I would like to thank the contribution of my colleagues Csajbók, Attila and Kovács, András Mihály.

Dear Ladies and Gentlemen,

First of all, I would like to thank for the opportunity of being invited to this very interesting conference. The topic “Catching-up strategies after the crisis” could not be more relevant. As I will argue in the next few minutes, we should not consider the financial crisis as something fading quickly away, its aftermath will most probably stay with us for several years. Let me put it another way, my impression is that the crisis clearly changed the rules of the game for countries with the intention to converge to Western-European income levels. This road will be much bumpier compared to what it seemed from the past, therefore it requires a very conscious strategy in policy making.

In the next few minutes I would speak about four interrelated topics. First, I sketch the new rules of the game in the post crisis world. Second, monetary policy options and macro-prudential challenges in the years ahead will be outlined. Finally, I would make a few remarks regarding my opinion on euro-area accession. Most remarks of mine, I believe will be general, valid for all CESEE countries. Others will be more valid for countries with high FX debt burden.

Taking stock of the starting position: the financial crisis forces changes in the convergence model of CESEE countries

The financial crisis brought a reassessment of risk attitude toward debt financing. Those countries, where real convergence was accompanied by current account deficits and excessive debt flows did face deeper recession.

The reliance of CESEE countries on foreign funding depended on two key elements of macroeconomic framework: fiscal and exchange rate policies. Countries with tight fiscal policies and low government debt ratios ceteris paribus had lower external imbalances (for example Czech Republic and Poland versus Hungary). Second, flexible exchange rate system ceteris paribus helped avoiding large credit booms (flexible inflation targeting versus currency board regimes). Naturally, these two parameters do not capture all the relevant information on whether a country became fragile in macroeconomic terms prior to the crisis. However, research has shown, that they were instrumental in the resilience of countries with respect excessive capital inflows and sudden stops. In addition, differences in macro prudential policies in controlling capital flows helped somewhat mitigating excessive capital flows, but their effectiveness were very far from perfect.

Though the situation on financial markets consolidated somewhat in the last year or year and a half, I believe, that lower risk tolerance compared to pre-crisis levels will prevail in the next

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1 Countries of Central, Eastern and Southeastern Europe.
few years. This is a natural consequence of global deleveraging, which takes several years after a financial crisis.\textsuperscript{3} As is shown in several papers,\textsuperscript{4} deleveraging means, that CESEE countries in the post crisis world might rely on external financing to a lesser extent, than previously. Unless these countries find more domestic savings to finance the catch-up process, real convergence will slow down.

\textit{Lower risk tolerance at the end of the day might lead to higher uncertainty, and higher volatility.} Lower risk tolerance means, that economic sustainability had become a key issue, and there are very few if any countries among CESEE who are surely on a sustainable path. The closer is a country to a point where the sustainability of a country’s economic policy is questioned, the more sensitive it becomes to both global and country specific economic news. As a Hungarian central banker, I had to learn this lesson already several years ago. We need economic policies that push countries towards sustainability.

As already mentioned, on the \textit{fiscal} side, sustainability requires tight policies, we have to decrease indebtedness to levels, where countries do not become excessively reliant on external financing sources. As CESEE countries are less developed than core Europe – contrary to the traditional macroeconomics – the same level of government debt can not be afforded. As lower GDP/capita implies lower household wealth, the same level of government debt as e.g., in Germany, would require much more external financing, hence external debt. This is also a lesson, you must learn from the Hungarian case. Tight fiscal policy also helps private savings to finance private investments, and hence we can avoid a slowdown in real convergence in a period of scarce external financing.

However, it is clear that – apart from Hungary – most problems among CESEE countries were rather caused by excesses in the private sector, than by excessive government spending. Though, as is shown in case of “peripheral Europe”, this picture can change quickly, systemic risk in the private sector can easily turn to government debt.

Regarding private sector imbalances, the issue is even more complex, as we cannot identify one actor, responsible for the behavior of a whole sector. Here we have two policy optimon: \textit{monetary and macro-prudential}, and one should not forget about their interaction. Let me look at them in turn.

\textbf{Monetary policy in a post-crisis world: living together with permanent level of high uncertainty}

As I argued, the crisis brought a reassessment of risk, resulting in the reassessment of sustainable external balances. Foreign investors are not the only actors to change their opinion regarding the most likely path of future variables. Households, corporates and all economic actors should reassess, what they thought sustainable previously about the future. With forward looking agents, this means that they react now stronger in output, expenditures and prices compared to how they did in the past. All this means an extreme level of uncertainty.

\textit{We need a robust monetary strategy that helps to live together, with high level of uncertainty.} We need a transparent framework, flexible enough to absorb risk premium shocks, but such, that ensures price and financial stability in the long run. Flexible inflation targeting might be considered as such a system. Inflation target as a final nominal anchor is transparent but flexible enough to (1) avoid reacting to excessive risk premium volatility with interest rate policy (2) incorporate other type of policy considerations, like macro-prudential ones.


It is also obvious however, that one instrument, namely interest rate policy, cannot be enough to achieve both price, and financial stability. One of the most important lessons from the financial crisis is that there can be conflicts. The empirical evidence shows, that increasing price and macroeconomic stability gives extreme incentives to financial risk taking, as risk aversion declines due to observed stability.\(^5\)

As almost every problem, the conflict of price stability and financial stability among small open emerging economies is mostly linked to the volatility of capital flows.\(^6\) During “good times”, excessive capital inflow appreciates the exchange rate, and, as a consequence, overheating does not necessary appear in inflationary pressure, but in rising external imbalances, credit booms. During “bad times”, on the contrary, capital outflows cause depreciation and inflationary pressure, when financial sector imbalances are closing. From financial stability point of view traditional inflation targeting seems to be too loose when imbalances are building up, and too tight, when financial imbalances are closing. Macro-prudential policies can help to tackle this problem, though their effectiveness largely depends on the fact whether they are implemented internationally or only nationally. National policy can easily be circumvented in a world of globalized capital markets and multinational banking sector.

We also know however, that CESEE countries are not uniform regarding their fragility of their financial systems. In fact there are more countries in the region that relied on excessive foreign funding prior to the crisis, than those who did not. Hungary is one of the countries where external deficit was relatively large prior to the crisis, though we did not achieve the level of fixed exchange rate countries. These countries could only run these sizeable deficits absorbing FX based capital flows, as in line with international observations, foreign investors were reluctant to take the FX risk associated with quick debt accumulation.\(^7\) In other worlds, the “original sin” syndrome created sizeable currency mismatches in them.

There is an increasing complexity of the monetary transmission mechanism (MTM) in countries, moving from sizeable external deficit to more sustainable path. The first point is a likely strengthening of the interest rate channel on new flows. Prior to the crisis, the interest rate channel was circumvented by FX borrowing, which meant that only the exchange rate channel of the monetary transmission mechanism did really work. As a result, after the crisis, macro-prudential regulation has been implemented in several countries to constrain FX lending (in Hungary FX base mortgage lending is already legally prohibited), and it is also true that observed exchange rate volatility also induced a reassessment of risk associated with FX lending. These factors in the future should mean that on new credit flows, the domestic interest rate will be the dominant price, contributing to a strengthening of the traditional interest rate channel. However we cannot estimate the exact magnitude of these new parameters, as there is not available data for the new regime.

A second point regards the inheritance of the past: we have to live together with the unhedged FX loan stock for several years, as there is no possibility of quick redenomination.\(^8\) This would require transferring FX risk to the foreign sector, which by definition is hardly feasible due to the problem of original sin.

Due to these factors, the stock and flow channels of monetary policy might counteract each other. While the effect of monetary loosening/tightening on output and hence inflation might

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7 See MNB (2010) op. cit.

increase if we only consider new flows, the unhedged FX debt stock effect works in the opposite direction. A given change in the exchange rate has a smaller effect on output and hence on inflation as in the past. A weakening of the HUF increases household indebtedness, which causes a drop in the domestic demand, weakening the effect of stronger net exports. The exact magnitude of different channels, and most notably the FX stock channel can vary from time to time, depending on the level of the exchange rate.

Furthermore, there can be **serious nonlinearities** in the MTM mechanism depending on the levels of the risk premium, exchange rate, and hence banking sector resilience: the higher the risk premium, the weaker the exchange rate and the banking sector’s capital base, the more likely, we will enter in a situation, where monetary loosening has recessionary effects, when the banking sector cuts back lending seriously, this situation might hinder financial stability.

**The crisis has highlighted the importance of macroprudential policies and their cross-border coordination**

I already mentioned macroprudential policies here and there, let me now turn to them in more detail. The crisis had made it clear that in order to achieve long-lasting macroeconomic stability, striving for price stability is not enough: it has to augmented by stability in the financial system. These two goals often conflict, therefore monetary policy alone is not capable of continuously facilitating both of them. Additional policy tools are needed. As I said earlier, in small open economies the conflict often manifests in volatile capital flows. A first policy reaction to such a situation often is the introduction of capital controls, just like the ones we currently observe in Latin American and Asian emerging countries. Now, the CESEE region may not currently be a target of hot money inflows, but this may change in the future. The use of capital controls is a controversial issue, and excessive reliance on them in the CESEE region (at least in the countries that are already EU members) is off the cards anyway, as it is against the fundamental EU principle of free capital movement. This leaves macroprudential regulation as a potential policy tool in these countries to mitigate systemic risk, either inherent or stemming from volatile capital flows.

Macroprudential tools are generally categorized into two types according to their primary aims, which can be (a) **enhancing systemic resilience** or (b) **leaning against the financial cycle** (reducing procyclicality). **Systemic resilience** tools are typically microprudential instruments recalibrated for macroprudential purposes. These may include the regulation of various ratios, such as loan-to-value (LTV) or payment-to-income (PTI), or forbidding “toxic” products. Hungary recently has deployed such tools in order to discourage unhedged FX lending, which proved to be a major source of systemic risk. Regulation may be stricter in the case of systemically important (e.g. too-big-to-fail) financial institutions. Typical examples of **countercyclical tools** are dynamic provisioning (e.g. the one in place in Spain even before the crisis) or a countercyclical capital buffer (e.g. the one proposed in the new Basel III regulatory standards).

Similarly to monetary policy, macroprudential policy can be tight or loose. In other words macroprudential policy may be characterised by its **stance**, just like monetary policy.

As I mentioned earlier, an important factor in the effectiveness of macroprudential policies is cross-border consistency. Cross-border coordination in the end should boil down to coordination of macroprudential stances. The key motives for cross-border coordination are to avoid regulatory arbitrage on the one hand and to provide a level playing field for financial

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institutions on the other. I believe that this is especially true in the case of the CESEE region as these countries are deeply integrated in the European banking system, with the branches and subsidiaries of Western European banks being dominant players in the CESEE domestic financial systems. Home-host coordination is therefore of primary importance.

If macroprudential policy stances substantially differ in home and host countries, this may encourage regulatory arbitrage. Regulatory arbitrage stems from the feature of the globalised financial system that many financial transactions between two parties in the same country can in fact be executed in another country (through e.g. subsidiaries/branches of internationally active financial institutions). In a home-host setting for example, tightening the macroprudential stance in the host could be circumvented if the home stance is loose and allows for a re-direction of intermediation through e.g. branches.

The flipside of this story, which gets less attention, is that a cross-border rechanelling of financial activity from a country with a tougher regulatory regime to a more lightly regulated one increases the potential for contagion to the more disciplined country (think of the decline in share prices of the large internationally active Austrian banks when the markets started to focus on their Eastern European exposures).

While regulatory arbitrage seems to be a home-host issue, the “level playing field” argument for macroprudential coordination is probably more relevant in host-host relations. This stems from the fact that the financial systems in CESEE countries often share the same parent banks. As a result they are to some extent competitors in the cross-border allocation of funds from parent banks. In such a situation, loosening the macroprudential stance in one host country might channel intermediation activity from another host. In addition to violating fairness, such beggar-thy-neighbour regulatory policies can lead to a mutually detrimental ‘race to the bottom’ regarding regulatory standards, leading to the increase of region-wide systemic risk.

In a nutshell, the case is strong in the CESEE region for a cross-border coordination of macroprudential policies both in the home-host and in host-host directions in order to avoid regulatory arbitrage and to create a level playing field. While bilateral coordination may be sufficient in certain home-host issues, multilateral coordination seems to be superior in most of the cases and certainly in host-host coordination. As of today, however, the institutions for such coordination are not in place. Supervisory colleges may come close, but they don’t have a macroprudential angle. The planned cross-border stability groups seem to be better suited for this purpose, but if they are organised according to banking groups instead of geographical areas with significant exposures to each other, they will probably not turn out to be efficient macroprudential coordination fora. It remains to be seen whether the soon-to-turn-operational European Systemic Risk Board (ESRB) can serve as an effective coordination vehicle for CESEE macroprudential policies.

Finally, allow me to make a precautionary warning against too much reliance on macroprudential policies in facilitating financial stability. In my opinion, although they are necessary, they certainly are not sufficient in themselves for this purpose. First, without sustainable macro policies (fiscal in particular) and price stability the financial system may easily find itself in trouble or may intermediate insufficiently. Secondly, although its aim is to reduce system-wide risk, macroprudential policy in the end is a set of particular tools targeting particular problems in particular parts of the financial system. In other words it is not as general as monetary policy, which affects virtually all economic agents. If, for example, there is a long-lasting general tendency of increased (and excessive) risk-taking in the economy, macroprudential policy in itself can at best slow it down but cannot offset it.

permanently. In such situations support from monetary policy, e.g. in the form of leaning-against-the-wind behavior, is necessary.

**Euro entry: our ultimate safe harbor or compulsory task**

Prior to the crisis, it seemed a safe bet to assume, that euro entry brings stability and prosperity in the region, especially in Central Europe. Arguments in this respect were based on three main results. First, there is a deep economic integration with core European countries, like Germany: high trade share, with high intra-industry component, high level of FDI in the traded sector. Second, deep financial integration, mainly due to high level of foreign ownership in the financial sector, with core European countries. Finally institutional similarity and convergence also made it probable, that most of the region forms an optimal currency area, with the eurozone.11

In Hungary, with probably the largest swings in fiscal policy in the last decade, we soon realized that we should – at least in fiscal terms – “put our house in order”, before entry. We also carefully watched the performance and sustainability of Mediterranean countries.

However, relatively small care was taken when analyzing the institutional weakness of euro-area set-up. The unexpectedly large shock of the crisis brought up these institutional weaknesses of the euro: the enforceability of the Stability and Growth pact, and imbalances with fixed exchange rate in the private sector. With the hope, that recent reform efforts tackle area-wide problems, we still cannot sit back and relax. We have to draw conclusions from small, acceding country point of view, which are necessary for successful membership. It is especially important, given that (1) weak economic performance of some countries became obvious only after several years of entry, (2) prevention seems much cheaper, than crisis resolution.

The first lesson is, that formal convergence criteria are necessary, but more care should be taken with respect to sustainability of fulfilling them, and a careful monitoring of general economic sustainability. Unsustainable fiscal policies, and private sector imbalances are hard to correct inside the euro-area, as countries has less policy tools to adjust by giving up exchange rate flexibility. Though it is also true, that in the short term with high FX debt burden, the room for exchange rate adjustment is also limited.

Second, it turned out that deep economic and financial integration without monetary integration raises coordination issues: the exchange rate is not just a handy tool, but a source of shocks as well. Thus, from this point of view, new member states should enter EMU as soon as possible, because outside countries are more vulnerable. However, this is only an option if policies are proved to be sustainable.

Finally, we have to admit that being a sustainably successful country in the euro-area is going to be an extremely challenging task. It’s like a labyrinth, and it is easy to loose the way at every step. First we need a disciplined government, to keep fiscal reserves for bad times. Second, we need anchored inflation expectations, to avoid artificially low interest rates fuelling a credit boom in the private sector, and to minimize the possibility of wage competitiveness problems. Finally we need flexible prices and wages, so that they can adjust relatively easily inside, given that corrections in the real exchange rate are necessary. If we have all of these, we can probably exploit all of the benefits of a single market. In my view however, we should not pretend, that staying outside in the long term is a feasible solution. It’s not just a compulsory task, in a highly globalized world domestic policies can have smaller and smaller role in controlling the economy, so the overall trend should be obvious for us.

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11 See for example MNB (2002).