



NATIONAL BANK OF THE REPUBLIC OF MACEDONIA

Lingering low interest rate environment and monetary accommodation in the euro area - impact on the region?

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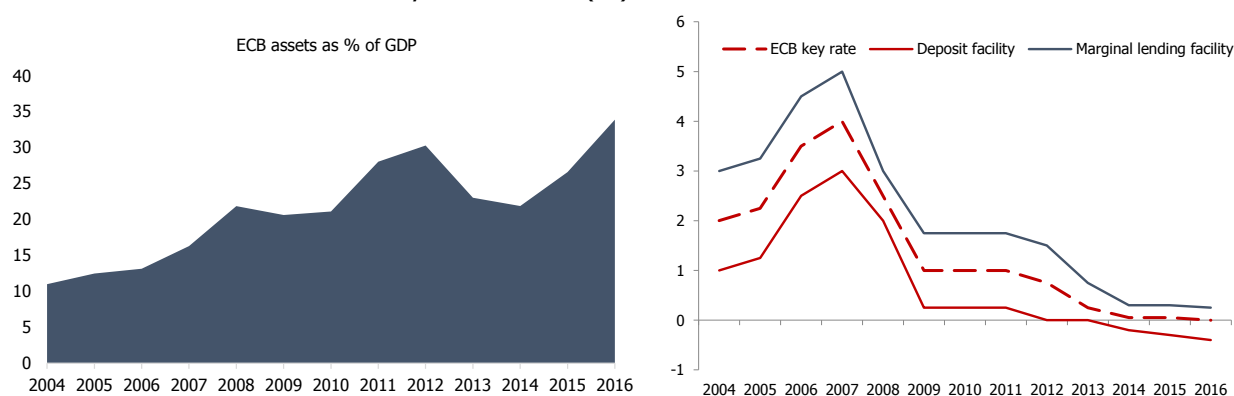
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Lingering low interest rate environment and monetary accommodation in the Euro Area – impact on the region?

A decade after the global crisis outburst, withdrawal of the ECB unprecedented monetary stimulus seems distant. The low interest rate environment, breaking of the nominal zero lower bound frontier and the enormous balance sheet of the central bank, linger on, being a reflection of the economic malaise and low inflation. Decisive standard and non-standard monetary policy² action supported the impaired financial markets and impacted the terms of financing and hence the recovery of the Euro Area economy. Yet, the growth agenda is to be completed, as healthy expansion is still not achieved and balance sheet crisis in the Euro zone is still present. Albeit for solving the growth puzzle a larger focus on structural policies and productivity growth is called, it is more than obvious that accommodative monetary stance of the ECB will persist in the forthcoming period, as a tool for growth support and for closing the gap between the current inflation and the medium term inflation target.

Chart 1: ECB balance sheet and key interest rate (%)



Source: ECB, WEO and Federal Reserve Economic Data

Having in mind the magnitude of the monetary accommodation and the fact that ECB tapering seems remote, this note investigates the effects the monetary accommodation produces on the countries in the Central and South-Eastern Europe³. All economies in the region are open economies with strong trade and financial linkages with the EU. Thus, there are a couple of channels through which the accommodative monetary policy of the ECB may be transmitted to the

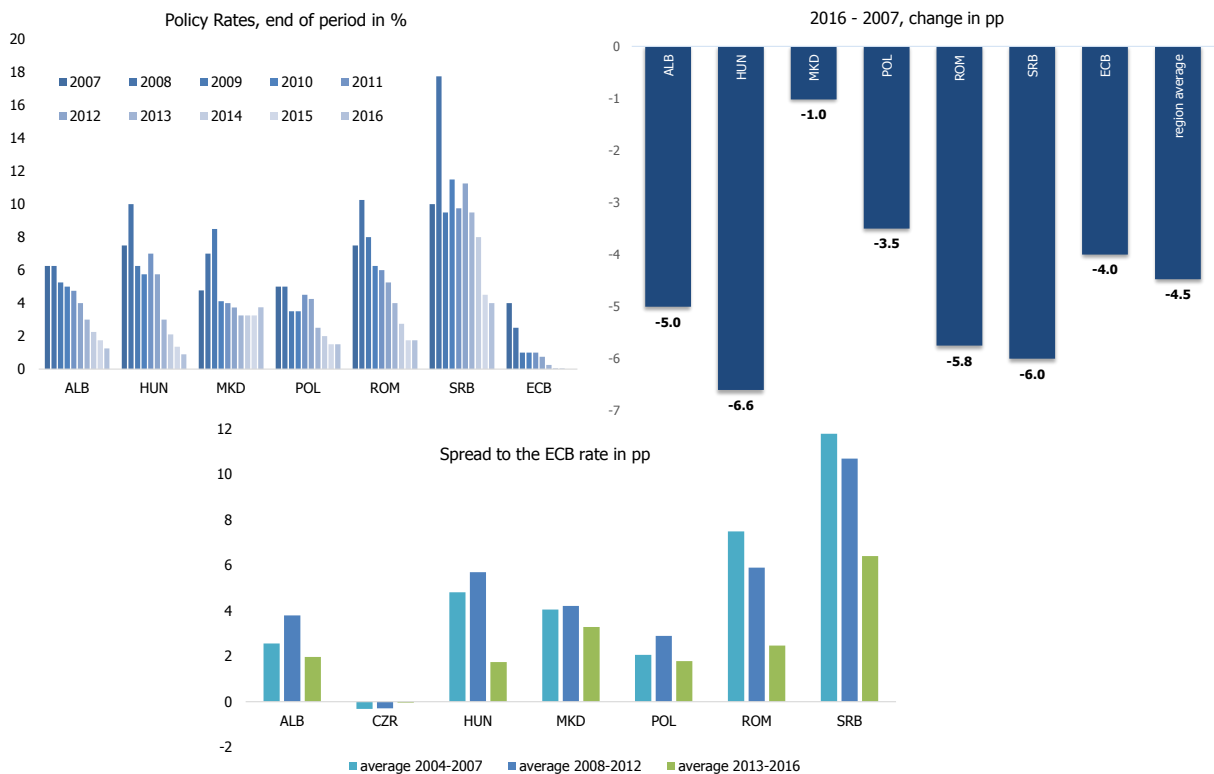
²Since 2009 ECB adopted a number of asset purchase measures aimed at stabilizing dysfunctional financial markets. Given the importance of the bank finance for the non-financial sector, the ECB undertook specific measures targeted at covered bond market, which is an important source of liquidity for banks. To ensure adequate depth and liquidity at secondary markets for government securities and increase the investors' confidence in 2010 Securities Market Program and later on in 2012 Outright Monetary Transactions were implemented. To support the lending to the private sector a credit easing package was introduced in 2014. To address the risk of prolonged period of low inflation, at the beginning of 2015 the Expanded Asset Purchase Program was adopted.

³Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Serbia, Slovenia.

region. In this analysis we will focus on the financial channel, i.e., on the extent to which eased financial conditions due to the ECB's unprecedented monetary stimulus has affected the financial conditions in the region. First, we will tackle the question on the synchronization between the changes in ECB rate and policy rates in the region, and subsequently the transmission to banks' lending rate as an indicator for the financing conditions of the private sector. In this context we will also touch upon the issue of the spread between foreign and domestic interest rates as an important factor that influences the room for monetary policy maneuver of the central banks in the region, especially for economies with some form of managed exchange rate regime. Given the fact that in many economies, the banking system predominantly relies on domestic sources of financing, we will also take a look at the impact on the yield on savings. Second, the ECB monetary policy through the quantitative easing, flooded the system with liquidity, part of which potentially could be allocated into the region. Therefore, we will analyze the financial flows in the region to better understand the abundance of the flows, changes in the pattern and in their structure. Third, we will explore whether the suppressed interest rates in the Euro Area have impacted the cost of sovereign borrowing of the government.

Despite the heterogeneity of the monetary policy and exchange rate regimes in the region, the policy rate reaction of the central banks has been mostly in line with the accommodative stance of the ECB. In general, low interest rate environment in the Euro zone allowed a room for lower interest rates in the region, without any major disturbances in the external sector. At the very beginning of the crisis, some of the countries due to some specific constraints were not able to follow the ECB actions, while since 2009 almost all economies followed a loosening pattern. This was the case for Macedonia, where the central bank initially tightened, as well in 2016, as a response to pressures on the exchange rate, which is a primary concern in a fixed exchange rate regime. Hungary was in a similar position, tightening the monetary policy stance, as a reaction to the pressures on the domestic currency and rising risk premium. In Serbia, apart from the tightening at the crisis outburst, it was also observed in 2010 and 2012, in presence of large deviation of the inflation from the inflation target. Yet, excluding these "episodes", the monetary policy stance in the region was lax, with policy rates declining across the board. The most recent data point to an average adjustment of policy rates close to 4.5 p.p. since 2007, which is a somewhat bigger adjustment compared with the change of the ECB policy rate (4 p.p.). The adjustment ranged between 1 p.p. in Macedonia and 6.6 p.p. in Hungary. Hence, the spread to the Euro Area rate narrowed in most of the economies, which was particularly pronounced after 2012, when a debate on the future of the single currency came to the fore. In such a context, when the anchor currency undergoes a crisis, the compression of the spreads seemed unlikely to become a hurdle for capital influx in the countries in the region.

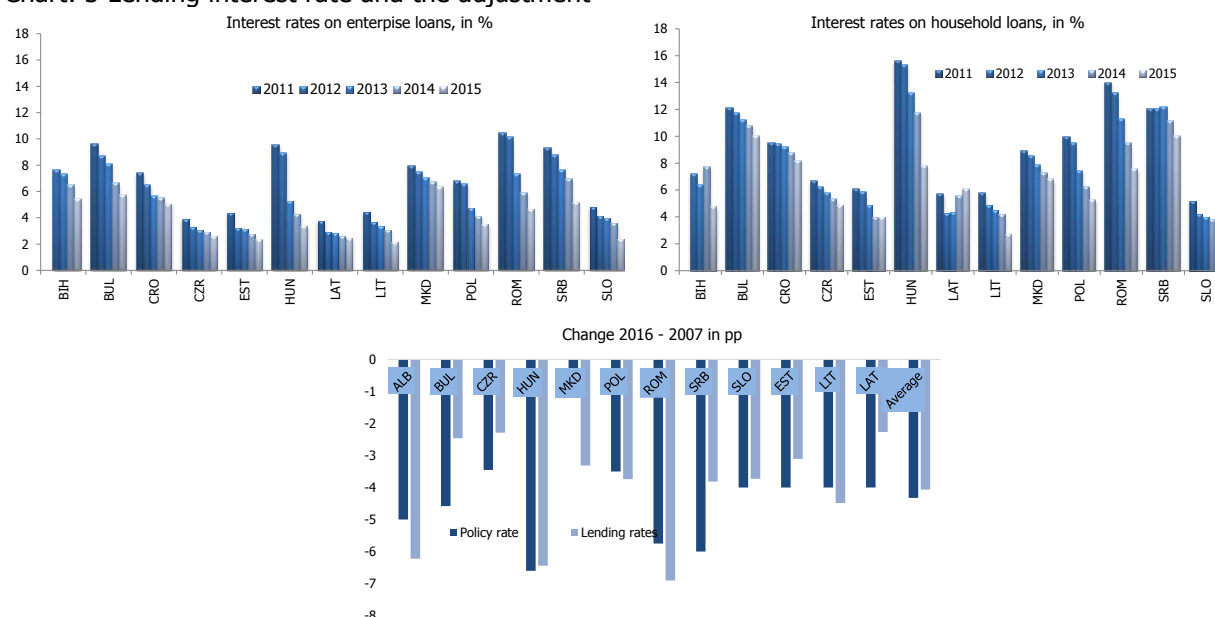
Chart 2: Central bank policy rates



Source: Central Banks' internet pages.

The eased monetary stance across of the central banks in the region led to loosening of the financial conditions for borrowing of the private sector. The scrutiny of the lending interest rate data reveals that the downward adjustment of the cost of credit is visible in all of the countries in the region. The ease of the lending rates was pertinent both for households and corporate sector, though in some of the countries, like the Baltic States, Romania, Bulgaria and Serbia, the correction of the interest rates on loans was more pronounced at the corporate segment. Macedonia and Poland have the feature of a sharper correction at the housing segment, compared to the corporate. The magnitude of the correction along different sectors is conditioned upon many specific factors, the initial levels, the riskiness of the portfolios, for instance, and hence it is difficult to infer which banking sectors had larger “pro-growth” adjustment in the interest rate policy. What is also important is the fact that the costs of financing were reduced, and the intensity of the reduction did not differ much compared to the changes of the key policy rate (highest difference of about 2 p.p. is observed for Macedonia, Serbia and Bulgaria). Thus, access to financing for both households and corporate sector was facilitated, contributing to higher propensity to borrow and underpinning economic recovery.

Chart: 3 Lending interest rate and the adjustment*



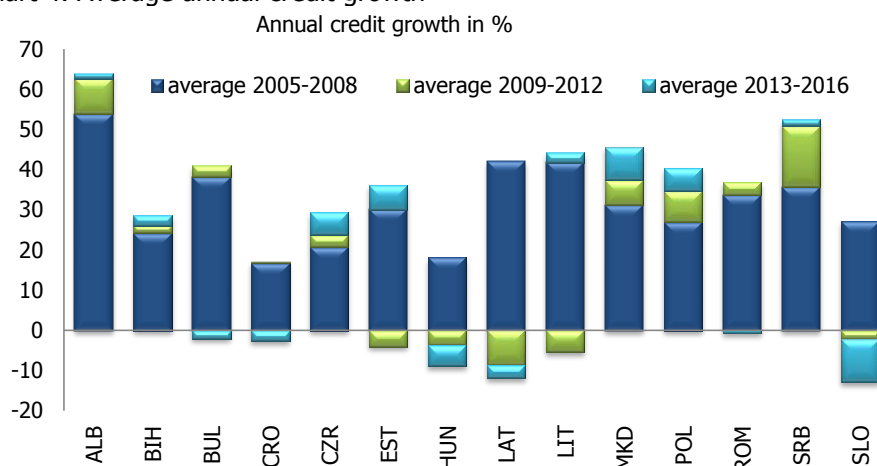
Source: Central Banks' internet pages. *Policy rates in Baltic countries are approximated with the ECB interest rate, while for Bulgaria, where currency board is in place, the interbank rate is used as a proxy.

The ease of the lending rates, was probably important, but not sufficient prerequisite for enabling stronger credit financial flows in the region. Although in the last couple of years signs of credit recovery are visible in many of the countries, it is still tepid, and in some of the countries deleveraging of the private sector continues. The average rate of change in the last three years is still negative in countries like Slovenia, Hungary, Latvia, Croatia, Bulgaria, indicating that some structural obstacles, such as high NPLS, new regulatory requirements, deleveraging of the private sector, still act as drag for a stronger credit revival. Also, cleaning up of the balance sheet of the banks may to some extent distort the data on the credit support. In order to make a qualitative dynamic review of the main forces behind the lending behavior of the banks in the region, we do a recap of the main findings of the CESEE Bank Lending Survey from 2013 until present day⁴. The recap points to several important conclusions. First, credit supply from being tight in the second half of 2013, was gradually eased until the first half of 2015. Afterwards it stabilized, and no major changes were observed. In all of the surveys, including the last one for the first half of 2016, the new regulatory environment and capital constraints, as well as the NPL ratio are pointed as key factors which adversely impact supply conditions. Second, demand for credits was improving throughout the whole period, since the second half of 2014 in particular. Furthermore, since 2015 credit demand for investments purposes is also visible, signaling positive structural shifts. Third, access to funding of the banks, in general was not signaled as problem even at the beginning of the survey, indicating that funding problems that emerged at the beginning of the global crisis were alleviated. But, it should be stressed that throughout survey vintages, a rebalancing of the

⁴ CESEE Bank Lending Survey, European Investment Bank.

sources of financing was visible. Given the deleveraging of the international banks present in the region, the intra-group financing which was receding was substituted with local funding. Easy access to retail and corporate deposits was reported as a feature in the second half of 2015, and the first half of 2016 as well.

Chart 4: Average annual credit growth

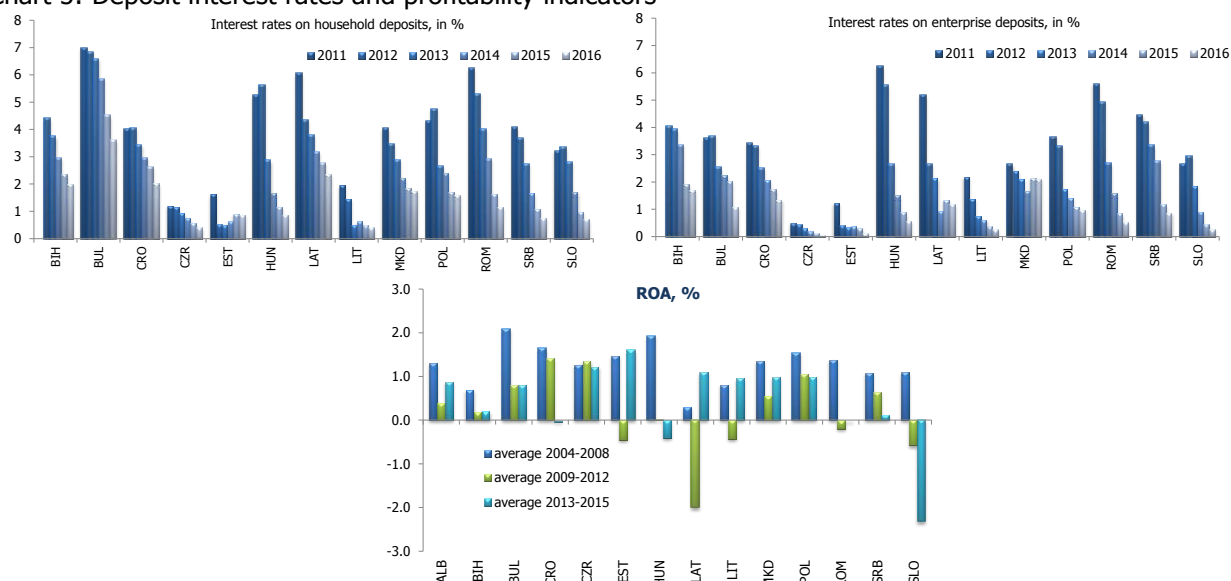


Source: Central Banks' internet pages.

In light of the rising importance of local funding as a source of financing for the banking systems in the region, and hence as a basis for further credit revival, one important aspect is the impact of low interest rates on the savings in the banking system. The dynamic observance of the deposits rates in the banking system of the region reveals a large downward adjustment of the yield on deposits, both for corporates and for households. The average deposit rate on households and corporate deposits for the region equals 1.4% and 0.9% in 2016, compared to around 5% and 4%, respectively in 2007.⁵ The correction is in line with the policy rate and lending rates adjustment, and reflects the natural response of the banks for preserving their profitability at acceptable levels. Yet, it seems that deposit interest rates in some of the countries in the region, in the members of the Euro Area in particular, are approaching the lower bounds. Albeit saving alternatives for the private sector in the region are limited, further drop in deposit rates might act as a constraint for further deposit growth. The falling opportunity costs can increase the propensity to hold cash or short-term funds in the banking system, thus eroding the quality of the financing sources and banks' ability to provide more credit. Still, given that recent bank profitability indicators point to a gradual improvement in profitability, profitability concern will probably weigh less on the deposit interest rates. Nevertheless, in few of the countries (Croatia, Hungary, and Bosnia) profitability indicators are still worrisome. In addition, further decline of the ECB rates, for some of the countries might also pose challenges in this regard.

⁵Interest rate data for Bosnia, Croatia, Serbia available since 2011, or 2012. Hence the 2007 figures do not include these countries, and Albania as well, for which sector by sector data is not available.

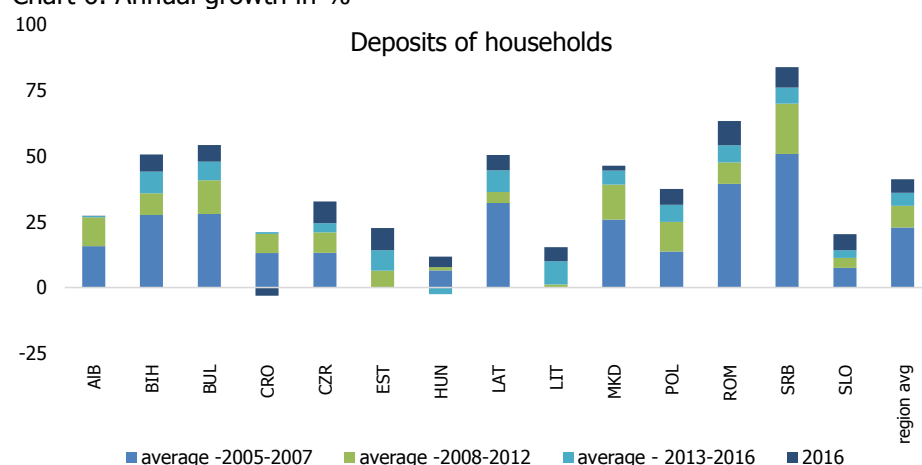
Chart 5: Deposit interest rates and profitability indicators



Source: Central Banks' internet pages.

The data on the average annual growth of households' deposits in the region show a sharp deceleration, compared to the pre-crisis period. Yet in the last three years the growth rate was rather stable and gravitated around 5%. On a country by country basis, there are some examples where the data do reveal need for cautiousness. Thus, in countries like Albania, Croatia, and Macedonia as well, the growth of household's deposits is tepid. In the first two countries, the average growth rate is around zero in the last four years, while in Macedonia, although the growth rate is positive, a slowdown is observed in 2015 and 2016. In the Macedonian case, a comparison of household's savings and its fundamentals was conducted, and the analysis revealed that the slowdown cannot be explained by the change in the disposable income, nor by other savings alternatives. Hence, some country-specific factors – political instability, and the drop in the interest rates were detected as possible causes for the slowdown.

Chart 6: Annual growth in %

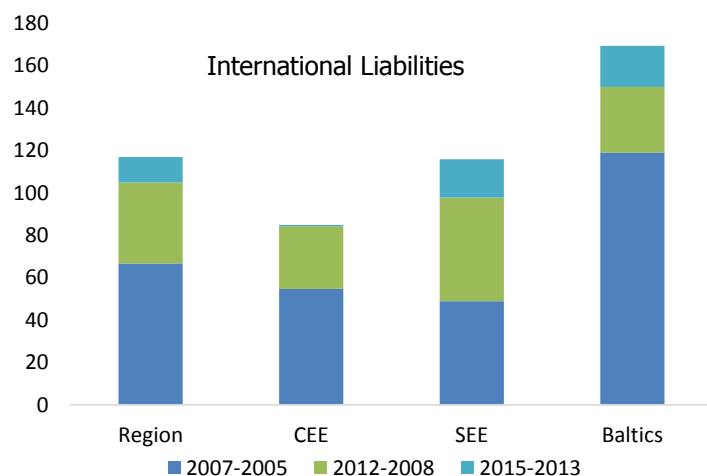


Source: Central Banks' internet pages.

Apart from the interest rate channel, quantitative easing is another possible spillover channel of ECB policy that so far has not been subject to a wide research. The expected outcome of the ECB assets purchase programs for the region would be allocation of part of the liquidity on the CESEE financial markets, enabling increase of the cross-border capital flows, compression of the longer term yields, of the government in particular and possible increase of the stock market indices. Most of the research concerning unconventional measures has been focused on quantitative easing of Fed and the research concerning the ECB measures has been scant. A recent empirical investigation on the matter, published in September 2016⁶, deals exactly with the spillovers of the ECB's non-standard monetary policy into the CESEE economies. The empirical investigation employs an event study methodology, assessing whether the announcements of the ECB non-standard measures affected the nominal exchange rate, long-term sovereign yield, stock market indices and portfolio inflows. The findings suggest that ECB measures had moderate impact on all of the variables. Furthermore, the study proceeds with empirical investigation of the effects on the dynamics of cross-border capital flows, distinguishing between portfolio investment and international bank lending. The results reveal that ECB non-standard measures may have enhanced cross-border flows to the CESEE region. We will try to tackle some of the above-stated questions, by observing the most recent data on balance of payments, which can be used as an indication of the dynamics and the structure of the capital flows. We will observe the period before and after the crisis, and in the latter one, in order to observe the most recent changes, we will focus on the last three years, in particular.

⁶Carlone A. and Colabella A., "Spillovers of the ECB's non-standard monetary policy in CESEE economies", Bank of Italy, Occasional Paper no.351, September 2016.

Chart 7: Cumulative financial inflows as % of GDP, changes in p.p.

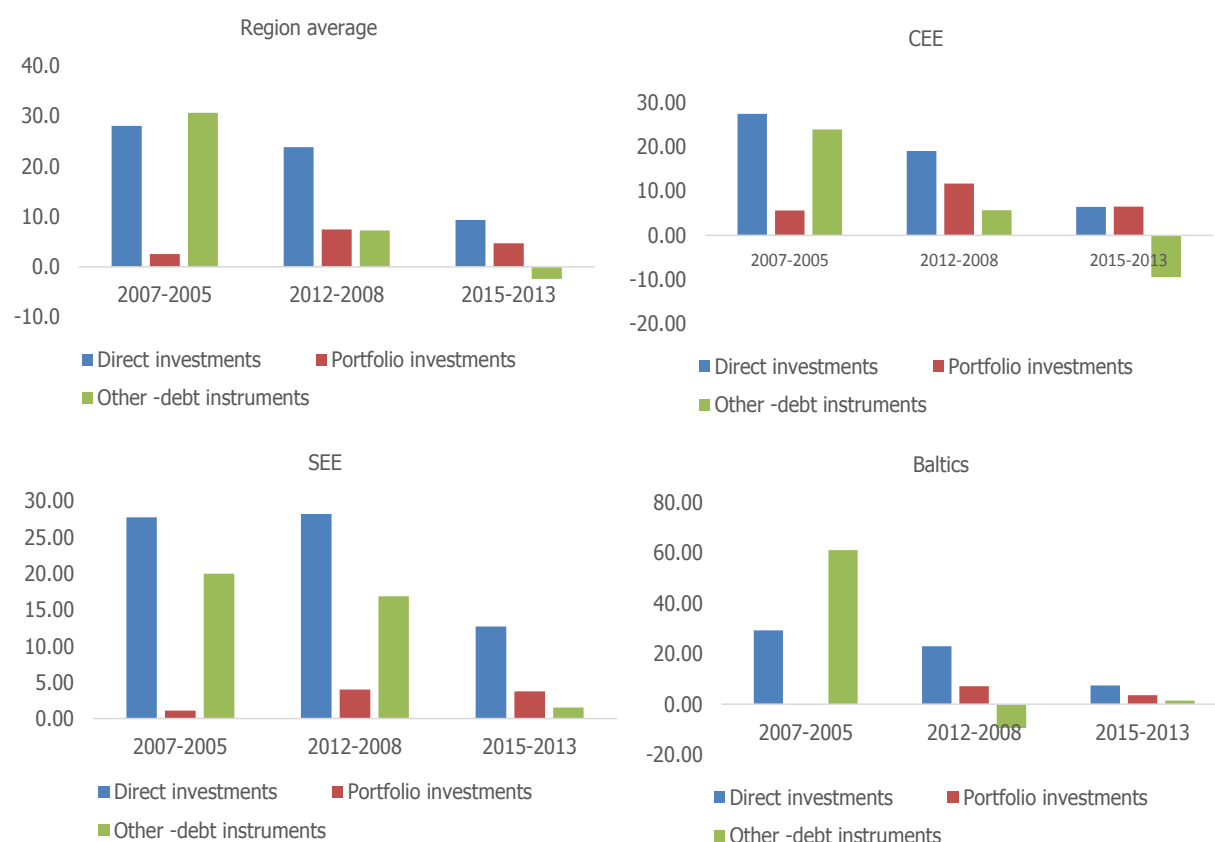


Source: International Monetary Fund, Balance of Payments Statistics.

Data from the balance of payments statistics used as an indicator for the capital inflows in the region point that overall capital flows have continued, but at a much slower pace compared to the pre-crisis period. The slowdown is visible in the most recent period, as well.

Thus, during 2013-2015 the capital inflows for the region on average amounted to around 12 % of GDP, compared to a cumulative growth of 38 % of GDP in 2008-2012 and 67 % during 2007-2005. The largest slowdown is observed for the CEE group of countries, where capital inflows almost stalled.

Chart 8: Components of capital inflows, cumulative change in p.p. of GDP

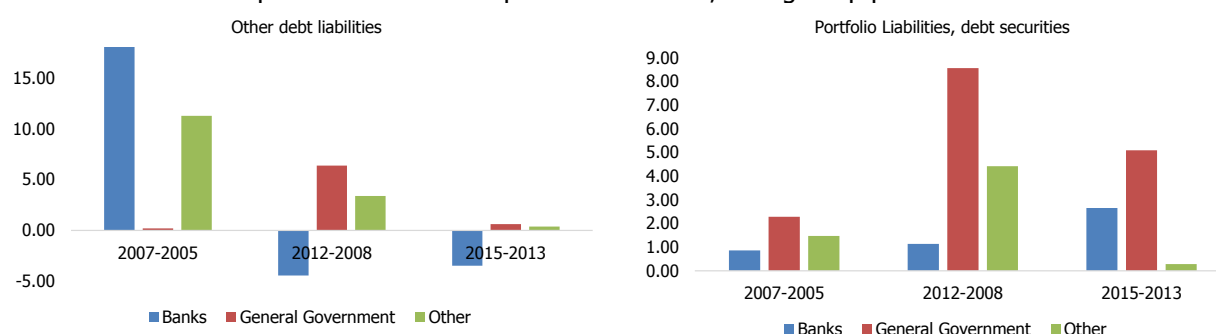


Source: International Monetary Fund, Balance of Payments Statistics.

The screening of the structure of the capital inflows pinpoints to a slowdown of all types of capital inflows. Foreign direct investments continued in the region, but at a slower pace especially during 2013-2015. In all three regions, direct investment flows moderated, but were positive on a continuous basis since the crisis. The slowdown of the portfolio inflows was the lowest. The dynamics of portfolio inflows is positive throughout the whole period for all sub-regions. Since 2008 on a cumulative basis portfolio inflows increased on average by 12 p.p. of GDP with highest increase observed in CEE countries of 18 p.p. of GDP. The portfolio flows were mainly driven by the debt component, while the equity component went through mild changes. The largest part of the debt portfolio inflows was driven by the government borrowing, reflecting its financing needs amidst expansionary fiscal policy and favorable terms of financing on the international market. The decline of the long term yields, as well as the fact that since the end of 2014, ECB started to purchase sovereign bonds and absorbed part of the market, opened more room for governments to borrow. Although it is difficult to draw any firm conclusions, the data point to possible spillover effects of the asset purchase programs to the region through the portfolio channel, in particular for the government sector.

As for the other flows, the most notable slowdown is observed for the other debt instruments. In the last couple of years even a repayment of other debt instruments is registered. The downward adjustment of the other debt instruments is observed in the CEE countries, while in the other two groups mild increase of the debt financing is seen in the most recent period. The more granular data reveal that this deleveraging refers to the banking system, and it is present across the board. This is consistent with the findings of the CESEE Bank Lending Survey, where banks report a reduction of the intra-group financing. Thus, this data does not provide any evidence for spillover effects of the quantitative easing through the banking liquidity channel that is the increased liquidity of the EU banks has not led to increased cross-border lending to their subsidiaries in the region.

Chart 9: Sectoral components of debt and portfolio liabilities, change in p.p. of GDP



Source: International Monetary Fund, Balance of Payments Statistics.

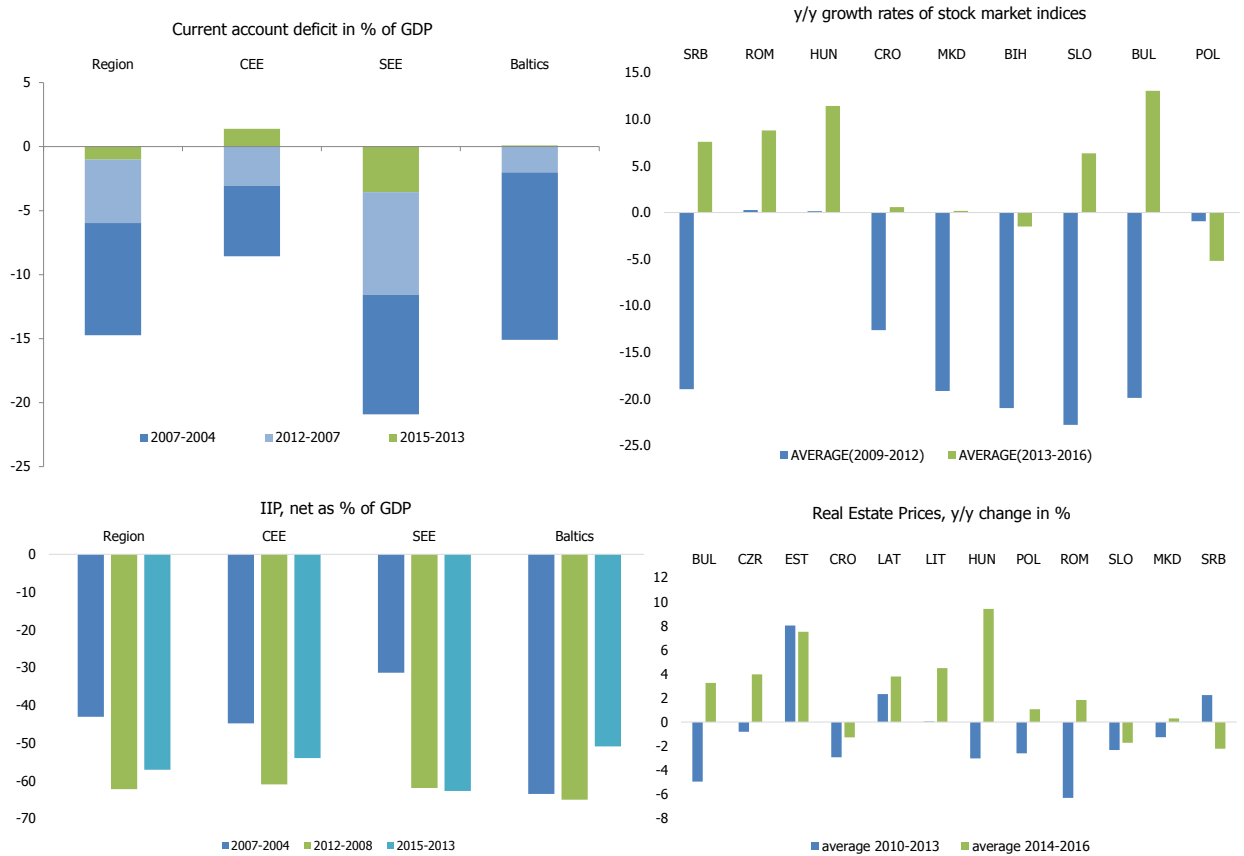
If we observe the dynamics of capital flows though international investment position lenses, conclusions change somewhat. The IIP data also points to a notable slowdown of the capital inflows and even to a decline in liabilities across all sub-regions in the most recent period. When dissecting the structure of the international liabilities, similar to the BOP data, a decline in the debt component in the last three years is noticed. The strongest intensity has been recorded in the CEE countries, but also in the other two regions as well, which was not the case to the BOP data where a very mild increase in the other two sub-regions is observed. According to the IIP data, deleverage refers to all three sectors, not only to the banking system, and it has been present in the last 3 years, with the exception of the banks where the deleveraging started since the emergence of the crisis. Same conclusions on portfolio flows, derived from the BOP data, can be also drawn from the IIP position. They continued to grow in the post-crisis period, driven mostly by the debt component of the government. As for the foreign direct investments, their growth in the last period stalled, mainly due to the decline observed in the CEE countries. In the other two sub-regions growth continued, but at a much slower pace especially during 2012-2015 period.

Overall, the data indicate that the ECB policy measures positively affected financial conditions in the region. First, loosening of the monetary stance through conventional instruments (policy rate) created a room for loosening of the monetary stance in the Central and South Eastern

economies without negative implications for the balance of payments. Reduced policy rates led to reduced lending rates thus decreasing the costs of borrowing of the private sector. Second, the ECB asset purchase programs that resulted in unprecedented increase of liquidity most probably positively affected the liquidity conditions in the region, as well. Although at a significantly decelerated pace, capital inflows continued in most of the countries of the region. Exceptions are the outflows from the banks in the context of the process of deleveraging, although the outflows might have been bigger in absence of asset purchase policies. Portfolio investments have been relatively solid, explained to a great extent by governments' borrowing on the international markets.

Although the capital inflows were not sizable leading to creation of imbalances in the economies, vigilance is warranted. The pre-crisis process of rapid worsening of the net international position was stalled, but with differences across countries. The improvement is visible for CEE and Baltic states, while SEE region registered worsening of the international position, albeit from initially lower levels. Despite the downward adjustment, at end 2015 the IIP in most of the countries is above the threshold set by the European Commission's Macro Imbalance Procedure (-35% of GDP), which points to a still relatively high exposure to potential external shocks. Given the banks' deleveraging process and their higher reliance to domestic sources, the credit growth in the region is still anemic without significant pressures on the aggregate demand and current account deficit. Furthermore, the analysis of the developments at the stock exchanges in the region also do not point to any sizable flows resulting in notable price changes misaligned with the general economic developments. The stock indices in the region have been gradually recovering especially since 2013, but in most cases they have not recovered to the pre-crisis levels. Concerning the real estate market, the prices have been also recovering, though they are still below the pre-crisis levels, with the fastest upward adjustment in Hungary and the Baltic States.

Chart 10: External positions and assets prices indicators



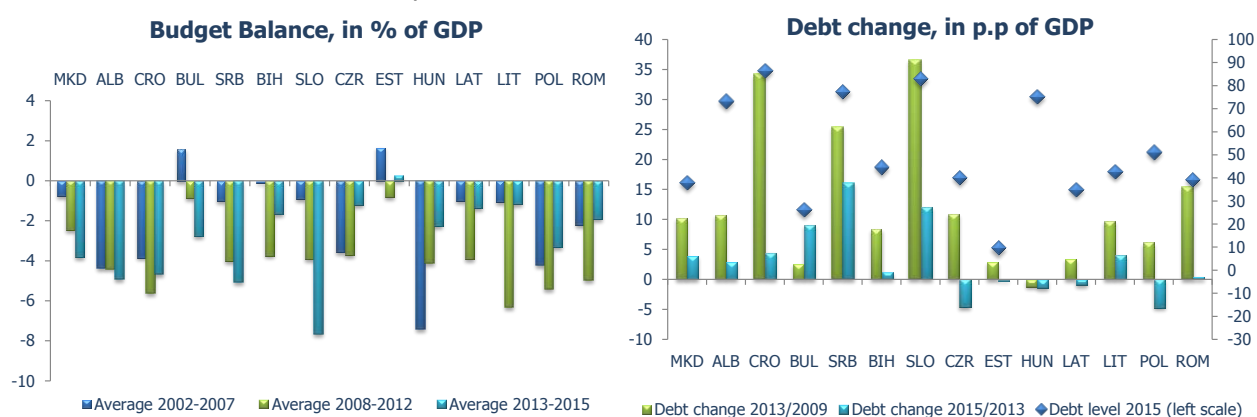
Source: International Monetary Fund, Balance of Payments Statistics, WEO October 2016 Database, Eurostat.

Despite the absence of sizable inflows, relatively high external financial exposure of the region underlines the risks in case of global tightening of the financial conditions in the context of tightening of the US monetary policy or a “surprise” tapering by ECB. The region is mostly exposed to the European markets, but to the extent that the US tightening affects European financial markets it may have negative implications for the region through the interest rate or liquidity channel. Having in mind the state of the fiscal finances particularly vulnerable segment seems to be the government sector.

The screening of the fiscal position of the countries in the region, shows that without doubts financial crisis took a toll on the fiscal positions of the countries. Against the background of countercyclical fiscal policy headline balances deteriorated sharply and the public debt went on a rising track. The deterioration in the fiscal position and lack of fiscal space (due to low initial space before the crises) emphasized the need for consolidation. Most of the countries of the region recognized it and embarked on the consolidation path. In the 2013-2015 period the budget deficit figures show that nine out of fourteen countries of the region have already reduced the deficit level compared to the 2008-2012 period. The other five countries (Macedonia, Albania, Serbia, Bulgaria and Slovenia) increased the deficit

reflecting idiosyncratic factors, countercyclical policy (Macedonia, Bulgaria), or recognition of implicit liabilities (emergency recapitalization of the country's banks in Slovenia). The same dynamics is more or less mirrored by the government debt data. After the strong initial debt rise, the consolidation phase imposed slower borrowing pace, however in most of the countries the debt continued to rise. Analyzing the countries, only 5 countries of them, Czech Republic, Poland, Hungary, Latvia and Estonia, managed to reduce the debt in the 2015/2013 period. These countries, with the exception of Hungary are less vulnerable when it comes to the government debt as they belong to the so called "lower indebted countries". On the other side, the debt rise in the latest period additionally inflated already high levels of debt and deepened the vulnerable positions of some of the countries in the region (Slovenia, Croatia, Serbia and Albania).

Chart 11: Fiscal indicators, developments in different periods of time

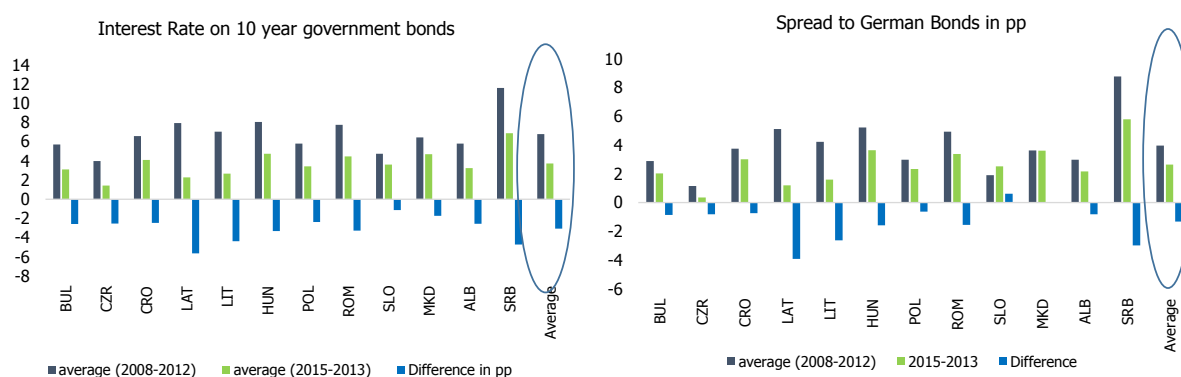


Source: WEO October 2016, database.

The analysis of the long-term rates on government debt reveals that after the peak of the crisis in 2009, the interest rates on government borrowing in the region have been declining.

The only exception from the pattern is Slovenia, where the costs of government borrowing went on a rising track in the period of 2011-2013, reflecting the banking system crisis and the adverse feedback loop to the sovereign segment. The average long-term interest rate in the 2008-2012 equaled close to 7%, and declined to an average of 3.7% in the 2013-2015 period, which is an adjustment of around 3 p.p. Also, the spread of the interest rates of countries in the region relative to the interest rate of Germany, as a risk-free anchoring rate, followed a declining path, and hence more favorable conditions to borrow. Some of the simple indicators for the fiscal space, like the interest rate – growth differential, although improved compared to the acute phase of the crisis, still is less favorable relative to the pre-crisis period.

Chart 12: Interest rates on government bonds in %

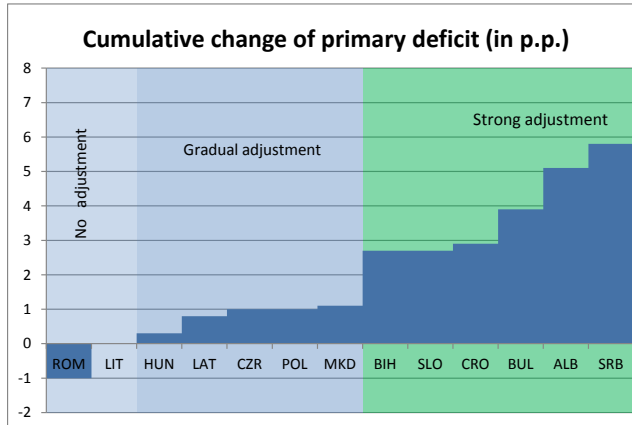


*The data for all the countries, except for Albania, Macedonia and Serbia is Eurostat data referring to the Maastricht Treaty EMU convergence criterion series which relates to interest rates for long-term government bonds denominated in national currencies. Data is based on central government bond yields on the secondary market, gross of tax, with a residual maturity of around 10 years. For Serbia and Albania –Thomson Reuters data on average interest rate on government securities. Macedonia data refer to the average interest rate on securities at the longest available maturity issued.

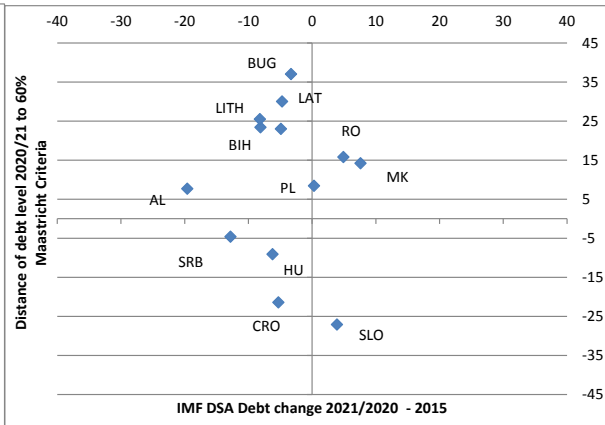
The continuous debt increase suggests need for further fiscal adjustment, which will be challenging in case of tightening of financial conditions. The presence of ultra-low interest rates in the Euro Area and the abundance of liquidity on the market have not been conducive to faster consolidation. The need for further fiscal adjustment is clearly emphasized in the latest available IMF country reports. The screening shows that with exception of two countries (Romania and Lithuania) all the countries should adjust further. According to the IMF, most of the countries are in the so-called group of "strong adjusters"⁷. This means that the governments should have a very "ambitious" agenda, or have to significantly shrink the primary deficit in order to ensure fiscal sustainability. Expectedly, the most indebted countries are amongst the ones where the strongest downward adjustment is envisaged, such as Slovenia, Croatia, Serbia and Albania. However, even if they pursue their consolidation plans, some of them will still have vulnerable position as the debt level will be higher than what the Maastricht criteria prescribes (60% of GDP) - chart 13 lower right and left quadrant. Further fiscal consolidation against the background of still "anemic" economic activity and rising interest rates may be very challenging.

⁷ Authors' definition, presented on chart 13.

Chart 13: Size of fiscal adjustment -2021-2015*



Debt change and distance from the Maastricht Criteria 60% of GDP**



*Size: 0.5 - no adjustment; 1 - gradual; above 1 - strong. ** "-" is above "+" is below the benchmark.

To sum up, it appears that ECB policy accommodative actions affected the financial conditions in the region. Reduction of the main policy rate allowed a room for policy rate reduction in the region thus contributing to lower costs for borrowing of the private and public sector. Part of the injected liquidity through asset purchase programs seems to be allocated on the CESEE financial markets, enabling cross-border capital flows that underpinned the process of recovery of asset prices and reduction of the borrowing costs. In case of global tightening of the financial conditions in the context of tightening of the US monetary policy or a "surprise" tapering by ECB, many countries in the region may face challenges as the external financial exposure of the region is relatively high, despite the recent declining trend. This, in particular holds for the government sector as the process of fiscal consolidation is very gradual and the public debt continues to increase.