EU11 REGULAR ECONOMIC REPORT: COPING WITH EXTERNAL HEADWINDS

SPECIAL TOPIC: DRIVERS OF CONVERGENCE IN EU11

June 2012
EU11 Regular Economic Report:

Coping with External Headwinds

Special Topic:

Drivers of Convergence in EU11

This Regular Economic Report (RER) is a semiannual publication of the Europe and Central Asia Region, Poverty Reduction and Economic Management Department (ECA PREM), World Bank. It covers economic developments, prospects, and policies in 10 European Union (EU) member states—Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia—and one prospective member, Croatia. For the first time in this RER series, Croatia is included because of its expected EU entry in July 2013. Throughout the RER, for simplicity, we refer to this group of eleven countries as EU11.

The RER is prepared by a team consisting of Simon Davies, Stella Ilieva, Ewa Korczyc (lead author), Matija Laco, Sanja Madzarevic-Sujster, Catalin Pauna, Emilia Skrok, and Gallina A Vincelette (lead author and team lead). The World Bank Global Prospect Group, coordinated by Dilek Aykut, provided excellent insights for the global prospects section. The special topic note of this issue “Drivers of Convergence in EU11” was coauthored by Jesus Crespo Cuaresma, Harald Oberhofer, Karlis Smits, and Gallina A Vincelette. Ewa Korczyc, Emilia Skrok, and Sebastian Eckardt provided valuable inputs to the note.

The team is grateful to Satu Kahkonen (Sector Manager, ECA PREM), Yvonne M. Tsikata (Director, ECA PREM), and Peter C. Harrold (Country Director, ECCU5) for their guidance in the preparation of this report. The team is thankful for comments on earlier drafts of this report received from colleagues from the World Bank, the International Monetary Fund, the European Commission, and several EU11 central banks and ministries.
TABLE OF CONTENTS

EU11 REGULAR ECONOMIC REPORT: COPING WITH EXTERNAL HEADWINDS ............................................... 1

GLOBAL TRENDS ................................................................................................................................. 3
RECENT DEVELOPMENTS IN THE EU11 .............................................................................................. 6
EU11 ECONOMIC OUTLOOK, ECONOMIC POLICIES AND RISKS FOR 2012–2013 ................................ 30
THE EU11 MEDIUM-TERM STRUCTURAL POLICIES AGENDA FOR GROWTH ..................................... 37
ANNEX 1 .............................................................................................................................................. 40
ANNEX 2 .............................................................................................................................................. 45

SPECIAL TOPIC: DRIVERS OF CONVERGENCE IN EU11 .................................................................... 47

INTRODUCTION ..................................................................................................................................... 48
INCOME CONVERGENCE AND POST-CRISIS PROSPECTS FOR EU11 ...................................................... 49
TRADE AND FINANCE: FUELLING ECONOMIC GROWTH, INCREASING VULNERABILITY ....................... 52
ENTERPRISE AND INNOVATION: CLOSING THE PRODUCTIVITY GAP ...................................................... 57
LABOR: OVERWHELMING DEMOGRAPHIC CHALLENGES ....................................................................... 61
GOVERNMENT: INSTITUTIONS CONVERGE, DIFFERENCES REMAIN ...................................................... 66
HOW TO SUSTAIN MEDIUM-TERM GROWTH IN EU11? ..................................................................... 69
REFERENCES ......................................................................................................................................... 70
ANNEX 1 .............................................................................................................................................. 72
ANNEX 2 .............................................................................................................................................. 73
Despite the challenging external environment, EU11 countries did well in 2011. First, economic growth strengthened to above 3 percent (from around 2 percent in 2010) and the region fully recovered its output losses from the global financial crisis. Second, fiscal measures delivered reduction of around 3 percent of GDP in the EU11 average fiscal deficit. Third, the financial sector remained resilient to renewed concerns about negative feedback loops between insecure sovereign debtors and fragile financial markets.

However, the good performance conceals important shifts in economic sentiment that occurred during the year. While the growth momentum was still strong in the first half of 2011, it slowed toward the end of the year, as the region started to feel the impact of lingering concerns about European sovereign-debt markets, creeping oil prices, and the global slowdown. With the downward trend in economic activity, labor markets remained slack. Unemployment rates hovered around those recorded in the midst of the global financial crisis with sluggish employment growth.

In mid-2012, three and a half years after the global financial crisis broke, EU11 counties are yet again faced with serious external shocks. With the economic slowdown in Europe, the prospects for EU11 countries look now weaker than six months ago. Since then a number of downside risks have materialized.

First, the slowdown in economic activity in EU15 has been worse than expected and raised doubts about the prospects for economic recovery in Europe; second, the impact of bold economic policy interventions in late 2011 and early 2012 was short-lived and financial markets have remained fragile; third, the uncertainty and volatility in financial markets has further undermined the confidence of both investors and households.

In this volatile environment, economic growth in EU11 countries is set to decrease from 2011 levels to 1.5 percent in 2012, with all EU11 countries growing slower than a year before and three countries slipping into recession. However, given the heightened uncertainty, even this projected modest growth assumes that policies will be adopted in the Euro area to successfully avoid a serious deterioration in international financial market conditions. The near-term labor market outlook also remains unfavorable with unemployment at stubbornly high rates. With the weakening of economic activity and real wage growth below productivity growth, price pressures are expected to subside. Deliberate exchange rate flexibility and accommodative monetary policy in some EU11 countries are likely to continue to help the economies respond to the Euro area volatility. Banks’ funding pressures may intensify if the deleveraging process advances further.
A weak and uncertain economic outlook means that strong, three-pronged policy action is essential. First, central banks and financial supervisory authorities across the EU have to shore up confidence of financial markets. Monetary policy should continue to be accommodative in order to buffer EU11 against external shocks and help the economy defend against euro area volatility. Policies should be in place to ensure access to credit for viable borrowers despite banks' balance sheet pressures and ongoing deleveraging.

Second, with heightened uncertainty and market pressures on the one hand and decelerating economic growth on the other, the EU11 governments must decide how much, how fast, and in what ways they want to consolidate public finances, so that their fiscal positions do not become the source for financial market volatility. While the EU11 countries have specified numerical fiscal targets, they still need to spell out the measures to achieve the envisioned adjustments. In designing the composition of fiscal consolidation, governments should take into account the fragility of the economic outlook and try to limit the negative impact of fiscal consolidation on growth. Finally, structural policies in support of growth can help to overcome the financial, labor and fiscal challenges. Europe 2020 -- the EU strategy for jobs and growth -- sets ambitious targets to tackle not only the ongoing financial and macroeconomic challenges, but also the structural obstacles to sustainable growth in Europe.

By removing barriers to growth in product and labor markets, the EU11 countries can increase their potential economic gains in the medium term. Closing the existing institutional and structural gaps with the rest of the EU will soften the constraints imposed by demographic threats and produce sizable returns in income convergence with EU15. Providing incentives for labor mobility, making public finances more sustainable, adapting social security systems to demographic developments and harmonizing regulation across borders are key reform priorities for EU11.

### EU11 growth prospects

<table>
<thead>
<tr>
<th>Country</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU11</td>
<td>3.1</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1.7</td>
<td>0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.7</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Estonia</td>
<td>7.6</td>
<td>1.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Latvia</td>
<td>5.5</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Lithuania</td>
<td>5.9</td>
<td>2.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.7</td>
<td>-0.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Poland</td>
<td>4.3</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Romania</td>
<td>2.5</td>
<td>1.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-0.2</td>
<td>-1.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>3.3</td>
<td>2.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.0</td>
<td>-1.0</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Memo</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EU15</strong></td>
<td>1.5</td>
<td>-0.1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

*Source: World Bank staff calculations.*
EU11 Regular Economic Report: Coping with External Headwinds
Global Trends

GLOBAL GROWTH SUPPRESSED BY UNCERTAINTY IN THE EURO AREA

Global economic prospects have continued to deteriorate with the expectation that economic growth will bottom out in 2012. There is deep uncertainty about what the outcome of the euro area crisis might imply for not just Europe, but for economies worldwide. Apart from the turmoil in the euro area, the world economy must still deal with headwinds from reduced capital inflows, and fiscal and banking sector consolidations in many advanced countries. Near term, all these factors will dampen growth.

Growth in Europe is expected to dip into negative territory in 2012 before recovering in 2013. The baseline scenario for this report assumes that the euro area avoids a major crisis. The greatest risks to this are a disorderly outcome in crisis-hit euro area countries, lack of credible economic programs in the countries affected, and a shortfall in external resources to support them, which could trigger contagion. Calming financial markets will require credible commitments to solving macroeconomic imbalances and boosting competitiveness at the national level as well as substantial coordination of economic policies at the European Union level.

Table 1. Global Growth Prospects

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011e</th>
<th>2012f</th>
<th>2013f</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>4.1</td>
<td>2.7</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>OECD</td>
<td>2.9</td>
<td>1.4</td>
<td>1.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Euro area</td>
<td>1.8</td>
<td>1.6</td>
<td>-0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>4.5</td>
<td>-0.7</td>
<td>2.4</td>
<td>1.5</td>
</tr>
<tr>
<td>United States</td>
<td>3.0</td>
<td>1.7</td>
<td>2.1</td>
<td>2.4</td>
</tr>
<tr>
<td>China</td>
<td>10.4</td>
<td>9.2</td>
<td>8.2</td>
<td>8.6</td>
</tr>
<tr>
<td>Russia</td>
<td>4.3</td>
<td>4.3</td>
<td>3.8</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Source: GEP June 2012, World Bank staff calculations.

Constant shifts in market sentiment are causing serious problems for the global recovery. In 2011 the global economy slowed abruptly as a result of advanced country fiscal consolidation policies, the natural disasters in Japan and Thailand, and half-hearted activity in the euro area (Table 1). There were modest signs of improvement in the first months of 2012 both in emerging Asia and in the United States (US) as well as positive market sentiment in the European Union (EU). However, recent renewed uncertainty in the euro area is seriously clouding the global outlook.
Market jitters from the euro area are not only impeding economic activity in Europe, they are threatening economic recovery globally. After a modest recovery in the first half of 2011, economic conditions in the euro area have deteriorated. Efforts to generate economic growth in the southern periphery of the euro area have not yet succeeded, and the ambitious fiscal consolidation agenda is retarding recovery. As a consequence, euro area growth turned negative in the fourth quarter of 2011 in almost all countries, showing negative quarter-on-quarter growth rates (Figure 1). The euro area escaped recession in the first quarter of 2012 mainly thanks to the performance of the German economy. However, recent business surveys suggest the euro area economy is again contracting in the second quarter of 2012.

Bold policy interventions from late 2011 and early 2012 provided some short-lived relief. The fourth quarter of 2011 and the first quarter of 2012 were marked by unprecedented policy interventions in Europe, among them agreement with private creditors on a rescue package for Greece, EU government commitments under the Fiscal Compact, the €1 trillion long-term refinancing operations (LTRO) of the European Central Bank (ECB), and reinforcement of the European crisis-management firewall by combining the European Stability Mechanism and the European Financial Stability Facility. As a result, equity prices rebounded, money markets and corporate bond spreads declined, and CDS spreads for both banks and countries narrowed. However, uncertainty on European financial markets again surged in spring 2012 after elections in France and Greece and

---

1 The ECB allotted €529.5 billion to the financial system with the second LTRO to 800 financial institutions. After deducting other operations maturing about the same time, the net injection was about around €310 billion (compared to €190 billion for the first LTRO).
further uncertainties about the Spanish banking sector generated renewed concerns about the sustainability of public finances in peripheral EU economies.

Calming financial markets will require that countries make credible commitments to resolve their macroeconomic imbalances supported by substantial coordination of economic policy within the EU. So far, the lack of easy answers and of political consensus to address euro area woes adds to market uncertainty, worsening financial conditions and depressing economic activity.

Given resurgent economic volatility and uncertainty, especially in the euro area, global growth will be at best modest in 2012 and accelerate only over the medium term. The baseline scenario for this report assumes that a major Euro area crisis is avoided. Provided that there is no major crisis in Europe, global GDP is projected to increase 2.5 percent in 2012 and reach 3.0 percent in 2013 (Table 1). Growth in the OECD countries is expected to expand by only 1.3 percent this year, depressed primarily by banking-sector deleveraging and continuing fiscal consolidation. As these pressures ease in 2013, GDP growth in the high-income OECD is projected to firm up at 1.8 percent in 2013, but growth in the euro area will be negative (–0.3 percent). On the upside, should European policymakers be able to confine the euro area crisis to the periphery countries, GDP growth would strengthen to 0.7 percent in 2013.

There are substantial risks to the near-term global outlook. There is deep uncertainty about what the outcome of the euro area crisis might imply for both European and global economies. The greatest risks are a disorderly outcome of the Greek crisis, a lack of credible economic programs in other countries affected, and a shortfall of external resources to support them, any of which could trigger an epidemic of contagion. Moreover, expectations are clearly crucial to how events unfold. Apart from the turmoil in the euro area, the world economy may still need to deal with potential headwinds from reduced capital inflows, fiscal and banking-sector consolidations in high-income countries and higher than current oil prices. All of these factors will tamp down growth.
Recent Developments in the EU11

Solid Economic Growth in 2011 Despite Severe External Volatility

Even with the strains in the international economic environment, the EU11 grew solidly in 2011. Its 3.1 percent growth in 2011 was relatively broad-based and exceeded the 2.0 percent growth in 2010. EU11 growth was driven by manufacturing and construction, as investment continued to recover. The growth momentum was subsiding in every consecutive quarter of 2011 and further in the first quarter of 2012, as the region started to feel the impact of the worsened external environment.

Although the momentum of growth slowed throughout Europe, EU11 economies grew strongly in 2011. In the EU11 countries output accelerated by 3.1 percent in 2011 compared to 2 percent in 2010 (Figure 3). Most countries in the region grew above their potential growth rates. All EU11 countries other than Slovenia recorded positive GDP growth in 2011. While in the first half of 2011 most EU11 countries continued to expand strongly, the growth momentum slowed toward the end of the year, when the region started to feel the impact of lingering concerns about European sovereign-debt markets, creeping oil prices, and the global slowdown. Nevertheless, growth in 2011 was strong enough to allow the EU11 region to recover its output losses from the global financial crisis.

Figure 3. GDP Growth in EU11 and EU15, percent

Source: Eurostat, World Bank staff calculations.

---

2 The group of EU11 countries comprises: Bulgaria (BG), Croatia (HR), the Czech Republic (CZ), Hungary (HU), Estonia (EE), Latvia (LV), Lithuania (LT), Poland (PL), Romania (RO), Slovenia (SI), and Slovakia (SK). Croatia is included in the EU11 group of this Regular Economic Report in light with its expected upcoming EU entry in July 2013.
Recovery in the EU11 was uneven. While the aggregate EU11 GDP was above the pre-crisis level – mainly due to strong performance of the Polish, Slovak and Czech economies, – output levels in other countries were still below their pre-crisis levels. Growth rate differences increased not only between the EU11 and EU15 but also among the EU11 countries. The difference between the best and the worst performers widened from 6 percentage point in 2010 to 8 percentage points in 2011. Economic growth in 2011 exceeded 4 percent in Estonia, Lithuania, Latvia, and Poland (Figure 4). After two years of negative growth, Romania’s GDP expanded by 2.5 percent, driven by a robust increase in industrial output and agricultural production. Growth in Bulgaria, the Czech Republic, and Hungary hovered around 2 percent; and was close to zero in Croatia and Slovenia. The widening gaps in growth are worrying because they indicate that countries are not recovering as expected and the process of convergence to the EU15 living standards is likely to take longer.

The economic rebound in EU11 was driven by manufacturing. As in the EU15, manufacturing contributed the most to the expansion of output (value added) in 2011. Growth in construction, supported by EU-cofinanced investment projects and favorable weather, was much stronger in the EU11 than in the EU15 (Figure 5).

---

3 The group of EU15 countries comprises: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

4 See the discussion in the Special Topic note of this report.
Figure 5. Contributions to Value-Added Growth

Source: Eurostat, World Bank staff calculations.
Notes: Data for Croatia and Romania are not included.

**EU11 economic growth was broad-based in 2011.** A breakdown of GDP expenditure components shows that EU11 growth was balanced and driven by investment, net exports, and consumption (Figure 6). In contrast, external demand was what mainly supported growth in the EU15. Throughout the year, in the EU11, fuelled by projects co-financed by the EU, investment increasingly supported growth. Meanwhile, investment declined in EU15 countries amid uncertainty about near-term growth prospects and tightened credit conditions. In the EU11, inventory, which had been a key driver of growth in 2010, was still a growth factor in the first half of 2011. Inventory began to weigh on growth in the last quarter of 2011 because of destocking as the outlook deteriorated.

Figure 6. Contributors to GDP Growth, EU11 and EU15, percent

Source: Eurostat, World Bank staff calculations.
Note: Other refers to statistical discrepancy
The broad-based EU11 growth conceals large country differences. Despite lower demand for EU11 exports in several European trade partners, exports stayed strong throughout 2011. EU11 exports rose on the back of competitiveness gains stemming from the real depreciation of currencies and declining unit labor costs. In fact, in Slovakia, the Czech Republic, Hungary, and Bulgaria growth was driven primarily by net exports (Figure 7). Domestic demand, supported by both consumption and investment, was a major contributor to growth in Estonia, Latvia, Lithuania, Poland, and to a lesser extent Romania. This is particularly striking in the Baltic countries, where growth in private consumption is accompanied with declines in credit to the private sector. The strong private consumption growth can be contributed to large improvements in the labor market there. In Estonia, the strong growth in private consumption also resulted from a relatively high saving rate and increases in disposable income. In Croatia and Slovenia, economic growth underperformed the EU11 average, mainly because of drastic retrenchment in investment. In Slovenia, this was a consequence of the contraction of the construction sector after its boom in the pre-crisis period.

Figure 7. Contributors to GDP Growth, EU11 Countries, 1Q–4Q 2011

![Contributors to GDP Growth, EU11 Countries, 1Q–4Q 2011](image)

Source: Eurostat, World Bank staff calculations.

With the mild recession in the euro area, EU11 economic activity moderated in the first months of 2012. Quarterly GDP estimates in the first quarter of 2012 point to a continued slowdown in EU11 countries. The GDP is expected to have increased by 1.7 percent, down from 2.5 percent growth in the fourth quarter 2011. In addition, high frequency indicators, such as retail sales, industrial production, exports and imports, show weak growth in both EU11 and EU15 (Figure 8). Consumer and business confidence are still depressed.

---

5 See the discussion in the External Development and Labor sections below.
NARROWING EXTERNAL IMBALANCES, ROBUST FDI, AND STABLE EXTERNAL DEBT LEVELS

Despite a marked slowdown in external demand, the EU11 current account balance improvements in 2011 stemmed from stronger exports rather than weaker imports. FDI flows into the EU11 remained robust, and external debt levels stabilized.

After a solid performance in 2010, growth in global trade decelerated in 2011 and is expected to slow further in 2012. Global trade lost momentum in 2011 because of the high base effect from the previous year, weakening economic activity in Europe, natural disasters in Japan and Thailand, and geopolitical tensions in the Middle East and North Africa (Figure 9). The slowdown in trade was more pronounced in the EU15 than in the EU11 because economic growth there was slower. As a result, the EU15 trade growth rate dropped from nearly 10 percent in 2010 to less than 5 percent in 2011. Though the slowdown in EU15 trade activity also affected the EU11, its growth stayed close to 10 percent.

In 2011, both exports and imports weakened, but the growth rates remained positive. The deceleration in global growth led to a decrease in export growth. At the same time, the deteriorating economic situation in the EU, especially the weakening of domestic demand, weighed heavily on imports (Figure 10). Nevertheless exports were growing faster than imports leading to trade making a positive net contribution to growth. This trend is likely to continue through 2012.
While in 2011 export growth slowed compared to 2010 almost everywhere in the EU11, it was still solid, reflecting improvements in external competitiveness and solid economic performance of Germany (Figure 11). Supported by a rebound in manufacturing, exports grew substantially in Slovakia and the Czech Republic. In Romania, Hungary, and Poland depreciating currencies helped exports to grow, although more slowly than in 2010. Across the EU11, the performance of merchandise exports was remarkably strong. In part this performance reflects existing structural obstacles in trade of services across borders such as complex administrative and legal requirements as well as the lack of easily accessible, clear and correct information regarding national requirements to enter a market, among others.

In countries where domestic demand was recovering, imports surged faster than exports. Most obviously, import growth outpaced export growth in Estonia and Latvia on the back of strong domestic demand (Figure 11).
Trade in early 2012 was affected by recession in some European trade partners and stronger than expected industrial activity outside the EU. Data for the first quarter of 2012 suggest that growth in exports decelerated to only about 4 percent year-on-year in EU11, a drastic drop from the 25 percent growth recorded in early 2011. The steepest drop in exports was recorded for intermediate goods as manufacturing production shrank. The growth rates of exports of capital and consumption goods also declined, but more slowly. The fall-back in export growth was mainly related to intra-EU trade; extra-EU trade continuing to grow at double-digit rates (Figure 12).
Current account balances improved in almost all EU11 countries as trade balances narrowed (Figure 13). Countries that saw substantial improvements in their trade balances (Bulgaria, Estonia, Hungary, and Slovakia) ended 2011 with surpluses in their current accounts. However, Current accounts in Latvia and Lithuania turned into deficit in 2011, reflecting stronger demand for imports (Latvia) and higher income payments and current transfer payments (Lithuania).

Despite the euro area uncertainties, portfolio and net FDI flows to EU11 remained healthy. While just after the crisis there was a shift in the composition of capital flows towards portfolio investment, in 2011 this was reverted as FDI flows recovered (mainly in the form of reinvested earnings). FDI exceeded pre-crisis levels in the Czech Republic, Estonia, and Slovenia (albeit from a low level). Poland, Croatia, Slovakia and Latvia experienced the largest gains in FDI in 2011 compared to 2010. For example, FDI inflows more than tripled in Slovakia and Latvia. In contrast, net FDI declined in Hungary as direct investment by Hungarians abroad increased.

Figure 13. Current Account Composition and Financing, 2010–2011 (Percent of GDP)

Source: Eurostat, World Bank staff calculations.
In the EU11 in 2011 the ratio of gross external debt to GDP was almost unchanged from 2010. Having made significant adjustments to external current account balances and better growth performance, Bulgaria, Latvia, Estonia, and Hungary reduced their external debt-to-GDP ratios by more than 10 percentage points as bank deleveraging continued (as well as in response to reserve requirement harmonization in Estonia upon Euro adoption). The other countries kept their external exposure at levels similar to those of 2010 thanks to higher government borrowing and intercompany lending. In 2011, intercompany lending in the EU11 grew by close to €22 billion, mainly in Hungary, Poland, and Slovakia.

**Figure 14. External Debt in EU11 (Percent of GDP)**

*Source: Central banks, World Bank staff calculations.*

*Notes: For Hungary data excluding Special Purpose Entities.*

**Stubbornly High Unemployment**

*EU11 economic growth in 2011 was largely jobless. Employment creation was modest and mostly resulted in part-time and fixed-term jobs. Unemployment continued to be stubbornly high, especially among the youth and the unskilled. Real wages again grew more slowly than productivity.*

**Employment gains lagged the recovery of output in 2011.** In 2011 about 160,000 jobs were created across the EU11. For the first time since the start of the financial crisis in 2008, employment growth was positive in both the EU15 and the EU11. However, the pace of improvement in labor market outcomes was well below the speed of economic recovery. Bulgaria and Slovenia were the only EU11 countries where employment growth remained negative in 2011. No EU11 country other than Poland (which kept growing throughout the crisis) managed to return to pre-crisis employment levels. By the end of 2011 there were 1.1 million fewer jobs in EU11 countries than at the end of 2008.
Employment creation was modest and largely in the form of temporary and part-time jobs. The increase in nonstandard types of employment reflected increasing demand by companies for more flexible work arrangements as a buffer against economic volatility (Figure 16 and 17). Increases in temporary contracts and part-time work helped to stabilize employment levels by adding flexibility to the labor market in almost all EU11 countries. While many temporary and part-time employees have reasons for working under such contracts, for an increasing number of workers these jobs are an option of last resort. For example, since 2008 the share of EU11 workers seeking permanent positions who could only find temporary jobs increased by about 5 percentage points, surpassing 70 percent by 2012. The share of part-time workers who want a full-time job increased even more (by nearly 7 percentage points), though from lower levels (Figure 18).
Figure 18. Involuntary* Part-time in Total Part-Time Employment and Involuntary* Temporary in Total Temporary Employment (Percent)

Source: Eurostat, World Bank staff calculations.

Notes: *involuntary employment is defined as those part-time or temporary workers who are engaged in these forms of employment because they cannot find either full-time or permanent jobs.

At the end of April 2012, the EU11 had about 5 million unemployed. The unemployment situation in both EU11 and EU15 is as bad as at the peak of the crisis. The EU11 unemployment rate was slightly above 10 percent, roughly the same as in early 2010. Unemployment rates in Croatia, Slovenia and Bulgaria are currently higher than in the crisis peak. In Croatia, this is due to poor economic growth, while in Slovenia, it stems from the major layoffs in the construction sector. Bulgarian businesses continue to be very reluctant to hire new employees, partly because improvements in the labor market are held back by skill mismatches and adverse demographic trends. Meanwhile, unemployment rates dropped considerably in Estonia, Latvia, and Lithuania (though from very high peaks) driven by good economic performance. In Slovakia, Romania, Hungary, and Poland unemployment rates remained broadly unchanged.

Figure 19. Unemployment Rates, EU11 and EU15

Source: Eurostat, World Bank staff calculations.

Note: Pre-crisis refers to the lowest monthly unemployment rate in 2007-08; Crisis peak refers to the highest monthly unemployment rate in 2009-10; Current refers to April 2012
Poor labor market outcomes were especially prevalent for the young and the low-skilled. Across the EU11 region, youth unemployment rates are much higher than total unemployment (Figure 20)—at the end of 2011, the youth unemployment rate of 28 percent was almost three times higher than the total unemployment rate. Moreover, since late 2008, unemployment rates for youth have increased significantly more than for any other group (Figure 21). In addition, tough labor market conditions have translated into lower participation rates and increased detachment of youth from the labor market. Increases in the number of NEET—not in education, employment, or training—illustrate this point. The low-skilled—those with no more than lower secondary education—have also experienced higher than average increases in unemployment everywhere in the region except Romania and Slovakia (Figure 22 and 23).

Figure 20. Unemployment Rates, Youth vs. Total, 2011

![Graph showing unemployment rates for youth compared to total unemployment in 2011](image)

Source: Eurostat, World Bank staff calculations

Figure 21. Change in Unemployment Rates, Youth vs. Total, 2008–2011

![Graph showing change in unemployment rates for youth compared to total unemployment](image)

Source: Eurostat, World Bank staff calculations.

Figure 22. Unemployment Rates, Low-skilled vs. Total, 2011

![Graph showing unemployment rates for low-skilled compared to total unemployment in 2011](image)

Source: Eurostat, World Bank staff calculations.

Figure 23. Change in Unemployment Rates, Low-skilled vs. Total, 2008–2011

![Graph showing change in unemployment rates for low-skilled compared to total unemployment](image)

Source: Eurostat, World Bank staff calculations.

6 "Youth" refers to those under 24, "low-skilled" to those with no post-secondary education, "long-term" unemployment to those who have been seeking work for more than a year.
The portion of long-term to total unemployed rose in the EU11 countries in 2011. The crisis has also made it hard for workers who have lost their jobs to get new ones. The share of long-term unemployed in total unemployed has increased from 44 percent before the crisis to almost 50 percent.

Vacancy rates in the EU11 have declined steadily since 2008. At 0.6 percent in the fourth quarter 2011, they reached their lowest levels since the global economic crisis began (Figure 24). Low and decreasing vacancy rates coupled with higher unemployment rates have suppressed wage pressures.

In both EU11 and EU15, real growth in productivity per worker exceeded real growth in labor costs, strengthening competitiveness. The biggest competitiveness gains were recorded by Bulgaria, Lithuania, Romania, Croatia, and Latvia, where real output per worker grew by at least 5 percentage points faster than labor costs. Only in the Czech Republic and Hungary did labor costs increase, but even there they were slower than the gains in productivity. But while there is a cost advantage in most EU11 countries as productivity growth outstrips growth of unit labor costs, output is still below potential; the labor market will only improve as external and domestic demand strengthens (Figure 25).

Figure 24. Vacancy Rate, EU11 and EU15 (Percent)

Figure 25. Growth in Real Labor Productivity and Real Unit Labor Cost, 2011 (Percent)

Source: Eurostat, World Bank staff calculations
Headline inflation in the EU11 was kept high in 2011 by increases in indirect taxes and global commodity prices. Monetary policy remained accommodative, and interest rates stayed low.

Despite economic slowdown, inflation is still elevated in both EU11 and EU15. Since mid-2011 headline inflation has been hovering around 3.5–4 percent in EU11 and about 3 percent in EU15. Prices continued rising even as economic activity was gradually slowing. The difference between inflation rates in the two regions narrowed from about 3.5 percentage points in early 2009 to less than 1.0 in May 2012. This convergence in price developments is almost entirely due to higher inflation in EU15, driven by high commodity prices and depreciation of the euro, rather than by price declines in EU11.

Core inflation in the EU11 countries accelerated markedly in 2011, from slightly above 2 percent early in the year to 3.3 percent in December. The increases in core inflation were driven by one-off factors, such as increases in indirect taxes as governments pursued fiscal consolidation. Value-added tax (VAT) rates went up in Croatia, the Czech Republic, Hungary, Poland, Latvia, and Slovakia. In Poland, import prices went up as the zloty depreciated and increases in administered prices kept core inflation high. In addition, robust domestic demand contributed to high core inflation in Poland. In Hungary, weakly anchored inflation expectations and important currency weakness pushed up core inflation despite a large degree of slack in the economy. Surging commodity prices globally were pushing up energy and administered prices. Across the region, declining food prices in the second half of 2011 helped to contain increases in inflation.

7 As of July 2012, the standard VAT in Latvia will be reduced to 21 percent.
Volatility in the Euro area in late 2011 and early 2012 was passed through into exchange rate fluctuations in the EU11. The euro yo-yoed against the currencies of the EU’s 20 most important trading partners as market sentiments about the fiscal and economic prospects of some euro-area countries kept changing. The unprecedented ECB policy interventions in late 2011 and early 2012 calmed markets and translated into real exchange rate appreciation in most EU11 countries. When uncertainty about the euro area was renewed in the spring of 2012, however, EU11 exchange rates again began depreciating.

Real effective exchange rates (REER) for Poland, Hungary, and Romania are noticeably below pre-crisis levels. In contrast, countries with pegged exchange rates are close to August 2008 levels (Figure 31). REERs for only three of the EU11 countries—
Bulgaria, Lithuania, and Slovakia—remain above pre-crisis levels. In the euro countries, Slovakia, Estonia, and Slovenia, the REER appreciated by 0.4 to 0.8 percent in the last quarter, which is less than for the euro area as a whole, where the REER appreciated by 1.6 percent in the first few months of 2012.

Figure 31. Real Effective Exchange Rates, CPI Deflated (Index: Aug 2008=100)

![Real Effective Exchange Rates, CPI Deflated](image)

*Source: BIS, World Bank staff calculations.*

**Policy rates have remained at low levels in EU11.** Although policy rates in Hungary and Poland are already inching up, recent increases in headline inflation rates have led central banks to tighten their policy rates. Since end-November 2010, the Central Bank of Hungary in five steps has increased the policy rate from 5.25 percent to 7.00 percent. On May 9, 2012, the Central Bank of Poland raised its benchmark rate by a quarter point, to 4.75 percent, the highest since January 2009 and the first increase since June 2011 (Figure 32). The policy rate was hiked to fight persistent inflation, which reached 3.9 percent in March—well above the 2.5 percent target for 18 months. In May 2012, Romania’s central bank for the first time in eight months kept its policy interest rate unchanged, at 5.25 percent, halting a series of four rate cuts (by a cumulative 100 basis points) to protect the leu, which on May 24 fell to an all-time low of 4.466 per euro.

Figure 32. Policy Interest Rates (Percent)

![Policy Interest Rates](image)

*Source: Central banks, World Bank staff calculations.*
A Deleveraging Financial Sector

Instability in the euro area is having a continuing negative effect on EU11 financial markets, exerting pressures on bank funding, constraining credit growth, and fueling financial sector deleveraging. With foreign banks deleveraging, local private sector deposits became the dominant source of EU11 funding in 2011. Except in Estonia, nonperforming loans remained at elevated levels in 2011.

Concerns about the stability of the financial sector in the euro area have affected the performance of EU11 financial markets, as can be seen in the volatility of EU11 sovereign bond pricing. As the first half of 2012 ends, financial markets are weaker than they were in June 2011 because investors are increasingly wary of a disorderly default by a European bank or sovereign. EU11 sovereign and banking group risk spreads have generally tracked market sentiments. In the last year CDS spreads have risen most in Hungary, Slovenia, and Croatia—countries where economic activity has been particularly sluggish. In addition to that, CDS spreads for Slovenia rose due to delayed structural reforms and fragile situation in the financial sector. In contrast, thanks to their healthy economic prospects and their solid fiscal position Estonia and the Czech Republic have the lowest risk in the region. Poland’s CDS spreads remained at moderate levels reflecting its strong position in the EU11 region. Financial market agents on the whole continue to differentiate between countries on the basis of their economic fundamentals.

Figure 33. 5Y CDS, EU11 Countries (Basis points)

Source: Reuters, Bloomberg, World Bank staff calculations.

Financial sector uncertainties in the euro area have also slowed capital flows to EU11 countries, fueling the financial sector deleveraging. Gross capital flows to EU11 countries (Figure 34) amounted to €48.7 billion in 2011, a contraction of almost 25 percent relative to 2010. While equity flows remained robust, bank-related debt flows decreased to a new low in 2011. As reported by the Bank for International Settlement (BIS), cross-border claims by foreign banks dropped in all EU11 countries as the banks downsized their operations. Bank claims on EU11 countries by the end of 2011 totaled EUR 304.8 billion.
(Figure 35)—11.2 percent less than at the end of 2010 and a noteworthy 23.7 percent less than at the end of the first quarter of 2011.

**Figure 34. Cumulative Gross Capital Inflows, EU11 (€ billions)**

Source: Eurostat, World Bank staff calculations.

**Figure 35. Foreign Bank Claims on EU11 vis-à-vis Banking Sector**

Source: BIS, World Bank staff calculations.

**Funding pressures on EU11 banks have intensified.** After the two LTRO liquidity injections by the ECB, spreads of dominant European banking groups operating in EU11 countries declined. The positive developments were short-lived, however, as tensions in euro area financial markets resurged in spring 2012. With investor confidence in Europe slipping, funding costs went up (Figure 36), further pressuring banks to shrink their balance sheets. Euro area banks have also begun to reinforce their balance sheets, through, e.g., stricter capital adequacy requirements. The cost for parent funding to subsidiaries in the EU11 has therefore risen, and access has narrowed.

**Credit growth in the EU11 has been subdued.** As in the EU15 private sector credit in EU11 in March 2012 was about 6 percent below its pre-crisis peak in October 2008 (Figure 37). The aggregate regional picture conceals large cross-country differences. In particular, credit is below the pre-crisis peak in Hungary, Lithuania, Latvia, Estonia, Romania, and Slovenia. These are the countries where credit growth was particularly strong prior to the 2008 financial crisis. In all these countries except Romania this was due to a contraction in
credit to businesses rather than households. In Poland, Slovakia, and the Czech Republic, fuelled by both household and corporate demand, private sector credit was 6 to 10 percent higher than in October 2008 (Figure 38). In Bulgaria and Croatia, overall private sector credit remained flat as positive spur in corporate loans offset the negative growth of credit to households.

**Figure 37. Real Credit Growth, EU11 and EU15, (Index: Oct 2008=100)**

Source: ECB, World Bank staff calculations.

**Figure 38. Composition of Real Credit Growth. EU11 and EU15, Oct 2008–Mar 2012**

Source: ECB, World Bank staff calculations.

**Figure 39. Emerging Europe Bank Lending Conditions Index, by Categories (50=neutral)**

Source: IIF

**EU11 credit growth has been constrained by supply and demand factors.** Tensions surrounding the European economic outlook and euro area banks have inevitably impacted EU11 credit conditions. Banks remain cautious in their lending practices and apply tougher lending standards, particularly for corporate loans (Figure 39). At the same time, with slacking economic activity and household and company balance sheets not yet repaired in some EU11 countries, demand for both household and corporate loans has remained weak in segments of the EU11 economy.
As foreign banks deleverage from the EU11 banking system, local private deposits have become the dominant source of funding. Deposits have been growing faster than credit in EU11, driving loan-to-deposit ratios down in many countries (Figure 40 and 41) and contributing to the deleveraging of foreign banks. Notably, local deposits are supplanting foreign banks as they deleverage. Private deposits have overall grown across EU11.

**Figure 40. Private Sector Deposits, Contributions to Growth**

![Graph of private sector deposits contributions to growth.]

**Figure 41. Private Sector Loan-to-Deposit Ratios**

![Graph of private sector loan-to-deposit ratios.]

*Source: Central bank websites, World Bank staff calculations.*

Although bank capital positions have strengthened, nonperforming loans are still rising. NPL ratios deteriorated in a number of EU11 countries mainly due to still weak economic activity (Figure 42). NPL-to-total loan ratios rose in Bulgaria, Croatia, Hungary, Romania, and Slovenia. Except for Romania, all these countries have increased bank regulatory capital requirements relative to risk-weighted assets (Figure 43). In contrast, Estonia, Slovakia, Latvia, Lithuania and Poland saw their NPL-to-total loans ratios decline, though compared to 2009. NPLs in absolute terms remain high in all EU11 countries except Estonia.
Continued Fiscal Consolidation

In 2011, the EU11 countries improved their public finance position on the back of fiscal consolidation measures. The largely expenditure-based consolidation spared public investment and was directed to limiting the growth of current spending.

Improving headline fiscal balances and shoring up fiscal sustainability are top priorities for EU11 governments. The volatility of financial markets and the uncertain growth outlook have motivated governments across Europe to try to boost both market confidence and resilience to future shocks by putting their fiscal houses in order. Before the crisis, markets were less sensitive to public debt and deficit levels; now sovereign CDS spreads are much higher for countries with high deficits and significant debt (Figure 44).

Figure 44. EU27 Public Debt, Deficits, and CDS Spreads, 2007 and 2011

Source: Eurostat, Bloomberg, World Bank staff calculations

Note: The size of the bubbles represents 5Y CDS spreads.
The aggregate EU11 public finance balance improved significantly in 2011. The aggregate EU11 fiscal deficit declined from 6.4 percent in 2010 to 3.7 percent in 2011. This fiscal consolidation of almost 3 percent of GDP is slightly more than envisioned in October 2011, and markedly more than the one pursued by the EU15 countries (Figure 45). Fiscal balances improved in all EU11 countries except Slovenia and Croatia. In Slovenia the fiscal deficit widened from 6 percent in 2010 to 6.4 percent in 2011 because of one-off capital support operations. In Croatia the fiscal deficit increased marginally because economic activity was subdued. The Hungarian fiscal deficit turned to surplus in 2011 because liquidation of the second pension pillar produced a one-off revenue increase of 9.7 percent of GDP.

**Figure 45. General Government Fiscal Deficits, Projected and Actual, EU10 and EU15 Countries, 2010–2011 (Percent of GDP)**

![Graph showing fiscal deficits for EU10 and EU15 countries from 2010 to 2011.](source)

Source: Eurostat, April 2012 EDP notifications, World Bank staff calculations.

Corrective fiscal measures and a supportive economic cycle produced improvements in public finances in 2011. Though structural measures were the major force in improving fiscal balances in EU11 countries, the supportive economic cycle in the region also contributed positively (Figure 46). It was only in countries with exceptionally high economic growth (Estonia, Lithuania, and Latvia) that the cyclical component had more impact than discretionary fiscal measures. Reductions in government spending were a major factor in EU11 fiscal balance improvements. Spending declined from close to 44 percent of GDP in 2010 to 42 percent in 2011, mostly because of reductions in current expenditures, mainly on wages and social benefits. At the same time, interest payments increased, driven by both higher debt levels and higher government bond yields (Figure 47). In the aggregate, public investment did not suffer: many EU11 countries managed to execute intensive public investment programs in spite of the difficult fiscal situation. This was the case in Poland, Romania, Hungary and Estonia. However in five EU11 countries, there was a reduction in public investment in 2011 compared to 2010.
Persistent market pressures coupled with the necessity to adjust to the EU budgetary rules (including the new Fiscal Compact – see Box 1) underlined the need for further fiscal consolidation despite weaker economic prospects. Currently, nine of the EU10 countries (EU11 excluding Croatia) are subject to the excessive deficit procedure (EDP) of the European Commission (EC). Bulgaria, which had to correct its fiscal balance by the end of 2011, is on track to full compliance with the Stability and Growth Pact, as the European Commission has made a recommendation to the European Council to abrogate the EDP in Bulgaria. Hungary had to take additional measures (e.g., new levies on telecommunications services and financial transactions, reductions in subsidies for drugs, spending cuts at ministries) to restore fiscal discipline but is now on track to reduce its excessive deficit by year-end. The other seven countries are also in a position to correct their fiscal positions and meet deadlines for deficit correction in 2012 (Poland, Romania, Lithuania, and Latvia) or 2013 (Czech Republic, Slovenia, and Slovakia).
On March 2, 2012, all EU member states, except the Czech Republic and the United Kingdom, signed a new fiscal compact to tighten fiscal governance and anchor future fiscal consolidation. Signatory countries have committed to new rules on fiscal deficits and debt, among them a 0.5 percent limit on the structural deficit and an automatic debt reduction target that obliges member states with gross public debt exceeding 60 percent of GDP to reduce public debt by 1/20 of the ‘excess debt’ annually. While relying on numerical limits to constraint fiscal discretion, the new compact puts greater emphasis on enforcement of fiscal rules than the original EU Stability Pact. Key changes include automatic sanctions unless a qualified majority objects; ex ante fiscal surveillance; and enforceability of fiscal rules in the European Court of Justice.

Source: European Commission, World Bank staff.

**Strong fiscal consolidation has helped to limit increases in debt-to-GDP ratios in the EU11 countries** (Figure 48). In 2011, debt-to-GDP ratios increased for the fifth year in a row, and were somewhat more than had been planned in October 2011 fiscal notifications. However, the increase in EU11 is less than in EU15, and public indebtedness relative to size of economy is far lower than in the EU15. Across the region public debt increased everywhere except Estonia, Latvia, and Hungary. In Hungary, a drop in public debt stemming from the large primary surplus was almost completely offset by depreciation of the forint. Similarly, depreciation of the zloty toward the end of 2011 pushed up the public debt-to-GDP ratio in Poland. By buying back bonds Latvia recorded the biggest reduction in indebtedness—2 percent of GDP.

**Figure 48. General Government Debt, Projected and Actual, EU11 and EU15, 2010–11**

Source: Eurostat, April 2012 EDP notifications, World Bank staff calculations.
EU11 Economic Outlook, Economic Policies and Risks for 2012–2013

DECELERATING ECONOMIC ACTIVITY IN THE NEAR-TERM AMID EURO AREA UNCERTAINTY

In the EU11 economic growth is set to decrease from its 2011 levels by half to 1.4 percent in 2012. However, with uncertainty heightened, even this modest growth projected assumes that policies adopted in the euro area can successfully avoid severe deterioration in international financial market conditions.

The volatility and uncertainty still prevailing in the euro area make it very difficult to forecast economic performance. In the environment of volatile financial markets, short-term forecasting of EU11 economic performance has become highly sensitive to abrupt shifts in economic sentiment and unconventional economic policy decisions in the euro area. While there was relatively little divergence in views about the economic outlook in 2011, uncertainties again increased in 2012 as the sovereign debt crisis in the euro area escalated as compared to 2011 (Figure 49).

In mid-2012 prospects for EU11 countries look weaker than they did just six months ago. A number of risks have since materialized that negatively affect the near-term outlook. They include:

- The slowdown in economic activity in EU15 has been worse than expected. Fourth quarter 2011 GDP data that showed a mild recession in the euro area raised doubts about the prospects for economic recovery in Europe.
- The impact of bold economic policy interventions in late 2011 and early 2012 was short-lived. Heightened uncertainty surrounding the sovereign debt crisis has weighed down financial markets and renewed concerns about negative feedback loops between insecure sovereign debtors and fragile financial markets.
- The uncertainty and volatility in financial markets has undermined the confidence of both investors and households.

As a result, 2012 economic prospects for the EU11 countries have been downgraded. Since the November 2011 issue of this RER, forecasts for 2012 have been reduced for all EU11 countries except for Poland and Slovakia (Figure 50).
Albeit at a decelerating pace, the EU11 economy is expected to expand in 2012—provided there is no further deepening of the crisis in the Euro area. Assuming an orderly resolution of euro area sovereign debt problems, EU11 growth will still be halved: from 3.1 percent in 2011 to 1.5 percent in 2012. The EU11 countries will retain their growth advantage over the EU15 of about 1.5 percentage points so that they will continue to converge to average EU living standards. With the reemergence of the euro area tensions, economic growth in Europe continues to suffer from the waning confidence of consumers and businesses, which is negatively affecting the economic forecast for EU11.

Under a baseline scenario of no worsening of euro area economic problems, all EU11 countries are projected to grow at lower rates in 2012 than in 2011; their economies will rebound only in 2013. The countries that grew fastest in 2011 will continue to grow albeit at a more modest pace. Growth in Estonia, Latvia, and Lithuania will slow in 2012 by more than 3 percentage points, though they will still be above the expected EU11 average of 1.5 percent. In the other EU11 countries, output growth will be 1 to 2 percentage points lower in 2012 than in 2011. Private consumption, investment (supported by modest credit

<table>
<thead>
<tr>
<th>Table 2. EU11 Growth Prospects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>EU11</td>
</tr>
<tr>
<td>Bulgaria</td>
</tr>
<tr>
<td>Czech Republic</td>
</tr>
<tr>
<td>Estonia</td>
</tr>
<tr>
<td>Latvia</td>
</tr>
<tr>
<td>Lithuania</td>
</tr>
<tr>
<td>Hungary</td>
</tr>
<tr>
<td>Poland</td>
</tr>
<tr>
<td>Romania</td>
</tr>
<tr>
<td>Slovenia</td>
</tr>
<tr>
<td>Slovak Republic</td>
</tr>
<tr>
<td>Croatia</td>
</tr>
<tr>
<td>Memo</td>
</tr>
<tr>
<td>EU15</td>
</tr>
</tbody>
</table>

*Source: World Bank staff.*
growth and retained corporate earnings), and net exports are expected to drive EU11 growth this year. Declines in public consumption, due to continuing fiscal consolidation, and destocking will be a drag on economic performance. In 2013 growth is expected to strengthen to about 2.5 percent as domestic demand recovers.

With economic prospects shaky in the euro area, EU11 trade flows are expected to slow in 2012 but then recover in 2013. Export growth will continue to decelerate in the second half of 2012 as demand from EU trading partners slackens. A mild upsurge in import demand from outside the EU will not be enough to offset the drop in EU11 exports to the euro area. The softening of domestic demand since January is likely to continue through December, slowing the pace of import growth. As private consumption and investment ramp up in 2013, imports can be expected to pick up.

Near-term prospects for attracting foreign investment to the EU11 are generally positive. FDI flows have been stable in EU11 countries, in response to their 2011 economic growth. If the euro area crisis gets no worse and they retain investors’ confidence, EU11 countries should continue to attract FDI at a pace close to the current one. Gross external debt-to-GDP ratios in the EU11 are expected to hold steady if the euro area problems do not worsen.

The near-term labor market outlook in EU11 is still unfavorable. With the expected slowdown in economic activity, the modest employment growth of 2011 may go into reverse. However, the unemployment rate is projected to be essentially unchanged until 2013, when it should start going down gradually as economies rebound. Real wages are likely to continue the recent trend of growing more slowly than productivity. Going forward, the faster growth in productivity (output) than in unit labor costs in most EU11 countries implies that, with output below potential, labor market improvements can materialize only when demand, both external and domestic, strengthens.

With economic activity weakening in 2012, price pressures are likely to subside. Prices dynamics stabilized in early 2012 and near-term inflation is expected to decline somewhat because of subdued economic activity and soft wage pressures. In the medium term, given the expectations for modest economic growth, price pressures in the EU11 should again be limited. Upside risks to the inflation outlook seem unlikely, although they
could materialize along with global commodity price rises, the pass-through of new increases in indirect taxes and administrative prices, and unexpectedly strong economic activity.

**Monetary policy in EU11 countries should continue to be accommodative well into 2013 in order to keep debt service costs low, support asset prices, encourage investment, and avert a possible slide into deflation.** Monetary policy should help to buffer EU11 against external shocks and help the economy to cope with heightened euro area volatility. With economic activity slowing, interest rates are expected to be low. EU11 countries with flexible exchange rates have been able to partially absorb external shocks through nominal currency depreciations and in this respect are better placed than those with fixed rates to do so again.

**With euro area banks deleveraging, it is likely that gross capital flows from EU15 to EU11 countries will decline and funding pressures increase.** Bank-related capital inflows to EU11 from crisis-hit euro area economies, especially Greece and Spain, will undoubtedly dry up. As euro area banks deleverage, domestic deposits are likely to remain the dominant source of funding in EU11. Credit is expected to grow only modestly in 2012–2013 given the softening of demand for both household and corporate loans. Weakening economic activity may push up NPLs, but their proportion of total loans is not expected to change significantly, and in the near term EU11 commercial banks are expected to remain well capitalized.

**Sustaining financial stability and building confidence in EU11 financial markets are both necessary for boosting growth and will remain high on the EU11 policy agenda.** With all the external uncertainty, markets will continue to pressure banks to clean up their risk profiles. EU11 bank balance sheets will be closely scrutinized as euro area banks deleverage, but policies should ensure that credit is available to viable borrowers.

**Fiscal consolidation is still a high priority for EU11.** With heightened uncertainty and market pressures on the one hand, and the growth decelerating on the other, EU11 governments must decide quickly how much, how fast, and in what ways they want to consolidate public finances (Figure 52). While fiscal policy needs to be carefully calibrated to the circumstances of each country, certain common factors influence the pace, timing and design of fiscal consolidation strategy. Front-loaded fiscal adjustments are usually the first concern for countries with large correction needs and under severe market pressures. Gradual fiscal consolidation is the first choice of countries with sustainable debt and little market pressure, but with the desire to improve the sustainability of public finances in the medium term to create fiscal buffers against future shocks. Finally, back-loaded fiscal
consolidation is appropriate for countries that enjoy favorable market conditions and can support growth by delaying fiscal efforts.

**EU11 governments are planning to pursue gradual fiscal consolidation in the near-term.** According to both the EC Spring Forecast and government plans as reflected in the updates of the Convergence and Stability Programs, the aggregate EU11 deficit is expected to narrow in 2012 and 2013. From the government plans it appears that the deficit will fall by about 1.4 percent of GDP by 2013, slightly more than the EC expects (Figure 53).

**Figure 52. Average CDS spreads and debt levels**

Despite a weakening economic outlook, EU11 countries remain committed to reducing their deficits in order to shore up fiscal sustainability and rebuild fiscal policy buffers over the medium term. The scale of the projected fiscal adjustment varies by country. While fiscal balances in 2012–13 are expected to improve in all EU11 countries but Estonia and Hungary, the degree of fiscal adjustment differs considerably. This is mainly because of differences in initial fiscal positions. Countries like Slovenia, Romania, and Lithuania that have large fiscal imbalances are embarking on major fiscal consolidation efforts of 3.5–4 percent of GDP over the next two years, and Poland’s goal is to reduce the fiscal deficit from 5.1 percent in 2011 to 2.2 percent in 2013. The fiscal positions of the Czech Republic and Slovakia are likely to improve only marginally. Estonia’s fiscal balance is expected to turn negative in 2012 due to the disappearance of windfall revenues (and subsequent expenditures) linked to the Kyoto trading system, social indexation of pensions, and restoration of payments for the second pillar of the pension system. While the EU11 countries have specified numerical fiscal targets, they still need to specify the measures they will use to achieve the envisioned adjustments. In designing the composition
of fiscal consolidation, governments should take into account the fragility of the economic outlook and try to limit the negative impact of fiscal consolidation on growth (Figure 54).

**Figure 53. General Government Deficits, EU11 and EU15, 2011–13**

![General Government Deficits, EU11 and EU15, 2011–13](image1)

*Source: Eurostat, Convergence/ Stability Programs, EC Spring Forecast, World Bank staff calculations.*

**Figure 54. General Government Deficits, EU11 and EU15, 2011–13**

![General Government Deficits, EU11 and EU15, 2011–13](image2)

*Source: Eurostat, Convergence/ Stability Programs, World Bank staff calculations.*

Under the baseline scenario of no deepening of the euro area crisis, the declining trend in fiscal deficits is expected to continue over the next two years. With their economies weakening in 2012, many countries in both EU11 and EU15 are likely to pursue procyclical fiscal tightening (Figure 55). Expected declines in fiscal deficits will be driven solely by discretionary consolidation, and will be partly offset by the worsened economic situation. In 2013, with economic conditions improving both EU11 and EU15 are set to return to countercyclical fiscal policy.

As a consequence of sustained reduction in fiscal deficits, the EU11 public debt-to-GDP ratio can be expected to stabilize in 2012 and start declining in 2013. For the first time in five years, the EU11 public debt-to-GDP ratio will not increase in 2012; the ratio is expected to stabilize at about 50 percent.
There are substantial downside risks to the baseline projections for the EU11 near-term outlook, which assumes that euro area sovereign debt problems will not worsen. Risks for the EU11 economic outlook mainly originate in the euro area. Among them:

- Further escalation of the euro area sovereign debt crisis would reinforce a negative and self-perpetuating feedback loop between weak banks and fragile euro area governments. Since the EU11 is highly integrated with the EU15, such confidence shocks would exert pressure on EU11 financial markets across asset classes.

- The EU11 banking system is susceptible to deleveraging by euro area banks. While the deleveraging that has already taken place has been fairly orderly, renewed concerns about Greece and Spain are further stressing an already stressed euro area banking system.

- A protracted recession in the euro area would spill over to the EU11. EU11 economic prospects are already somewhat fragile, especially for countries whose economies are closely linked through trade with troubled euro area countries. A major deterioration of conditions in the euro area could reduce GDP growth in EU11 by about 2 percent compared to the baseline and force contraction on the economy.
The EU11 Medium-term Structural Policies Agenda for Growth

Europe 2020—the EU strategy for jobs and growth—sets members ambitious targets for tackling not only continuing financial and macroeconomic challenges, but also structural obstacles to sustainable growth. By removing barriers to growth in product and labor markets, despite challenging demographics the EU11 countries can increase their potential economic gains in the medium term.

Besides combating current macroeconomic challenges, the medium-term economic growth potential of the EU11 can only be realized if structural barriers to economic activity are removed. Strengthening growth prospects can be invaluable in calming market jitters and ensuring access to financial markets at attractive prices. Both product and labor market reforms are pivotal for enhancing the productivity and competitiveness of EU11 countries. Policies should be aimed at enhancing competition in product markets, decreasing the fragmentation of trade, and integrating financial services. In addition, reforming labor markets by increasing the ability of firms to adjust wages and employment will foster innovation and job creation and boost long-term growth prospects.

The new EU strategy for jobs and growth, Europe 2020, aims to boost Europe’s potential for sustainable growth and competitiveness. In response, EU national governments have submitted 2012 national reform programs and medium-term convergence programs (2012–2015). In these documents they identify policy priorities and structural measures to boost growth and employment over the medium term. Based on those, the European Council has issued country-specific recommendations.

While restoring financial and macroeconomic balances is the top policy priority for all member states at present, advancing the structural reform agenda will boost potential growth in the medium term. Based on recommendations of the European Commission to the European Council, specific structural gaps were identified for each EU11, which encompasses their priority areas of reform. These recommendations focus on the following inter-related areas (Table 3):

- **Labor market reforms:** Large and persistent unemployment, especially among vulnerable groups, testifies to the need for bold EU11 labor market reforms. Making labor conditions more flexible will help some EU11 countries to address structural rigidities in their labor markets. Country-specific recommendations address
employment issues, especially with regard to dampening the effects of the crisis and tackling youth unemployment.

- **Education reforms**: Given the demographic pressures, significant improvements in labor force skills will promote productivity and growth. Here reforms to improve the quality of secondary and tertiary education, address skills mismatches, and increase labor market flexicurity (combining flexibility and security) are crucial for improving labor outcomes. The Council recommendations also relate to providing training to help people join or rejoin the labor force. Raising skills will boost innovation, entrepreneurship, and ultimately economic growth. Attracting women into the labor markets of new EU member states can be eased by increasing the availability of early childhood facilities.

- **The business environment, private sector development, and competition**: Simplifying business regulation, addressing lingering governance issues, and enforcing contract and property rights are among areas where some EU11 countries could pursue reforms to build up the private sector and make it easier to do business. Opening up markets and opportunities for business development—e.g., through privatization and in traditionally regulated monopolies like energy, electricity, and rail—are among Council recommendations for the new EU member states.

- **Public service delivery and administration**: Enhancing the quality of public administration is essential to the delivery of public goods and services. Improving public procurement, increasing the transparency of the legal system, and removing bottlenecks to absorption of EU funds are featured in the recommendations.

- **Long-term sustainability of public finances**: Beyond the continuing fiscal consolidation in the EU11, ensuring that public finances are sustainable over the medium and the long term (see Box 1) rests on the ability of governments to implement growth-friendly structural fiscal policy. Reforming pension systems, shifting taxation away from labor, better targeting social assistance, and ensuring that social safety nets cover the most vulnerable are top priorities for EU11 countries.

- **Social safety nets and social inclusion**: Beyond providing a safety net for the unemployed in times of crisis, social assistance can be strengthened by better targeting and more efficiency and access to quality social services for vulnerable groups, such as children and the disabled. Well-designed and well-delivered social assistance can increase the incentives for people to work.
Table 3. European Council Recommendations for Structural Reforms in the EU11

<table>
<thead>
<tr>
<th>Country</th>
<th>Human capital development</th>
<th>Business environment, private sector development and regulated monopolies reforms</th>
<th>Governance, public administration, provision of public services</th>
<th>Long-term fiscal structural reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor market</td>
<td>Education and early childhood care</td>
<td></td>
<td>Pensions</td>
</tr>
<tr>
<td>BG</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>CZ</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>HR</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HU</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>LV</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PL</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>RO</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SI</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Source: European Commission, World Bank staff.

Note: This summary table is based on detailed recommendations by the European Council accessible at: http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm

Structural issues must be tackled to increase medium-term economic gains in EU11 countries and restart the process of income convergence with the rest of Europe. While short-term macroeconomic imbalances will need to be addressed at once, removing over time the structural obstacles to growth in product and labor markets will make it possible for EU11 countries to raise their productivity and employment rates. In the next several decades the labor force is expected to contract significantly more in the EU11 than in the rest of the EU. These demographic trends will inevitably jeopardize the sustainability of public finances, and ultimately the prospects for growth and income convergence. Providing incentives for labor mobility, making public finances more sustainable, encouraging the private sector to develop and create jobs, adapting social security systems to demographic developments, harmonizing regulation across borders, deepening trade and financial integration, and encouraging discovery and innovation will be top reform areas for the EU11. In many of these areas, closing EU11 gaps with the rest of the EU will soften the constraints imposed by demographic threats and produce sizable returns in terms of income convergence. These issues are discussed in detail in the special topic note of this report.
Annex 1

CROATIA: THE 28TH EU MEMBER STATE

As of July 1, 2013, with the Treaty of Accession having been ratified by the parliaments of all EU member states, Croatia will join the European Union. Due to the post-independence conflict Croatia experienced in the early 1990s and its political, institutional, and economic consequences in ensuing years, the country lagged behind other Central and Eastern European (CEE) countries in its relationship with the EU. The Stabilization and Association Agreement was signed in 2001; in 2003 Croatia applied for EU membership; and in June 2004 the European Council accepted Croatia as a candidate for EU membership. Accession negotiations began in October 2005 after a finding that the country was cooperating fully with the International Criminal Tribunal for the former Yugoslavia.

Since 2007 the EU accession process has grown increasingly complex; it is not fully comparable to the process earlier members went through. The EU *acquis communautaire* has been expanded to 35 chapters, of which 33 were subject to negotiation. The new Chapter 23 on Judiciary and Fundamental Rights has become the most critical chapter, and the negotiations process introduced opening and closing benchmarks for Croatia that earlier candidates were not confronted with. At the end of the negotiating process, Croatia demonstrated its ability to translate each of the 35 chapters of the EU *acquis* into national law. Finally, on December 9, 2011, the Treaty of Accession was signed; Croatia must continue to respect the obligations it accepted in the treaty, and the European Commission is monitoring fulfillment.

The prospects of joining the EU and the legal harmonization process have significantly transformed Croatia. It has been steadily converging with the EU in income, competitiveness and living standards, and in the years before the crisis economic growth was robust, averaging above 4 percent, thanks to expansion of credit and mounting foreign capital inflows. By 2010 the country’s GDP per capita (Figure 56) had doubled over the decade, while on a purchasing power standard (PPS) basis it stood at 61 percent of the EU average and 97 percent of the EU new member states (EU10) average (Figure 57), despite the fact that convergence stopped since the crisis outbreak. Closing the income gap and facilitating convergence with other EU countries is, as it has been for some years, an overriding priority for Croatia.
Liberalization of trade with the EU has led to integration with the EU single market. Croatia is an open economy with total trade in goods and services accounting for about 90 percent of GDP in 2011. Apart from exports of machinery and transport equipment (mainly ships), tourism was the biggest source of export revenue, generating 14.4 percent of GDP. The EU, primarily Germany and Italy, has long been Croatia’s largest trading partner. In 2011, its share in total Croatian exports was relatively stable at 60 percent; Central European Free Trade Agreement (CEFTA) countries accounted for a fifth of the exports, slightly more than in 2009. The euro area is the source of about three-fourths of FDI flows into the country; although that was previously a strength, it may now be a transmission channel for crisis contagion.

However, although important, accession to the EU and adoption of EU standards is not a guarantee that the integration process will be sustainable. The global crisis exposed some fundamental economic weaknesses for Croatia. Because capital inflows had dried up, investment activity plunged, from 27.1 percent in 2009 to 22.6 percent in 2011, leading to negative labor market and fiscal performance. The fiscal deficit grew above 5 percent of GDP as revenue severely under-performed while public spending remained rigid; the external debt-to-GDP ratio reached 100 percent, of which 70 percent pertains to private sector. Declining
demand for exports coupled with the limited diversity in Croatia’s exports led to a severe decline in industrial production and forced defensive restructuring.

Persistent major rigidities threaten the sustainability of growth and extension of its benefits to all citizens. Not only is the Croatian economy less competitive than its EU10 peers, the Global Competitiveness Index suggests that it relies too much on resource-efficiency-based growth, while knowledge-based growth is still in its infancy. The index shows that Croatia is slowly closing its competitiveness gaps with the EU10 and EU15 in labor, goods, finance, and human capital efficiency, but huge gaps remain in innovation, technological readiness, institutions, and business sophistication.

Croatia’s labor market displays serious weaknesses. Labor market performance in Croatia remains weak. In 2011 the country’s 52.4 percent employment rate was among the lowest in the EU. The cause is a combination of high unemployment (13.9 percent) and low participation rates (about 61 percent). These results are outliers among EU10 as well as EU15 countries. In 2011 unemployment in Croatia was surpassed only by Latvia and Lithuania among EU10 countries, and only Spain, Greece, and Ireland among EU15 countries had higher rates. Labor participation is the lowest among all the countries in the EU. Taken together, these results suggest that Croatia’s labor market is not well equipped to contribute to higher and sustained economic growth. Moreover, reducing labor legislation rigidities alone will not be enough to improve employment outcomes. The social protection system also needs to be reformed to incentivize work, and the educational system must be made more responsive to changing labor market demands.
The investment climate in Croatia remains complex and cumbersome. Although starting a business in Croatia has become easier in recent years, the bankruptcy process is still long. Efficient closing procedures ensure that an inactive or insolvent business can be dissolved in a reasonable time while assuring creditors the highest possible recovery rate. In Croatia, the bankruptcy of a limited liability company takes three years, nearly twice the OECD average, mainly because of reliance on courts to resolve bankruptcy cases, and the courts have a significant backlog of unresolved cases. Similarly, the cost of closing a business is high and the recovery rate for creditors is low. Incomplete corporate restructuring and the preeminence of the state in the economy are other reasons why the firm turnover rate is lower than in comparable economies.

**Figure 61. Difficulties in Doing Business**

Source: World Bank staff calculations, based on Doing Business.  
Note: Index of the principal components of the ease of doing business index in 2011, scaled from 0 [poor] to 100 [excellent]) Averages are computed using principal component analysis. EFTA here comprises Iceland, Norway, and Switzerland. The EU15 comprises Denmark, Finland, Iceland, Ireland, Sweden, and the United Kingdom (North); Austria, Belgium, France, Germany, Luxembourg, and the Netherlands (Continental); and Greece, Italy, Portugal, and Spain (South). The EU12 comprises Estonia, Latvia, and Lithuania (North); the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia (Continental); and Bulgaria, Cyprus, and Romania (South).

Major challenges remain in the area of modernizing the public sector and ensuring the rule of law. Though Croatia spends more of its GDP on public administration than EU10 countries, its effectiveness is lower than with Croatia’s peers, according to various governance indicators. The World Economic Forum Competitiveness Reports rank inefficient public administration first in the list of barriers to doing business in Croatia. The World Bank governance indicators also suggest that the country must bridge a wide gap to catch up with EU10 and EU15 public administration effectiveness and rule of law indicators. Between 2005 and 2011 Croatia pursued reforms to ensure a wide and effective
access to justice as part of its efforts to raise legislation and institutions to the modern standards of Europe. These efforts did reduce the backlog of cases through reforms in institutions and procedures; they also shortened the duration of court proceedings, modernized court administration, rationalized the court network, and provided education and professional training. These efforts need to be extended.

EU membership opens a wide horizon of opportunities, most notably access to generous EU funds. Once it joins the EU, Croatia will have access to EU grant funding amounting to nearly 2.5 percent of GDP—six times the amount it currently has at its disposal. Although so far its track record in this area is satisfactory, capacity constraints in implementing agencies and local governments of Croatia to absorb EU structural and cohesion grants upon accession are an area that requires a lot of attention if Croatia wants to maximize the benefits of the EU accession.

A principal dilemma for policymaking over the coming years will be how to reconcile the need to consolidate macroeconomic stability with the need to meet the substantial acquis commitments, especially in infrastructure and environment. Upon accession, the EU Structural and Cohesion funds available to Croatia will exceed €1.5 billion a year. At the same time, Croatia will also be obliged to contribute about €680 million annually to the EU budget. On the other side, there are costs associated with the negotiated transition periods for harmonizing Croatian laws with the EU directives. Only in the case of water sector, the total cost through 2023 of harmonizing Croatian law with EU water utility directives is estimated at EUR12.6 billion. The significant costs associated with the acquis are expected to put heavy pressure on spending and deficits and there is a risk that they will accelerate public expenditure to unsustainable levels. To prevent this, tight expenditure management and mechanisms, restructuring of current expenditure, and a strong revenue base are necessary. Identifying ways to effectively bring in the private sector to share the costs of integration will be vital.
The Macroeconomic Imbalance Procedure (MIP) was introduced in early 2012 as part of enhanced economic governance in the EU. Its aim is to identify early and to correct in a timely manner macroeconomic imbalances to reduce their spillover effects among EU member states. The first step in this procedure is an Alert Mechanism Report prepared by the European Commission for the early detection of possible imbalances. This is followed by an in depth-review which the Commission undertakes for each Member State that it considers may be affected by, or may be at risk of being affected by, imbalances. In its first Alert Mechanism Report (AMR) released in February 2012, the European Commission (EC) assessed the external and internal imbalances of EU member states using 10 indicators and taking into account economic developments over a three- or a five-year period (Table 4). The EC concluded that 12 countries needed intensified review to assess the degree of imbalances and identify policy measures to correct them. Three EU11 countries—Bulgaria, Hungary, and Slovenia—were among them based on large, although rapidly adjusting, external imbalances related to the current account deficit (Bulgaria); net investment positions (Bulgaria and Hungary) and the rapid accumulation of internal imbalances; private sector debt (Bulgaria, Hungary, and Slovenia); and general government debt (Hungary). The AMR did not assess Romania or the other countries with EU financial assistance programs (Greece, Ireland, and Portugal).

Late in May 2012 the EC released the results of its intensive reviews and concluded that while the imbalances were not excessive, in Cyprus and Spain they needed to be addressed with urgency. The next most significant imbalances were identified in Hungary and Slovenia. Country-specific recommendations, proposed by the EC and to be adopted soon by the Council were:

- Bulgaria—reducing skills and regional labor market mismatches; reviewing minimum thresholds for social security contributions; boosting total factor productivity; and reducing the risks of repeating boom-cycles
- Hungary—creating conditions for a stable policy environment and a well-functioning institutional system; reducing public debt and external exposure; and raising growth potential through labor and product market reforms
- Slovenia—tightening prudential standards and improving corporate governance; creating a good investment climate, especially for FDI in productive sectors; and containing growth in wages.

---

8 Based on http://ec.europa.eu/europe2020/index_en.htm
### Table 4: EC Internal and External Imbalances Assessment, selected EU11, 2010

<table>
<thead>
<tr>
<th>Scoreboard indicators and indicative thresholds</th>
<th>External imbalances and competitiveness</th>
<th>Internal imbalances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicative thresholds</td>
<td>Current account balance, % of GDP</td>
<td>Net international investment position, % of GDP</td>
</tr>
<tr>
<td></td>
<td>Net internal investment position, % of GDP</td>
<td>Real Effective Exchange Rate</td>
</tr>
<tr>
<td></td>
<td>Export market shares, % change (5-years)</td>
<td>Nominal Unit Labor Cost, % change</td>
</tr>
<tr>
<td></td>
<td>Deflated house prices, y-o-y % change</td>
<td>Private Sector Credit Flow, % of GDP</td>
</tr>
<tr>
<td></td>
<td>Private Sector Debt, % of GDP</td>
<td>General Government Debt, % of GDP</td>
</tr>
<tr>
<td></td>
<td>Unemployment Rate, %</td>
<td>Unemployment Rate, %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Current account balance, % of GDP</th>
<th>Net international investment position, % of GDP</th>
<th>Real Effective Exchange Rate</th>
<th>Export market shares, % change (5-years)</th>
<th>Nominal Unit Labor Cost, % change</th>
<th>Deflated house prices, y-o-y % change</th>
<th>Private Sector Credit Flow, % of GDP</th>
<th>Private Sector Debt, % of GDP</th>
<th>General Government Debt, % of GDP</th>
<th>Unemployment Rate, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG</td>
<td>0.02</td>
<td>-11.1</td>
<td>-97.7</td>
<td>10.4</td>
<td>15.8</td>
<td>27.8</td>
<td>-11.1</td>
<td>-0.2</td>
<td>169</td>
<td>16</td>
</tr>
<tr>
<td>CZ</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>EE</td>
<td>0.02</td>
<td>-2.5</td>
<td>-97.7</td>
<td>10.4</td>
<td>15.8</td>
<td>27.8</td>
<td>-11.1</td>
<td>-0.2</td>
<td>169</td>
<td>16</td>
</tr>
<tr>
<td>LV</td>
<td>0.02</td>
<td>-80.2</td>
<td>8.5</td>
<td>14</td>
<td>-1.1</td>
<td>-3.9</td>
<td>-8.8</td>
<td>141</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>LT</td>
<td>0.02</td>
<td>-55.9</td>
<td>9.1</td>
<td>13.9</td>
<td>0.8</td>
<td>-3.7</td>
<td>-5.3</td>
<td>81</td>
<td>38</td>
<td>12</td>
</tr>
<tr>
<td>HU</td>
<td>0.02</td>
<td>-112.5</td>
<td>-0.5</td>
<td>1.4</td>
<td>3.9</td>
<td>-6.7</td>
<td>-18.7</td>
<td>155</td>
<td>81</td>
<td>9.7</td>
</tr>
<tr>
<td>PL</td>
<td>0.02</td>
<td>-64</td>
<td>-0.5</td>
<td>20.1</td>
<td>12.3</td>
<td>-1.1</td>
<td>3.8</td>
<td>74</td>
<td>55</td>
<td>8.3</td>
</tr>
<tr>
<td>RO</td>
<td>-6.6</td>
<td>-64.2</td>
<td>-10.4</td>
<td>21.4</td>
<td>22.1</td>
<td>-12.1</td>
<td>1.7</td>
<td>70</td>
<td>31</td>
<td>6.6</td>
</tr>
<tr>
<td>SI</td>
<td>0.02</td>
<td>-35.7</td>
<td>2.3</td>
<td>-5.9</td>
<td>15.7</td>
<td>0.7</td>
<td>1.8</td>
<td>129</td>
<td>39</td>
<td>5.9</td>
</tr>
<tr>
<td>SK</td>
<td>0.02</td>
<td>-66.2</td>
<td>12.1</td>
<td>32.6</td>
<td>10.1</td>
<td>-4.9</td>
<td>3.3</td>
<td>69</td>
<td>41</td>
<td>12</td>
</tr>
</tbody>
</table>

**Source:** EC
Special Topic: Drivers of Convergence in EU11
Introduction

The European economic growth model has delivered unprecedented welfare to the continent over the last half century. The model's blend of enterprise and social inclusion is unique. The resultant continuous process of economic integration in Europe over the last half century boosted economic growth and facilitated income convergence throughout the region, often driven by trade and financial linkages. European enterprises not only profited immensely from integration but are significantly more socially responsible than in other parts of the world. European states invest heavily in education and research and development (R&D) activities and offer social protection to workers both during and after their participation in the labor market. In the last two decades, the virtues of the European growth model have now materialized in the income convergence being experienced by EU11.

In spite of its remarkable success, several aspects of the European economic growth model require reform to ensure that it is sustainable. Among the priorities for many European states today are providing incentives for labor mobility, making public finances more sustainable, and adapting social security systems to demographic developments, and harmonizing regulation across borders.

This note zeroes in on the EU11 region to explore what is driving their prosperity and growth. Since they began the transformation process, this group of emerging countries has made impressive strides as developing market economies and is anchoring development in EU institutions. The speed at which economic integration has taken place and its healthy returns in terms of income growth and convergence make the EU11 countries particularly interesting economies to study.

The main messages related to the drivers of growth and prosperity in EU11 are as follows:

- **Convergence:** The financial crisis had a significant effect on income growth in the region; as a result, the extraordinary income convergence process that took place in the last decade has decelerated. The EU11 region does have good prospects for further convergence dynamics although the speed of income convergence may differ significantly across economies. Largest gains in income convergence in EU11 will come from closing the gap in human capital investment with EU15.

- **Trade and finance:** Although trade and finance have fueled convergence in incomes and living standards, trade in modern services has not increased concomitantly. Trade will remain pivotal for sustaining economic growth in EU11. Financial

---

9 The EU11 group of countries comprises Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, and Slovakia. See Annex 1 for a complete list of country groupings.

10 This note adopts the thematic framework presented in Gill and Raiser (2012) “Golden Growth: Restoring the Luster of the European Economic Model.”
integration within EU11 and between EU11 and EU15 will continue, but with a focus on strengthening stability in cross-border banking.

- **Enterprise and innovation:** Firms in EU11 have been successful at creating jobs, raising productivity, and competing in international markets. Innovation indicators, however, suggest that EU11 countries as a group lag behind other EU member states.

- **Labor:** Recent demographic developments in Europe are raising questions about the sustainability of the European growth model. Because of demographics, policies to close the educational attainment gap and create incentives for labor market participation and the return of skilled workers who have migrated will gain in importance.

- **Government:** EU integration has helped enhance the quality of government by strengthening the rule of law, facilitating economic openness, and promoting voice and accountability. This was achieved mainly through high outlays for social benefits. E11 governments are still larger than in other emerging countries with similar income levels. This differential and shortcomings in government effectiveness are holding back growth. Moreover, pressures for more social spending are likely to rise as the demographics worsen.

## Income Convergence and Post-Crisis Prospects for EU11

Europe’s economic growth in the last half century has noticeably narrowed income differentials between countries. From 1950 through 1973, Western European incomes converged quickly toward those in the United States. Then, by the early 1990s, the incomes of more than 100 million people in the poor south—Greece, southern Italy, Portugal, and Spain—grew closer to those of advanced Europe. The European convergence in consumption levels in the last four decades is unmatched. Annual per capita consumption in the southern periphery of the EU grew by 4 percent, while the 2 percent increase in the wealthier EU members was still impressive. Except for East Asia, the rest of the world has seen little or no convergence.

Starting with the EU association process of the Czech Republic, Hungary, Poland, Slovakia, Slovenia and the Baltic countries in the mid-1990, another 100 million people were gradually absorbed into the EU, and their incomes also increased quickly. In 2010 income per capita in Hungary was roughly 47 percent higher than in 1994, and Poland’s income per capita had more than doubled. Income per capita in the EU11 grew 5 percent annually between 1994 and 2010, narrowing the income gap between EU11 and EU15 by more than 6.5 percentage points. The income convergence dynamics for the period were mirrored in similar cross-country labor productivity growth, with the EU11 region moving toward (though still far from) the other EU economies. From
an institutional point of view, the EU’s Structural Funds played a particular role for equalizing fiscal capacity across European regions, so as to foster income convergence.

The global financial crisis and the economic recession in Europe have slowed the pace of income convergence for the EU11 region. GDP losses in the region hid very marked country differences. For some EU11 countries, the crisis brought major cumulative GDP losses (Latvia and Estonia), but others were affected only minimally (Poland and Slovakia). From 2005 through 2010 there was considerable income convergence in Poland and Slovakia, but in others (notably Estonia, Hungary, and Latvia) income convergence stagnated relative to the rest of the EU. The speed at which the gap in average income per capita between EU11 and the rest of the EU closes provides a measure of convergence. That fell from 0.70 percent a year for 2000-2004 to 0.42 percent for 2005-2010, but for the latter period the effects of the crisis on income convergence dynamics become abundantly clear. The average gap-closing speed for 2005-2007 was 16 times faster than the 0.06 percent a year recorded for 2008-2010. The link between the initial level of income per capita and subsequent growth is much stronger in the period 2000-2004 than in 2005-2010. To sum up, while the period 2000-2010 was characterized by a generalized income convergence trend in the region, the “boom-bust” dynamics in several economies of EU11 made the within-decade developments very heterogeneous.

**Figure 1. Average Annual Real GDP Growth (Percent)**

![Graph showing average annual real GDP growth](image)

*Source: For EU11: World Bank ECACE regional tables; for Western Europe, IMF World Economic Outlook*

---

11 The correlation between initial income per capita and economic growth, which had averaged (−0.5) for 2000–2004—an indication that the poorer economies in the region were growing faster than richer ones—was only (−0.23) for 2005–2010.

12 EU15 South: Greece, Italy, Portugal, and Spain; EU15 North: Denmark, Finland, Ireland, Sweden, and the United Kingdom; EU15-Continental: Austria, Belgium, France, Germany, Luxemburg, and the Netherlands.
While in the last decade income growth differentials have substantially reduced the income gap between EU11 and the rest of the EU, the poor performance of EU15-South was also an important factor to explain such a development. Between 2007 and 2010 the gap between EU11 and EU15 South closed by 0.17 percent annually but the gap between EU11 and EU15-Continental group widened by 0.09 percent.

How can EU11 countries re-accelerate income convergence with the rest of the EU? Having identified several plausible scenarios about changes in technology and the accumulation of human and physical capital in EU11, it is possible to project the likelihood of income convergence.\textsuperscript{13} From the analysis it appears that the likelihood of EU11 income convergence with EU15 in the long-term is very high, but fully converging will take time. The distribution of relative income per capita in EU11 with respect to EU15 obtained from projection exercises for 2020, 2030, 2040, and 2050 indicate that the income convergence process will continue, and eventually the distribution of relative income per capita will become more concentrated around values that imply full, or close to full, convergence of incomes in EU11 and EU15 (Figure 3).\textsuperscript{14}

\textsuperscript{13} We apply a simple income projection model developed to quantify future income convergence prospects for the EU11 region under several scenarios for the future dynamics of physical and human capital accumulation and shifts of the technology frontier. Using the estimated parameters of a panel regression model, Crespo Cuaresma, Havetová, and Lábai (2012) propose to create income per capita projections for the countries in the European Union based on combinations of paths of physical capital accumulation (high, medium, and low scenarios); human capital dynamics (constant attainment rate and improvement scenarios); and technology frontier shifts (constant and linear extrapolation). By assigning such scenarios to different EU regions (EU11 versus EU15, in our case), the exercise provides 144 potential income paths by country. These can be used to evaluate the potential for EU11 convergence by decade. The combination of scenarios implies that uncertainty about future developments in production factors is explicitly incorporated into the quantification of the income convergence progress (see also Hlouskova and Wagner, 2005, for related income projection models applied to Central and Eastern European economies).

\textsuperscript{14} The results presented here are based on a simulation design that implicitly assigns equal likelihood to all possible scenarios. Weighting income projections by \textit{a priori} subjective probabilities of occurrence will yield shifts in the projections’ histogram.
Human capital accumulation dynamics are the key factor in explaining why some EU11 countries are more likely to be successful in closing the income gap with EU15 in the long term. Differences in income convergence speed within EU11 can be attributed to the sizable gap with EU15 regarding human capital accumulation. To close these differences, further investment in human capital could significantly accelerate income convergence. Investment in human capital can even pay off where educational attainment is already relatively high if demand is rising for skilled workers and employers are running into specific skills shortages (see World Bank 2012). To the extent that human capital investments (in terms of both quantity and quality) affect an economy’s ability to innovate, the benefits for income convergence from policies directed to improving skills may be particularly important.

In terms of accumulation of production factors, the growth rate of physical capital in the EU11 region has been systematically above that in EU15. Redirecting investments to more productive sectors seems to be an income convergence priority in the region. The recent crisis has also had a negative effect on innovation policies in EU11, which diverge in innovative capabilities from the rest of the region (Archibugi and Filippetti 2011). Such a development, through its effect on growth in total factor productivity (TFP), poses risks to progress in EU11 income convergence with EU15.

In a nutshell, while in the last 20 years progress in income convergence with the rest of the EU can be considered a success, the financial crisis jammed on the brakes.

---

15 Recently, a number of scholars have emphasized the prominent role of human capital accumulation as a driver of income growth and convergence in Europe in studies of the determinants of economic growth and income convergence patterns in Europe (see LeSage and Fischer 2008; Crespo Cuaresma, Doppelhofer; and Feldkircher 2012; and Crespo Cuaresma and Feldkircher 2012).
Taking into account current production factor endowments, although heterogeneous across individual economies the prospects of continuing on the convergence path are good for the region as a whole. If the right policies are in place, further gains can be expected from convergence in educational attainment for countries where human capital investment lags behind the EU15 economies. Such a lag, as measured by the difference in the share of working age population with tertiary education to the EU15 average, ranks from 19.7% in Romania to -7.6% in Estonia.

**Trade and Finance: Fuelling Economic Growth, Increasing Vulnerability**

Trade and finance—facilitated by the single market of the EU and its forebears—have fueled convergence in incomes and living standards. In 2009 Europe’s trade in goods was worth about $4.5 trillion, more than East Asia’s and North America’s combined, and trade in services was worth $2.25 trillion, more than the entire rest of the world combined. Today, Europe’s economies are more integrated through trade than those of any other part of the world, stimulating faster convergence in incomes and living standards. EU11 has been especially effective at taking advantage of their opportunities to integrate westward by trading goods and modern business services.

While trade in goods between the EU15 and the EU11 countries has grown rapidly since the mid-1990s, trade openness varies. Trade flows relative to GDP are much higher in the EU11 states than elsewhere in the world due to low barriers to goods trade in the Single Market, falling trade barriers for both goods and services, and the relatively small size of economies in the region. However, trade-to-GDP ratios and the direction of intra-EU trade flows vary. Trade-to-GDP ratios in Hungary, the Czech Republic, Estonia, and Slovakia have reached EU15-Continental levels, led primarily by trade in intermediate goods. Location does a lot to explain trading patterns between new and old EU member states. EU15-North, especially Finland, Sweden, and Denmark, are important destinations for exports from Estonia, Latvia, and Lithuania. EU15-Continental countries, especially Germany, are major markets for exports from Poland, the Czech Republic, Hungary, Slovenia, and Slovakia. EU15-South has not been much of a market for exports from EU11 countries, but markets in EU15-North and EU15-Continental countries (especially Germany) have helped keep EU11 exports resilient despite the sovereign debt crisis in peripheral Euro area countries. The EU15 export share with EU11 countries doubled from less than 4 percent in 1996 to almost 8 percent by 2008, and the EU11 export share with the EU15 has remained around 60 percent for the past two decades.

---

16 While EU15-Continental comprises six EU countries (Austria, Belgium, France, Germany, Luxemburg, and the Netherlands), the aggregates are largely driven by Germany. The latter accounts for almost one half of the EU15-Continental output.
Considering the size of their economies, the EU11 countries are the export champions of Europe. Except for Romania and Bulgaria, the EU11 economies have the largest export-to-GDP shares in the EU, averaging more than 50 percent in 2009–2010. Slovenia, the Czech Republic, Slovakia, Hungary, and Poland also had the largest increases in export shares over the last decade. In EU11 countries, machinery and transport equipment comprised more than half of exports in 2006–2008, with the fastest-growing subcomponent being cars and other road vehicles. However, export growth has not been uniform in EU11. Though trade barriers have been reduced, some countries continue to lag in competitiveness.
Europe’s most developed economies have been increasingly outsourcing sophisticated tasks to their EU11 neighbors. Measures of both export sophistication and relationship-specificity (RSI: the fraction of differentiated inputs embodied in exports) show that trade within Europe is becoming more complex even as trade with non-European partners becomes less so. The sophistication of intermediate exports from EU11 to the EU15 rose by about 15 percent from 1996 to 2005, though it has flattened since then. Moreover, the sophistication of EU11 exports to EU15 rose faster than its exports to markets outside the EU. Again, using an EU15 lens, the EU11 countries are becoming increasingly sophisticated as both sources and markets for goods.

Trade in modern services in Europe is increasing, but not fast enough. While costs of cross-border transactions for goods have plunged, for services the single market is still a work in progress. In recent years, intra-EU services exports have grown slower than exports to non-EU countries despite the Service Directive and other initiatives to push regional integration in services. However, EU11 countries integrated faster within the internal market than with the rest of the world. From 2004 through 2008, services exports from EU11 to other EU members grew annually by 24 percent—6 percentage points higher than exports to non-EU countries. But progress is mixed: travel and financial services have done well, transport and other business services—especially those involving new technologies and the Internet—have not. In EU11 countries, the share of services traded is almost double what it was when the transition began.

Better facilitation of trade in services could generate momentum for EU income and productivity growth. With reforms that make adopting newer technologies easier, better regulations, and greater mobility of workers, Europe’s trade in services could triple in the next decade. More importantly, productivity in the general services sector—which is about 70 percent of GDP in Europe—would increase.

Integration of financial services in the last two decades was crucial in facilitating financial flows from the EU’s richer, slower-growth countries to less-developed, fast-growing new member countries. While financial integration worldwide progressed rapidly starting in the late 1990s, Europe stands out for the regional deepening of financial integration, especially in the EU11. As theory would predict, in Europe capital flowed downhill, from richer to

Figure 10. EU11 Exports to EU15 by Country Groups, 2010

Source: Eurostat, World Bank staff calculations
poorer countries. Between 2004 and 2008, the average annual capital flow from advanced to emerging economies was more than 10 percent of GDP, compared to about 4 percent in Latin America and the Caribbean.

**Furthermore, the composition of the capital flowing into EU11 was different from that of capital flowing into emerging countries in Asia or Latin America.** First, the amount of foreign direct investment (FDI) in emerging Europe was higher than in other emerging markets (Figure 11). In EU11, median average annual FDI inflows were more than 5 percent of GDP between 2000 and 2008; meanwhile, in EU15 median average annual FDI flow was slightly negative. Second, banking and other flows promoted financial integration. The median share in GDP of foreign assets plus liabilities increased from less than 100 percent in 1997 to more than 200 percent just before the crisis broke in 2008. In emerging markets in East Asia and Latin America the median ratio for 1997–2008 never topped 125 percent. Third, entrance of Western banks helped to strengthen corporate governance in the financial sector. In the EU11 countries, foreign ownership of banking system assets today accounts on average for over 80 percent of total assets; the range runs from 25 percent in Slovenia to 99 percent in Estonia. As a result, money and banking markets integrated the most, government bond markets and equity markets the least.

**Figure 11. Capital Flows, Average of Group Median Values, (Percentage of GDP)**

Source: Gill and Raiser (2012); World Bank staff calculations.

Note: EU coh = EU cohesion countries; E. prtn = EU eastern partnership countries; LAC = Latin America and the Caribbean region; CA = current account; FX = foreign exchange.

17 In other parts of the world, capital flows went uphill – from poorer countries like China to richer ones like the United States. This pattern, though puzzling, is well-established.
In some cases financial integration and closeness to Western European finance led to excesses, making EU11 countries vulnerable to financial deleveraging of Euro area banks. Access to finance made it possible to borrow from abroad for investment not only to fuel growth and convergence but also to finance the consumption that has made these economies vulnerable to sudden reversals in capital flows. Financial integration has led to rapid growth in private credit in EU11. The credit growth was supported not only by such supply factors as access to finance but also by demand for housing and consumer durables. Moreover, residential overcrowding in the new EU countries was much worse than in the old EU member states (Figure 12).

**Figure 12. Primary Residence Overcrowding, 2009 (Percent of tenants)**

Trade and finance will remain pivotal for convergence. As Europe looks for new ways to boost both incomes and productivity, it could consider deepening integration of trade in both goods and services. While there is certainly room for the EU11 countries to export more niche products and services, they can also achieve growth by improving the sophistication of the goods and services they export. Though financial integration will continue to power the EU convergence engine, deleveraging of Euro area banks from their EU11 hosts has spurred home and host authority coordination efforts in support of stable cross-border banking.\(^1^8\)

---

\(^1^8\) The European Bank Coordination (“Vienna”) Initiative was established at the height of the global crisis of 2008-09 as a private-public sector platform to secure adequate capital and liquidity support by West European banking groups for their affiliates in Central, Eastern, and Southeastern Europe. The initiative was re-launched in January 2012 in response to renewed risks for the region from the Euro area crisis.
Enterprise and Innovation: Closing the Productivity Gap

Europeans believe that private enterprises are accountable to shareholders for profit, but they also have more responsibility for the social and environmental consequences of their actions than businesses elsewhere in the world. Firms are therefore expected not only to significantly contribute to job creation and job security but also to be globally competitive. This belief also induces more widespread regulations in social and environmental policies.

Over the last decade European firms have been successful in creating new jobs, increasing the value added to their products, and exporting to foreign markets. This general trend was driven by EU11 countries as well as those in EU15-North and EU15-Continental. In EU11 economies, from 2002 to 2008 growth in average employment was about 2.7 percent and in value-added about 5.6 percent; meanwhile the same countries were exporting the equivalent of about 54 percent of GDP to foreign markets.

Fueled by the expansion of the services and construction industries, EU11 was generating almost twice as much employment as EU15, even though in much of the region growth in manufacturing jobs was negative. From 2002 to 2007 the number of jobs in service industries grew above 3 percent in Latvia, Romania and Estonia and reached its overall maximum of 5.9 percent in Lithuania. In contrast, between 2002 and 2007 growth in Slovenian manufacturing jobs averaged just 0.6 percent, and manufacturing employment actually shrank in Hungary (-0.9 percent) and Latvia (-1.4 percent). Negative employment growth dynamics in the more traditional industrial sectors have been evident throughout the EU11.

Within EU11, the firms that are creating jobs are of different sizes. In the Slovakia, Estonia, and Romania, for example, employment growth occurs mainly in firms with less than 10 employees, while in Bulgaria and Poland, it is large firms that are net job creators. From 2002 to 2007, in Slovakia average annual employment growth in firms with less than 10 employees was 11.4 percent, while it was just 0.4 percent for larger firms. In the same period in Hungary, the number of jobs in firms with less than 10 employees decreased by 0.1 percent, but employment in large firms grew between 10 times faster (to about 1 percent).

Since 2000, an increase in labor productivity has led EU11 value-added to grow more than twice as fast as in the EU15. Not only did EU15-South fail to gain much in productivity in the last decade, firms there tend to be less internationally competitive. Although in absolute terms, labor productivity is substantially higher in EU15 than EU11, the gap has narrowed significantly over time. From 1995 to 2009, for instance, EU11 countries made the largest productivity gains in the whole EU, with productivity shooting up by 2.5 percent in service industries and about 5 percent in manufacturing.
According to the 2011 and 2012 editions of *Doing Business for Eastern Europe and Central Asia* EU11 countries are among the most-improved economies. In particular, Hungary has substantially facilitated the creation of successful businesses. Latvia has, among other things, reduced the time it takes to export and import by introducing electronic submission of customs declarations. This allows Latvian companies to compete more successfully in world markets. Based on *Doing Business* indicators, the EU11 countries provide the same quality of business environment as most EU15 economies (Figure 14).

**EU11 countries that perceptibly improved their business environment were able to attract FDI.** The decision to cut the red tape involved in starting businesses helped these economies attract international investors. Among the leading EU11 FDI recipients are Bulgaria, the Czech Republic, Estonia, Hungary, and Slovakia, all of which have tidied up their doing business indicators in the last two decades. At first glance, the most productive investments seem to be directed toward EU11 economies that have a more business-friendly environment. Arguably, a more-business friendly environment is a pre-condition for making FDI investments more productive.19

---

19 Empirically, Harding and Javorcik (2011) demonstrate that promoting investments in emerging economies increases FDI inflows into these countries. The total economic impact of the improved business environment in EU11 economies deserves more careful scientific treatment. It would be interesting to assess empirically whether similar FDI projects in EU11 economies with different business environments progress differently. Finally, to fully understand how business regulation affects firm size, productivity, etc. it might be helpful to compare firms within each EU11 country. Differences between countries might have other causes than simply differences in the business environment. Studying variation in regulation of different industries within EU11 economies could be a source of information for future studies.
Subsidiaries of multinational enterprise (MNE) networks are on average more productive than independent domestic firms. Foreign-owned firms outdo domestic in both average productivity and productivity growth (Figure 15). There are competing explanations for this. Because MNEs may simply cherry-pick the most productive domestic firms as acquisition targets, foreign ownership might not be sufficient to justify giving it credit for productivity gains (see, e.g., Loungani and Razin 2001; Almeida 2007). Or it may be that post-acquisition productivity growth can be used to isolate the causal effect of foreign ownership. TFP might be a more comprehensive and useful yardstick for measuring the effects of MNEs on productivity growth in EU11.20

Figure 15. Productivity Differentials, Foreign- and Domestically Owned Firms, Selected EU11 Countries

<table>
<thead>
<tr>
<th>Average productivity, 2008 thousand US$ per employee</th>
<th>Annual value-added growth, 2003–08 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic: 45</td>
<td>Domestic: 3.8</td>
</tr>
<tr>
<td>Poland: 26</td>
<td>Foreign: 4.3</td>
</tr>
<tr>
<td>Slovenia: 25</td>
<td>Domestic: 5.6</td>
</tr>
<tr>
<td>Croatia: 23</td>
<td>Foreign: 6.6</td>
</tr>
<tr>
<td>Estonia: 22</td>
<td>Domestic: 2.4</td>
</tr>
<tr>
<td></td>
<td>Foreign: 2.9</td>
</tr>
</tbody>
</table>

Source: Amadeus; World Bank staff calculations

Notwithstanding success in raising employment, productivity, and competitiveness, for long-run economic prosperity in open economies, innovative capacities are crucial. Enterprise and innovation—aided by deep and comprehensive regional economic integration—have enabled Europe to account for about a third of the world GDP with less than one-tenth of world population. Clearly, the EU is already one of the most competitive and economically sound regions in the world.

However, despite their solid growth record, the economies of EU11 score poorly on most dimensions of innovation. Interestingly, in the EU11 countries the correlation between innovation and TFP growth is slightly negative, while in EU15 it is positive. In part this is explained by the fact that returns on innovation vary in relation to both the stock of complementary investments in physical and human capital and a country’s position relative to the technological frontier. As countries get further from the frontier, the business climate is likely to be worse and the private sector less sophisticated, so that even the best ideas will yield little fruit. Moreover, as human capital in both the public and

20 For excellent surveys on estimation and calculation of firm TFP, see Del Gatto, Di Liberto, and Petraglia (2011) and Van Beveren (2012).
private sector gets weaker, R&D investments might produce fewer good ideas. To the degree that they displace investments in education or infrastructure, the turn on R&D could be negative.

**Figure 16. R&D Expenditure (Percent of GDP)**

![Graph showing R&D expenditure as a percentage of GDP](image)

*Source: World Bank estimates based on Eurostat*

**EU11 countries innovate mainly through osmosis.** Firms have demonstrated considerable ability to quickly adopt existing technologies using FDI and trade links as conduits. The increase in ownership by MNEs has induced massive FDI flows into EU11, with benefits for domestic firms. MNE activity is typically associated with technology transfer, which is expected to increase the productivity of the acquired firm (see, e.g., Uminski 2001). Moreover, direct competitors may benefit from productivity spillovers (see, e.g., World Bank 2001). The presence of MNEs fosters competition in local markets by forcing domestic firms to produce more efficiently (see, e.g., Kang 1993). Consequently, FDI is shown to increase productivity generally, which makes all (surviving) firms more competitive. This allows firms to produce on a larger scale, which is likely to enhance job creation. A higher share of FDI inflows relative to GDP can thus be expected to affect productivity positively.21

**In summary, over the last two decades, EU11 firms have become more productive and successful in competing in global markets, although in innovation EU11 countries are less effective than other EU members.** In the long run a lack of innovation could cause economic disadvantages. Fostering innovative firms should be a priority for EU11 policymakers.

---

21 There is variation in the outcome productivity variables that cannot be fully explained by FDI inflows. One remarkable result is that productivity growth varies a lot for countries that attract very similar amounts of FDI (see, e.g., Latvia and the Slovakia).
Labor: Overwhelming Demographic Challenges

The degree of social protection European workers enjoy in the form of employment protection and social benefits is significantly higher than in any other developed region. The generosity of the social protection system allows Europeans to maintain a balance between work and leisure. While this pillar of the European growth model has obvious benefits for workers, it discourages labor participation and is a burden on the public finances. Europeans do indeed work less and retire earlier than Americans. Over the last four decades the effective retirement age in Europe has systematically declined in Europe even though life expectancy has risen significantly. Relatively low labor mobility adds to the problems Europe faces in achieving efficient allocation of labor within and between countries.

EU11 social protection indicators do not seem to be systematically different from those in the rest of Europe. Though EU11 employment protection laws tend to be less stringent than elsewhere in the EU, its market protection indices have been converging with those of the EU15 in recent decades, both because Western European economies have adopted more liberal labor market policies and because EU11 countries have increased protection.

![Figure 17. Employment Protection Index](Image)

Source: OECD Indicators of Employment Protection

Note: Scale from 0 (least stringent) to 6 (most restrictive)

![Figure 18. Hiring and Firing Practices Index](Image)

Source: World Bank Doing Business

Labor costs have accordingly risen faster in EU11 than in EU15, in line with the convergence in labor productivity. Current labor productivity levels correlate strongly with labor costs per hour (see Figure 19), both within EU11 countries and between EU11 and EU15 countries. In this sense, economic fundamentals appear to be responsible for the large increases in unit labor costs in EU11 over the last decade. For the case of EU15, such a correlation exists but is not as robust as in the case of EU11, suggesting that institutional factors play a more important role as determinants of unit labor costs differences in high productivity countries.

62
Given the relatively generous social protection system, expected demographic developments are among the most formidable obstacles to the sustainability of the European growth model. With employment protection high, social benefits generous, and reduced mobility, the most important methods for improving workforce productivity in the long term are to increase labor market participation and both develop skills and attract talent, meanwhile ensuring fiscal sustainability.

**Figure 19. Labor Productivity and Labor Costs per Hour, 2009**

Together the expected shrinkage of the working-age population and the dramatic rise in the proportion of the population above age 65 pose a serious threat to the European growth model. The median age in EU11, which is currently comparable with the rest of Europe, is expected to increase 6.8 years on average by 2050 (Figure 20). In the rest of the EU the increase is expected to be 5.8 years. The old-age dependency ratio in the EU11 will deteriorate with the share of the elderly in the population reaching 33 percent in 2060 from 16 percent in 2010. Currently, there are about 5 persons of working age for every person in pension age in the EU11. By the year 2060, this is expected to fall to less than 1.5 persons of working age for every person.

Since labor participation and savings rates both tend to be lower for older people, such a demographic development has direct effects on macroeconomic factors of production. If age-specific behavior with respect to participation in the labor market and saving is held constant, without remarkable increases in productivity, EU11 income per capita is likely to grow more slowly.

---

22 The demographic prospects of economies in Central and Eastern Europe were discussed extensively in World Bank (2007). See Annex 2 for more detail.
23 These figures are based on the median scenario of the UN World Population Projections.
The expected decline in labor force participation is larger and much more persistent in EU11 than in EU15. Taking into account the sizable differences in participation rates by educational attainment, methods put forward by Loichinger (2012) were used to obtain projections of the labor force for EU11 and the rest of the EU for 2015 through 2055 (Figure 21). The resultant benchmark labor force growth projections for EU11 and the rest of the EU suggest that the fall in the labor force in EU11 will be more dramatic than in the rest of Europe. The loss in labor force for the forthcoming decades is expected to be of approximately 19% between 2010 and 2050 in EU11, compared to 3% in the rest of the EU. The policy challenges posed by such changes in age structure in EU11 are thus even more urgent than in EU15.

The issues associated with these demographic developments are aggravated because EU11 does a poor job of attracting migrants. The difference between EU11 and EU15 in net migration rates is remarkable (Figure 22). The rate at which highly skilled workers leave the EU11 is the highest of the EU regional aggregates (Figure 23). To the extent that EU11 economies evolve toward innovation and technologically advanced products, a shortage of skills could constrain economic growth in the region. Creating incentives to bring skilled individuals back may soon become a priority for EU11 economies.

---

24 The method combines age-, sex-, and educational attainment-specific participation rates obtained from the European Labor Force Survey with population projections by age, sex and education calculated using the probabilistic population projection methods described by KC et al (2010)
Apart from increasing the retirement age, policies to increase EU11 labor participation rates will necessarily have to incentivize and retain highly skilled individuals. A wage premium as high as 25–30 percent was found recently for workers in Eastern Europe who had experience in Western Europe (Iara, 2008). Standard estimates of the returns to education in the region may thus not be very informative for domestic policy if decisions to migrate, and eventually to return, are taken into account. Such earning differentials have potent signaling effects for education decisions. They also may turn the EU11 “brain drain” into a “brain rental” by enabling the return of skilled emigrants to the region. Such beneficial effect, however, requires impulses in terms of demand for skills in EU11 and thus the fostering of innovation activities and entrepreneurship to attract talented emigrants back to the region.

See also the theoretical underpinnings in Mayr and Peri (2009).
Persistent sizable differences in participation rates by educational attainment can be seen in the EU (Figure 24), and are significantly larger for women. Currently, the share of EU11 population aged 30-34 with tertiary education is about 21 percent, compared to more than 30 percent in EU15-Continental and EU15-North. Further educational expansion at the tertiary level may to some extent be effective in attenuating the detrimental effects of population aging. The average for individuals with tertiary education in EU11 also hides considerable differences between countries in the region. Certain economies might thus earn significant income growth dividends from using investments in human capital to increase participation.

EU11 investments in human capital are also expected to significantly accelerate the income convergence process. In order to quantify their effect on convergence, the previous income projection exercise was repeated assuming that EU11 invests more than EU15 in human capital. The results (Figure 25) indicate that EU11 countries have ample room to speed up income convergence significantly by investing in skills formation. Based on both the benchmark scenario and a scenario implying that EU11 invests more in human capital, the distributions of relative income per capita in 2050 for EU11 compared to EU15 indicate that a virtuous interplay of increased labor market participation and higher income growth is likely to result from further human capital investments. This is particularly true for countries that have larger gaps with EU15 in terms of educational

26 Following Crespo Cuaresma, Havettová and Láhaj (2012), we assume that this share will grow at a speed estimated from the historical experience of countries at similar levels of educational attainment while tertiary educational attainment rates in the rest of Europe remain constant. That scenario implies that EU11 would over time build up a positive differential in human capital accumulation with respect to the rest of the EU that would materialize in a difference of 8 percentage points in the tertiary education attainment rate by 2050.
attainment and thus ample scope for increasing tertiary education attainment rates. In contrast, to improve labor participation through education policy in economies with already high educational attainment, it would be necessary to improve the quality of the educational system.

In sum, the demographic developments that are likely throughout Europe in the next few decades pose particular problems for EU11. To keep the economic growth model sustainable as society ages and labor force participation plunges, policies are needed to increase labor market participation (e.g., by raising the retirement age) and attract back skilled workers who have migrated. Over the long-term, further EU11 investments in human capital are likely to fuel labor market participation rates and economic growth.

Government: Institutions Converge, Differences Remain

For the last decade EU11 governments have been larger than those in emerging economies outside Europe, but smaller than in EU15. European governments tend to be large: the median government size was larger by 11 percent of GDP in EU15 and 13 percent in Eastern Europe than among their peers in other regions. In 2010, government spending accounted for over half of GDP in EU15 and over two-fifths in EU11. Only in Slovenia and Hungary is the size of the government comparable to the average in EU15. The smallest governments were those of Bulgaria and Romania. Social expenditures explain the variations (Figure 26). The composition of revenues also varies significantly between old and new EU countries (Figure 27). For instance, EU11 countries collect more in indirect taxes and nontax revenues than EU15 countries, but corporate and individual taxes still account for a small share of revenues.

A large government is a drag on growth. Over time, big governments tend to create sclerotic bureaucracies that crowd out employment in the private sector and lead to dependence on public transfers and public wages. Large public administrations can also produce organized interest groups keener on exploiting their powers for their own benefit than on facilitating a prosperous private sector (Olson 1982). Econometric results show a powerful inverse relationship in Europe between initial government size and subsequent growth, though not worldwide (Gill and Raiser, 2012). The results suggest that in Europe a 10 percentage point increase in initial government spending as a share of GDP is associated with a reduction in annual real per capita GDP growth of about 0.6–0.9 percentage points a year.
EU11 governments are larger than other emerging countries outside Europe because social transfers are large, and the impact of transfers on growth is not as significant as that of spending on public investment or education. Indeed, the regression results for Europe show that social transfers have a consistently negative effect on growth, even though the coefficients vary in size and significance. High social transfers might well be the negative link from government size to growth in Europe.

But size is not the only feature of government that matters – what the government does also matters. The process of EU integration has helped improve the quality of government in EU11 by strengthening the rule of law (well-defined property rights and a functioning legal system), facilitating economic openness, and promoting voice and accountability. While full income convergence is likely to take decades, the EU11 countries have already successfully adopted EU law (Figure 28). Having a common body of law with EU countries has strengthened the rule of law in the post-Socialist countries and has helped policy reforms implemented over recent decades to strengthen public administration and public financial management.

However, the quality of institutions in EU11 remains weak relative to EU15: government quality declines from north to south and west to east. Even though EU11 per capita income is still only about three-quarters of EU15-South, the region matches the south on the government effectiveness indicator (Figure 29). While all EU11 countries have made considerable progress in building up their institutions, in certain aspect there are still
gaps with EU15 countries (especially EU15-Continental and EU15-North). Estonia has made the most progress; its ranking in the Transparency International Corruption Perception index, on effectiveness of government is very close to EU15 levels.

Moreover, there is considerable scope to make government spending more efficient in EU11 countries. Although assessing the efficiency of the public sector is always challenging due to difficulties in measuring government output, many studies have identified vast “efficiency reserves” in the public sector: there is considerable scope for saving by, e.g., moderating public wages and pensions or enforcing private contracts. Public Expenditure Reviews of several EU11 economies, conducted in recent years by the World Bank, found three main sources of inefficiency: (1) Governments are slow to adjust spending patterns, especially in education, to shifting demographic trends; (2) incentives for local governments to save are weak; and (3) governments have attempted to improve equity without properly evaluating policy outcomes. In many EU11 countries generous social assistance and other benefits are poorly targeted.

Figure 28. Adoption of EU Law, 2009

![Bar chart showing adoption of EU Law, 2009.]

Source: Eurostat.

Note: The indicators shows the ratio of directives for which measures of implementation have been notified by Member States divided by directives applicable on the reference date by Member States.

Figure 29. Worldwide Governance Indicators: Effectiveness of Government Score

![Graph showing Worldwide Governance Indicators: Effectiveness of Government Score.]

Source: Worldwide Governance Indicators.

Note: Government Effectiveness (GE) – capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.

In the medium term the combination of large governments and inefficient spending will inevitably worsen the fiscal position, allowing debt to accumulate and becoming a drag on growth. Applying lessons from other countries about what works, EU11 countries have significant scope to make the bureaucracy leaner, fiscal institutions more reliable, public services more competitive, and tax administration more effective; and to use electronic government to keep citizens better informed. Otherwise, large governments,
moderating growth, weak institutions, and rapidly aging populations will cause large fiscal imbalances. During the crisis, deterioration in fiscal balances contributed more than 50 percent to increases in debt in EU11 countries. Post-crisis, while growth in public debt has slackened considerably, more than half of the ultimate increase was attributable to negative interest rate and growth difference (Figure 30). Because slow growth combined with the primary fiscal deficit will continue to push up EU11 public debt, fiscal consolidation must be a top priority for EU11 policy makers.

**Figure 30. Cumulative Changes in Public Debt and Causes, EU11 Countries (Percentage points of GDP)**

![Figure 30. Cumulative Changes in Public Debt and Causes, EU11 Countries](image_url)

*Sources: Eurostat, EU11 member country conversion programs, World Bank staff estimates.*
How to Sustain Medium-term Growth in EU11?

There are reasons to believe that convergence of EU11 income per capita to Western European levels will continue, but will proceed more slowly. Trade and financial integration have sped along at a spectacular pace in EU11 in the recent past, although trade in modern services and the integration of government bond and equity markets are somewhat behind. As in the rest of Europe, demographic developments will pose huge challenges for the sustainability of public finance in the EU11 economies. In the next several decades the EU11 labor force is expected to contract more than labor forces in the rest of the EU, making it even more urgent that countries in the region reform pension systems, change migration policy, and find incentives to attract talent to the region. Closing the gap with the rest of the EU in educational attainment levels and improving education quality might significantly soften the constraints imposed by the demographic threats and produce sizable returns in terms of additional income convergence.

In spite of the good prospects of further income convergence to EU15, the lessons drawn from the recent growth experience in EU15-South bring to the forefront the latent risks in terms of constraints to sustainable medium-run economic growth. The analysis in this paper identifies certain areas where structural features that may be growth-hampering in EU11 economies resemble those of countries in EU15-South. The lessons learned from the EU15-South region should help EU11 countries to optimize reform policies in order to achieve further income growth. In this respect, measures to improve the business environment, the government quality and spending efficiency, all factors which have been claimed responsible for slowing economic growth in EU15-South, need to be prioritized in the policy agenda of the EU11 economies. In addition, further developing the institutional basis for fostering innovation activities should be given a privileged treatment as an instrument to achieve income convergence. This is more the case since the recent crisis has led to a divergent trend in innovation spending within the EU.
References


Annex 1

COUNTRY GROUPINGS

**EU11**: Bulgaria, the Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovakia, and Slovenia.

**EU15**: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom

**EU15-South**: Greece, Italy, Portugal, and Spain

**EU15-North**: Denmark, Finland, Ireland, Sweden, and the United Kingdom

**EU15-Continental**: Austria, Belgium, France, Germany, Luxemburg, and the Netherlands
The EU11’s population has declined and aged in the past two decades. The EU11’s population fell from around 106 million people in 1990 to 102 million in 2010. In addition, the age structure of the population in the region has changed towards a larger proportion of the population in older age groups now than two decades ago (Fig 1). Between 1990 and 2010, the share of the population aged 60 and over increased from 9.1 to 12.3 percent. The share of the population aged 80 and over currently accounts for about 4 percent of total. Two key factors drove this change: the large decline in fertility rates (Fig 2) and the fast raising life expectancy (Fig 4). Life expectancy at birth has increased markedly over the last two decades, to about 75 from about 70 in 1990.

The phenomenon of population aging is not uniform across countries. Between 1990 and 2010, the EU11 population was aging fastest in Slovenia, which showed 6 percentage point increase in the share of people aged 60 and over. In contrast, in Slovakia the change in the share of the old age population was the smallest. In Bulgaria, Latvia, Croatia and Estonia more than 17 percent of the population is over age 60 today ().

Looking ahead, the EU11 countries will be aging fast with unprecedented changes in the size and structure of its population (see Figure 64, Figure 65). The overall EU11

---

population is projected to fall by about 15 percent between 2010 and 2060 due to three factors:
- Although the EU11 fertility rate is expected to reach 1.6 in 2060, it will be well below the natural replacement rate. It will also be significantly lower than the average fertility rate for the EU15.
- Between 2010 and 2060, the EU11 countries will experience only limited migration net inflows. Migration flows are hard to predict, but in the absence of major policy changes, they are unlikely to reverse the overall demographic pattern.
- Life expectancy is projected to continue to increase by about 1.5 year each decade, which is very similar pace to the rest of EU. According to the EC Aging Report, life expectancy at age 65 in the EU11 will continue to rise in the coming decades, reaching about 20 years for men and 25 years for women by 2060.

Figure 64. Average values for fertility rate, life expectancy, net migration flows in the period from 2010 to 2060, in the EU27, EU15 and EU10

Figure 65. Projected structure of the population by age group, 1 January (% share of total population)

Source: The EC (2012 Ageing Report)