EU and the CEE: Productivity and Convergence*

Boris Vujčić
Governor of the Croatian National Bank

Since the 1990s, Central and Eastern European (CEE) countries have gone through significant institutional and economic transition and most of them are now full members of the European Union (EU). Nonetheless, their economic convergence is far from over, while income and productivity gaps between Central and Eastern Europe and old Europe have not closed yet. Moreover, it seems that, since the onset of the global financial crisis in 2008, the convergence progress has slowed down. Faced with post–crisis challenges, the CEE countries will have to find new and more flexible drivers to support the relaunch of the catching–up process and to build more efficient and productive economic systems in years to come. So, let us revise what has been achieved so far, and look into where potentials for further improvement of the CEE economies lie.

The importance of productivity for the relative position of a country

The performance of the central and eastern EU member countries since the 1990s has been outstanding, making them a key driver of growth in Europe, and the only converging story on the old Continent. CEE countries started with a low level of productivity compared to old Europe. That was still the case even ten years into the transition. The productivity level was only half of the old Europe average in 2002 (Figure 1). However, convergence was very quick and productivity growth demonstrates just how fast this progress was. Since the early 2000s, productivity growth in the Central and East Europe was on average more than three times higher than in the rest of the EU (Figure 2). To a large extent that was due to a dismal performance of old Europe, which has barely seen any increases in productivity. This catch–up process has slowed down somewhat during the crisis, but is still in place.

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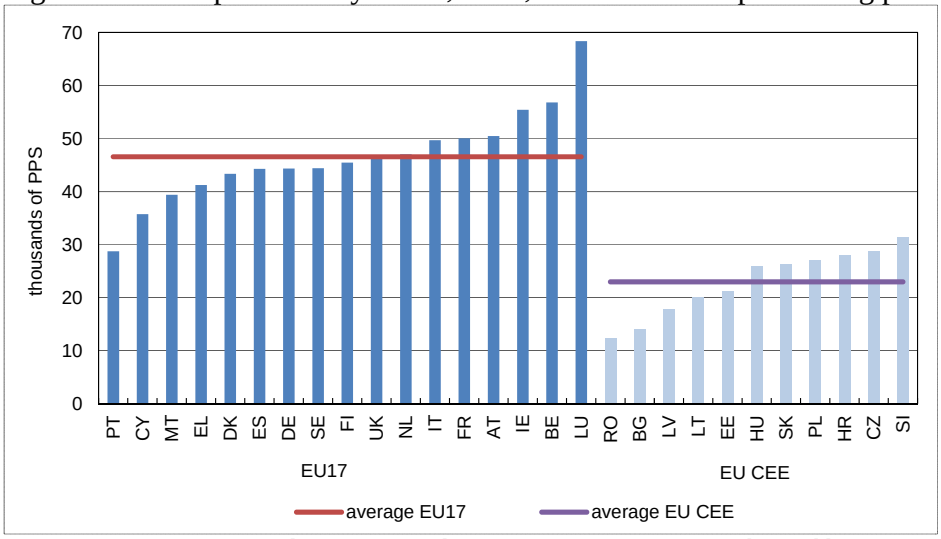
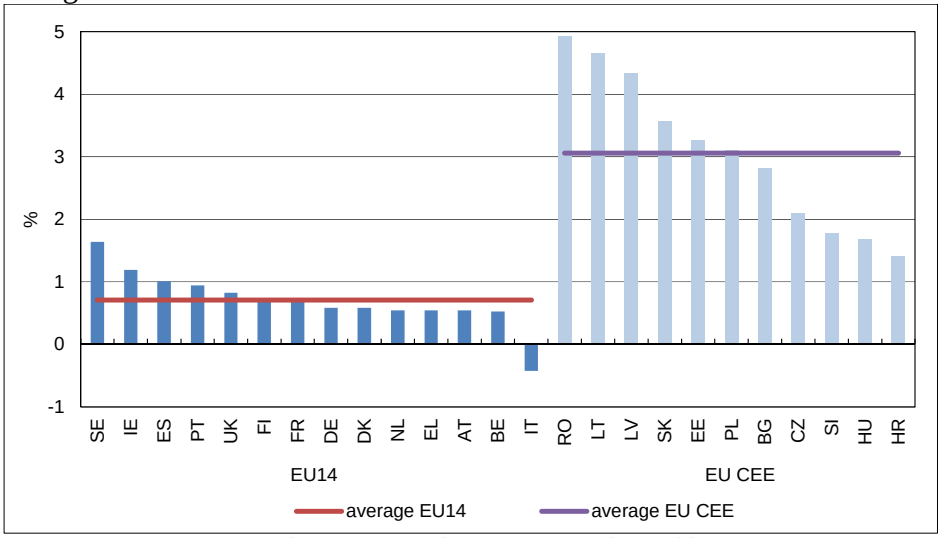
Figure 1 Labour productivity levels, 2002, in thousands of purchasing power standards (PPS)



Notes: AT = Austria, BE = Belgium, BG = Bulgaria, CY = Cyprus, CZ = Czech Republic, DE = Germany, DK = Denmark, EE = Estonia, EL = Greece, ES = Spain, FI = Finland, FR = France, HR = Croatia, HU = Hungary, IT = Italy, LT = Lithuania, LU = Luxembourg, LV = Latvia, MT = Malta, NL =Netherlands, PL = Poland, RO = Romania, SE= Sweden, SK = Slovakia, SI = Slovenia, UK = United Kingdom.
Source: Eurostat.

Figure 2 Real labour productivity growth per person employed, average annual percentage change 2002–2013



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Source: Eurostat.

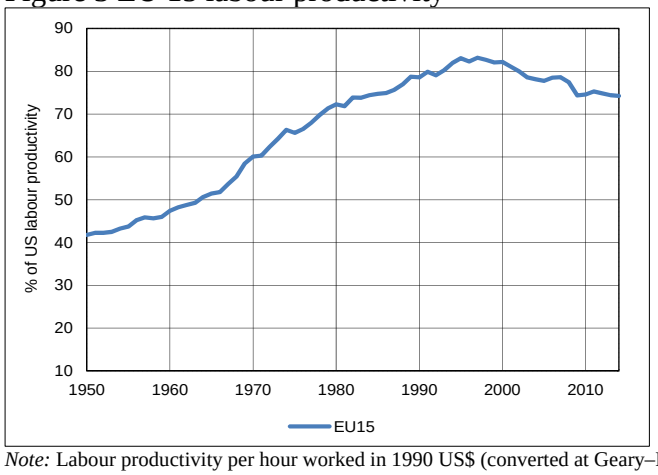
On the other hand, misallocation of resources remains a potential issue among EU countries. According to evidence published by the Competitiveness Research Network (CompNet 2014) of the European Central Bank (ECB) productivity was very heterogeneous across firms

operating within narrowly defined sectors, and distribution was not only disperse but also very asymmetric, featuring a large mass of low productivity firms and very few high productivity firms (Lopez–Garcia et al. 2015). According to available data for the CEE countries, Slovenia is among the countries with a better labour productivity distribution, while, at the other end, Romania has a significant cluster of firms in the low productivity area. Therefore, the data demonstrate significant potential for further increases in efficiency that can come from within–sector reallocation toward more productive firms that can generate further productivity gains.

Where does the EU stand compared to the US?

Using the old EU as the benchmark for the CEE countries is motivated by its role as the major economic and trade partner of the CEE economies, as well as by the objective of creating a fully converged common currency area. On the other hand, the United States (US) have, since World War II, been used as a benchmark for the convergence of Europe, as well as of the rest of the world. The crisis has revealed many of the structural and institutional weaknesses of the old EU. However, Europe's convergence progress towards the US actually stopped long before the crisis, in the mid–1990s. In the early 2000s, US productivity growth re-accelerated and the US-Europe gap widened. Today, old Europe stands at approximately 75 per cent of the US gross domestic product (GDP) per capita level (Figure 3), the same as CEE countries towards old Europe.

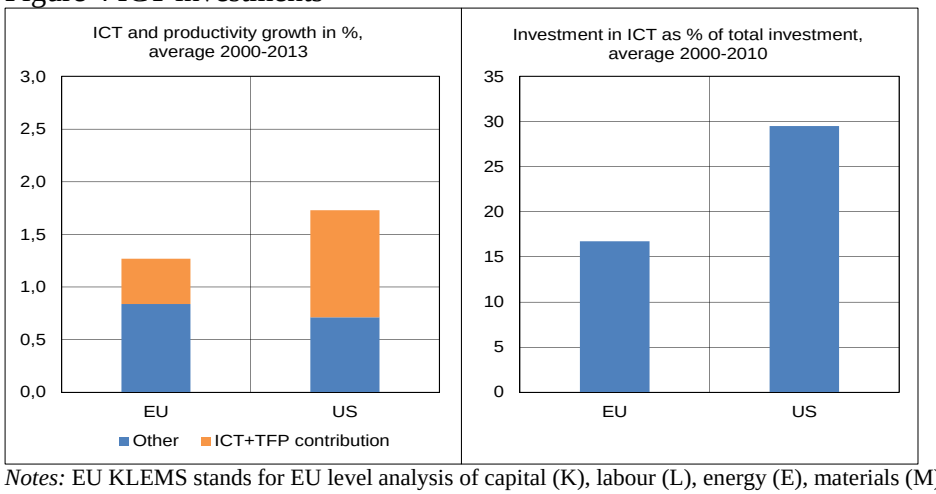
Figure 3 EU 15 labour productivity



Note: Labour productivity per hour worked in 1990 US$ (converted at Geary–Khamis (international dollar) purchasing power parity), US=100.
Source: *Total Economy Database, The Conference Board (2015).*

There is a large strand of literature trying to explain the differences in productivity between the US and Europe and much emphasis has been put on the information and communication technology (ICT) revolution. It has been argued that the reason for higher productivity growth in the US lies in the ICT contribution and the amount of investment in the ICT industry. According to the data, there is a significant difference in investment in ICT and the contribution of ICT and total factor productivity to the US increase in productivity compared to the EU one (Figure 4). Also, interesting research done by Bartelsman et al. (2010) shows that inflexible labour markets are not conducive to the growth of the ICT industry. In that sense, doing business, as measured for example by labour market flexibility but also by other indicators, is important for productivity growth. Fast–changing industries like the ICT are prone to shocks and need to have flexible conditions for hiring and firing. Thus, they will refrain from setting up their business in countries with overly regulated labour markets. This research shows that there are differences between the flexibility of labour markets in US and Europe, but also significant differences within Europe, making them more or less attractive for ICT investments.

Figure 4 ICT investments

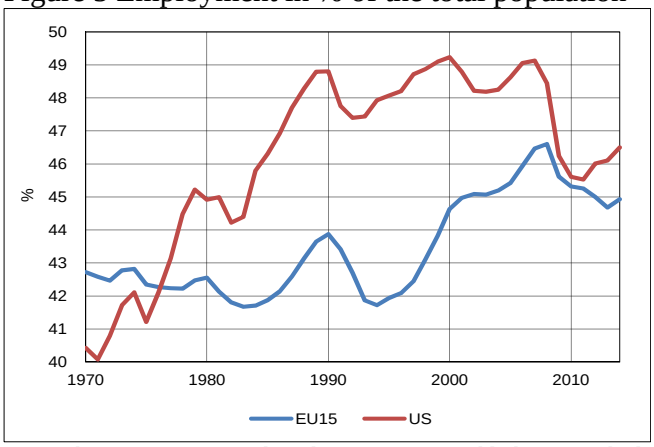


Notes: EU KLEMS stands for EU level analysis of capital (K), labour (L), energy (E), materials (M) and service (S) inputs. OECD = Organisation for Economic Co-operation and Development.
Sources: EU KLEMS; The Conference Board; OECD.

Part of the explanation behind divergent productivity trends also lies in working habits. There are two trends here. The first one is actually a favourable labour market trend in Europe that has served as a partial explanation of Europe's lagging behind in terms of productivity growth. Namely, since the mid–1990s Europe was converging towards the US in terms of increases in labour participation and employment and that trend was present all the way up until the beginning

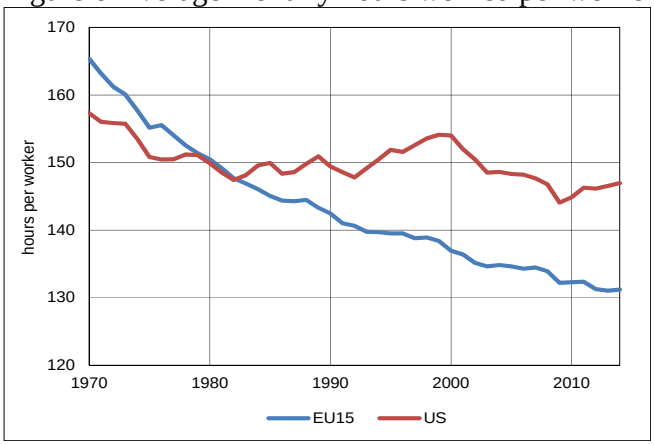
of the crisis. Since the breakout of the crisis, employment dropped both in EU and US, but at a much faster pace in the US. A few years into the crisis, however, it seems that US and EU are diverging again (Figure 5). Another crucial trend, but a less favourable one, is the one of continued decline in working hours in Europe (Figure 6), both in absolute terms and relative to the US.

Figure 5 Employment in % of the total population



Note: The EU15 average is based on average monthly hours worked.
Source: Total Economy Database, The Conference Board (2015).

Figure 6 Average monthly hours worked per worker

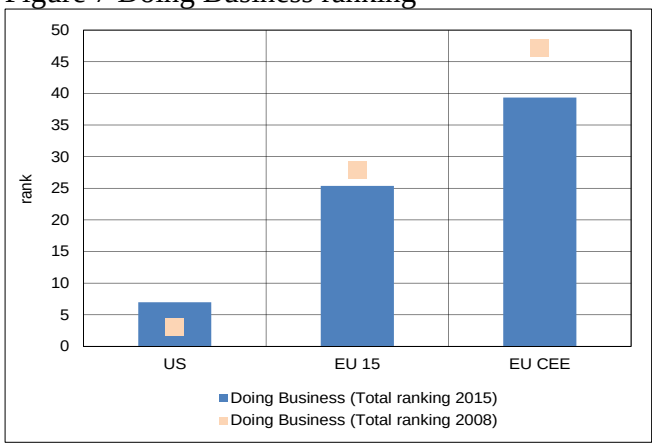


Note: The EU15 average is based on average monthly hours worked weighted by GDP (converted at Geary–Khamis purchasing power parity).
Source: Total Economy Database, The Conference Board (2015).

In addition, there are significant institutional differences between Europe and the US. According to 'Doing Business' data, the US is a place where the business environment is much more favourable than in old Europe, and CEE countries are lagging behind even more. Although CEE countries have done a lot since the beginning of their transition period, they improved their

business environment even more in the post–crisis period. Nevertheless, this is an area where CEE countries still can do a lot and thus contribute to future catch–up with old Europe, and the US.

Figure 7 Doing Business ranking

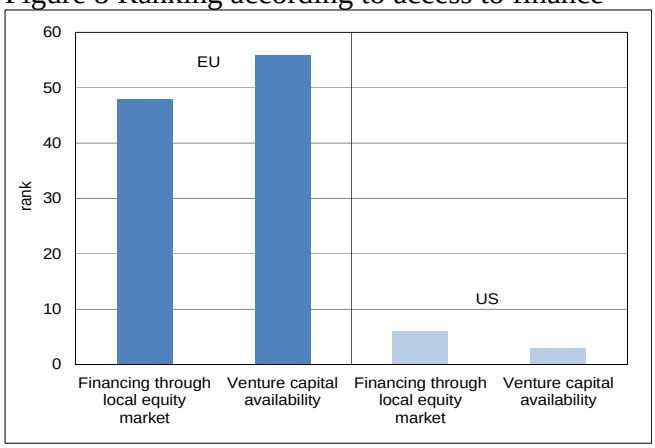


Notes: EU15 = average rankings of the 15 old EU members; EU CEE = average rankings of Central and Eastern European countries.
Source: Doing Business 2008 and 2015, World Bank.

Europe is lagging behind in business momentum. In the 1990s, all large companies and all fast growing companies were created in the US, not Europe. In addition, the evidence shows that US firms are more likely to expand or contract, while business in Europe is dominated by old static firms (Bravo-Biosca 2011). One can say that a Schumpeterian destruction works much better in the US than in Europe. Less dynamic business growth distribution in Europe points to less experimentation and to a slower reallocation of resources from less to more productive businesses, two very important drivers of productivity growth. In addition, the higher proportion of static European firms suggests lower competitive pressures, which is potentially damaging for long–term productivity growth. As a result, the process of job reallocation across firms is slower, hampering productivity growth in Europe. Unfortunately, Europe has been unable to create an environment for fast–growing companies. That is something that should be a goal for Europe as a whole, not just for CEE.

Finally, in terms of financing conditions, we can see large differences in the availability of financing through equity and venture capital between EU and the US. Young and prospective firms require access to financing sources in order to support their growth potential. Although this issue has been recognized in Europe, not much improvement is evident, except in rare cases, such as in the UK.

Figure 8 Ranking according to access to finance



Note: EU rank = GDP weighted average of EU28 country rankings.
Source: Global Competitiveness Report 2014–2015, World Economic Forum.

Going forward

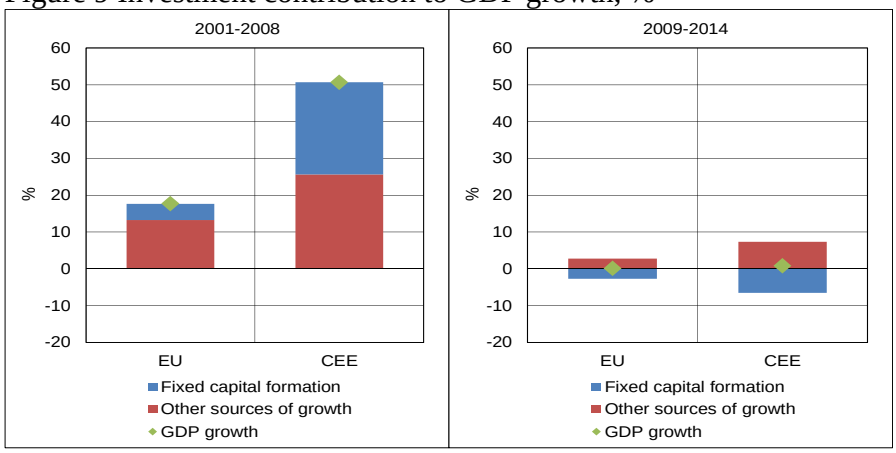
One thing that has marked the change in the world landscape since the early 2000s was very rapid growth of productivity in emerging and developing economies. It was not only Central and East Europe catching up towards old Europe, but the whole emerging market world catching up to the mature economies, which has significantly increased competitive pressures. Productivity growth in emerging and developing economies reached its peak around 2007. Since then, mature and emerging economies have embarked on a slower trend of productivity growth. This slowdown, for emerging markets, appears to be a result of the end of a rapid catch–up growth period (The Conference Board 2014, 2015).

Moreover, globalisation and increased trade integration have reduced barriers to market access, and led to the relocation of the production. The relative price of tradable goods declined, which might have influenced the long–term trends in the inflation rates. A more intense global competition prevents companies from raising prices and puts downward pressures on wages in many sectors. This might partly explain the absence of the usual, historical, reaction of inflation rates to the unusually expansionary monetary policies that central banks are running these days. Globalisation may have reduced the strength of the cyclical response of inflation to domestic output fluctuations. Prices of many items that are produced or consumed at home are increasingly determined by foreign demand and supply factors rather than local factors. Moreover, financial integration allows for larger trade balance deficits or surpluses and, thereby, weakens the

relationship between domestic output and demand. However, in the globalised, more competitive world, countries with the absence of wage flexibility and/or productivity response, experience a relative increase in unit labour costs (ULCs), which leads to an increase in unemployment rates, and/or increase in the public debt in the countries that decide to support weak sectors.

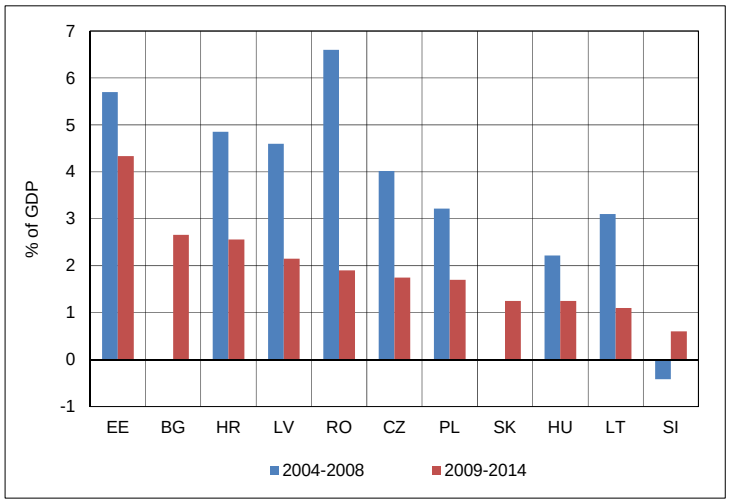
The crisis brought to an end the investment–driven growth model. The pre–crisis foreign capital inflows abruptly dried up, thus negatively affecting economic performance in the CEE region (Figure 9). In post–crisis period, net foreign direct investment (FDI) inflows fell in all countries of the region. In the pre–crisis period Slovenia was the only exception, recording net outflows of international investments; all other countries were recipients of a strong inflow of FDIs (Figure 10). Post–crisis, along with the downward–heading investment cycle, the CEE region was also faced with excessive private sector leverage. Rapid debt build–up in the run–up to the crisis raised concerns about the debt repayment possibilities during the crisis, which triggered a deleveraging process in the post–crisis period. Consequently, that has put an additional drag on investment recovery. Only once the debt becomes sustainable and collateral rates increase we can expect resumption in investment again. Completion of the deleveraging process is a necessary, but not sufficient condition, for restoring investment growth. The CEE region clearly needs to find new investment drivers, and they are more likely to be found domestically, as the pre–crisis abundant foreign capital inflows are unlikely to come back anytime soon (Dabrowski 2014). Hence, the key challenge for Central and Eastern Europe today is to manage the transition from imported productivity gains to endogenous sources of innovation as drivers of growth.

Figure 9 Investment contribution to GDP growth, %



Source: Eurostat.

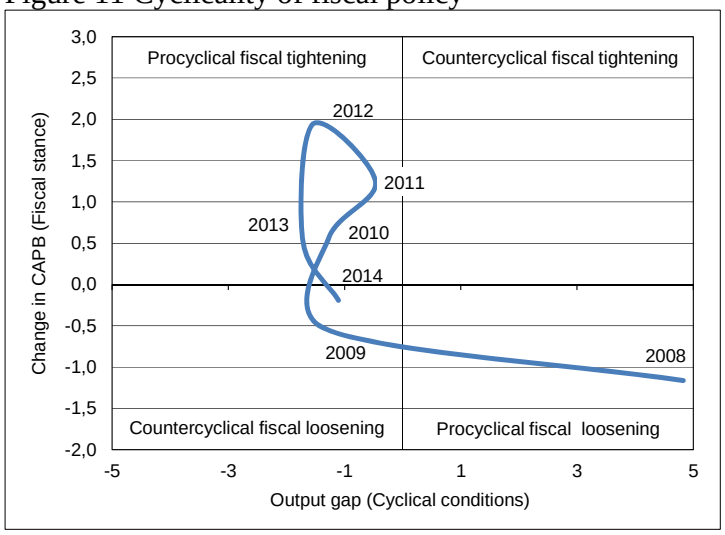
Figure 10 Direct Investment: Net incurrence of liabilities, average 2004–2008 and 2009–2014, in % of GDP



Notes: Average values for Bulgaria are obtained using 2010–2014 data and for Slovakia using 2008–2014. Net liabilities are calculated as difference between liabilities and assets and the positive sign refers to a net investment inflow. BG = Bulgaria, CZ = Czech Republic, EE = Estonia, HR = Croatia, HU = Hungary, LT = Lithuania, LV = Latvia, PL = Poland, RO = Romania, SI = Slovenia, SK = Slovakia.
Source: Eurostat.

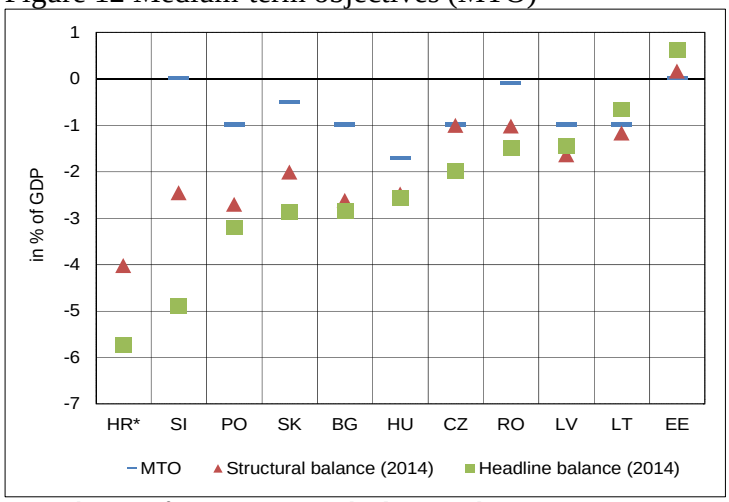
The question that arises is what policy tools are available to relaunch growth and convergence? Fiscal policy has been singled out by a number of economists as the desirable policy tool to support economic recovery. Yet, in reality, fiscal policy in the CEE region has behaved opposite to what would have been a desirable policy path. Fiscal policy was highly procyclical – expansionary before the crisis, while tightening in the midst of the crisis (Figure 11). So, why have countries not adjusted their fiscal policies to a more desirable stance? The answer is simple – because they had no fiscal space to do so. If you were in a wrong position in good times, you'll end up being in a wrong position in bad times. Which is very similar to the macroprudential policy stance. After years of expansionary policies that resulted in the build–up of high deficits and public debts, when the crisis struck, countries had no fiscal space to implement proactive countercyclical fiscal policies. High debt ratios now inevitably have to be sweated down and need to be brought to more sustainable levels. Except for the Baltics, none of the CEE members of the EU has reached their medium–term objectives (MTOs) set by the European Commission yet (Figure 12). In other words, if the fiscal Growth and Stability Pact will be enforced, public spending cannot be the driver of future growth, at least not in the medium term. Therefore, the investment rebound will have to come mainly from private sources, rather than through the fiscal space.

Figure 11 Cyclicality of fiscal policy



Notes: The output gap and the change in the cyclically adjusted primary balance (CAPB) are computed as GDP-weighted averages of EU CEE countries. The impact of government assistance to the financial sector is excluded from the calculation of CAPB. *Source: AMECO (Annual macro-economic) database, European Commission; Hrvatska narodna banka (HNB).*

Figure 12 Medium-term objectives (MTO)

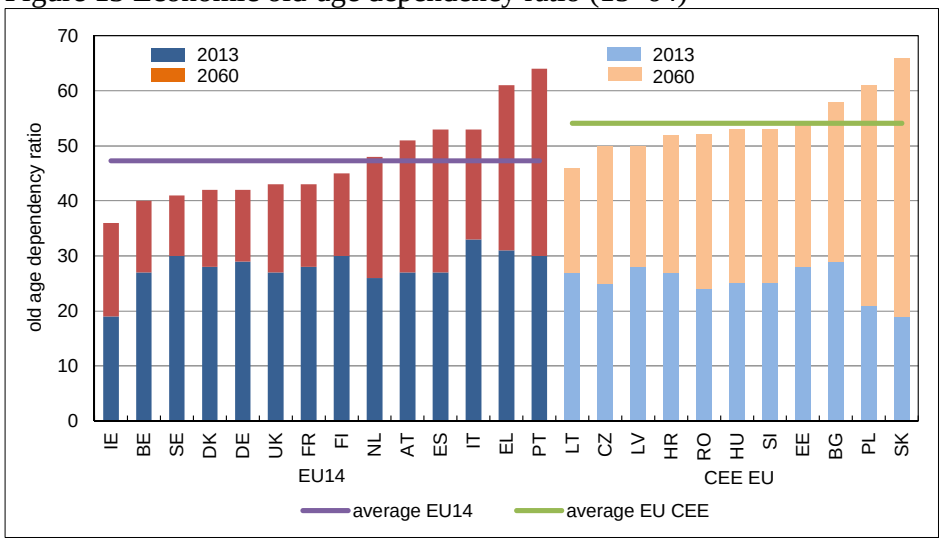


Note: The MTO for Croatia is yet to be determined.
Source: Eurostat; European Commission.

On top of the challenges mentioned above, there is also a serious longer term problem – the ageing of the population. It is a broader, European, and not only European problem, but the population is ageing faster in Central and East Europe than in old Europe, which makes it especially acute in CEE. The old–age dependency ratio will double until 2060 in many countries (Figure 13). This will not only put more weight on the growth prospects, but will also create additional pressure on the fiscal position of all countries, although at varying degrees. In order to address these

challenges, the authorities will have to re–think the compatibility of their labour market, pension and health care systems with demographic trends. Measures to increase the labour force participation rates seem to be an obvious, desirable, policy venue, alongside reforms of the pension and health care systems.

Figure 13 Economic old-age dependency ratio (15–64)



Notes: People aged 65 or above as % of the population aged 15–64. AT = Austria, BE = Belgium, BG = Bulgaria, CZ = Czech Republic, DE = Germany, DK = Denmark, EE = Estonia, EL = Greece, ES = Spain, FI = Finland, FR = France, HR = Croatia, HU = Hungary, IT = Italy, LT = Lithuania, , LV = Latvia, NL =Netherlands, PL = Poland, RO = Romania, SE= Sweden, SK = Slovakia, SI = Slovenia, UK = United Kingdom.
Source: Ageing Report 2015, European Commission.

Concluding remarks

With the limited space for fiscal and monetary policies, key priority for the CEE region is embarking on deep structural reforms. Monetary policy might have already done enough, if not too much. Furthermore, there is little or no fiscal space in most of the countries, particularly given the monetary policy constraints to support cheap government financing in the long run. Too long period of extremely low interest rates might become counterproductive, as it might induce more savings, rather than spending. Therefore, the CEE region needs to continue with reforms that increase the productivity of domestic economies, and in particular with 'Doing Business' reforms aimed at reducing the complexity and cost of complying with business regulation and strengthening legal institutions, as well as improving overall efficiency of the public sector.

To conclude, over the next decade CEE will have to move from a classical catching up by imitation and imported productivity gains to a more flexible and knowledge–based system with more value added and more diversified exports. The CEE countries will need to further increase productivity of capital and labour by their own means which makes investments in education, ICT and research and development (R&D) crucial. Fiscal policies will need to be directed toward restoring sustainability, while macroprudential measures should aim at safeguarding financial stability and avoiding recurrence of bubble episodes. Governments will need to find ways to encourage an environment that rewards experimentation, penalises inertia and reduces the costs of failure. This goes not only for the CEE countries, but also for all Europe aiming at building more efficient, dynamic and productive economic systems in the years to come. Finally, Europe, and in particular CEE, will have to re–think the compatibility of their labour market, pension and health care systems with a slowly, but surely, arriving challenge of rapidly ageing population. That will almost surely have to lead to the all sorts of policies supportive of the increase in labour force participation.

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