the first quarter 2011 at 29.7 percent year on year (y-o-y), and has subsequently slowed.

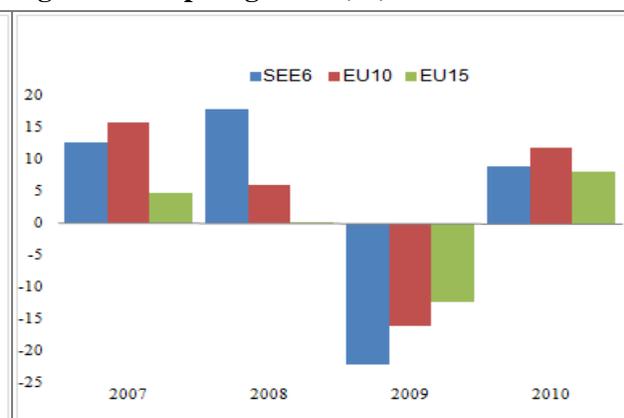
**Figure 9: Export and economic growth (%)**



Source: SEE6 Central Banks and Eurostat.

Note: Export growth is in bars, real GDP growth is in lines.

**Figure 10: Import growth (%)**

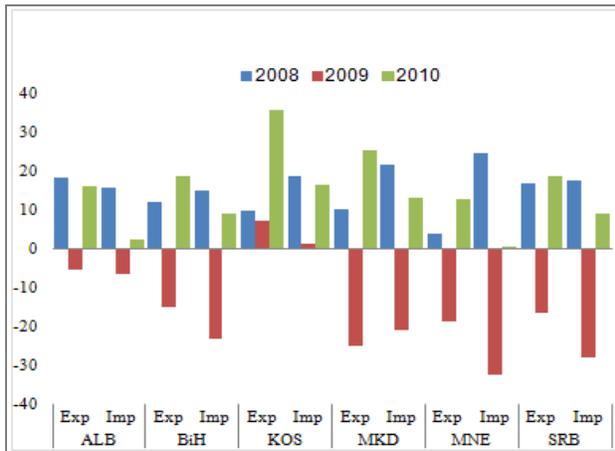


Source: SEE6 Central Banks and Eurostat.

**SEE6 import dynamics are similar to those of exports but with a deeper decline in 2009 and a more muted recovery.** Imports fell by a full 22 percent compared to just 16 percent for the EU10, and they recovered by just 9 percent in 2010 compared to 12 percent for the EU10 (Figure 11). The 2010 increase in imports reflects higher prices of oil and food but was dampened by relatively slow economic growth, particularly in Serbia where there were eight consecutive quarters of negative y-o-y import growth.

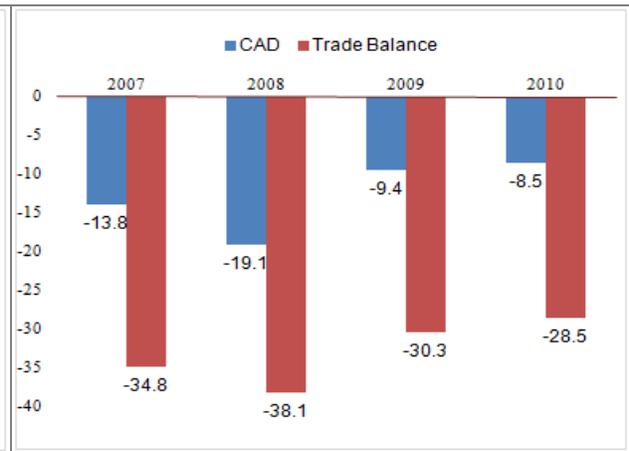
**The current account deficits (CAD) which had reached unsustainable levels in some SEE6 economies by 2008, have since improved significantly, largely as a result of a slower recovery of imports than exports, albeit with some variation across countries.** High pre-crisis import levels in the SEE6 region were driven by increased domestic demand from the economic expansion in 2008. This and a slowdown of exports in Bosnia and Herzegovina, Albania and Serbia and a decline of exports in Kosovo, FYR Macedonia, and Montenegro in the last quarter of 2008 led to a CAD of 19.2 percent of GDP for SEE6 in 2008. But since imports fell more than exports in all countries in 2009, and export growth recovered briskly the following year both the trade balance and the CAD improved by about 10 percentage points of GDP in 2010 compared to 2008.

**Figure 11: Export and import growth, (% y-o-y)**



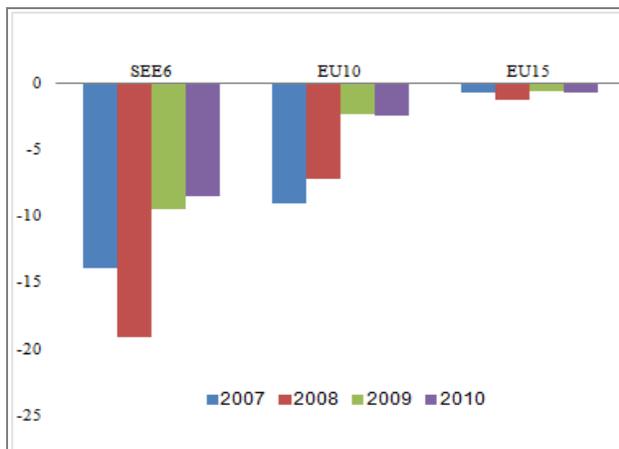
Source: SEE6 Central Banks.

**Figure 12: SEE6 CAD and trade balance, (% of GDP)**



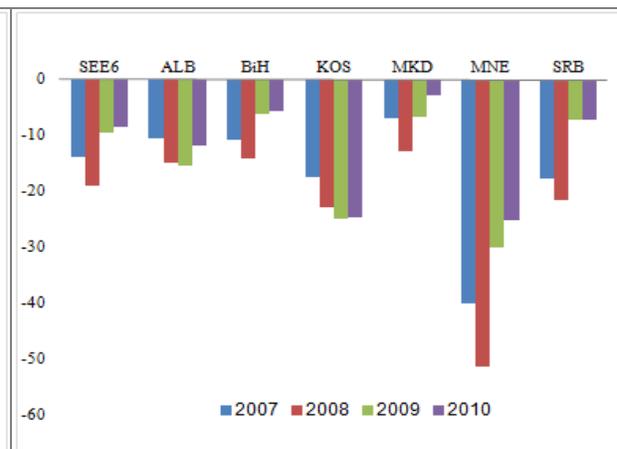
Source: SEE6 Central Banks and WB staff calculations.

**Figure 13: CAD, (% of GDP)**



Source: Central Banks and IMF WEO and WB staff calculations.

**Figure 14: CAD by countries, (% of GDP)**

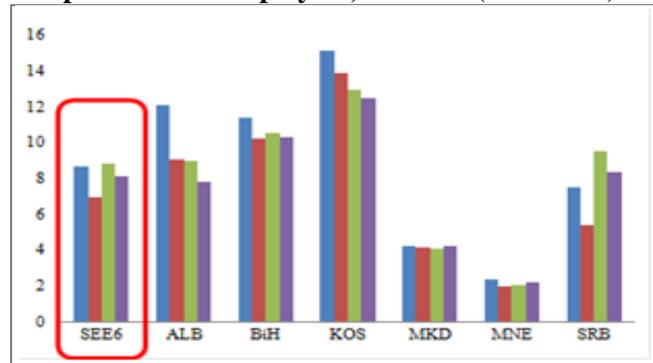


Source: SEE6 Central Banks.

**Despite recent improvements SEE6 CADs still remain high, particularly in Montenegro and Kosovo.** The CAD in SEE6 improved to single digits in 2010 but still remained larger than in EU10 and EU15 (Figure 13). Montenegro had a very large CAD fueled by FDI and strong domestic demand in 2007-2008 (Figure 14). It has declined since but remains over 20 percent of GDP as does Kosovo's large and growing CAD which is largely fueled by highway construction.

**While remittances have remained stable for the SEE6 as a whole, this masks significant differences between countries.** There is a large diaspora of SEE6 workers in high income EU countries as well as USA Canada and Australia. During the last crisis a number of these host countries took measures to preserve employment, and remittances were relatively mildly affected. However, the Albanian Diaspora is concentrated in Greece and Italy and these workers were more negatively affected (Figure 15).

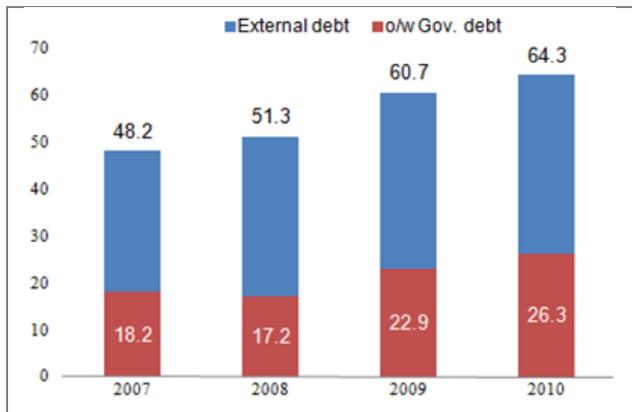
**Figure 15: Workers' remittances and compensation of employees, received (% of GDP)**



Source: SEE6 Central Banks.

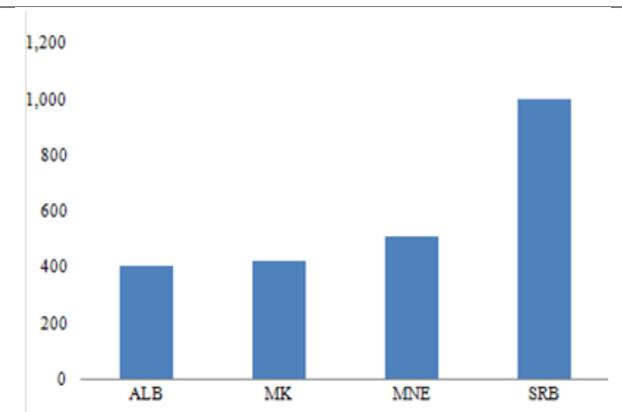
**Both gross external debt and government debt to GDP ratios increased significantly between 2008 and 2010** (Figure 16). External debt grew by 13 percentage points of GDP (to peak 64.3 percent of GDP in 2010). About 2/3 of it is attributable to government borrowing (9 percentage points of GDP) to finance fiscal deficits used to smoothen crisis effects. From June 2009 to September 2011 four countries have issued Eurobonds (FYR Macedonia in 2009, Albania in 2010, Montenegro in 2010 and 2011 and Serbia in 2011) (Figure 17). In addition some of the SEE6 countries used their IMF quota allocations and loan proceeds which increased debt.

**Figure 16: External debt (% of GDP)**



Source: Central Banks and Ministries of Finance (MoF) of SEE6.

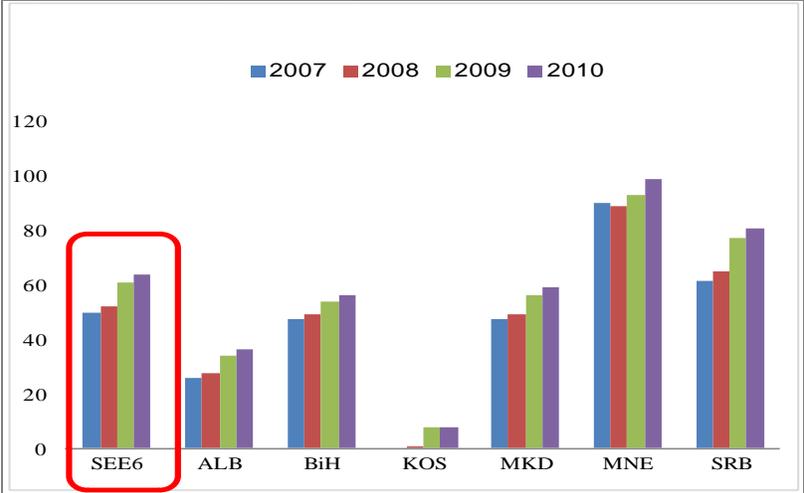
**Figure 17: Total bonds outstanding (mln. US\$)**



Source: MoFs of SEE6 countries.

The SEE6 group is heterogeneous regarding the level of external debt although all are trending upwards (Figure 18). Montenegro and Serbia are both above the regional average and also had the highest debt growth, FYR Macedonia and Bosnia and Herzegovina are slightly below the SEE6 average.

Figure 18: Total public and private external debt (% of GDP)

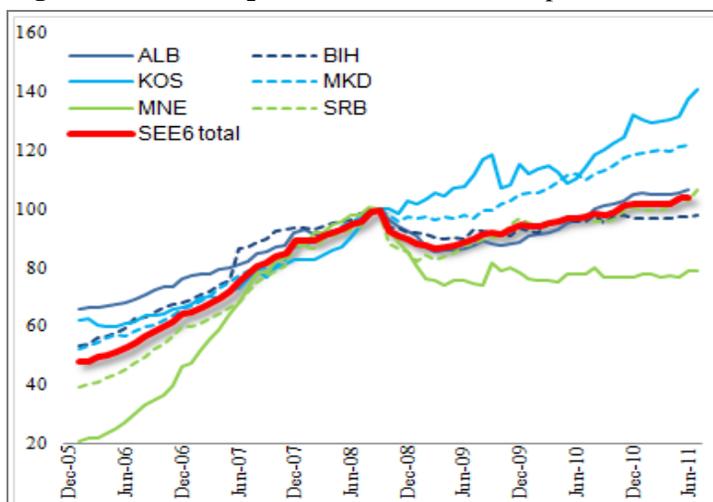


Source: Central Banks and MoFs of SEE6, IMF, WB.

## 4. MONETARY POLICY AND FINANCIAL SECTOR

**I**n all SEE6 countries except Montenegro bank deposits have recovered through mid-2011 following the first wave of the global economic crisis, in late 2008 and early 2009. At that time most SEE6 countries experienced a run on deposits that was mild to modestly severe. Montenegro saw the sharpest drop, with the stock of total deposits falling by about 25 percent from September 2008 to March 2009. In the same period, Serbia experienced a drop of deposits (expressed in euro) of close to 20 percent, Albania a drop of almost 15 percent, Bosnia and Herzegovina a drop of about 10 percent, and FYR Macedonia a drop of about 4 percent. Kosovo was an exception, with deposit growth slowing down, but not turning negative. Since

**Figure 19: Total deposits** (valued in euro, Sept. 2008=100)

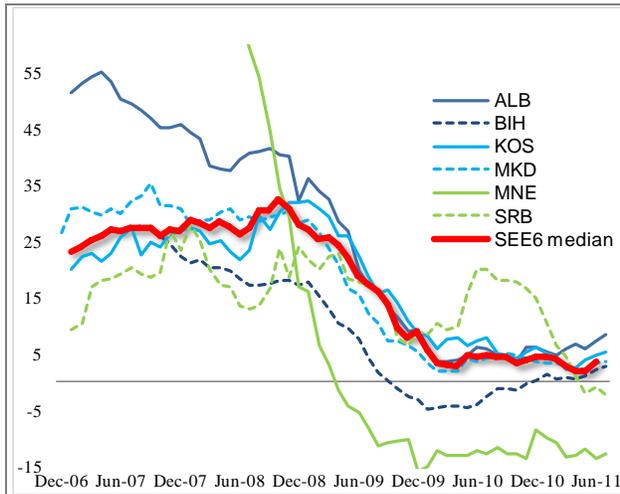


Source: SEE6 Central Banks.

mid-2009, total deposits expressed in euro have started recovering, and now exceed pre-crisis levels in the SEE6 as a whole, as well as in most of the countries individually: deposits in Albania, Kosovo, FYR Macedonia and Serbia are above pre-crisis levels, while in Bosnia and Herzegovina they are very close to pre-crisis level. The only exception is Montenegro, where the level of deposits remains well below the pre-crisis peak (some 20 percent as of August). Significantly, so far there are no signs that a possible second wave of the crisis is causing another round of run on deposits, but this possibility cannot be ruled out (Figure 19).

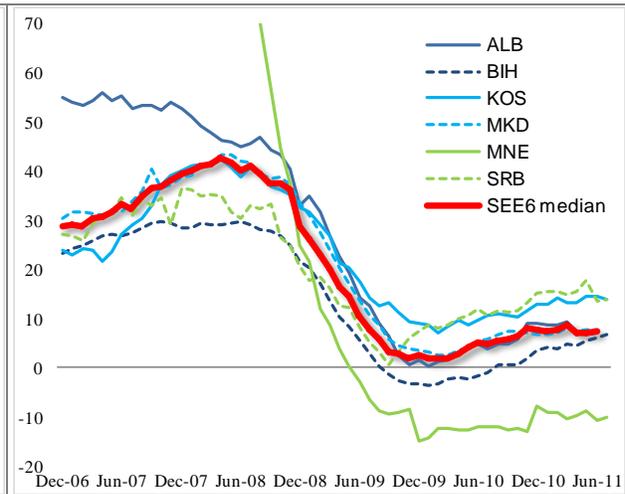
**There was also a sharp drop in credit activity through most of 2009; by 2010 and in 2011 credit activity picked up, but at rates well below those in the pre-crisis period.** In the credit boom prior to the 2008 crisis, the SEE6 experienced real growth of credit to the private sector in the high double-digit range (Figure 20a). As the first wave of the crisis hit in late 2008, there was a sharp slowdown in credit expansion. From early 2010 credit to the private sector stabilized and is generally expanding again, but at much more modest (and sustainable) rates than pre-crisis. For example, the nominal y-o-y growth of credit to the private sector (expressed in euro) in different SEE6 countries ranged from 30 percent to over 50 percent in Q3 2008; as of Q2 2011 it is between 5 percent and 15 percent (and is negative in Montenegro) (Figure 20b).

**Figure 20a: Real y-o-y growth of credit to private sector**



Source: SEE6 Central Banks.

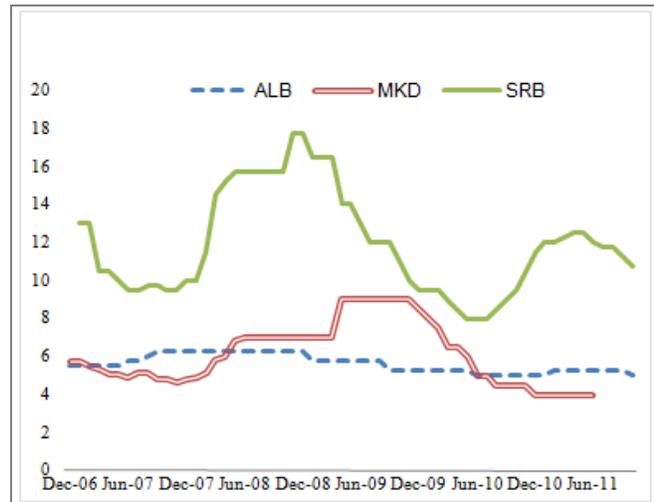
**Figure 20b: Nominal y-o-y growth of credit to private sector**



Source: SEE6 Central Banks.

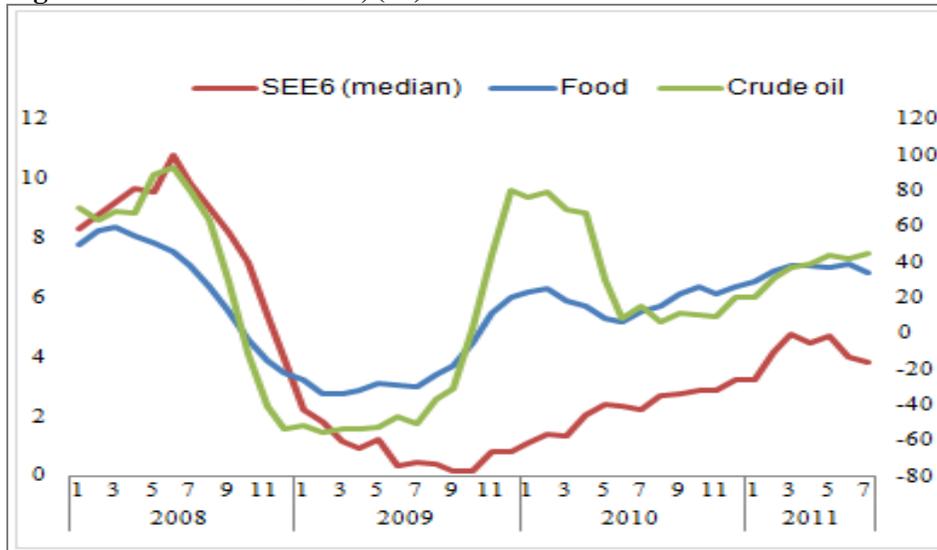
**Monetary policy was constrained by specific limitations in different countries; a fully accommodative stance was not possible in the aftermath of the crisis.** For example, the FYR Macedonian central bank was faced with pressures on foreign exchange reserves, and it in fact increased the reference rate in the months following the crisis. The central bank of Serbia was faced with high inflation, and it also made increases in the reference rate in late 2008, and then again in another cycle from mid-2010 to mid-2011 (Figure 21). In addition, during the period when most of the central banks were coping with a run on deposits, they had to refrain from substantial rate cuts or policy easing. A further constraint came from the fact that Kosovo and Montenegro have unilaterally adopted the euro, Bosnia and Herzegovina has a euro-based currency board and FYR Macedonia has a managed currency using the Euro as reference; only Albania and Serbia have flexible exchange rate regimes. In the case of flexible exchange rate countries financial stability was also a concern because of the effect of an abrupt nominal depreciation on bank's foreign currency liabilities.

**Figure 21: Reference rate (%)**



Source: SEE6 Central Banks.

**Figure 22: Inflation in SEE6, (%)**



Source: SEE6 National Statistics Offices, FAO, Bloomberg.

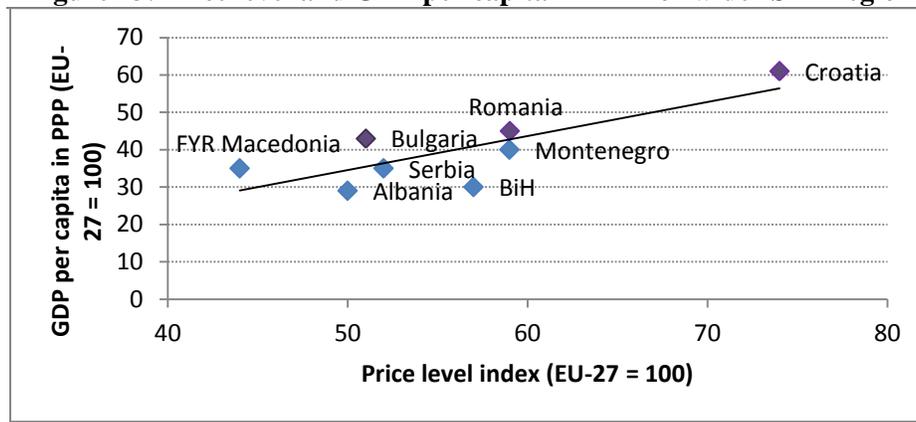
**Inflation peaked in the first half of 2011, after rising since the end of 2009, and is now gradually easing.** The collapse in domestic demand led to a collapse in inflation as the 2008/2009 crisis set in. However, from the last quarter of 2009, inflation increased on the back of the rising global food and energy prices (Figure 22). SEE6 countries, in particular, have a large share of their CPIs driven by food and energy prices. Inflation has peaked in the first quarter of 2011 as these external price pressures have abated. Serbia in particular experienced a strong upsurge in inflation, with CPI peaking in April at 14.7 percent year-on-year; it has since eased to 9.3 percent in September.

### Box 1: Price differences in SEE6

Comparing prices across countries can shed light on important questions about economic issues such as regional trade and economic integration, convergence of income per capita, and exchange rate policy. Economic theory suggests that growing regional and EU integration – coming from removal of (tariff and non-tariff) obstacles to trade<sup>6</sup> - should bring convergence in prices within the SEE region as well as with prices in the EU. Stylized facts from the EU largely support the price convergence theory.

Price levels in SEE6 differ, both within the region and vis-à-vis the European market which the region aims to integrate more deeply. Within the region, prices are lowest in FYR Macedonia (44 percent of the EU-27 average), and highest in Montenegro (59 percent of the EU-27 average). Prices in the region as a whole are much lower than the EU average (Figure 23). Interestingly, price convergence in several SEE countries is higher than in the newest EU members, Bulgaria and Romania, despite the fact that these two countries have higher income per capita and are part of the Single Market. This could partly be explained by low average salaries in Romania and, particularly, Bulgaria.

**Figure 23: Price level and GDP per capita in PPP for wider SEE region**



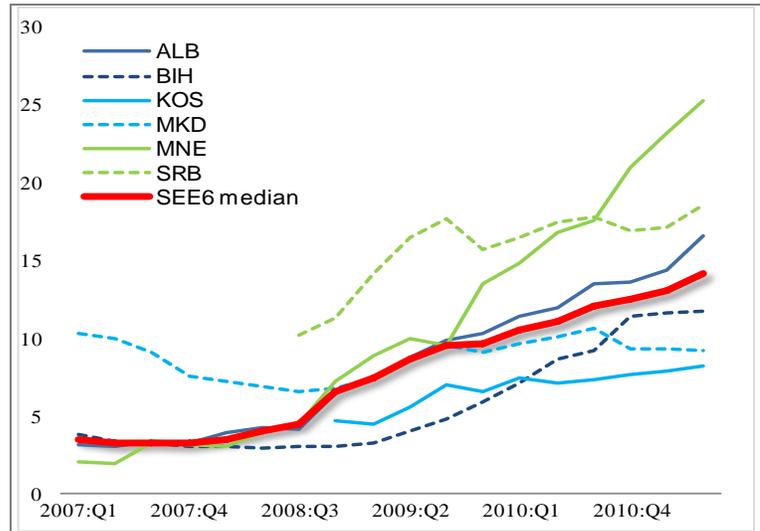
Source: Eurostat.

In addition, the price of a homogenous domestically-produced (except in Kosovo and Montenegro) good, Coca-Cola, can be used to assess price differences as well as the appropriateness of exchange rates in the region. For the past 25 years, the Economist magazine has published the Big Mac Index for this purpose. Though such an assessment should not be used as basis for policy making, the price differences may be used as guidance to check where further analysis is needed. Coca-Cola is cheapest in Albania and most expensive in BiH: the average price of Coca-Cola in Sarajevo is 34 percent more expensive than in Tirana. There is a huge variation in pricing strategies of Coca-Cola between small shops and large retail stores. If price of Coca-Cola in small shops is compared across countries, Serbia is most expensive.

<sup>6</sup> As barriers to trade are removed, the “Balassa-Samuelson effect” takes care of price convergence even for non-tradable goods and services. Higher productivity in tradable sectors in rich countries leads to higher wages in those sectors, but because firms compete for workers, this also pushes up wages in non-tradable sectors. So, average prices, of both tradable and non-tradable goods and services, are higher in rich countries.

As the crisis escalated in 2009, there was a rapid increase in non-performing loans (NPLs) in all of SEE6 countries; NPLs have since stabilized in some, but not all countries, and they remain significantly above pre-crisis levels. Prior to the 2008 crisis, NPL levels in all SEE6 countries were at relatively low levels (generally below 5 percent). But as the crisis escalated, there was a sharp increase in the NPLs (Figure 24). During 2010 NPLs stabilized in Bosnia and Herzegovina, Kosovo, FYR Macedonia and Serbia (although at an elevated level), but they continue increasing in Montenegro and Albania.

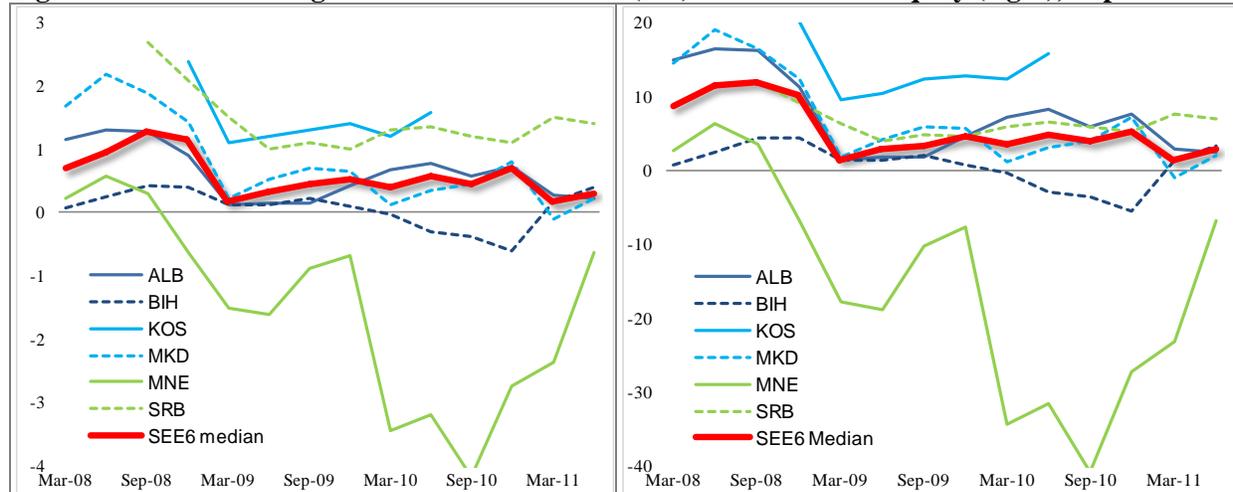
**Figure 24: Non-performing loans (% of total loans)**



Source: SEE6 Central Banks.

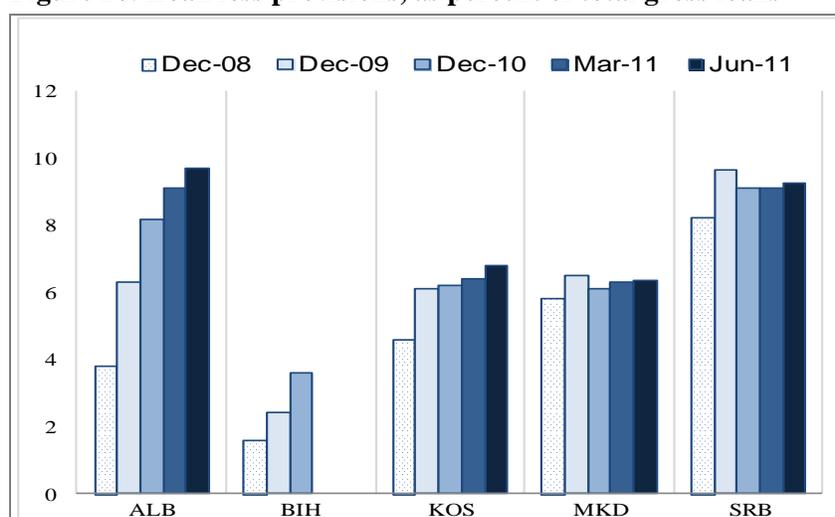
On the other hand, with a few notable exceptions, banks in the region remain liquid and report solid capital buffers (for example capital adequacy ratios of the banking sector in Q2 2011 were about 16 percent in FYR Macedonia, and 20 percent in Serbia) which provide reasonable assurance about their ability to absorb any further shocks. In addition, most banks gradually returned to profit in 2010 and the first half of 2011 (Figure 25). Loan loss provisions have been increased significantly in some countries, and in some countries they were already at a relatively high level in the early stages of the crisis (Figure 26).

**Figure 25: SEE6 banking sector returns on assets (left) and returns on equity (right), in percent**



Source: Central Banks.

**Figure 26: Loan loss provisions, as percent of total gross loans**

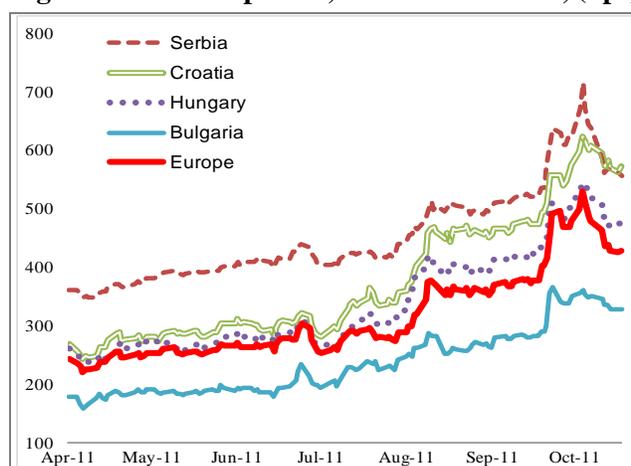


Source: SEE6 Central Banks.

Credit and funding risks are returning to the region however, driven primarily by adverse developments in the EU, an overhang of NPLs from banks in many SEE6 countries, and slowing economic growth. The EMBI spread for Serbia (the only country from the SEE6 region with data on EMBI spreads available) has increased in the last two months, although there has been some easing lately. However, the increase in the risk premium for Serbia, as measured by EMBI spreads, is fully correlated with the overall increase in risk perception; the relative spread to other emerging Europe countries remains unchanged (Figure 27). This suggests that the deterioration is fully externally driven.

At the moment, overall banking systems in SEE6 countries appear resilient, with high liquidity and significant capital buffers, but this could change abruptly, especially for specific banks. Similar to EU10 countries, almost all of the foreign banks in SEE6 are from EU countries (Figure 28). However, the SEE6 is characterized by a comparatively high share of Greek and Italian owned banks (Table 3). In tandem with EU-wide calls to increase leading banks' capital, further stress on their respective parent banks' funding may put pressure on their local subsidiaries to provide liquidity or dividends to their parents. This could potentially cause another credit crunch in the region. The fact that most of these banks are subsidiaries, rather than branches and thus subject to monitoring and regulation by local SEE6 regulators provides further assurance that rapid unwinding of their positions is not likely.

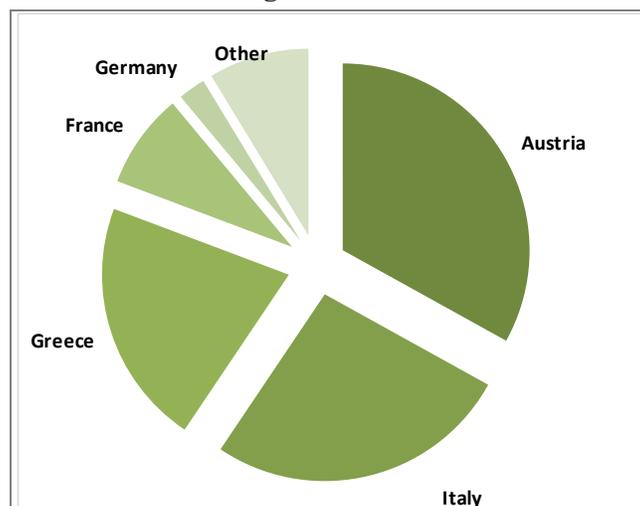
**Figure 27: EMBI spreads, selected countries, (bps)**



Source: Bloomberg.

Note: Europe index comprises Belarus, Bulgaria, Croatia, Hungary, Lithuania, Poland, Russia, Serbia, Turkey and Ukraine.

**Figure 28: Geographic breakdown of foreign claims of the banking sector of SEE6 countries**



Source: Bank for International Settlements (Consolidated Banking Statistics).

**Table 2: Claims<sup>7</sup> of selected banks on SEE6 countries (percent of GDP, 2010)**

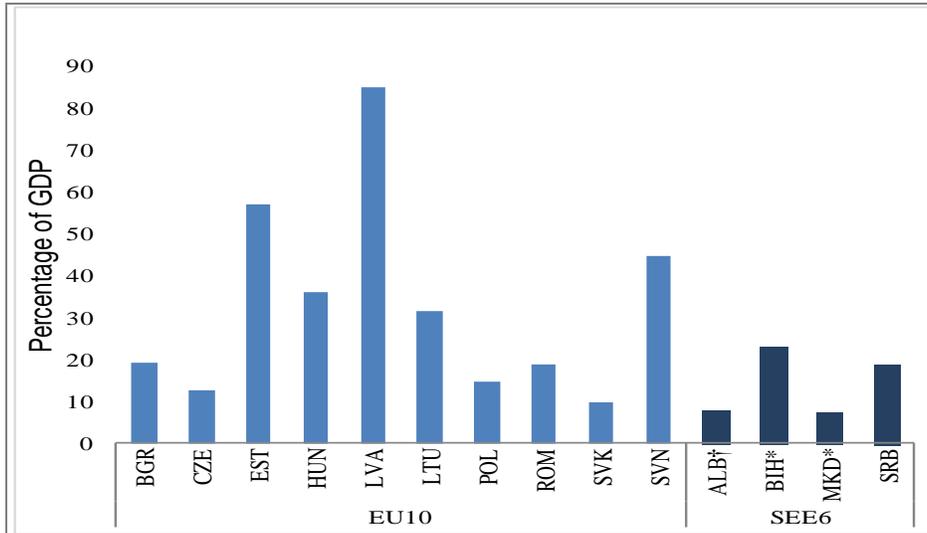
Country	Greece	Italy	Portugal	Spain
<b>SEE6</b>	<b>13.2</b>	<b>15.2</b>	-	<b>0.0</b>
Albania	14.0	9.3	-	-
Bosnia and Herzegovina	-	21.2	-	0.0
Macedonia	20.2	0.3	-	0.0
Montenegro	0.6	-	-	-
Serbia	18.3	19.3	-	0.0
<b>EU10 + Croatia</b>	<b>3.5</b>	<b>13.0</b>	<b>1.3</b>	<b>0.7</b>

Source: Bank for International Settlements (Consolidated Banking Statistics), World Bank WDI.

**The overall level of dependence of SEE6 banks on foreign funding is less than in EU10 countries (Figure 29).** In SEE6 foreign banks are increasingly reliant on domestic deposits for finance. As was noted above there is currently no indication of a run on deposits of the sort that accompanied the 2008 turbulence, although the situation needs careful monitoring. CDS spreads for largest banks operating in the region have increased since the beginning of the year (with some easing since late September), which may lead to higher interest rates (Figure 30).

<sup>7</sup> Claims represent the loans and other domestic assets of these banks including those financed from local deposits.

**Figure 29: Foreign funding of banks, 2010**

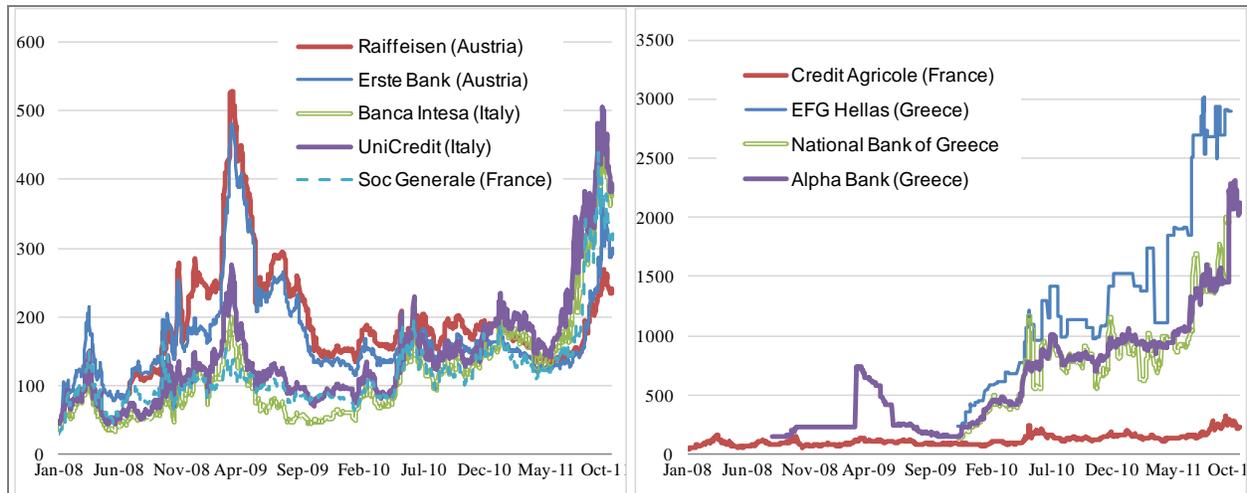


Sources: IMF, WDI.

†as of 2008, \*as of 2009.

EU10: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia; SEE6: Albania, Bosnia and Herzegovina, FYR Macedonia, Serbia.

**Figure 30: CDS spreads for selected banks**



Source: Reuters, Bloomberg, World Bank staff calculations.

**Any possible further deterioration of key European parent banks will have an adverse effect on the SEE6 real sector.** Direct cross-border lending is an important source of funding for the SEE6 real sector, amounting to about 18 percent of GDP (Table 4). If banks in Europe experience further severe tension, individual firms will likely experience difficulties in refinancing these loans. At the same time, FDI and portfolio flows typically constitute a more stable funding source that is less likely to lead to instability. That said, FDI to the SEE6 has slowed since the second half of 2008, and is now at about 60 percent of the pre-crisis levels (Figure 31).

**Table 3: Real sector funding sources (% of GDP, 2010)**

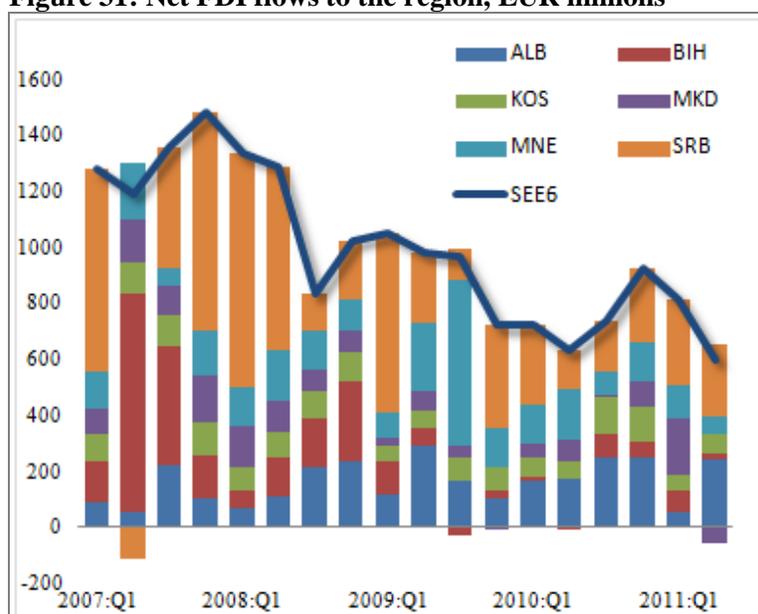
Country	Domestic bank credit				Foreign borrowing				FDI and foreign portfolio investment in equity			
	Stock	Growth			Stock	Growth			Stock	Growth		
	2010	2008	2009	2010	2010	2008	2009	2010	2010	2008	2009	2010
<b>ECA</b>	<b>48.9</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>18.5</b>	<b>3.0</b>	<b>0.2</b>	<b>0.4</b>	<b>49.2</b>	<b>5.7</b>	<b>3.1</b>	<b>1.6</b>
<b>SEE6</b>	<b>49.1</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>18.2</b>	<b>9.1</b>	<b>1.4</b>	<b>0.8</b>	<b>34.7</b>	<b>7.0</b>	<b>5.9</b>	<b>4.7</b>
Albania	37.8	0.4	0.1	0.0	6.3†	1.2	1.0	0.6	22.1†	7.6	8.2	9.5
Bosnia and Herzegovina	58.3	0.1	-0.1	0.0	0.0*	4.1	3.3	3.5	11.0*	5.0	1.4	0.4
Kosovo	35.1	0.3	0.1	0.1	n.a.	2.9	3.1	3.3	n.a.	9.5	7.5	7.4
Macedonia	44.5	0.3	0.0	0.0	20.8*	3.4	2.8	1.3	49.5*	5.7	2.0	3.2
Montenegro	69.9	0.2	-0.1	-0.1	n.a.	10.9	-1.5	2.8	n.a.	21.2	36.9	18.5
Serbia	49.5	0.2	0.1	0.2	33.4	14.8	0.5	-1.0	53.7	6.2	4.7	3.6
<b>EU10 + 1</b>	<b>59.5</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>18.8</b>	<b>2.2</b>	<b>0.6</b>	<b>0.2</b>	<b>66.5</b>	<b>9.0</b>	<b>2.6</b>	<b>-0.7</b>

Source: IMF International Financial Statistics and Balance of Payments Statistics, World Bank WDI.

Growth in foreign funding is measured as the net inflow as a share of GDP. Growth in domestic bank credit is measured as real growth as a share of GDP.

†as of 2008, \*as of 2009.

**Figure 31: Net FDI flows to the region, EUR millions**



Source: SEE6 Central Banks.

## 5. FISCAL POLICY AND PUBLIC DEBT

**T**he fiscal situation remains fragile and the SEE6 authorities need to rebuild fiscal buffers and be prepared for further expenditure consolidation should revenue forecasts not be fulfilled as a result of worsening global conditions. During the last few years, SEE6 countries exhausted the modest buffers created in the pre-crisis period of high growth and buoyant revenues. With the exception of Kosovo, no country has sizable deposits to draw down. In addition, the domestic capital markets are shallow and while banks appear to have strong liquidity at the moment, this may rapidly change in case of a sharper slowdown in economic activity. Moreover, access to external financing markets will remain difficult for SEE6 countries in the period ahead.

**SEE6 countries implemented quite different fiscal policies prior to the 2008-2009 global financial crises.** The average fiscal deficit in the region during this period was relatively small. However this masked significant differences between countries. Albania continuously had deficits close to or above 3 percent of GDP while Bosnia and Herzegovina ran surpluses. FYR Macedonia maintained a largely balanced budget; Kosovo and Montenegro replaced their deficits in the early part of the observed period with surpluses while Serbia went from a balanced budget to a deficit.

**Table 4: Fiscal deficits, (% of GDP)**

	2005	2006	2007	2008	2009	2010
<b>ALB</b>	-2.8	-3.2	-3.7	-5.5	-7.1	-3.0
<b>BIH</b>	0.1	2.8	0.6	-3.5	-5.6	-4.2
<b>KOS</b>	-3.1	2.5	7.3	-0.2	-0.7	-2.7
<b>MKD</b>	0.2	-0.5	0.6	-0.9	-2.7	-2.5
<b>MNE</b>	-1.8	2.9	6.7	-0.4	-5.7	-4.9
<b>SRB</b>	0.8	-1.6	-1.9	-2.7	-4.5	-4.6
<b>Average</b>	-0.3	-0.5	-0.5	-2.7	-4.6	-3.8

*Source:* Staff calculations based on MoFs data, IMF data for BIH.

**Fiscal deficits in 2005-07 would have been larger (and surpluses smaller) had it not been for strong growth in revenues as a result of growing domestic demand.** Revenues (as percentage of GDP) increased in all countries except FYR Macedonia and Serbia. At the same time, expenditures (as percentage of GDP) increased in most countries, with Serbia and Montenegro seeing the largest increases. Combined with strong GDP growth, the relatively small deficits resulted in considerable reduction of the ratio of government debt to GDP (this despite recognition of liabilities by some SEE governments, such as restitution in FYR Macedonia and war damages and frozen foreign currency deposit claims in Bosnia and Herzegovina). By the end of 2008, government debt in SEE6 fell to 33.9 percent of GDP<sup>8</sup>; a rate similar to the average for the EU10 countries (36 percent of GDP) and well below the Maastricht criteria of 60 percent of GDP. Albania was an outlier with government debt of 55 percent of GDP, reflecting its continuous deficits. On the other hand, at the end of 2008 Kosovo did not report any government debt reflecting the conservative fiscal policy but also historical reasons.<sup>9</sup>

<sup>8</sup> In addition to developments with the deficit, debt dynamics in some of the SEE6 countries were significantly influenced by recognition of liabilities related to liquidating the legacies of the past (frozen foreign currency deposits at the time of brake-up of SFR Yugoslavia, war damages, restitution claims).

<sup>9</sup> Up to 2009 Kosovo had no public debt. In 2009 Kosovo took over its share of former Yugoslavia's debt to IBRD, in the amount of Euro 381 million (9.7 percent of GDP). Kosovo has not participated in the division of other assets and liabilities of former Yugoslavia and if this process takes place it may inherit additional debt (to the Paris and London Clubs).

**The fiscal performance has deteriorated in all countries since 2008 despite relatively heterogeneous growth outcomes.** Average growth in SEE6 countries turned negative in 2009 as exports and capital inflows collapsed, though with considerable differences among countries. Fiscal positions deteriorated in all countries exposing the vulnerabilities created by excessive reliance on booming domestic demand in the pre-crisis period. The average fiscal deficit increased to 2.7 percent of GDP in 2008 and further to 4.6 percent of GDP in 2009. Revenues measured as a percent of GDP fell in all countries (except Kosovo and Albania which continued to grow) with Montenegro being most affected. On the other hand, expenditures as a percent of GDP increased in all countries (except Serbia) with the biggest increases registered in Kosovo, Bosnia and Herzegovina and Albania.

**There was only limited fiscal adjustment in 2010 as SEE6 economies struggled to accelerate growth.** Albania made the largest adjustment decreasing the fiscal deficit from above 7 percent of GDP in 2009 to 3 percent of GDP in 2010 followed by Montenegro which undertook an adjustment of 1.5 pp of GDP and Bosnia and Herzegovina which reduced the deficit by 1.4 pp of GDP. Expenditures bore the brunt of the adjustment in these countries. The average fiscal deficit in SEE6 economies fell to 3.8 percent of GDP. On the other hand, the deficits in Kosovo and Serbia increased. Kosovo increased its deficit significantly as capital expenditures surged while underperforming revenues resulted in slight widening of the deficit in Serbia. As a result, SEE6 government debt increased further to 38.4 percent of GDP by 2010. The deterioration in the fiscal accounts and government debt was, however, not as great as in the EU10 countries where government debt increased to 47.1 percent of GDP.

**With the exception of Albania, government debt levels remain below 50 of GDP, but there are significant vulnerabilities because of external conditions.** The structure of debt is favorable with relatively small exposure to commercial borrowing and, as a result, relatively small debt servicing costs.<sup>10</sup> However while public debt as percentage of GDP is lower than in EU10 countries, the public debt as percentage of annual government revenues, at around 111.4 percent of GDP, is close to the EU10 average. Once again, Albania is the most vulnerable economy with debt accounting for more than double the annual revenues.

**Table 5: Selected government debt indicators (2010)**

	ALB	BIH	KOS	MKE	MNE	SRB	SEE6	EU10
<b>Debt, as % of GDP</b>	58.2	36.9	6.9	24.6	51.3	42.9	38.4	47.1
<b>Debt, as % of revenues</b>	219.7	82.0	25.1	79.9	121.9	104.7	111.4	124.8
<b>Interest expenditures, as % of GDP</b>	3.4	0.6		0.7	1.0	1.2	1.3	

*Source:* WB Staff calculations based on MoF data.

**Most SEE6 countries have adopted some sort of regulation limiting the level of public debt.** However, the commitment of the authorities to these targets is yet to be tested. Albania, Kosovo and Serbia have capped government debt through legislation, while FYR Macedonia and Montenegro have done it through strategy level documents.

**The 2011 budgets of SEE6 countries did not envisage a substantial fiscal adjustment.** In fact, Albania and Kosovo increased the targeted deficits slightly, FYR Macedonia and Serbia are preserving the deficits at the levels in 2010 and only Bosnia and Herzegovina and Montenegro planned some reduction in the fiscal deficit. According to the most recent available data, the countries appear to be on track to meet their

<sup>10</sup> Interest expenditures average around 1 percent of GDP in the SEE6 countries with the exception of Albania where interest expenditures in 2010 were 3.4 percent of GDP.

targeted deficits, though continued prudence will be required. Kosovo ran a small surplus in the first half of the year and registered a small deficit in the third quarter. In the absence of large spending sprees by the end of the year, Kosovo fiscal accounts are likely to over-perform significantly. Bosnia and Herzegovina ran a largely balanced budget (though this underestimates the true fiscal position as it does not include expenditures on foreign financed projects which are off-budget). The fiscal deficits in the other SEE6 countries were around 2 percent of GDP in the first half of 2011. The deficits in Albania, FYR Macedonia and Montenegro appear to have moderated in the third quarter, putting these countries largely on track to meet the deficit targets by the end of the year. However, the deficit in Serbia continued to increase forcing the authorities to increase the targeted deficit (from -4 percent of GDP to -4.5 percent).

**Table 6: Initial projections and developments in the first half of 2011**

	Revenues	Expenditures	Fiscal balance	Balance as of June 2011
	Initial projections, as percent of GDP			Actual
<b>ALB</b>	26.6	30.1	-3.5	-2.0
<b>BIH</b>	44.4	47.4	-3.4	NA
<b>KOS</b>	27.6	31.1	-3.5	1.1
<b>MKD</b>	31.4	33.9	-2.5	-1.7
<b>MNE</b>	40.5	42.8	-2.3	-1.5
<b>SRB</b>	39.1	43.7	-4.5	-3.0

*Source:* Staff calculations based on MoF data.

**The case for fiscal prudence is further strengthened by the tight financing constraints facing the SEE6 countries.** Albania has recently been moving into shorter-term debt with a corresponding slight increase in yields. Also, Serbia has been facing difficulties because of weak demand for government debt paper with maturity longer than 2 months in recent months. At the same time, faced with an early election at home and a highly volatile environment abroad FYR Macedonia decided to draw funds from the Precautionary Credit Line with the International Monetary Fund in spring 2011.

**However, immediate financing needs appear to have been secured.** Serbia was able to issue a US\$1 billion global bond recently, in addition to the IBRD-guaranteed borrowing of US\$ 400 million earlier this year. Montenegro issued a EUR 180 million Eurobond in April 2011. FYR Macedonia drew EUR 220 million from the IMF's PCL in March 2011 and is to borrow EUR 130 million using an IBRD-guarantee by the end of the year. Kosovo has strong deposits to draw down from while Albania should be able to finance the remaining deficit through a mix of deposit reduction and inflows on foreign financed projects. Bosnia and Herzegovina's financing sources are expected to remain modest. In terms of access to foreign private financing most SEE6 countries have solid, though not investment grade, ratings and stable outlooks in each country except BIH.

**Table 7: SEE6 Rating agency sovereign debt ratings and outlooks**

	Standard and Poor's		Moody		Fitch	
	rating/outlook	date	rating/outlook	date	rating/outlook	date
Albania	B+/Stable	19/04/2010	B1/Stable	29/06/2007		
BIH	B+/Negative	28/07/2011	B2/Negative	16/05/2011		
Macedonia, FYR	BB/Stable	24/08/2011			BB+/Stable	27/10/2011
Montenegro	BB/Negative	31/03/2010	Ba3/Stable	30/03/2011		
Serbia	BB/Stable	16/03/2011			BB-/Stable	11/11/2010

*Source:* S&P, Moody and Fitch.

*Note:* Kosovo has not yet requested a credit rating.

**As expected, recent fiscal performance is reflecting the strength of the overall economic activity in SEE6 countries, but also higher inflation as well as non-economic factors.** Kosovo posted strong tax revenue growth (around 9.7 percent in real terms) given the up-beat economic indicators; however, this was off-set by lower non-tax and capital revenues (lower dividends). Total revenues increased by 4.2 percent in real terms in FYR Macedonia in the first half of the year but this was largely driven by the earlier payment of the Telecom dividend. Excluding this, revenues increased only marginally as the impact of the stronger domestic demand was offset by the underperformance of non-tax revenues and social contributions. Total revenues also increased slightly in Bosnia and Herzegovina with a moderate recovery in domestic demand. Concerns about the slowing of the Albanian economy resulted in revenues falling by 2.8 percent in real terms in the first half of 2011. Similar trends continued in the Albanian economy in the third quarter as well with an improvement in excises and contributions off-setting a relatively weak collection of most taxes. Depressed private consumption in Serbia resulted in revenues falling by 4.4 percent in the first half of the year with the trend continuing in the third quarter as well. Similarly, revenues in Montenegro fell by 5.3 percent in real terms despite increases in excises rates. Revenues did recover in the third quarter somewhat as collection efforts were increased.

**On the expenditure side, governments have been trying to stimulate the economy this year but may need to adjust going forward in line with the available financing constraint.** Most countries increased spending though the quality of the stimulus may be questionable. FYR Macedonia increased spending by close to 6 percent in real terms in the first half of 2011, also reflecting some front-loading of expenditures. The increase in spending was targeted towards capital expenditures, health spending and transfers. These trends moderated in the third quarter with expenditures falling in real terms. Montenegro increased expenditures by about 3.8 percent largely reflecting labor regulation changes that increased wages and pensions. These changes are likely to impact spending on these items over the medium term as well and have already pushed the growth rate of expenditures up in the third quarter. Similarly, Albania increased spending by 3.5 percent in real terms in the first half of the year with social transfers accounting for half of the increase in spending. Tighter control over spending was introduced in the third quarter in order to ensure that the annual deficit target is met. Overall spending increased by 3.3 percent in real terms in Kosovo, however, reflecting relatively slow spending in the first quarter. Expenditures increased strongly in the second quarter and most recently reflect a surge in capital spending but also higher spending on wages and salaries. Expenditures from the Bosnia and Herzegovina budget were down in real terms reflecting lower spending on goods and services and subsidies. Similarly, expenditures fell in real terms in Serbia, though gains from wage and pension restraint were insufficient to compensate for the underperformance in revenues resulting in a higher deficit. Furthermore, gains may be short-lived given upcoming indexation of pensions and wages in October.

## Box 2: Government size in SEE6

The government share of the economy varies widely across the SEE6 with expenditures spanning the range of less than 30 percent of GDP to almost 50 percent. Using either revenues or expenditures as a measure, Bosnia and Herzegovina, Montenegro and Serbia can be classified as having large governments, even when compared to the EU10 countries. Albania and Kosovo can be classified as small government economies while FYR Macedonia has a moderate size of government.

Social insurance contributions appear to be the biggest factor contributing to such large revenue differences. Bosnia and Herzegovina, Montenegro and Serbia derive substantial part of government revenues from social insurance contributions. Consequently, social transfers account for a higher part of spending (though these also include relatively generous non-contributory social transfers such as social assistance and other benefits). Albania on the other hand has a much smaller social insurance scheme which does not cover a considerable part of the population while Kosovo does not have one (though a privately managed pension insurance scheme does exist). Poor labor market outcomes have strained the finances of the social insurance schemes in most of SEE countries requiring increasing transfers from the budget. The pressures over the social insurance schemes are likely to increase going forward and will warrant reforms to the system. Growth in the near future may be jobless while population aging will put additional pressures over the medium and long term.

**Table 8: Structure of government revenues in SEE6 countries, 2010**

	ALB	BIH	KOS	MKD*	MNE	SRB
<b>as percentage of total revenues</b>						
<b>Direct taxes</b>	13.8	6.6	10.6	8.9	11.1	14.0
<b>Indirect taxes</b>	49.3	44.4	66.2	40.5	46.0	42.2
<b>Contributions</b>	16.5	35.1	0.0	27.3	28.9	26.4
<b>Other revenues</b>	20.4	13.8	23.1	23.3	14.0	17.4
<b>Total revenues</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>as percentage of GDP</b>						
<b>Direct taxes</b>	3.6	2.9	2.9	2.9	4.9	5.7
<b>Indirect taxes</b>	12.9	19.7	18.2	13.4	19.5	17.3
<b>Contributions</b>	4.3	15.6	0.0	9.1	12.2	10.8
<b>Other revenues</b>	5.4	6.1	6.4	7.7	5.9	7.1
<b>Total revenues</b>	26.2	44.4	27.5	33.1	42.6	41.0

*Source:* Staff calculations based on data from MoF of SEE6 countries, IMF data for BIH. (MKD definition of general government)

**Considerable differences remain even when contributions are excluded.** While statutory rates are similar across the SEE6 countries, there are large differences in revenue performance. Most tax revenue in SEE6 countries is generated from indirect taxation. Given the similar VAT rates and customs tariff schedules the large differences in performance are difficult to interpret. They could reflect differences in informality, the tax base or inefficiencies in tax administration or less visible taxes which increase the fiscal burden in the economy. Direct taxes are relatively small reflecting the high unemployment rate and informality but also tax rate reductions made in recent years as the SEE6 economies struggled to attract investment. Consequently, SEE6 countries now offer some of the lowest income taxes in Europe and Central Asia.

**On the expenditure side, the size of the government sector is largely driven by social transfers and public sector wages.** The large government countries (Bosnia and Herzegovina, Serbia and Montenegro) have public sector wages bill in excess of 10 percent of GDP, reaching almost 13 percent of GDP in Bosnia and Herzegovina. While Kosovo and FYR Macedonia spend less as percentage of GDP on wages, measured as percent of total expenditures, the wage bill still represents a considerable burden on the budget. Bosnia and Herzegovina, Montenegro and Serbia also spend significantly more funds on social transfers, driven largely by pensions. With the exception of Kosovo, the allocation for capital expenditures in SEE6 countries is relatively small.

**Box 2: Continued**

**Table 9: Structure of government expenditures in SEE6 countries, 2010**

	<b>ALB</b>	<b>BIH</b>	<b>KOS</b>	<b>MKD*</b>	<b>MNE</b>	<b>SRB</b>
	as percentage of total expenditures					
<b>Wages and salaries</b>	18.1	26.5	24.4	22.6	23.3	22.6
<b>Social transfers</b>	29.3	31.5	13.0	29.3	29.0	42.7
<b>Other current spending</b>	35.5	32.6	23.1	35.4	36.6	25.1
<b>Capital spending</b>	17.1	9.4	39.5	12.7	11.4	9.7
<b>Total spending</b>	100.0	100.0	100.0	100.0	100.0	100.0
	as percentage of GDP					
<b>Wages and salaries</b>	5.3	12.9	7.4	8.0	11.0	10.
<b>Social transfers</b>	8.6	15.4	3.9	10.4	13.7	19.3
<b>Other current spending</b>	10.4	15.9	7.0	12.6	17.1	12.4
<b>Capital spending</b>	5.0	4.6	11.9	4.5	5.3	3.5
<b>Total spending</b>	29.3	48.9	30.2	35.6	47.1	45.6

*Source:* Staff calculations based on data from MoF of SEE6 countries, IMF data for BIH. (MKD definition of general government)

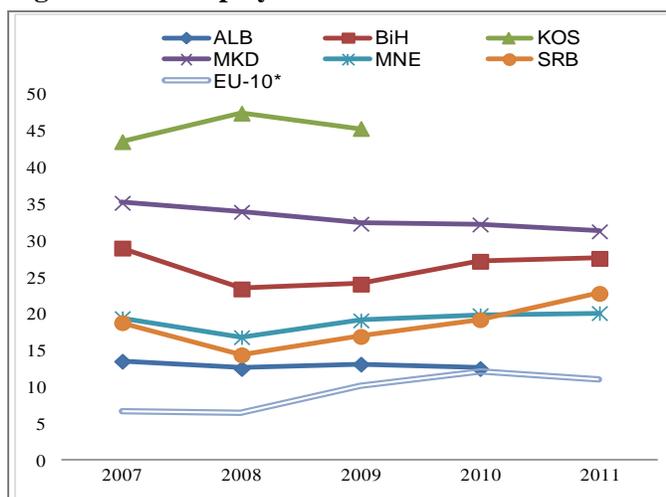
## 6. LABOR MARKET DEVELOPMENTS IN SEE6

**I**mproving employment opportunities remains a major long term challenge for the SEE6. Unemployment is generally high in the SEE6 and it is particularly high among the young. Moreover, much of the unemployment is long term, causing skills to atrophy. In addition, several countries have aging populations, strong migration dynamics and low participation rates especially among women. For those hit hardest by the crisis (Serbia, Montenegro and Bosnia and Herzegovina) employment has been falling and unemployment rising since 2008, and these trends will likely reverse only with a lag as economies recover. Overall the impact of the crisis has been somewhat milder than in EU10.

**All SEE6 countries had rapid growth up to 2008 accompanied by declining unemployment rates, but experiences since then have diverged (Figure 32).** Since 2008, unemployment in Serbia has been rising, it went from 14.4 percent in 2008 to 20 percent in 2010 – the highest level since the Labor Force Survey (LFS) was introduced in 1997.

BIH has followed the same trend: unemployment has risen to 27.2 percent in 2010. Unemployment in Albania rose as a result of the crisis, but then fell to 12.5 percent in 2010.<sup>11</sup> Despite the fall in output in 2009 and the slow recovery since, the FYR Macedonia unemployment rate has remained flat in 2009 and 2010 at 32 percent. Kosovo has not conducted a LFS since 2009, when unemployment was 45 percent, but it is expected that labor market conditions have improved since then in an environment of moderate growth rates and elevated public (infrastructure) investment. 2011 LFS data (available for all countries except Albania and Kosovo) show that unemployment continued to grow in BIH (27.6 percent), Montenegro (20.1 percent) and Serbia (reaching a record high 22.8 percent). In FYR Macedonia, the unemployment rate declined to 31.3 percent.

**Figure 32: Unemployment rates in SEE6**



Source: Labor Force Surveys of National Statistical Offices.

\* Simple average.

Note: 2011 data refer to second quarter (FYR Macedonia and Montenegro; April (BIH and Serbia).

SEE6 levels of unemployment are substantially higher than in the EU, including the EU-10 countries. In fact all EU-10 countries had single-digit unemployment rates before the crisis. Even Bulgaria and Romania which have levels of output similar to SEE6 countries managed to bring their unemployment rates to below 6 percent (2008).<sup>12</sup>

<sup>11</sup> Based on administrative data.

<sup>12</sup> Some of the differences in unemployment rates are attributable to differences in the survey methodology and quality. While all countries have introduced a Labor Force Survey, the frequency and quality of the surveys varies. FYR Macedonia and Montenegro produce LFS data quarterly, while the frequency is semi-annual in Serbia and annual in BIH. The LFS data in these countries are produced and published in a timely manner. Albania's and Kosovo's Statistics Offices, on the other hand, are supposed to have annual LFS, but in 2010 the LFS was not conducted in either country. In addition to differences in frequency, there are differences in the quality and methodology of the surveys even though all countries aim to have full compatibility with ILO/EUROTAT

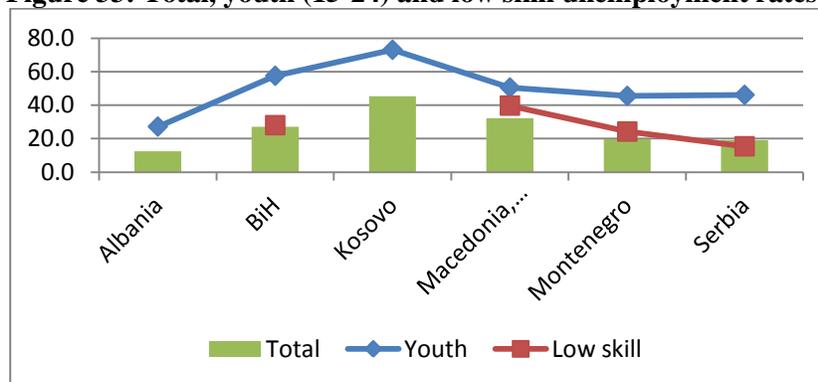
**The high level of unemployment among the youth and the low participation of women is striking in SEE6.** Youth unemployment is much higher than for other age groups in all countries, but it is especially alarming in BIH and Kosovo where majority of 15-24 year olds are looking but unable to find a job (Figure 33).

**Oddly, unemployment among those with low skills (no education beyond primary) is relatively close to the average unemployment rate.** In Serbia it is actually lower than the average unemployment rate suggesting a lack of higher quality jobs.<sup>13</sup> In contrast, low skill unemployment in the EU-10 countries is more than double the average unemployment rate. Romania is the only outlier in this regard: its low skill unemployment rate was lower than the average in 2010. The skill structure of the employed reflects the structure of the economies: agriculture, which employs a sizeable share of Serbia’s and Albania’s labor force, is a low skill sector, and so is the textile industry which employs about a quarter of Macedonia’s manufacturing sector labor force.

**Low skills will continue dragging down the labor market performance and keep poverty rates high.** In both BIH and Kosovo about 10 percent of the working age population has not completed primary education, while this percentage stands at 6 percent in Albania and Macedonia, at 3 percent in Montenegro and at about 1 percent in Serbia. The poor are clearly overrepresented in this group (in both Serbia and Montenegro poor individuals of working age are 6 times more likely than the non-poor not to have completed primary education), and unsurprisingly tend to be concentrated in lower skilled sectors and activities. In Bosnia, for example, 21 percent of poor workers are in agriculture against 12 percent of the non-poor. Detailed evidence for Serbia shows that low skilled sectors were most affected by the crisis both in terms of job and wage losses.

**Unemployment in the SEE6 is mostly long-term.** Over 80 percent of those looking for a job in BIH and Montenegro, and over 70 percent of those in Serbia, have been in the job market (jobless) for over a year and a large share of these have been jobless for three or more years with devastating effects on their skills and work abilities. The situation is most likely similar in other countries in the region, in particular in Kosovo, but data are not available.

**Figure 33: Total, youth (15-24) and low skill unemployment rates.**



Source: Labor Force Surveys of National Statistical Offices.  
 Note: Data are for 2010 except for Albania and Kosovo (2009).

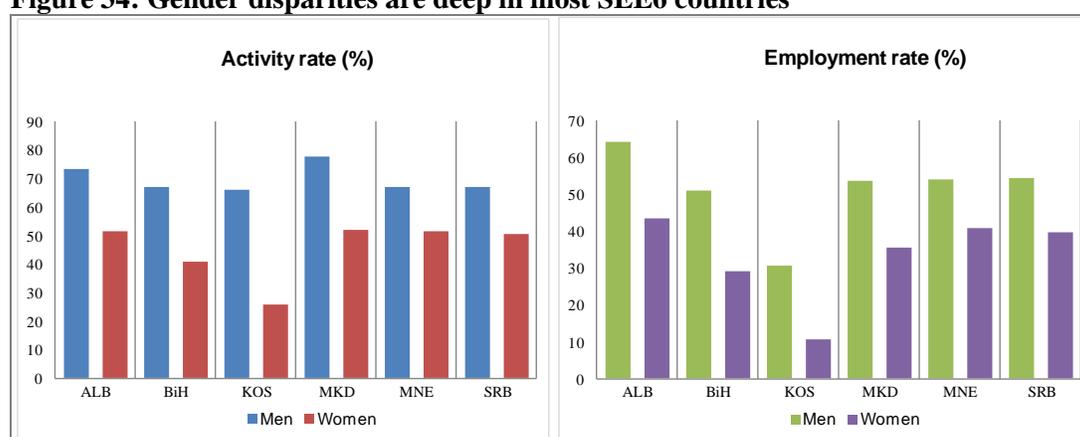
guidelines. For example, in defining the working age population, all countries use a “15 years and above” definition, except Kosovo which uses a “15-64” definition. FYR Macedonia and Serbia use both definitions.

<sup>13</sup> Ironically, in Serbia the unemployment rate of those with no formal education (11.7 percent in 2010) is lower than that for people with tertiary education (13.2 percent). However most of those with no formal education are inactive (not participating in the labor market).

**Participation in the labor market is low in the SEE6.** The share of active population is lowest in BiH (44 percent in 2010), Kosovo (48 percent in 2009) and highest in Albania (62 percent in 2009) and Serbia (59 percent in 2010). The share of active population is much higher in the EU-10 countries, and even more so in the rest of the EU. BiH and Kosovo, as well as FYR Macedonia (with 57 percent activity rate), are also the countries with highest unemployment, which implies that these countries have very low employment rates (Figure 35). Montenegro has a relatively low activity rate (50 percent in 2010)<sup>14</sup>. However, the rate of unemployment is low so the employment rate is higher than in most other SEE6 countries. The crisis did not have a large effect on activity rates: Serbia's participation rate declined from 60.5 in 2009 to 58.9 percent in 2011, and in other countries the change was marginal (0.6 percent decline in BiH and Montenegro).

It is important to note that in several SEE6 countries women are largely excluded from the labor market (Figure 34). The activity rate, and in turn employment, of women is strikingly low in Kosovo, and BiH.

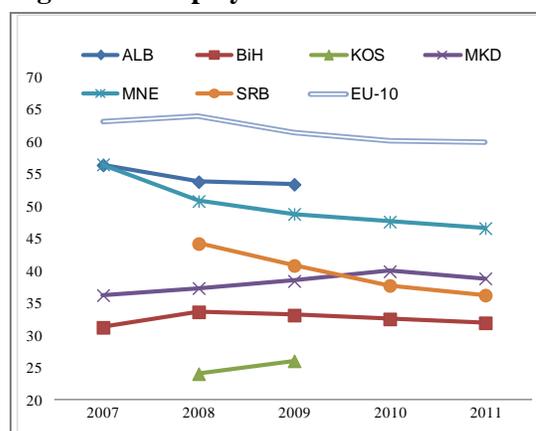
**Figure 34: Gender disparities are deep in most SEE6 countries**



Source: National Statistics Offices.

**Employment trends have reacted to the global economic crisis differently across the SEE6 (Figure 35).** In Montenegro and Serbia employment rates have been falling since 2007 with Montenegro having the steepest decline. The employment rate in BiH declined in 2009 and 2010 but at a much slower pace. These three countries were hit hardest by the crisis. On the other hand, in FYR Macedonia (which had a 0.9 percent GDP contraction) and Kosovo, the employment rate continued to increase throughout the crisis. The same is expected for Albania, whose economy, like Kosovo's, continued to grow during the crisis. Employment growth in the first half of 2011 was noted in Albania<sup>15</sup> and FYR Macedonia and Montenegro, whereas employment contracted in all other countries<sup>16</sup> even though growth was positive in all of them.

**Figure 35: Employment rates in SEE6**



Source: Labor Force Surveys of National Statistical Offices.

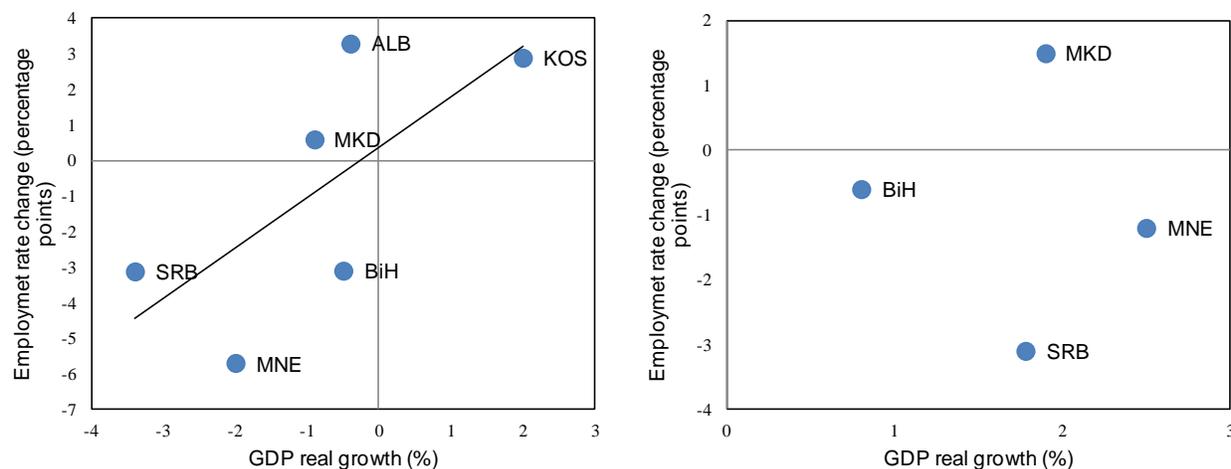
<sup>14</sup> Labor force defined as population at age 15 or more.

<sup>15</sup> Based on administrative data.

<sup>16</sup> No data for Kosovo.

There was also a variation in how labor markets responded to the contraction in output during the crisis (Figure 36). In most countries, the decline in employment persisted in 2010 despite the resumption of output growth: FYR Macedonia was the only country with a positive change in the employment rate.<sup>17</sup> Montenegro and BIH recorded larger declines in the employment rate in 2009 than would have been expected based on the contraction in output.

**Figure 36: Annual change in real GDP vs. change in employment rate for 2009 (left) and 2010 (right)**



Source: National Statistics Offices.

**In countries that produce regular quarterly LFS data, sectoral patterns of job loss and creation can be monitored.** In FYR Macedonia, almost 7,000 jobs (net) were lost in the second quarter of 2011<sup>18</sup>: services and manufacturing sectors shed jobs (about 12,000 and 4,000 respectively), while agriculture and construction sectors generated new jobs (3,900 and 5,800 respectively). In Serbia, over 100,000 jobs were lost between October 2010 and April 2011, of which about 43,000 were in services, 33,000 in agriculture, 17,000 in manufacturing and 8,000 in construction.

### Box 3: Tax wedge differences in SEE6 countries

**A high labor tax wedge contributes to informality and undercuts competitiveness and growth in several SEE6 countries.** While income tax rates are generally low (the highest rate is 12 percent, in Serbia), social contribution rates are very large in some countries, raising the overall labor tax wedge. Social contributions are over 30 percent of the gross wage in BIH (Republika Srpska), Montenegro and Serbia, and 41.5 percent in BIH (Federation BIH). In Kosovo, only 10 percent of the gross salary goes to social contributions (pension). FYR Macedonia has reduced its contribution rates over the last few years. Where the tax wedge is large it induces both employers and employees to move into the informal sector. This undermines the sustainability of pension and health finance systems. It also has a negative effect on competitiveness and growth as it pushes up labor cost.<sup>19</sup>

<sup>17</sup> No LFS data available for Albania and Kosovo for 2010.

<sup>18</sup> Comparison with end-2010 data is not available because new methodology (NACE Rev. 2) for data by sectors was introduced in 2011.

<sup>19</sup> In the region Montenegro has the highest average (net) salary. Albania and Kosovo have the lowest salaries in the region, followed by FYR Macedonia.

**Box 3: Continued**

**Table 10: Social contribution rates in SEE6 countries, as percent of gross wage**

Country	Health		Unemployment	Other social contributions	Total
	Pension	insurance			
Kosovo	10.0	0.0	0.0	0.0	10.0
FYR Macedonia	18.0	7.8	1.2	0.0	27.0
Albania	21.6	3.4	0.9	2.0	27.9
BIH: <i>Republic Srpska</i>	18.0	12.5	1.0	1.5	33.0
Montenegro	20.5	12.3	1.0	0.0	33.8
Serbia	22.0	12.3	1.5	0.0	35.8
BIH: <i>Federation BIH</i>	23.0	16.5	2.0	0.0	41.5

*Source:* World Bank.

*Note:* Various exemptions and wage/status-specific regulations are applied in the calculation of social contributions; hence the rates above are not fully comparable.

**The recovery in employment is likely to come with a delay.** The IMF estimates, based on analyzing recessions throughout the world over the past three decades, that it takes on average 3 quarters after the end of the recession before employment starts recovering, while unemployment reaches its peak with a lag of up to 5 quarters.<sup>20</sup> Those SEE6 countries which were hit hard by the global economic crisis overcame the recession in the middle of 2010. However, current global volatility may delay further gains. Furthermore, rebound of construction sector may not be as fast in those countries which are now facing a slowdown in bank lending and public infrastructure investment. Recovery (of exports) in heavy metal industries will depend on global demand and prices, and increase in exports of textile products will be driven by developments in Western Europe.

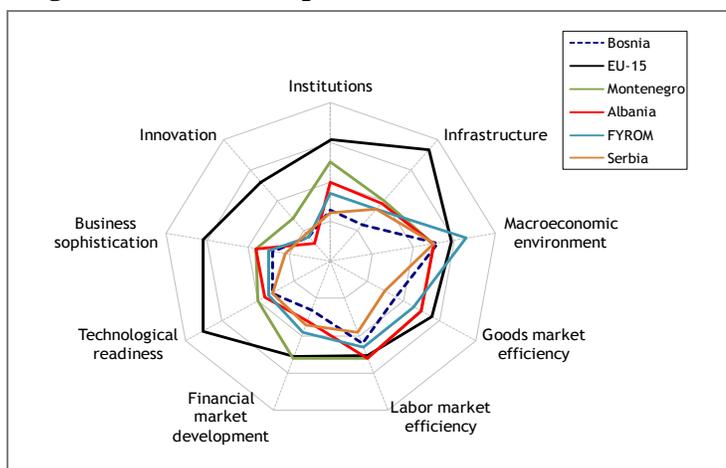
**While output growth is projected to accelerate in 2011 and 2012, the structure of economic activity may change which will affect labor market developments as well.** For example, the rebound of construction sector may not be as fast in those countries which are now facing a slowdown in bank lending and public infrastructure investment. Recovery (of exports) in heavy metal industries will depend on global demand and prices, and increase in exports of textile products will be driven by developments in Western Europe.

<sup>20</sup> ECA Knowledge Brief 1, 2011: Employment Recovery in Europe and Central Asia (World Bank).

## 7. STRUCTURAL POLICIES

**R**emoving long-standing structural impediments would help lay the foundation for solid and growth in the SEE6 region. While the growth challenges vary across the SEE6 strengthening growth without bringing back unsustainable domestic demand booms fuelled by excessive credit expansion is a common challenge. As Global competitiveness index shows (Figure 37) SEE6 countries have significant ground to cover in order to catch up to the EU15.

**Figure 37: Global competitiveness index 2011-2012**



Source: World Economic Forum, World Bank staff calculations.

### Box 4: Reform priorities

#### Macroeconomic management- immediate

- Public finances - strengthen the MTEFs and ensure fiscal consolidation plans are adhered to (as in Serbia's Fiscal Responsibility Law); create fiscal space for any future shocks
- Strengthen tax compliance and broaden the tax base
- Financial sector - strengthen supervisory authorities and the legislative framework

#### Business environment reforms – quick wins

- Shorten registration procedures
- Complete the regulatory guillotines and Regulatory Impact Assessments
- Reform the enforcement system to address the non-payment culture
- Complete privatization programs

#### Social sectors – immediate concerns, delayed impact

- Address demographic challenges (aging) in pension reforms
- Accelerate reform in health sector and social protection

#### Labor market rigidities and skill mismatches - immediate concern, delayed impact

- Launch vocational training, life-long learning and tertiary education sector reform

#### Trade and service liberalization - medium-term agenda, immediate impact

- Liberalize network industries (e.g. logistics, energy), privatize SOEs and remove of non-tariff barriers

#### Governance reforms – longer-term reform, delayed impact

- Accelerate judicial and anti-corruption reforms across the region
- Improve effectiveness, integrity and transparency of public administration

**Several countries recognize the need to pursue credible fiscal policies.** While the SEE6 has on average lower public spending share than EU10 or EU15, several countries stand out (Serbia, Montenegro and BIH) and would have to pursue spending-based consolidation over the medium term. FYR Macedonia has

had a solid track record of meeting its own fiscal targets. Kosovo embarked on a comprehensive public finance management, procurement and wage system reform program, while Montenegro and Serbia launched the pension reform to strengthen long-term sustainability of their pension systems. Serbia also recognized the need to legislate the fiscal rule through the fiscal responsibility act and has established the Fiscal Council that assumed the role of observing the fiscal rule and fiscal impact of legislation. Bosnia and Herzegovina would need to complete its Stand-By Arrangement (SBA) with the IMF, as this would be a positive signal of the authorities' commitment to prudent macroeconomic policies and it would help unlock significant support from international financial institutions.

**Reforms of the business environment have been a priority for the SEE6 region over the last two years.** Improving the business environment is good for growth and competitiveness, and has been the easiest reform effort from the political economy aspects. FYR Macedonia and Montenegro have made the largest improvements in the region as well globally, also recognized by the Doing Business indicators. Several other countries moved forward with selective business environment reforms - mostly those that pertain to shortening registration (of companies and property) procedures (Table 12) as well as with the regulatory guillotine work (BIH) and regulatory impact assessment (Albania). Permits issuance and unreliable contract enforcement, however, continue to hamper the business environment. Legislation enforcement and judicial and anti-corruption reforms are still high on the to-do-list, while their impact will be felt only over the medium term.

**Table 11: Doing business reforms**

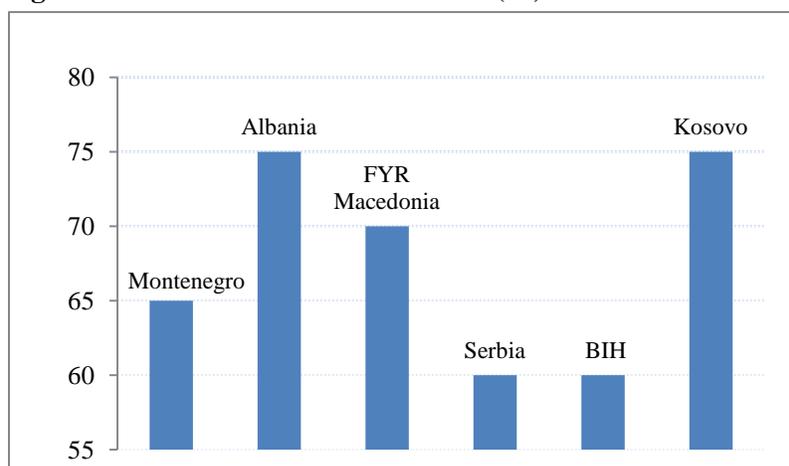
<b>Country</b>	<b>Doing Business Ranking 2012 (out of 183)</b>	<b>Recent Reforms</b>
Macedonia, FYR	22	Dealing with construction permits was made easier by transferring oversight processes to the private sector and streamlining procedures. It made property registration easier by reducing notary fees and enforcing the time limits established in the Law on Real Estate Cadastre. The establishment of a private credit bureau improved the credit information system. And legislative amendments increased the transparency of the bankruptcy process.
Montenegro	56	Montenegro made starting a business easier by implementing a one-stop shop. It made paying taxes easier and less costly for firms by abolishing a tax, reducing social security contributions, and merging several forms into one unified return. Finally, it passed a new bankruptcy law that introduces reorganization and liquidation proceedings and sets time limits for these proceedings. The law provides for the possibility of recovery of secured creditors' claims and settlement before completion of the entire bankruptcy procedure.
Albania	82	Albania made property registration easier by setting time limits for the land registry to register a title. On the other hand, dealing with construction permits became more difficult because the main authority in charge of issuing building permits has not met since April 2009.
Serbia	92	Serbia made transferring property quicker by offering an expedited option. It also adopted legislation that introduced professional requirements for insolvency administrators and regulated their compensation.
Kosovo	117	N/A
BIH	125	Bosnian and Herzegovina made dealing with construction permits easier by fully digitizing and revamping its land registry and cadastre. In addition, it made starting a business easier by replacing the required utilization permit with a simple notification of commencement of activities and by streamlining the process for obtaining a tax identification number.

*Source:* World Bank.

**Privatization and public-private partnerships have been recognized as important public finance challenges and if addressed could prove effective tool for restructuring state-owned companies that are heavily largely reliant on state aid.** The region, with around 65 percent of GDP created by private sector, has a lot of catching up to do with the EU10 countries where the private sector share in GDP averages 80 percent (Figure 38). In Albania, a comprehensive privatization agenda was launched in 2011 aiming to sell nearly 1,300 state-owned enterprises, and implementation of competition laws has been strengthened, but the sale of some key companies (oil, insurance) remains stalled. A number of concessions aimed at expanding hydropower plants in Albania and Montenegro is well underway. They yet need to develop into concrete projects. In BIH, privatization needs to be accelerated. A speeding-up of the process would bring much-needed investment, along with new skills and technology, and could provide a boost to growth rates but will require some politically difficult decisions by the authorities. The privatization process of remaining state assets remains somewhat stalled in FYR Macedonia and Montenegro, mostly due to a lack of investor interest. In fact, after several failed attempts to restructure

the country's aluminum conglomerate KAP, in October 2010, the government regained ownership of a 29 per cent share from the Russian majority owner Central European Aluminum Company.

**Figure 38. Private sector share of GDP (%)**



Source: EBRD Transition Report.

**Table 12: Logistics performance indicator, 2010**

Country	LPI	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Domestic logistics costs	Timeliness
Croatia	2.71	2.4	2.5	2.7	2.8	2.5	3.1	3.5
BIH	2.46	2.3	2.3	2.5	2.4	2.3	3.4	3.0
Macedonia, FYR	2.43	2.0	2.3	2.7	2.3	2.5	3.0	2.8
Serbia and Montenegro	2.28	2.3	2.2	2.3	2.3	2.1	3.1	2.5
Albania	2.08	2.0	2.3	2.3	2.0	1.7	2.8	2.1
Slovakia	2.92	2.6	2.7	3.1	3.0	2.9	3.1	3.3
Romania	2.91	2.6	2.7	3.2	2.9	2.9	2.6	3.2
Bulgaria	2.87	2.5	2.5	2.8	2.9	3.1	2.9	3.6
ECA (average)	2.59	2.4	2.4	2.6	2.5	2.6	3.0	3.0
EU-10 (average)	3.0	2.7	2.8	3.0	3.0	3.0	3.1	3.5
SEE6 average	2.4	2.2	2.3	2.5	2.4	2.2	3.1	2.8

Source: World Bank.

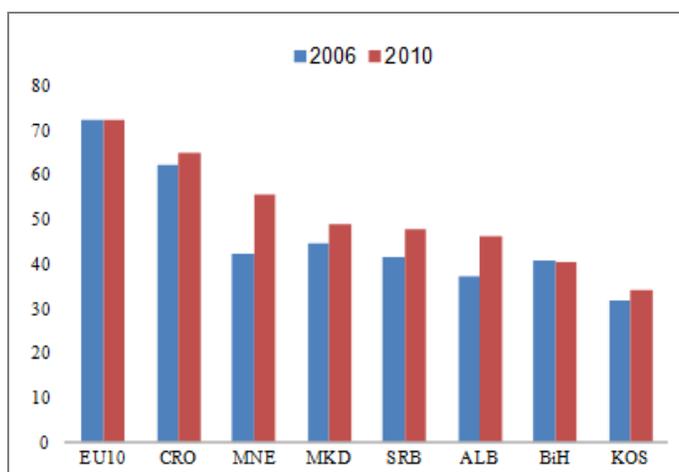
**Trade liberalization in the region has advanced reasonably well mostly through the WTO and CEFTA membership as well as the implementation of the Stabilization and Association Agreements with the EU.** However, a few trade policy issues can still be further improved and they relate to non-tariff barriers, excessive spikes in certain tariff lines and network liberalization. Reaping the benefits of a larger market often requires deep regional integration that goes beyond trade in goods. Recent studies provide

evidence of the positive effects on economic growth, direct and indirect, of trade in services.<sup>21</sup> The exports of services, and their sophistication, promote growth, while services policy positively correlate with the productivity of manufacturing firms that rely on services as inputs (examples being the Czech Republic and India). Integrating goods and services markets would enable the small CEFTA economies to become part of not only regional but also global supply chains and production networks, where SEE6 region lags well behind the advanced countries (Table 13). This would in turn lower costs to consumers and make these economies more attractive to foreign investment. Moreover, since regional integration is a prerequisite for joining the EU, opening the regional services market would prepare CEFTA economies for functioning within the EU single market.

**Despite progress over the last decade, labor markets remain relatively inflexible.** As noted in section 6 on labor market developments SEE6 countries continue to have low participation and employment. All SEE6 countries still face widespread informality, skill mismatch and inefficient social security systems. Key reforms that would support stronger labor force participation would include increasing the legal retirement age and reducing incentives for early retirement; fostering life-long learning; reducing labor regulation rigidities and providing incentives for employment through integrated social protection and social assistance. Pension reforms have advanced in Serbia and Montenegro which in 2011, among other things, increased the retirement age from 65 for men and 60 years for women to 67 years in 2025 and 2041, respectively.

**During 2011, the EU accession agenda has to a large extent led the reform efforts in the SEE6, and strengthened accession prospects.** As part of the EC accession process the Montenegrin government has been implementing the Action Plan across seven areas of governance and anti-corruption reforms and is expecting to launch the negotiation process. In Serbia, intensified work on getting the EU Candidacy Status (expected to be approved in December by the European Council) also led to improvements in the rule of law and governance. Advancing the EU process for Albania and Bosnia and Herzegovina is vital. Albania's progress towards integration into the European Union has been halted in the past year, while the long unsettled political situation in BIH led to further delays on the structural reform front, including those that are required by the IMF, World Bank and EU budget support programs.

**Figure 39: World Bank governance indicators**



Source: World Bank.

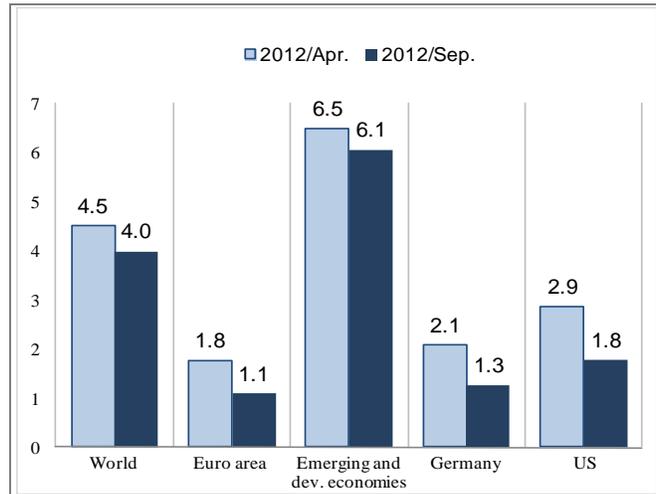
<sup>21</sup> Handjiski and Sestovic (2011), *Barriers to Trade in Services in the CEFTA Region*

## 8. PROSPECTS AND POLICIES

### Growth going forward

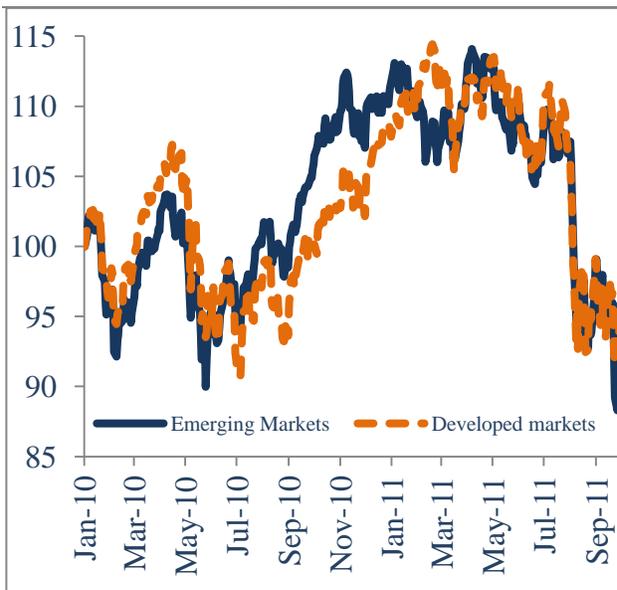
**N**ear term developments for SEE6 depend critically on factors that are largely beyond the control of SEE6 governments. As this is being written, leaders of the major EU countries are still seeking to implement set of credible policies to establish an orderly process for managing sovereign debt in Greece, to prevent risks from spreading to other economies in the euro zone, to recapitalize banks affected by likely sovereign debt write downs, and to establish a more unified and effective fiscal framework for EZ member states. Uncertainty over their ability to successfully conclude this process, as well a series of ratings downgrades, stock market volatility and uncertainty over US deficit policies has shaken investor and business confidence and kept consumers wary. Most forecasters have already reduced their projections for global growth in the US and the EU by a percent or more. Our projections are for SEE6 growth of 2.5 percent in 2011 and 2.1 percent in 2012, well below the pre-2008 rates of 6-10 percent (Figure 43). Should the policy makers fail and the crisis worsen, SEE6 performance, and the rest of world's, could be much worse.

**Figure 40: Changes in global growth forecasts for 2012** (made in April and September 2011)



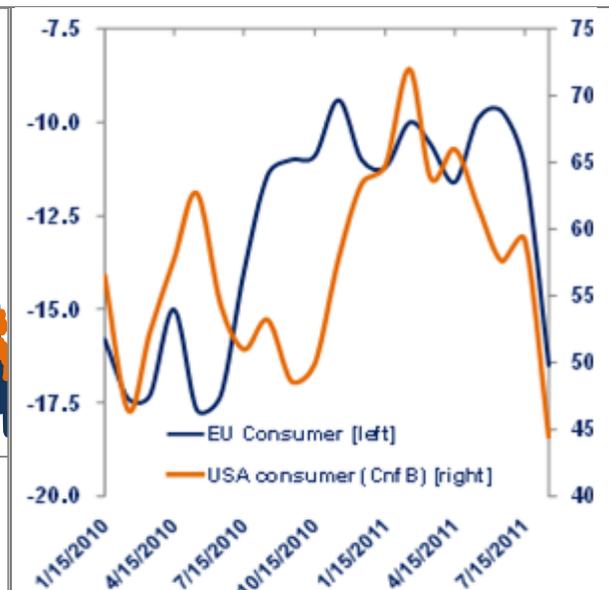
Source: IMF WEO.

**Figure 41: MCSI equity index Jan2010=100**



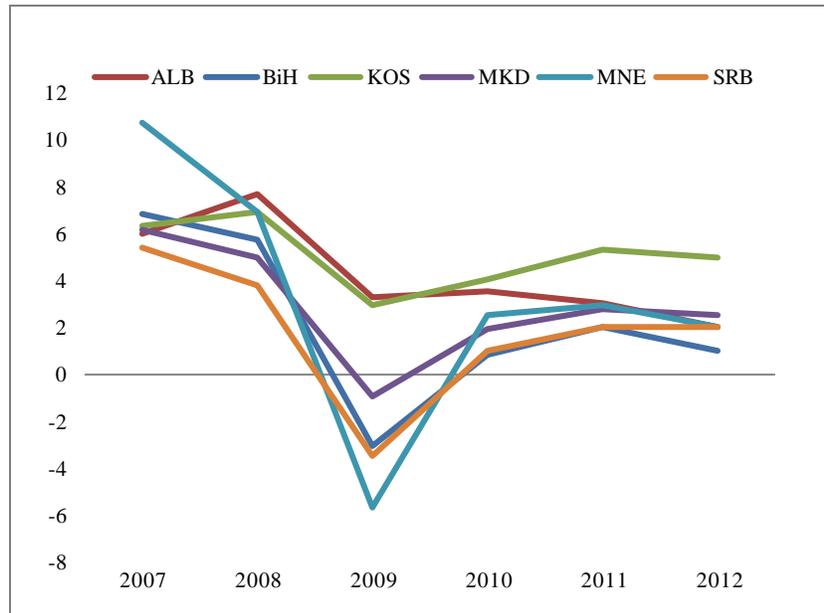
Source: Bloomberg.

**Figure 42: Consumer confidence indices**



Source: Bloomberg.

**Figure 43: SEE6 GDP real growth rates (%)**



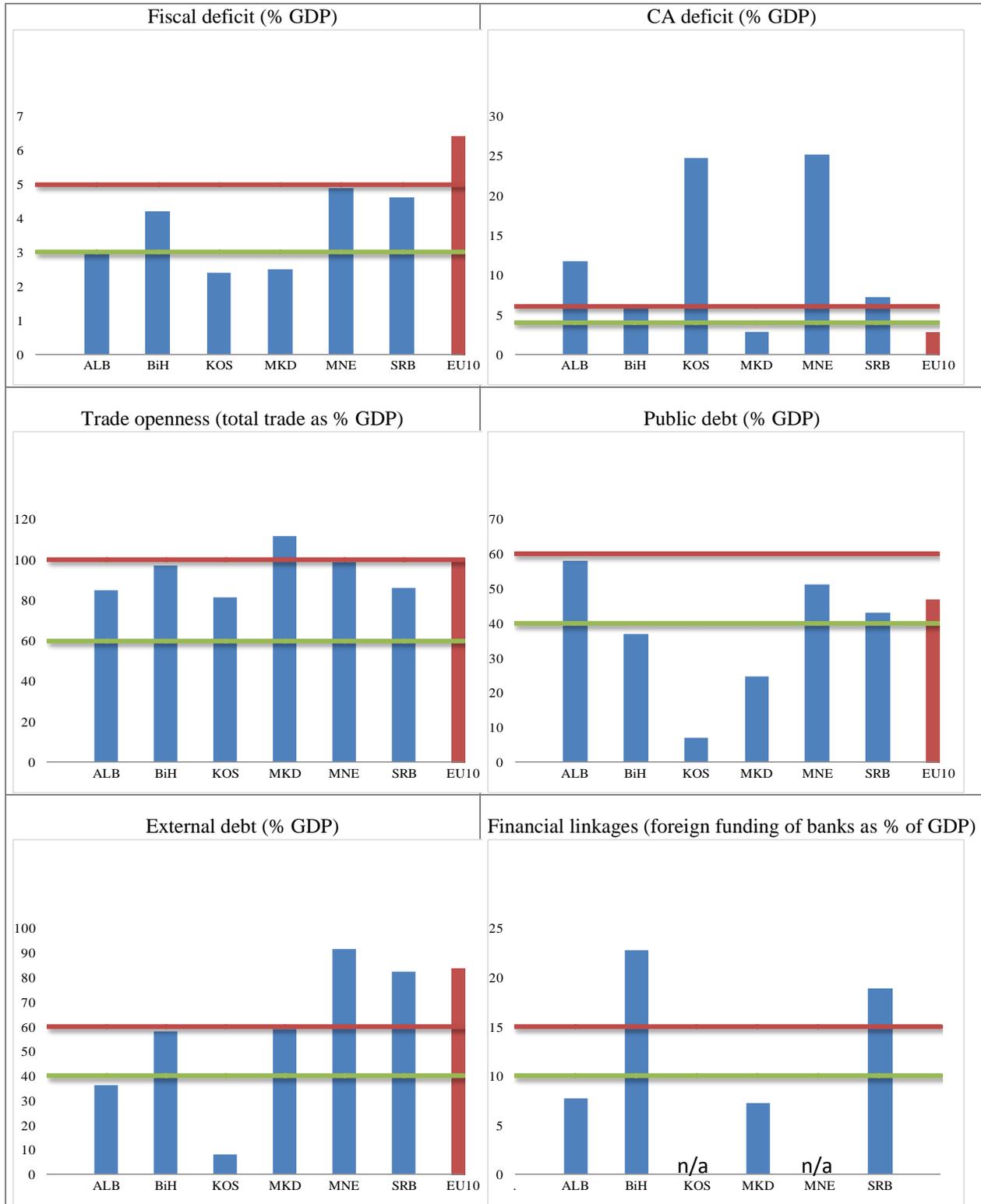
Source: National Statistics Offices and WB staff projections.

## Vulnerabilities

While there are no objective indicators of varying degrees of vulnerability, most observers tend to categorize high macroeconomic vulnerability in advanced emerging markets as fiscal or external deficits exceeding 5-6 percent of GDP and public or external debt above 50-60 percent of GDP. Low vulnerability would be associated with values of these variables below 3-4 and 30-40 percent of GDP, respectively. In our analysis, we have adopted the following macro vulnerability thresholds:

- Fiscal deficit: HIGH >5 percent of GDP; 3 < MEDIUM < 5 percent of GDP; LOW < 3 percent of GDP
- Public debt: HIGH >60 percent of GDP; 40 < MEDIUM < 60 percent of GDP; LOW < 40 percent of GDP
- Current account deficit: HIGH >6 percent of GDP; 4 < MEDIUM < 6 percent of GDP; LOW < 4 percent of GDP
- External debt: HIGH >60 percent of GDP; 40 < MEDIUM < 60 percent of GDP; LOW < 40 percent of GDP
- Total trade: HIGH >100 percent of GDP; 60 < MEDIUM < 100 percent of GDP; LOW < 60 percent of GDP
- Foreign funding of banks: HIGH >15 percent of GDP; 10 < MEDIUM < 15 percent of GDP; LOW < 10 percent of GDP

**Figure 44: Vulnerability indicators**



Source: World Bank staff estimates.

Note: Above red line: high risk; below green line low risk; between lines: moderate risk

Several features stand out for the SEE6 in respect of these benchmarks.

- Fiscal deficits are below but close to the high risk reference rate in Montenegro and Serbia. These two countries as well as Bosnia and Herzegovina are well above the Maastricht level. A key issue here is whether deficits at these levels can be financed.
- Current account deficits are very high relative to the high risk reference rate in Kosovo and Montenegro and to a lesser extent in Albania.
- As a group the SEE6 have a moderate degree of trade openness with only FYR Macedonia over the reference rate. While this represents a vulnerability it is partly a consequence of the small size of the economies. Moreover, it reflects the deliberate policy of closer integration with the EU.
- Albania and Montenegro stand out as having high public debt levels (including publicly guaranteed debt) that are close to the high risk reference rate.
- All the countries except Kosovo and Albania have relatively high levels of external debt with Montenegro and Serbia being well into the high risk range. While some of this debt is to official lenders, it represents a rollover risk should market access tighten further.
- Bosnia and Herzegovina and Serbia are particularly vulnerable due to a high dependence on foreign funding of banks.

## Policies

**SEE6 countries do not envisage substantial fiscal adjustment in 2012.** Montenegro's initial projections envisaged a significant reduction in the fiscal deficit in 2012 largely on the back of cuts in expenditures; however, these have been more recently amended with the 2012 deficit projected to be around 2 percent of GDP. Serbia is targeting a very modest adjustment of around 0.6 p.p. of GDP though the structure of the adjustment has yet to be defined. FYR Macedonia is likely to preserve the deficit target at around 2.5 percent of GDP. The authorities are committed to continue with firm control over public consumption and allocate more funds to capital spending. Albania is also likely to keep its deficit target for 2012 at around 3 percent of GDP. The 2012 – 2014 Medium-term Expenditure Framework (MTEF) of Kosovo envisages further widening of the deficit to around 3.6 percent in 2012 as major infrastructure projects are continued.

**Most SEE6 countries have incorporated an acceleration of economic activity into their 2012 fiscal projections.** However, in case of a greater turbulence, growth will be significantly affected and will put renewed pressures on the fiscal accounts. Similar to the 2009 crisis, growth and fiscal performance will most likely be heterogeneous. However, the recent sign of weaker growth in Albania and its relatively high level of debt may mean that Albania could be also negatively affected this time. While there appears to be some room for domestic borrowing this may crowd-out financing for private sector. Access to external market will continue to be difficult. For countries with fixed exchange rates, stimulating demand will also keep the trade deficits high and could threaten macroeconomic stability.

**Few SEE6 countries still have room to accommodate a worsening of the crisis through fiscal stimulus or even through allowing automatic stabilizers to operate. Thus several countries should accelerate fiscal consolidation, especially reforms to enhance longer-term fiscal sustainability and build fiscal buffers.** During the global financial crisis in 2008, governments of SEE6 countries had room to pursue counter-cyclical fiscal policies to mitigate the impact of the crisis. This helped them recover from the downturn. However, now probably only Macedonia would have room for an accommodative fiscal policy in the event the crisis worsens. In the rest of the countries, public debt and fiscal imbalances

increased during the previous crisis and the space for stimulus has been exhausted. Given the increased attention of markets to fiscal and debt sustainability, some countries should rather consider a precautionary tightening of fiscal policy, in particular through reforms that limit the immediate impact on output growth but enhance longer-term sustainability. Pensions and wage bills should be the main areas of focus. Countries that have flexible exchange rates should generally allow these to adjust and use only intervention to reinforce market movements rather than leaning against the wind.

**Despite the recent turbulence and the widening uncertainties about the near term future, a growth model that is based on deeper integration with the EU in terms of finance, trade, labor markets and institutions remains the best one for SEE6.** There are two basic lessons for the SEE6 to be learned from the recent past that will enable them to better exploit the benefits of this growth model over the medium term. The first is that future growth will need to be driven more by investment and productivity that enhances competitiveness and productive capacity, and less by the externally financed consumption, and investment in real estate and other bubble assets that characterized the pre-2009 period. The second is that there remains in most of the SEE6 countries a lengthy unfinished agenda of structural reforms. These urgently need to be addressed in order to take advantage of the access to markets, and to FDI, bank finance and remittances that integration offers, thereby building sustainable growth.

## Focus Note # 1

**Skills, Not Just Diplomas; what matters are the skills that workers have, not the diplomas they hold. To close the skills gap, we first have to close the knowledge gap.**

### SUMMARY

**P**aradoxically, for a region with relatively high and expanding educational attainment (as measured by the number of years of completed schooling) and relatively high-quality education in the early years of schooling, a shortage of worker skills has emerged as one of the most important constraints to firm expansion in the SEE6 countries. A recent World Bank publication – looking at the 29 countries located in Eastern Europe and Central Asia (ECA) -- entitled **Skills, Not Just Diplomas** seeks to answer the questions: Why do firms increasingly complain that they cannot find graduates with the right skills? What can countries do to close the skills gap?

## Focus Note #1

### Skills, Not Just Diplomas

**A** main message of the recent World Bank publication entitled **Skills, Not Just Diplomas**<sup>22</sup> is that policy makers cannot design policies to close skills gaps unless they first close the skills information gap. Across the region, data exist on the number of students who graduate (i.e., how many diplomas are issued), but internationally comparable data on whether graduates have the right skills and competencies for the job market do not exist. To close this gap, more tests to measure students, graduates and adults' skills and competencies are needed. Moreover, to better understand graduates' transition (or lack thereof) from their education institution to a job, tracer studies – surveys that survey graduates 1, and 5 years after graduation - are needed. Similarly, better and more detailed firm surveys are needed on what skills firms cannot find: is it technical, cognitive or non-cognitive (socio-emotional) skills that they cannot find? Only by understanding better what firms demand and what education institutions supply, can policy makers design effective policies to improve the matching.

Better information is not only needed by policy makers; firms and students need better information to help them make informed decision and become a stronger force in pushing education and training facilities to align curriculum with labor market needs. One of the first large big decisions in the life of a young adult is the decision of what and where to study. Currently, this decision is being made in SEE6 countries with relatively limited information about likely employment and earnings prospects.

#### **The skills challenge is real: firms struggle to find skilled workers**

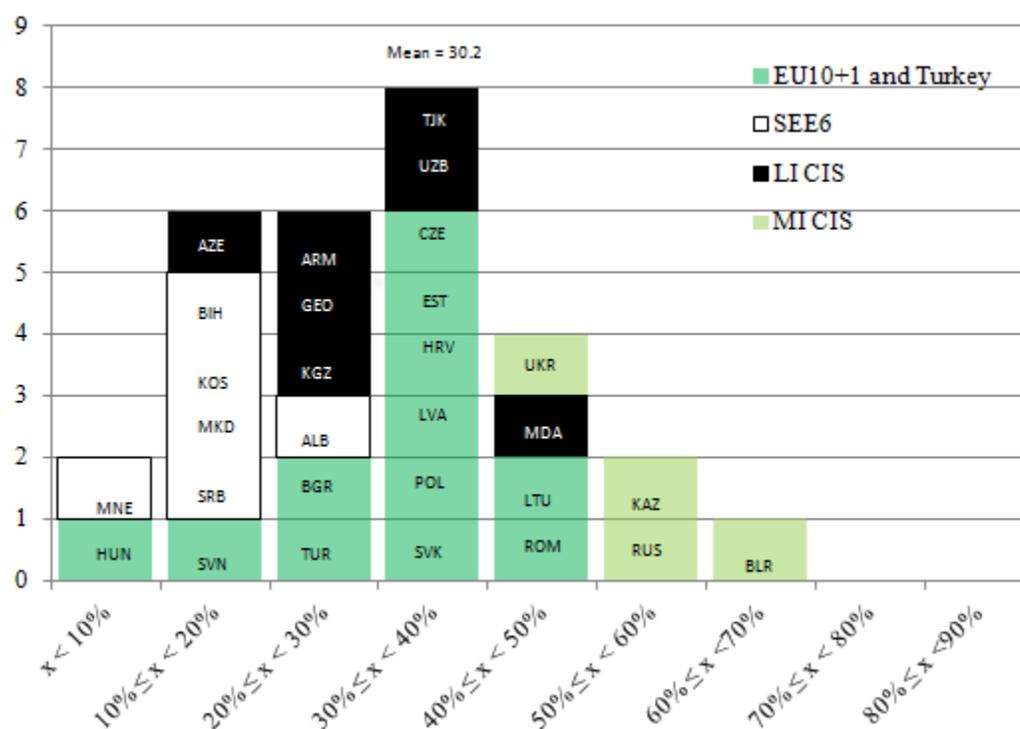
The European Bank for Reconstruction and Development (EBRD)–World Bank Business Environment and Enterprise Performance Surveys (BEEPS) show that firms' perception of skills constraints changed dramatically in ECA countries around 2005.<sup>3</sup> By 2008, skilled labor shortages had become the second most commonly reported constraint to growth in the BEEPS survey across all countries in the region, second only to tax rates (Figure 1). On average, 30 percent of firms considered education and skills to be a major or severe constraint in 2008. The highest proportion of firms reporting constraints were found among the middle-income CIS countries where more than 40 percent of firms were dissatisfied with the availability of skilled workers. A smaller proportion of firms in the SEE6 reported similar levels of dissatisfaction, while perceptions among EU10 countries varied considerably (BEEPS dataset 2008).

Although the firms in SEE seems to be less constrained by skills gaps than other countries in the wider region, there are, nevertheless, reasons to be concerned. First, the proportion of firms reporting that “education and skills of labor” was a constraint rose between 2005 and 2008. In 2005, 47 percent of the firms surveyed (in BEEPS 2005) reported skills being a constraint. This proportion jumped to 58 percent in 2008. Second, all SEE6 countries aim to become part of the EU market and converge to EU income levels; this process will require rapid increase in productivity which will have to come from improving skills of workers.

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<sup>22</sup> This Focus Note is based on the World Bank report “Skills, Not Just Diplomas: Managing Education for Results in Eastern Europe and Central Asia”. The report can be downloaded from <http://www.worldbank.org/eca/skills>

**Figure 1: Distribution of firms that consider worker skills a “Major” or “Very Severe” constraint, 2008**



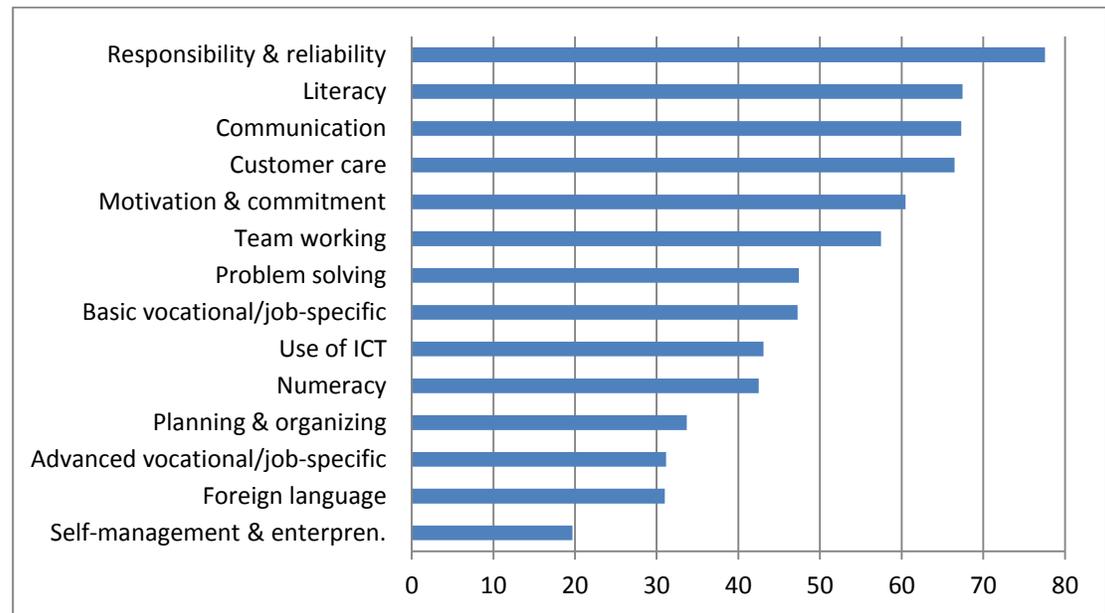
Source: Authors’ calculations based on BEEPS 2008.

Note: LI = Low Income, MI = Middle Income, x = % of firms (in respective countries) that consider education as an obstacle, Figure shows data obtained from the fourth round of the BEEPS carried out in 2008–09, which covered approximately 11,800 enterprises in 29 countries.

To understand what skills firms are struggling to find, additional surveys were carried out in a number of countries to probe further. In principle, the fact that firms are increasingly complaining about shortages of skilled workers could imply a number of things: first, graduates may not have the necessary technical skills to do the jobs that employers offer. This is not solely a matter of educational attainment, that is, of completing a certain level of education. It is also a matter of whether students have the skills needed on the job—the relevant knowledge, the ability to apply that knowledge, and the know-how to complete tasks and solve problems—when they graduate. Second, graduates of education and training systems in the region may lack the necessary behavioral (or “soft”) skills needed by employers, such as job attitudes and teamwork skills (see Box 1 for the types of skills that firms may be seeking).

There is widespread evidence that firms seek graduates who not only have knowledge as well as technical and general skills, but who also have behavioral skills. For instance, recent surveys of employers in FYR Macedonia (Figure 2) show that firms value such behavioral skills as highly (or more) as knowledge and cognitive skills (e.g., problem solving).<sup>21</sup>

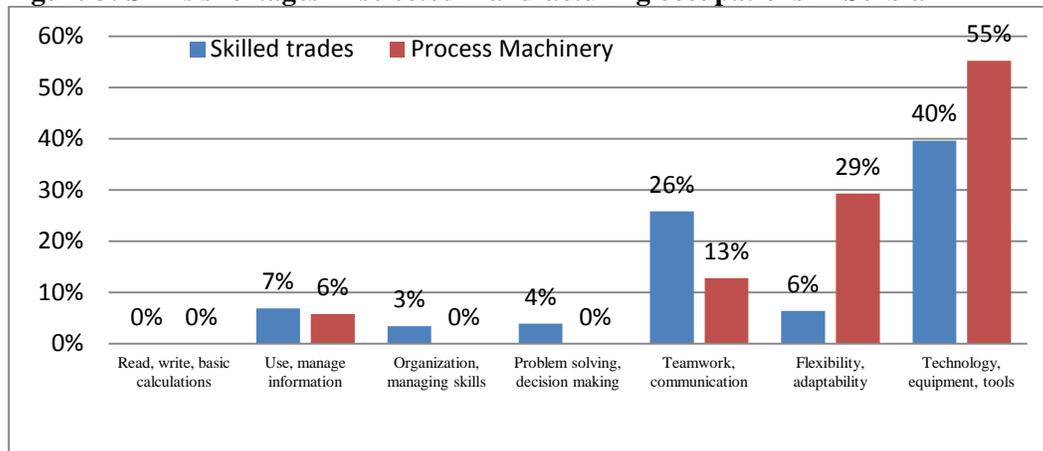
**Figure 2: Most important employability skills (% of firms reporting), FYR Macedonia**



Source: World Bank staff calculations based on Macedonia Demand for Skills Survey, 2009.

Then, an ILO survey of employers in Serbia found that manufacturing firms considered interpersonal (and technical skills) more important than basic cognitive skills such as numeracy. When asked which skills were the most important in their firm, teamwork/communication/inter-personal skills and efficient use of materials/technology/equipment skills came as most important to manufacturing firms expecting growth. A similar pattern is observed among wholesale firms. At the same time, the survey shows that 40 percent of the skilled workforce in trades and 55 percent of the workforce in “process & machinery” sectors were considered to have inadequate skills by the same group of manufacturing firms. The next most common competences to be lacking were flexibility and team work (Figure 3).

**Figure 3: Skills shortages in selected manufacturing occupations in Serbia**



Source: ILO Employer Survey Serbia, 2009.

### **Box 1: Higher-order skills for the world of work in the 21st century**

In common-day language, the term “skills” tends to be associated with skills that involve manual dexterity -- that is skill and grace in physical movements -- and the use of methods, materials, tools and instruments. These are the skills commonly associated with vocational schools and with specific occupations. In **Skills, Not Just Diplomas**, these skills are referred to as “technical skills”.

However, it is now widely recognized that individuals need a broad set of skills to succeed in life and in the work place. Therefore, in **Skills, Not Just Diplomas** use the term “skills” more broadly to talk about three distinct type of skills: (1) “cognitive”; (2) “non-cognitive” (or socio-emotional skills); and (3) technical skills. Cognitive skills are skills that involve the use of logical, intuitive and creative thinking. And the skills commonly associated with cognitive skills are skills such as verbal ability, numeracy and problem solving skills.

However, evidence is emerging that non-cognitive skills are as important to succeed in life. In common-day language, non-cognitive skills are often called interpersonal, soft, or life-skills and they are closely related to what common-day language might also call “personality traits”: “self-regulation”, perseverance, decision-making skills, team skills, and the ability to set life goals and preserve in their pursuit.

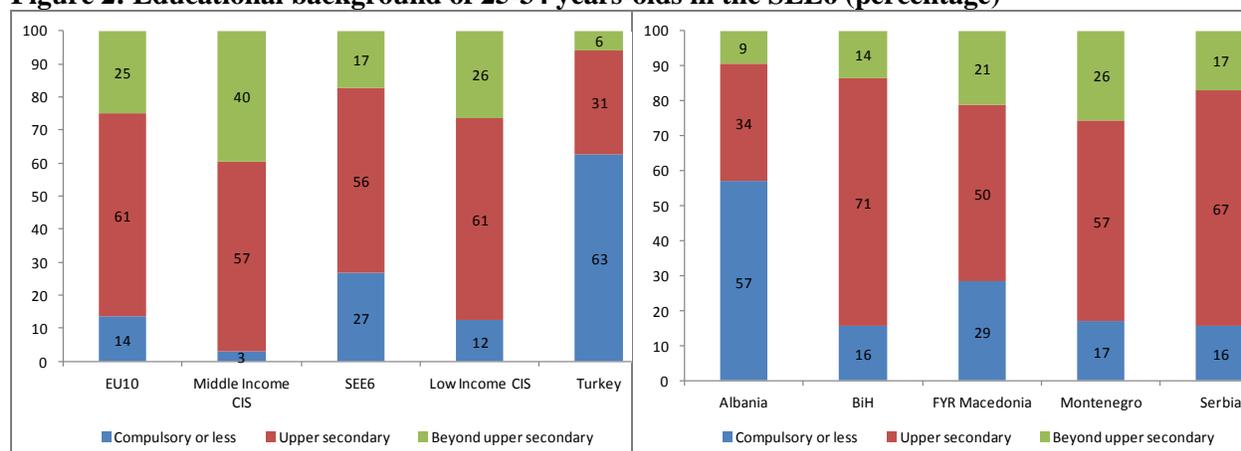
At present, standardized tests of secondary school students measure cognitive skills – both basic cognitive skills such as the ability to read as well as some higher-order cognitive skills such as critical thinking and analytical reasoning, but not behavioral skills. Recent research in by the World Bank in Peru provides an example of how to incorporate the testing of behavioral skills into regular household surveys.

*Source:* Authors, based on OECD (1999a) and materials available on the following websites: State Secretariat for Economic Affairs of Switzerland ([www.seco.admin.ch](http://www.seco.admin.ch)), Australian National Centre for Vocational Education Research ([www.ncver.edu.au](http://www.ncver.edu.au)), American Society for Training and Development ([www.astd.org](http://www.astd.org)).

### **What skills is it that education and training institutions are failing to deliver?**

From the surveys of firms, it is clear that – from the demand side – there is a perception that skills are not being provided. Turning to the supply side, it is a lot more difficult to pinpoint where, exactly, education and training institutions are failing to deliver them. The main problem – and this is a worldwide problem – is that that educational data tends to focus on quantity—for example, the number of enrolled and graduating students—and not the skills that students acquire (or fail to acquire). Moreover, data exist on the education attainment of the adult population but not on their mastery (or lack thereof) of technical, cognitive and non-cognitive skills. Where international comparative data are available, they focus on the quality of primary or lower secondary education. This focus on inputs and on youngsters’ level of skills is particularly problematic because very few young people in the region enter the labor market with only a lower secondary education. Most SEE6 students complete at least an upper secondary degree. But with no international assessment of the skills and competencies of upper secondary or tertiary graduates, it is impossible to quantify the gap in competencies between recent labor market entrants in, say, Serbia and Slovakia. The data that are available today document how many students graduate in a particular year, not what they offer employers in terms of competencies.

**Figure 2: Educational background of 25-34 years-olds in the SEE6 (percentage)**



Source: EBRD – World Bank Life in transition survey 2010

Note: Data on Kosovo not available.

Lack of relevant data on students and their individual performance is particularly acute in the vocational sector because of the large variety of vocational schools and the (likely) heterogeneity of their student populations. The tendency of educational data to focus on quantity, rather than quality and relevance, is also acute in adult education and training. At best, current surveys in that sector measure the number of training hours and courses in which individuals participate, or whether a firm offers training. But no international comparative data yet exist to compare the quality or relevance of such training.

Similarly, with enrollment in universities booming across the region, the lack of tests to measure the skills that students acquire during their studies is particularly constraining in terms of pinpoint problem areas. At the current juncture neither students, employers, nor policy makers know whether students are acquiring skills and knowledge during their years of study. And, no one knows where in the system – e.g. by fields of study, by type of university – students are on a particular steep learning curve compared to other places. In part, such information exists for certain professions where the profession itself has developed “professional exams” to certify that graduates are qualified. In many countries, such professional exam exists for lawyers, for teachers, for medical doctors and for architects. However, in SEE6 countries, the largest growth in enrollment has been in areas for which there are no professional certification exams, e.g. in economics, and business. Moreover, even these “professional exams” have their limitations in terms of the evidence they generate on skills: they only cover graduates who decide to take the exam; and only provide a pass-fail score, not an assessment of the mastery each graduate has vis-à-vis particular desired competencies (e.g. in the form of a score on a scale from 1-100).

Take the following concrete example of how this information gap on skills limits key actors in taking informed decisions and improving the quality of the sector: In FYR Macedonia, there are 5 public and 15 private higher education institutions, of which 13 offer programs in economics. Each stakeholder has questions which the current information system cannot answer.

- Student’s perspective: which institution does a better job at teaching me the skills I need to succeed? Without such information, the powerful force of students “voting with the feet” is significantly limited.
- Employer’s perspective: graduates from which institutions have acquired the skills and competencies that my firm needs?

- Higher education institution’s (teaching economics) perspective: how does my “economics” program compare to other “economics” programs? Are my students acquiring as solid mastery in the core competencies in this field as those in other institutions? If so, how do I demonstrate that to prospective students, and to potential employers of my graduates?
- Policy maker’s perspective: how does the performance (in terms of quality and relevance of the education provided) compare with other fields? Which institutions are doing a good teaching, and which are not? Which institutions need more support?

### **Turning the lights on**

To provide policy makers with the information needed to design better policies, and for students to become a stronger force to vote with their feet, the Skills, Not Just Diplomas book recommends the following ways of “turning the lights on”.

- Continue participation in international assessments (e.g. TIMSS<sup>23</sup> and PISA<sup>24</sup>).
- Expand the use of national assessments of students, placing more emphasis on identifying strengths and weaknesses of the education and training systems as opposed to only testing students (e.g. are there groups of students that systematically fail to acquire the desired level of competencies?).
- Introduce graduate tracer studies to track whether graduates find job (Box 2).
- Introduce tests of skills of tertiary students.

More data, alone, will not result in better policies; information has to be analyzed, disseminated and used for policy making. Countries that have succeeded in getting data on student performance used for policy making – e.g. Singapore, Poland, or Chile provide lessons for others to replicate. Some of these lessons include:

- Building (domestic) technical capacity to design and analyze tests. In Singapore, this capacity was gradually built by working closely with Cambridge researchers who, initially, designed and ran the tests. In Chile, the initial analysis was done on a pilot basis by a local university. Only gradually, was the assessment function moved to an autonomous agency.
- Expanding access to data sets to encourage researchers to identify strengths and weaknesses. For instance, the OECD makes the entire PISA dataset publicly available for researchers to download online (<http://pisa2009.acer.edu.au/>)
- Changing policies to make data matter, such as making improved student learning outcomes a component of teacher and school evaluations (if the results of assessments have no impact, whether directly or indirectly, on policies or people’s careers, it is very difficult to mobilize and sustain resources to maintain assessment centers and train people to analyze results).
- Actively disseminating results to all levels of the education system to ensure that curriculum design, and teacher training can be influenced by the strengths and weaknesses identified by the test results.

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<sup>23</sup> Trends in International Mathematics and Science Study.

<sup>24</sup> Program for International Student Assessment ([www.pisa.oecd.org/](http://www.pisa.oecd.org/))

## Box 2: Are graduates getting a job? Introducing graduate tracer studies in Romania and Hungary

With respect to tracer studies, two countries in Europe, Hungary and Romania, are making rapid progress. In fact, these studies are becoming a core element of tertiary management in these countries. In Hungary, 2010 marked the first year that results from the new “Graduate Career Tracking System” were produced (spanning graduates from 25–30 institutions). In Romania, data from a graduate survey will be available in 2011. By that time, policy makers will have results from surveys of students who graduated in 2008–09 (i.e., 12 months after they graduated), as well of students who graduated in 2004–05 (i.e., five years after they graduated). As is the case with Hungary, the development of the tracer study in Romania is being financed by EU Social Funds.

Hungary is moving ahead rapidly on tracer surveys for several reasons. In the first place, central policy makers in the country are pressuring tertiary institutions to start collecting such data. *The 2005 Higher Education Act of Hungary, for example, makes it mandatory for every university and college to carry out surveys of graduates.* The central government has also made tracer studies a part of quality assurance discussions, with the availability of such surveys now (or soon to be) tied to institutions’ accreditation agreements. In addition, the government is using the power of the purse, tying tracer survey data (or their availability) to three-year financing agreements. In the second place, institutions of higher education in Hungary themselves consider tracer data useful for a number of reasons: (1) they want labor market feedback to help them design better programs; (2) the data can be used in marketing; (3) the data is valuable for internal quality assurance; and (4) tracer surveys are one of many engagement tools for strengthening an alumni network.

Similarly, several OECD countries provide examples of such use of tracer studies. Norway has tracked such data since 1972; Italy, since 1998; and the Netherlands, since 1989. In the Netherlands, almost all graduates of higher education institutions are surveyed a year and a half after they graduate. The survey collects comprehensive information on a range of different topics, including information on the school-to-work transition (asking such questions as: How long did it take to find a job?); the type and quality of employment, if any (e.g., sector and educational and skills requirements); and students’ satisfaction with the education that they have completed (Did it provide a solid basis for entering the labor market? Did it develop the relevant skills? Did it achieve the right mix between practical and theoretical knowledge?). Table 1 below shows the types of information that the survey collects.

**Table 1: Information Collected from Tracer Study of Dutch University Graduates, 2007**

	Duration of job search (in months)	Full time employment (%)	Unlimited term contract (%)	Monthly gross income (euros)		Managerial or professional (% ISCO 1 or 2)	High utilization of skills (%)	High job satisfaction (%)
	Mean	Mean	Mean	Mean	Median	Mean	Mean	Mean
Science and math	0.7	88.4	45.6	2499	2429	83.6	71.0	77.5
Medicine and health	0.7	79.0	41.0	2904	2783	82.6	78.9	81.7
Engineering	1.0	94.4	66.2	2772	2631	87.4	75.2	72.8
Economics	1.0	96.1	71.3	2954	2783	70.3	65.6	70.1
Law	1.2	92.7	57.5	2864	2732	87.8	66.0	70.2
Humanities and arts	1.2	59.1	43.0	2188	2226	66.0	50.4	61.3
Social sciences	1.3	60.6	45.4	2317	2350	72.0	63.9	65.4
Agriculture	1.5	86.7	45.6	2137	2328	84.2	73.2	71.2

*Source:* Table provided by the Research Centre for Education and the Labor Market (ROA), The Netherlands, 2008, at request of the author.

## Focus Note #2

### Could Regional Cooperation Increase the Contribution of R&D and Innovation to Economic Development in the SEE6?<sup>25</sup>

#### SUMMARY

**T**he SEE6 share a common set of challenges and opportunities regarding research and development (R&D) and innovation. This note explores the potential contribution of R&D and innovation policies to long term development, emphasizing the benefits of a taking a regional approach to maximize the opportunities in this area.

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<sup>25</sup> This note was prepared by Dragana Pajovic (Analyst, ECSPF) and Paulo Correa (Lead Economist, ECSPF). The note builds on the Inception Report *Western Balkans Regional R&D Strategy for Innovation*. World Bank, June 2011. Mimeo.

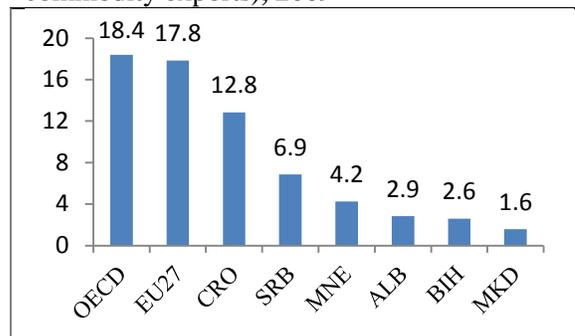
## Focus Note #2

### Could Regional Cooperation Increase the Contribution of R&D and Innovation to Economic Development in the SEE6?

#### Why R&D and Innovation policies?

To sustain long-term growth, SEE6 countries will need to foster industrial restructuring to boost productivity. One way to move up the ladder chain is by enhancing R&D policies to foster innovation. Industrial restructuring and innovation, in turn, will increase the sophistication (and value added) of industrial output and increase the sophistication of exports. So far this has not been the case and as Figure 1 indicates, the share of high technology in total exports is particularly low in FYR Macedonia, Bosnia, and Albania. However, recent FDI have begun to change the export structure in FYR Macedonia.

**Figure 1: High-technology exports** (share of commodity exports), 2009



Source: UN Comtrade, WDI, OECD.

#### Box 1: The Impact of R&D on Growth and Export: Lessons from Neighboring Countries

A recent World Bank study\* estimates the impact of reaching the 3 Percent R&D target set by the Lisbon Agenda (and confirmed by the Europe 2020) on GDP and exports in selected neighboring countries. The highest effects are expected in Bulgaria, Romania and Croatia – reflecting the distance of those countries to the mentioned target. For instance, in the case of Croatia and Bulgaria, reaching the 3 percent target would increase exports and GDP by up to 13 percent, respectively, by 2025 (Table 1).

The study also concluded that – among five Lisbon Agenda targets (R&D, labor participation, completion of market for services, reduction of administrative burden and education) – achieving the labor participation (75 percent) and R&D (3 percent) targets would generate the highest impacts on GDP and exports for Bulgaria, Romania and Croatia.

\* World Bank (2009): Croatia’s EU Convergence Report: Reaching and Sustaining Higher Rates of Economic Growth. Report No. 48879- HR.

**Table 1: The effects of Lisbon Agenda R&D target in 2025**

	GDP	Exports
Bulgaria	13.1	8.3
Croatia	6.0	12.9
Hungary	6.4	8.0
Poland	5.5	8.5
Romania	11.7	13.5
Slovakia	8.9	10.4
Slovenia	6.9	10.5

Note: Simulations based on the World Scan Model. The numbers are cumulative changes when achieving the 3 Percent target as compared to the baseline in 2025.

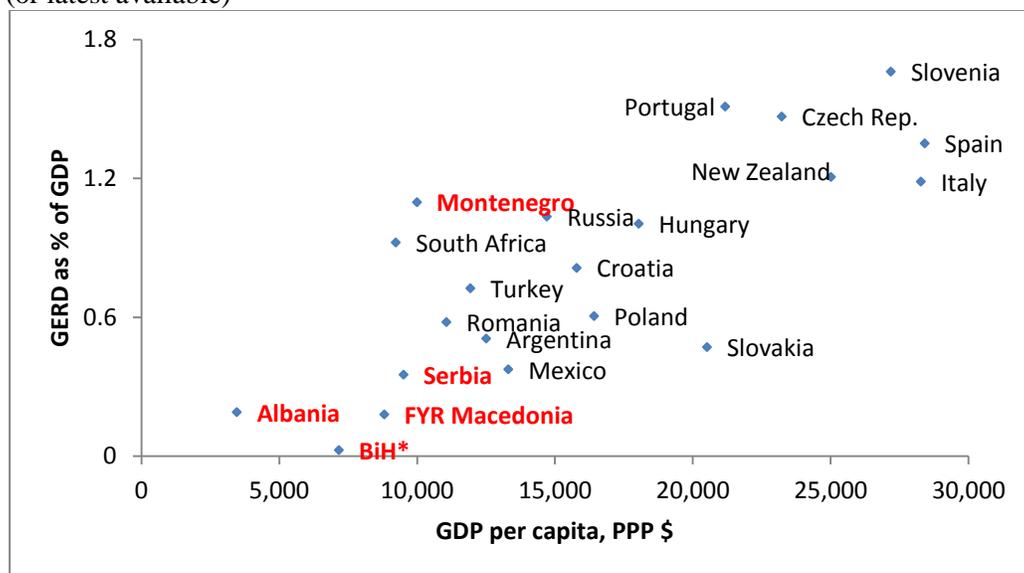
R&D is neither sufficient nor necessary for innovation but higher R&D expenditures at firm level often lead to higher productivity, probability to innovate and propensity to export. Firm’s R&D expenditures are also important in order to increase the “absorptive capacity” of the enterprise sector – i.e. the capacity of the enterprise sector to adopt and adapt foreign technology and benefit from spillover effects from foreign direct investments. While the decision to invest in R&D and innovation depends on a number of factors that are industry and country specific, appropriate R&D policies may induce firms to invest more in R&D, accelerate technology transfer and facilitate the collaboration between public research organizations and the enterprise sector.

## What are the challenges?

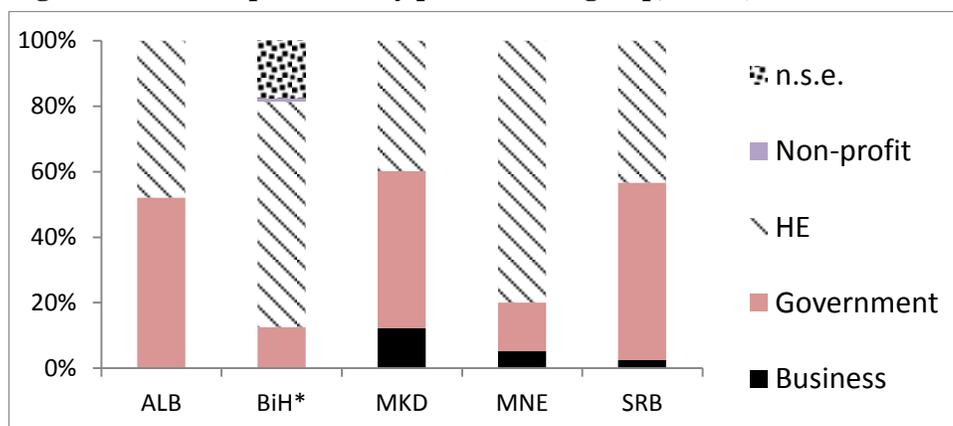
R&D policy is one of the areas in which SEE6 countries have achieved slow progress during the transition period. National Innovation Systems tended to be neglected and suffer from a legacy of unfinished reforms. Then, aggregate expenditures on R&D are comparatively low in most SEE6 countries. More importantly, these expenditures tend to generate limited scientific and economic results because expenditures are mainly concentrated in the public sector and little -- if any -- of the research results are commercialized. More broadly, cooperation with the private sector is negligible (Figures 2a and b). In sum, knowledge – when created – will very likely remain idle from an economic standpoint. To improve the impact of R&D policies, SEE6 countries need to improve the quality of public expenditures on R&D.

**Figure 2a: Gross R&D expenditure and GDP per capita, 2008**

(or latest available)



**Figure 2b: R&D expenditure by performance group, 2008** (or latest available)

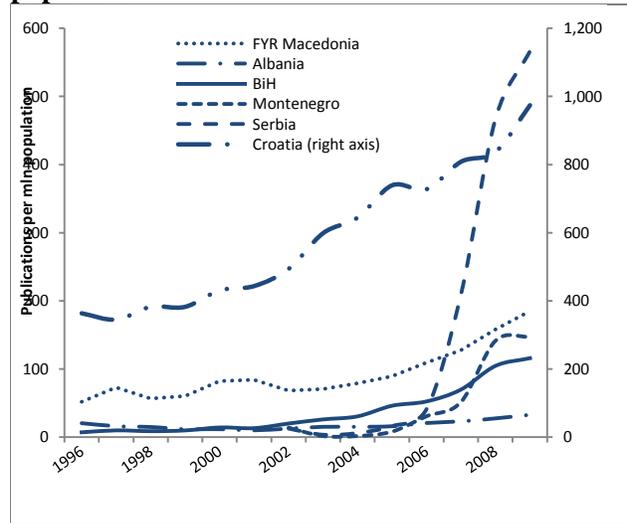


Source: UNESCO & OECD STI 2010/1 \*Partial data for BiH \*\*HE: Higher Education \*\*\*n.s.e: Not specified.

Poor scientific outcomes (low level of citations, patent applications, and patents granted) in SEE6 are result of allocation of public resources that is not based on performance but rather on a per headcount basis. Research resources only recently have started to be allocated on a more competitive basis, but “performance contracts” for example have not yet been introduced. On a positive note, the number of publications as a share of the total population has been increasing in recent years, particularly in Serbia (Figure 3).

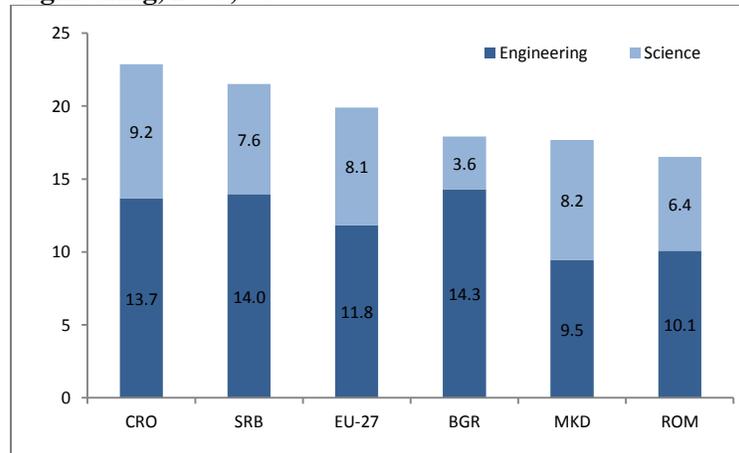
Another factor that determines scientific performance is the availability of R&D personnel and researchers. SEE6 have been experiencing brain drain in the last two decades. In Bosnia and Herzegovina, for instance, more than 60 percent of skilled scientists, researchers and university personnel left the country in the past 10 years, and the situation is very similar in Albania. Albania tried to address this issue by developing, in cooperation with UNDP, a Brain Gain Program (2006-2011), with the objective of engaging academia, the private sector and other stakeholders in utilizing the expertise of the Albanian scientific Diaspora. On the other hand, graduation rates show positive trends in the fields of engineering and, to some extent, science when compared to the EU-27 average (Figure 4).

**Figure 3: Document publications per mln population**



Source: World Bank, Unesco.

**Figure 4: Share of university degrees awarded in science or engineering, 2009, %**



Source: UNESCO.

Availability of modern research equipment is another problem in the region. Infrastructure facilities designed to serve the former Yugoslavia are sometimes too large for the new national market and expensive to be maintained by national budgets. The result is often deterioration. Access to information and communications technologies (ICT) also varies widely in the region. While Serbia and FYR Macedonia compare relatively well with EU countries, Albania and Bosnia and Herzegovina on the other hand are lagging behind.

## The Reform Agenda

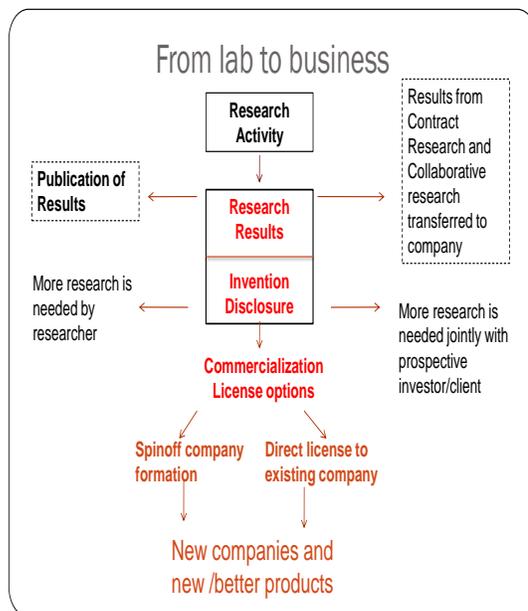
The SEE6 countries will need to address several challenges in order to unleash innovative potential, the most important being: (i) increase scientific output (publications; citations; patenting etc); (ii) accelerate commercialization of research and deepen collaboration with the business sector; and (iii) promote higher levels of private R&D investments and facilitate innovative start-up companies. How could these objectives be achieved and why a regional approach may help?

Increase scientific output. In a context of scarce resources, increasing scientific output will require better management of financial and human resources. One way to achieve this is by introducing performance-based contracts for the allocation of resources to public research organizations. These reform efforts have started in some EU10 countries such as Romania, and the SEE6 countries could learn from these experiences. Another way to promote efficiency is by increasing the fiscal autonomy and the flexibility to manage human resources of public research organizations. This should be accompanied by modernizing human resource policies to favor scientific achievement and open opportunities for young researchers (instead of the current practice of automatic promotions based essentially in the “time in service”). Increasing the allocation of research resources on a competitive basis (as opposed to a headcount basis) is another initiative to encourage results and excellence. All of the above measures could be incorporated into modern laws regulating scientific research -- as has been discussed in FYR Macedonia and Croatia.

Accelerate commercialization of research and deepen collaboration with the business sector. The impact of public R&D expenditure on economic development depends on the how the scientific results and research capacity are commercialized in the format of licensing; spinoff companies or contract research to the business sector. The problem is not the existence or not of commercialization but whether the conditions for a systemic (as opposed to occasional) process are in place. Most of the time, commercialization does not evolve naturally from research. Most discoveries require further development to reach a marketable stage. Researchers often lack capacity to envisage such potential and do not want to deviate from purely academic research that brings better prospects for career development. Another obstacle is the matching between the invention itself and the market demand as well as the format of commercialization (Figure 5). Enabling commercialization in the region would require, among other: (i) a legal framework that transfers the role of managing the intellectual property (IP) emerging from publicly funded research to universities; (ii) an incentive regime that encourages the researcher to engage in commercialization, as for instance, establishing a minimum financial compensation from the commercialization and counting commercialization results as relevant achievements for career development; and (iii) developing organizations specialized in IP management such as technology transfer offices.

Promote higher levels of private R&D and facilitate innovative start-up companies. Business R&D activity in a country is affected by a number of factors, including the degree of economic specialization, the level of competition and access to finance. Economic specialization is a relevant factor because

**Figure 5: The commercialization of public research – a schematic view**



sectors such as biotechnology and IT may be more likely to invest in R&D than say textiles or footwear industries. Meanwhile, higher competition could foster R&D and innovation when it reduces pre-innovation profits by more than it reduces post-innovation profits. With structural reforms still underway, this differential may be relevant, and promoting competition (i.e. reducing pre-innovation rents) may play an important role in transition economies. Access to external financing is another important factor to the expansion of business R&D. Access to credit for routine activities frees up internal resources to be invested in riskier businesses such as R&D and innovation. In this context, developing a series of direct and indirect support stages for innovation financing, several of which will require enough scale to allow proper risk management may be valuable interventions to promote business R&D. Direct support would involve public programs supporting the different phases of innovation development by SMEs or startups -- from grants to the development of a proof of concept; to matching-grants or conditional loans for prototype development as well as angel and venture capital type of funding for early stage financing and startups. Important initiatives in this direction are being developed in Serbia. Some of those programs have been in place in neighboring countries such Croatia where initial evaluations indicate a positive impact. Indirect support – in the form of tax breaks for R&D, while more relevant to larger firms – are another common form of public support that has been underutilized in the region.

### **Why Regional Cooperation Matters**

The reform agenda described above is complex and costly, and one way to reduce the cost and increase the reform impact is through regional cooperation. First, a regional reform program may serve as credible commitment for implementing reforms in this area. International commitments have often played such role in the implementation of reforms – as for example in the case of harmonizing trade-related regulations in the EU countries. In a joint-statement (Sarajevo, April 2009), Ministers from SEE6 countries responsible for Science and Research, launched a coordinated effort to develop a Regional Strategy on Research and Development for the SEE6 countries with the objective of building a broad political coalition -- supposed to include also international organizations -- to help mainstream innovation policy in the region. Long-lasting regional research cooperation is to contribute to place R&D as a priority action on the national political agendas.

Another way regional cooperation may help is by avoiding unnecessary fragmentation and/or duplication of expenditures – contributing to an improvement in the quality of public expenditures in R&D and their overall impact on the economy. Such regional approach seems particularly suitable in areas where none of the countries have sufficient capacity and resources to address the challenges faced and one such example is climate change.<sup>26</sup> Possible areas for cooperation include:

- Promoting the establishment of competitive regional centers of excellence in the fields of strategic interest for the region.  
Promoting development of regional research infrastructures, open access to pan-European research facilities of common interest, as possibly in the case of clean technology.
- Enhancing the potential of young scientists by supporting their career development and creating favorable conditions to sustain their research endeavors and facilitate their training, mobility and cooperation within the region.
- Strengthening the potential and capacity of the SEE6 to participate fully in the European programs and initiatives such as EC Framework Program No. 7, EUREKA (SME program)

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<sup>26</sup> The countries of the SEE6 region are carbon and energy intensive. At the same time, the region has been identified as one of the areas in the world with potential for Carbon Capture and Storage. Regional collaboration in low carbon R&D will be necessary to exploit synergies and leverage available funds.

and the Cooperation in Science and Technology program (COST) that promote increased involvement of the business sector, mainly SMEs.

- Developing regional early-stage finance instruments, including a venture capital fund to operate at regional level, as illustrated by Serbia ongoing initiative in developing a region-wide early stage financing facility.