Katalin Mérő[1] and Dóra Piroska[2]

Central and Eastern European countries' twist with macroprudential policies – the cases of Hungary and Slovakia

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[1]Senior Research Fellow, International Business School, Budapest

[2] Associate Professor, Department of International Studies, International Business School, Budapest

ABSTRACT

The paper examines the spread of macroprudential policies in Central and Eastern Europe. It explains the spread of policy tools that are able to control for systemic risk through the efforts of international organizations' policy diffusion and through policy learning of CEE policy makers. In order to understand macroprudential policymaking in CEE5 we look at Hungary (seriously hit by the crisis, non-Euro area member) and Slovakia (not seriously hit by the crisis, Euro area member). We show that locally initiated macroprudential tools were often used to satisfy local policy makers' own agendas: financial nationalism in Hungary and protectionism in Slovakia.

1. Introduction

Macroprudential policies have dominated the agenda of policy makers in Europe since the financial crisis. Their spread in Western Europe is explained as a countermeasure to bank bail-outs and the Euro area's reaction to the crisis. In Central and Eastern Europe (CEE), their spread is more puzzling. The banking systems of the five Central and Eastern Europe countries (CEE5) that joined the European Union in 2004, namely Czech Republic, Hungary, Poland, Slovakia and Slovenia, were less affected by the crisis: only a few were badly hit, but even there no major bank bail-out was necessary.[3] Only Slovenia (from 2007) and Slovakia (from 2009) have been members of the Euro area which required more discipline in implementing macroprudential regulations. In this paper, in order to understand macroprudential policymaking in CEE5 we look at Hungary (seriously hit by the crisis, non-Euro area member) and Slovakia (not seriously hit by the crisis, Euro area member). As both countries are members of the European Union, their national frameworks for bank regulation have adopted all EU directives and regulations that came out after the crisis and arguably included macroprudential policies. Because these regulatory changes are not unique to Central and Eastern Europe, but may be found in any EU member states, in this analysis we set them aside. We look only at those macroprudential regulations in these countries that were initiated by the national governments and, thus, are specific to these countries. We are especially interested in three areas of change in bank regulation and supervision. First, we explain the spread of macroprudential policies by pointing out the importance of policy diffusion and policy learning, that is, the fusions of national and

3 The only exception is Slovenia where from 2012 large scale state consolidation packages were necessary to restore the banking system stability.

international reform dynamics in individual countries. Second, we point out that macroprudential tools not only aimed at controlling macro risk, but were also used to support local policy makers' own agendas (financial nationalism in Hungary and protectionism in Slovakia). Indeed, in some instances macroprudential regulation was the unintended consequence of politically more significant goals. Third, we explore banks' reactions to macroprudential regulations, which may ultimately change the nature of banking in the region. By analyzing Central and Eastern European countries our aim is to explore and understand the spread of macroprudential regulations in non-core Western countries, thus providing insights into the dynamics on the peripheries of macroprudential changes in global financial governance.

Andrew Baker (2013/1) was the first to identify the domination of Western European policy makers' agendas by macroprudential policies. Baker claimed that after the crisis in the workshops of International Monetary Fund (IMF), the Bank for International Settlements (BIS), the Basel Committee on Banking Supervision (BCBS), and central banks of the most influential states a new understanding of finance became dominant. The essence of macroprudential thinking is an increased distrust in the efficiency of markets and a renewed demand that regulators intervene and set limits to financial actors. Baker in (2013/1) concluded his analysis by saying that macroprudential thought represented only a third-order change in policy making – as defined by Peter Hall (1993) – but not yet a Kuhnian paradigm shift. Although a marked change in thinking about the riskiness of banks and the role of the state in banking is detectable, the developments of corresponding first and second-order policies have not materialized yet. What Baker introduced as an ideational change (short of a paradigm change) other researchers have questioned. According to some authors, indeed, not much has changed since the crisis. Wigger and Buch-Hansen (2014) argue that so far no radical break with the neo-liberal form of capitalism can be seen. Helleiner (2010) argued that after the crisis a Bretton Woods moment was missed and the future of global governance of finance is not going to be very different from the present. However, others (like Moschella and Tsingou, 2013; Germain, 2010; Pagliari, 2012, Baker 2013/2) agree more with Baker (2013/1) and observe a 'general reorientation in the philosophy of global financial governance' (Moschella and Tsingou, 2013: 409); that is, they see a change not in the overall practice of banking, but in bank regulation and supervision more specifically. Given that there is so much disagreement over the magnitude of change and the process of change in bank regulation, our analysis of bank regulation and supervision in Hungary and Slovakia might be an important contribution to this debate. In relation to both countries we find relevant changes. In Hungary we highlight the importance of International Monetary Fund, and the Agreement the Hungarian government signed with it in 2008 in bringing about macroprudential policy changes. In relation to Slovakia we point out the relevance of Euro area membership since 2009 and its role in influencing Slovak policy makers. In both cases we highlight the fact that macroprudential considerations were present before the crisis, but only afterwards came to dominate the regulatory agenda, thus effectively resolving long-standing policy debates in the two countries.

Even those researchers who agree that important changes have indeed occurred in bank regulation and supervision debate whether this has led to an increase in state power vis-à-vis the banking sector or not. As Moschella and Tsingou (2013) wrote in the introduction of a special issue of *Regulation and Governance* on bank regulation: ‘However, the evidence assembled in this special issue does not provide clear-cut support for these propositions’ (Moschella and Tsingou 2013: 409). Baker (2013/1) certainly claimed an increase in state authority vis-à-vis banks as a consequence of macroprudential policies. Helleiner and Pagliari (2011: 184) more cautiously argued that ‘the crisis has thus revealed how the power of transnational private actors is more contingent than some of the pre-crisis literature suggested.’ Kudrna and Gabor (2013: 553) argued in relation to CEE that ‘uncertainty is only heightened during financial crisis that put supervisory authorities into a much more powerful position vis-à-vis supervised banks.’ Seabrooke and Tsingou (2014) documented otherwise. They argue that change in global governance of finance does not follow a ‘putative market-friendly versus market-skeptical divide’ that could be mapped onto more versus less interventionist governments in Europe (Mugge 2014: 319). While these authors look at a number of reasons as for why the state power has increased - if at all- in relation to banks, we will only look at changes in bank regulation aimed at controlling systemic risk as one possible reason for the change. Our look at the changing bank regulatory frameworks in Hungary and Slovakia contributes to this narrower debate. In both countries, the status of the department responsible for macroprudential policies in the relevant central banks has significantly increased. In Hungary, the new regulations have created special powers for state institutions such as the Financial Supervisory Authority and the central bank. However, since FIDESZ came to power in 2010, the government’s banking policies became generally market-unfriendly. Therefore, since 2010 the reason why the power of state institutions increased may not be linked solely to macroprudential concerns. It seems to us that it was the unintended consequence of the *étatist* policies of FIDESZ (Johnson and Barnes (2015) called it 'financial nationalism') which primarily sought to strengthening state power. In Slovakia, the state authority has already had been concentrated in relation to banks; we have detected no change in power there. However, in Slovakia macroprudential policy tools were used simultaneously to control macro-level risks as well as to protect the Slovak financial market from the predicted efforts of mother banks to withdraw liquidity and dividends. Thus, in both countries we found evidence that – in addition to the original aim of financial stability - local policy makers' agendas have defined the purpose and macroprudential tools were the means to achieve them.

Finally, changes in bank regulation necessarily affect the practice of banking. Our analysis is a *post factum* analysis; we looked at the reaction of banks after the new regulations were enacted and asked them to evaluate the changes from the perspective of their future behavior. Both in Hungary and in Slovakia banks have had a mixed reaction to the regulatory changes. In both cases they found the cost of implementing macroprudential regulation very high, but they were also interested in a better regulated, more stable financial market. The analysis of banks' reactions to macroprudential regulation in the countries predicts that the general pattern of banking may change in the future. This is because rules that control the stability of the whole banking system result in significantly higher costs of bank regulation compared to individual banks' inherently microprudential approach to risks and regulation.

Overall, we focus on those issue areas of macroprudential regulation around which substantial debates have been built in relation to its western manifestations. Also, these issues' resolution in CEE5 is not self-evident, and we show variations among the all-too-often lumped together CEE cases. Finally, our findings are relevant not only for Central and Eastern European countries, but more generally for global governance. For if there is a critical epistemic transformation of the technologies of governing finance even in the periphery (Boy, Burgess and Leander, 2010), the emergence of relevant changes in banking should follow.

The paper is organized as follows. The next chapter defines the macroprudential policy tools at a conceptual level. The third chapter analyses the similarities and differences of the CEE5 banking systems during the crisis. In the fourth chapter we select Hungary and Slovakia, to control for two explanatory factors of the macroprudential shift in the region and present the selection of macroprudential measures of the two countries. The fifth chapter analyzes the ways of dissemination of macroprudential approach in the two countries, and argues for a national twist in the application of these tools to serve local policymakers' interest. Finally, we look at local banks' reactions to the regulatory changes. The last chapter concludes.

2. What do we mean by macroprudential policies?

The essence of macroprudential regulation, as Baker (2013/1) has shown, is a result of the work of a few BIS officials (e.g. Crockett 2000; Borio, Furfine and Lowe 2001; Borio 2003) and academics (e.g. Danielsson *et al* 2001; Danielsson and Goodhart 2002; Danielsson and Shin 2003) during the early 2000s. Already then, they identified the key differences in focus and action of policies that not only control for micro, i.e., individual bank based risks, but also for systemic risks. However, before the crisis the macroprudential approach was treated by most policy makers as an analytical framework only, not as something from which to develop concrete regulatory tools. After the financial crisis, all over Western Europe policy makers initiated regulations that drew on these earlier works. As of today, most policy makers take macroprudential policies as a set of early warning systems for preventing/mitigating systemic risks over the medium turn. Here we do not problematize the relation between the BIS understanding of macroprudential regulation and Western European countries actual policy formation, instead rely on the original definitions and look for their CEE5 realization. Therefore, in order to identify macroprudential regulatory tools in CEE5 in general and in Hungary and Slovakia in details, we go back to Borio's (2003) classification in which he compared micro- and macroprudential policies' objectives and the understanding of risk and the calibration of control measures (Table 1).

Table 1 The macro- and micro perspectives compared

	Macroprudential	Microprudential
1. Proximate objective	limit financial system-wide distress	limit distress of individual institutions
2. Ultimate objective	avoid output (GDP) costs	consumer (investor/depositor) protection
3. Model of risk	(in part) endogenous	exogenous
4. Correlations and common exposures across institutions	important	irrelevant
5. Calibration of prudential controls	in terms of system-wide distress; top-down	in terms of risk of individual institutions; bottom-up

Source: Borio (2003, p.2)

The main differences between the macro- and microprudential perspective are the ultimate and the proximate aims of regulation (Table 1. items 1. and 2.) and the method of calibration (Table 1. item 5.), not the regulatory tools themselves. Several regulatory tools, depending on their objective and calibration, can be either macroprudential or microprudential[4]. The calibration of prudential controls is different in macro- and microprudential approaches not only because of the regulatory objective, but also because of their approach to risk. In the micro perspective the risk is exogenous, i.e., banks have no influence over it. In the macro perspective it can be generated and even amplified within the financial system, too (Table 1. item 3.). As it is demonstrated in Danielsson and Shin (2003), financial markets are exposed to both exogenous and endogenous risk, but the most serious financial market turbulences are caused by endogenous risk, i.e., when either market participants react to market and/or their behavior influence the market[5]. Correlation and common exposures across institutions, that is the interconnectedness of banks (Table 1. item 4.) also matters only in macroprudential perspective. The financial contagion through the interconnectedness of financial market participants was one of the first macroprudential issues raised by the academic literature (Rochet and Tirole, 1996; Allen and Gale, 2000).

Not only regulations themselves, but also the institutional framework of regulation and supervision can be either more or less supportive of macroprudential perspective. For example, institutional architectures that focus on individual banks and consumer and investor protection are microprudential in nature, while those institutional setups that focus on systemic stability are macroprudential. Typical examples for macroprudential institutional changes are the establishment of separate financial stability or macroprudential departments in central banks; organizing national financial stability boards; authorizing central banks and supervisory authorities with decree issuing power to protect the financial stability, etc.

Using the above definition we can demonstrate that all CEE5 countries made steps towards establishing the macroprudential policy framework after the crisis: Poland was the most active in all aspects of macroprudential actions, the Czech Republic was the least, while Hungary and Slovakia are somewhere in-between (Table 2).

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4 For demonstration we can use the example of Value at Risk (VaR) based capital calculation for market risk. If the VaR is calibrated according to the best banking risk management practice and to the risk appetite of the given bank it is definitely microprudential and as such, promotes the proper economic capital calculation. However if the regulators require specific VaR parameters for regulatory capital calculation purposes, for example using higher confidence level or supplement the VaR calculation with the stress VaR, it becomes macroprudential.

5 One of their examples is the mechanics of trading limits. When the prices are falling and traders approach their stop-loss limits, they forced to sell. However the mass selling has a further decreasing pressure on prices which triggers even more selling and so on, which is a case for endogenous risk.

Table 2 Locally originated macroprudential actions in CEE5 countries (2008-2012)

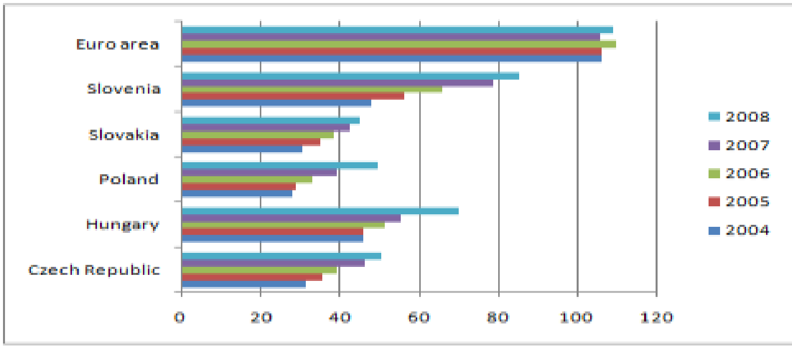
	Regulatory actions introducing macroprudential regulatory tools			Actions to strengthen the institutional framework of macroprudential regulation and supervision
	liquidity related	capital related	credit standards (e.g. LTV or PTI ratios) related	
Czech Republic	No	No	No	Yes
Hungary	Yes	No	Yes	Yes
Poland	Yes	Yes	Yes	Yes
Slovakia	Yes	Yes	No	No
Slovenia	Yes	Yes	No	No

Source: own compilation based on IMF (different Article IV. consultation documents and FSAP reports)

3. Financial crisis and the CEE5 banking systems

By the time of accession to the European Union in 2004, the CEE5 countries' banking systems were predominantly owned by West European, internationally active banking groups. Slovenia was an outlier in this respect. There privatization took place later, and state dominance remained much higher (Piroska, 2006). The CEE5 banking systems became similar in size and stages of development as well. The much lower level of financial depth, especially in retail lending in CEE5 compared to the EU average was a significant driver for extensive credit growth before the crisis (Figure 1). The high growth of business volumes together with the lower level of competition than in Western Europe resulted in outstanding profitability of the CEE banking sector in the years between the EU accession and the financial crisis.

Figure 1 Domestic credit to private sector (% of GDP)



Source: World Bank, Global Financial Development Database[6]

[6] World Bank, Global Financial Development Database, available via http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,contentMDK:23269602~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html , accessed June 2014

The crisis hit this region somewhat differently compared to Western Europe. Before the collapse of Lehman Brothers, it seemed that this time primarily the most developed countries would be affected, since structured assets were not important in CEE5 financial institutions' portfolio, a decoupling was expected between the countries with more sophisticated financial systems and the CEE region. However, four out of the five countries are small open economies that – as the crisis became deeper and longer - made decoupling an illusion (Dooley and Hutchinson, 2009; Király and Mérő, 2010). Poland, the largest and the less open among the CEE5, was hit least understood in terms of GDP growth. Moreover, as the Lehman Brothers' collapse lead to an immediate drying up of the financial markets, the banking systems of the CEE countries, especially those that were heavily financed through foreign interbank funds, faced serious funding difficulties. Consequently, CEE5 banks became vulnerable, especially in relation to liquidity and credit risk. The European Central Bank's (ECB) monetary policy made the liquidity risk for the non-Euro area countries even more serious by omitting their government bonds from the list of eligible assets as collaterals for ECB credit operations. As a reaction to impending liquidity crisis the parent banks, in line with their strategic commitment towards the region (Epstein, 2014), provided liquidity to their subsidiaries. Consequently the region's banking system generally had been less affected by the crisis than the western countries; there was no need for fiscal transfer in Czech Republic, Poland and Slovakia, only to a very limited extent in Hungary and only in a later stage of the crisis in Slovenia from 2012 onwards.

Before the crisis, in some of the CEE5 countries, especially Slovenia and Hungary, and to a lesser extent Poland, the rapidly increasing lending was accompanied by low levels of bank deposits, which resulted in extremely high proportion of foreign funds and high loan-to-deposit ratios (Table 3). The vulnerable liability structure of these banking systems materialized in funding risk just after the collapse of Lehman Brothers, first in Hungary, which had the highest loan-to-deposit ratio among the non-euro zone CEE5 countries, and where the long-term housing loans were financed by short-term FX swaps which were to be renewed permanently.

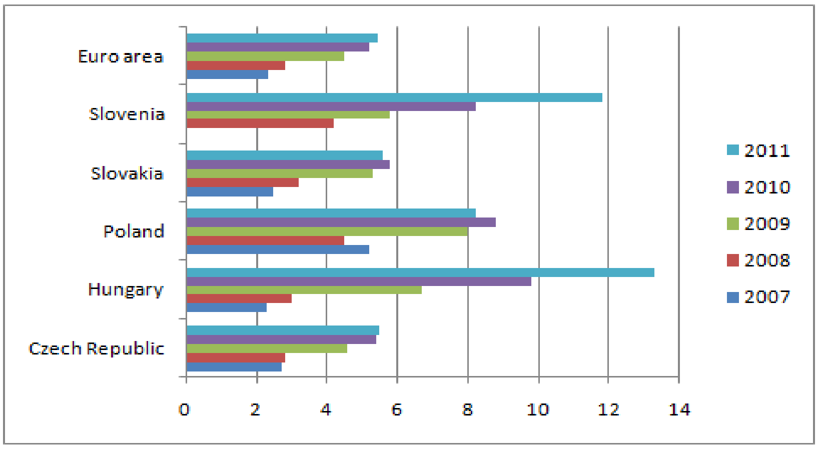
Table 3 Loan-to-deposit ratio in CEE5 countries in 2008

Czech Republic	Hungary	Poland	Slovakia	Slovenia
81	138	121	77	166

Source: Raiffeisen Research (2013)

Before the crisis, credit risk, measured by the proportion of nonperforming loans (NPL), seemed to be acceptable throughout in CEE5. The NPL to gross loan ratio was similar to the Euro area's average in Czech Republic, Hungary and Slovakia and significantly higher, but not extreme in Slovenia and Poland. By 2011, the Czech, the Slovak and the Polish banking systems more or less had gotten over the crisis without deep recession. The Polish NPL ratio peaked in 2010 and started to decrease, however it is still relatively high. The Czech and the Slovak NPL ratios are the lowest in the CEE5. The Hungarian NPL ratio, which was the best among the CEE5 in 2008, doubled in 2009 and followed a permanently increasing trend. By 2011, it became the highest of the CEE5. Slovenian banks have similarly high NPL ratios (Figure 2).

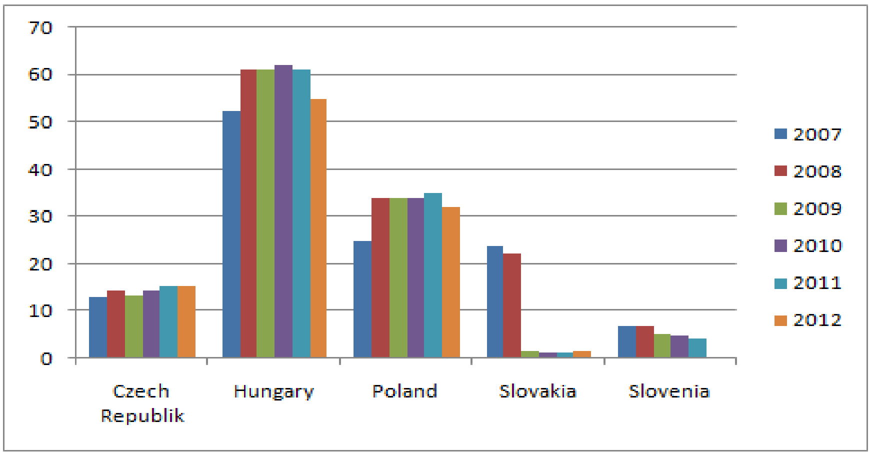
Figure 2 Bank nonperforming loans to gross loans (%)



Source: World Bank, Global Financial Development Database

Retail FX lending through the exchange rate risk also contributed to the sharp increase in credit risk, especially in Hungary. In Hungary, due to the high interest rate differences between the domestic and foreign interests the FX lending, especially lending in CHF became dominant and by 2008, almost all the retail loans were granted in foreign currencies. As a consequence, by 2008 more than 60% of total loans were denominated in foreign currencies. In Slovakia the volume of FX loans was much less and only Euro denominated loans were granted, which, as a consequence of the Euro zone accession in 2009, ceased to be FX any more. Consequently, the ratio of FX loans to total loans decreased to a minimum. In Czech Republic the FX lending to the retail sector was very low, while in Poland –due to the early intervention of the central bank-it was granted only to a limited extend. In Slovenia, where the Euro has been the local currency since 2007, the FX lending was negligible (Figure 3).

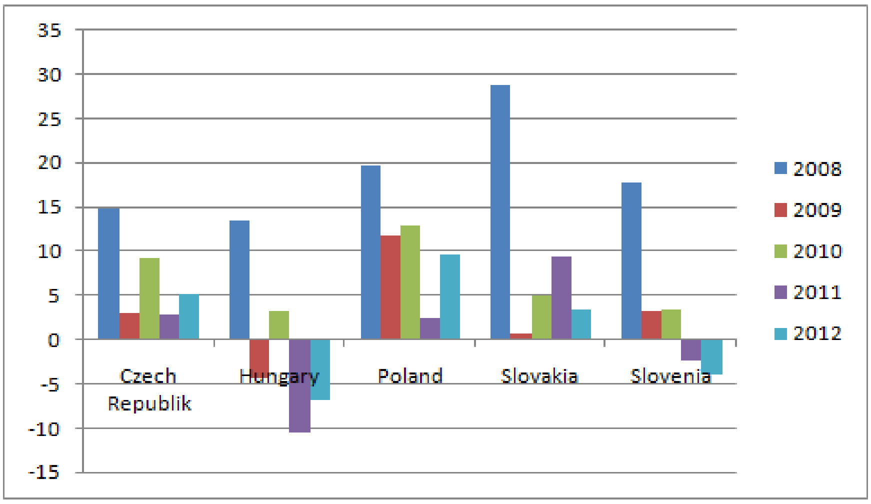
Figure 3 Loans in foreign currency (% of total loans)



Source: Raiffeisen Research (2013)

The funding difficulties together with high NPL and low profitability ratios lead to a significant credit crunch in Hungary in Slovenia by 2009 (Figure 4).

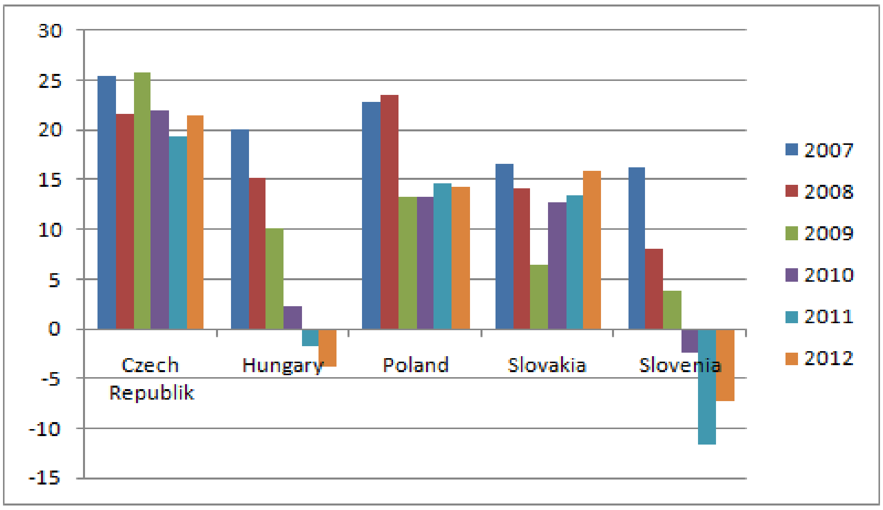
Figure 4 Loan growth in % yoy



Source: Raiffeisen Research (2013)

The above trends are also reflected in the profitability of the CEE5 banking sectors. The financial crisis resulted in only slightly decreasing RoE in 2008 in the region (Figure 5). In the following years, the profitability of Czech, Slovak and Polish banking systems remained high, while Hungarian and the Slovenian deteriorated and operated at a loss.

Figure 5 RoE of the CEE5 banking sector



Source: Raiffeisen Research (2013)

4. Contrasting conditions: Macroprudential turn in Hungary and Slovakia

Macroprudential regulations were introduced in all CEE5 countries soon after the outbreak of the international financial crisis. We argue that the explanatory factors relevant to Western Europe do not help us understand why. Given the lack of major bank bail-outs, there was no significant taxpayer pressure on policy makers to introduce countervailing macroprudential measures. While the Hungarian and Slovenian banking systems were seriously hit by the crisis, Slovak, Czech and Polish banks came out of the crisis relatively less affected. These banking systems have stable domestic deposit base, increased but manageable NPL and decreased but reasonable profitability, yet they all introduced macroprudential tools (Table 2). Therefore, in order to better understand the special reasons behind the macroprudential policy turn in CEE5 we select one of the moderately affected countries: Slovakia.

The other explanatory factor behind the macroprudential turn identified by Baker (2013/1) was the effect of the ECB and other European authorities' regulatory activism. In Euro area countries the crisis reaction of the European Commission and especially that of the European Central Bank and their obligatory participation in the Banking Union project certainly explains part of their locally initiated macroprudential policies. Again, to highlight CEE5's special position we select Hungary, a non-Euro area country where other dynamics also must have played a role (Table 4).

Table 4 Case selection: controlling for explanatory variables of macroprudential changes

	Effect of the crisis on the banking sector		
Euro area membership		week	strong
	yes	**Slovakia**	Slovenia
	no	Poland, Czech Republic	**Hungary**

After reviewing the banking related legislation in Hungary and Slovakia that were enacted after 2008, we selected all macroprudential regulatory and institutional changes that satisfy the criteria of Table 1 in three separate tables (Tables 5-7). We only selected regulations that were initiated by local actors. This is why we do not analyze regulatory changes that happened due to the implementation of macroprudential EU policies. We do not consider those regulations that had explicitly multiple aims such as monetary policy, stabilization, economic growth, consumer protection, etc. This is why we do not analyze bank levies, although both governments used them, but primarily as a fiscal tool. Finally, we only marginally look at regulations at the micro-sociological level such as monitoring, warnings, data provisioning etc.

Table 5 Hungary: Changes in the institutional framework of bank regulation and supervision

date	**institutional change**	**description**
1. January 2009	Amendment of the HFSA Act	Additional legal tools to react to the threats to the stability of the financial intermediary sector (exceptional data request, lengthening the duration of monitoring)
2. January 2010	Act CXLVIII of 2009 on some amendments of acts making financial supervision of the financial intermediary system more efficient amending the Act CXXXV of 2007 on the HFSA.	It establishes the Financial Stability Council. Its members are the Minister of Finance, Governor of Central Bank, and the President of HFSA. The same law modifies the Law on the Central Bank so that in case the stability of the financial intermediary sector requires it, the Governor has the initiative to recommend the creation of a new law to the government, which must react to the initiative by either making a new law or explaining why not.

3.	**December 2010**	Act CLVIII of 2010 on HFSA.	Empowers the HFSA with the power to issue decrees on certain issues. In order to preserve the stability of the financial intermediary sector the HFSA may suspend for max. 90 days activities and trading with certain products or may make them conditional.
4.	**December 2011**	Act CCVIII of 2011 on the Magyar Nemzeti Bank	With the modification of the Law on the Central Bank, the central bank received a number of rights to intervene in macroprudential regulation and supervision. (e.g. decree power in the area of systemic liquidity risk and development of new tools that may curb extensive credit outflow)
5.	**October 2013**	Act CXXXIX of 2013 on Magyar Nemzeti Bank (MNB) with effect as of 1 October	The HFSA was integrated into the central bank.

Table 6 Hungary: Macroprudential regulations enacted after the financial crisis

date		**regulation**	**description**
1.	**November 7. 2008**	HFSA resolutions on individual real estate mutual funds	HFSA suspended for max 10 days the operation of real estate funds and the trading of units of real estate funds.
2.	**December 30. 2009**	Government Decree on 361/2009 (XII.30.) on the terms of prudent retail lending and the assessment of creditworthiness	Introduced maximum requirements on loan-to-value (LTV) ratio on household mortgage lending. The limits were set in euro and forint, and other currencies. Payment-to- income (PTI) in forint, euro and other currencies.
3.	**September 2011.**	Act CXXII. of 2011 on the central loan information system	Established the Credit Bureau in relation to retail lending.
4.	**January 2012**	Government Decree No. 366/2011(XII. 30.) on liquidity coverage requirements for credit institutions and on the maturity mismatch of foreign currency positions of credit institutions**.**	Out of two new liquidity ratios at least one must be fulfilled in addition to fulfilling the requirements of foreign currency coverage ratio.

Table 7 Slovakia: Macroprudential regulations enacted after the financial crisis

date	regulation	description
1. **October 2008**	Decree No.18/2008 of National Bank of Slovakia of 28 October 2008 on the Liquidity of Banks and Branches of Foreign Banks and on the Process of Liquidity Risk Management of Banks and Branches of Foreign Banks	Introduced a new liquidity ratio with the aim to prevent the outflow of liquid assets from Slovak banks to parent banks.
2. **June 2010**	Decree of the National Bank of Slovakia dated 8 June 2010 No. 11/2010 stipulating methods of valuing positions recorded in the banking book and details of the valuation of positions recorded in the banking book including the frequency of such valuations	Banks must compare provisioning to expected losses; the difference shall be covered with capital in case of banks using the standardized approach for calculating credit risk capital requirement.
3. **January 2012**	Recommendation No 1/2012 of the Financial Market Supervision Unit of Národná Banka Slovenska of 16 January 2012 on support for banking sector stability.	Introduced three new rules: - core Tier 1 ratio of at least 9 per cent - maximum loan-to-stable-funding ratio (LTSF) of 110% - restriction of profit distribution (on dividend payment) as a function of core tier 1 capital

5. Understanding macroprudential policy shift in Hungary and Slovakia

Since 2008 a macroprudential turn in financial policy making has been clearly detectable in Hungary and in Slovakia. Both countries joined the EU in 2004. Thus, their policy makers have been well-informed about changes in the thinking about bank regulation that occurred in the many EU committees after the crisis. Moreover, the fact that their banking sector is dominated by foreign banks makes Hungarian and Slovak regulators quite sensitive to regulatory developments in home EU member countries. Therefore, policy learning has been an important factor in the implementation of locally initiated macroprudential policies. In addition, Hungary's macroprudential policy turn is related to the influence of the International Monetary Fund. However, the implementation of macroprudential policies came with a twist when the FIDESZ government was formed in 2010. Macroprudential policies were enacted not primarily for their capacity to control for systemic risks, but more because they were in line with the FIDESZ government's general bank policy that aimed at strengthen the role of the state vis-à-vis the banks.

In Slovakia, the number of macroprudential regulations enacted since the crisis is much smaller. This is certainly partly the result of Slovak policy makers' inclusion in the Banking Union, the EU project which aims at controlling for EU wide systemic risks, among other things. While the macroprudential policies that were initiated by Slovak policy makers all control for systemic risk, nevertheless some of them also had another purpose. They protected the local Slovak financial market from foreign mother banks by decreasing the mothers' ability to withdraw money. In other words, they made Slovak regulators able to exercise power over foreign mother banks.

That is, CEE's local macroprudential policy turn is a result of international organizations' efforts in policy diffusion as well active policy learning on the part of CEE officials; however, their actual realization points beyond their primary objectives and are made fit to local policymakers' own agenda. In the first section, we demonstrate our first claim; in the next one we tackle the second one.

5.1 International organizations, policy diffusion and policy learning

The importance of IMF and EU lending to Hungary in 2008 has already been analyzed from a number of perspectives. Its stabilizing effect on the Hungarian banking sector was pointed out by Kudrna and Gabor (2013: 557). Epstein (2014) looked at their role in backing the Vienna Initiative (VI). Recently, Lütz and Kranke (2014) compared IMF lending policy to troubled CEE countries to the EU's lending consideration and found a surprisingly stricter insistence on the tenets of the Washington Consensus by the EU than by the IMF staff. And most recently Johnson and Barnes (2015) pointed out its role in enabling the Orbán government's financial nationalist policies.

Before exploring IMF lending to Hungary from the perspective of macroprudential policy implementation, we need to clarify two things. First, in 2008 the Hungarian government turned for assistance to three international institutions: the IMF, the European Union and the

World Bank. We only analyze the IMF agreement, because the IMF led the Troika, and Hungarian policy makers negotiated mainly with IMF staff (interviews). Second, IMF lending policy has undergone major transformation since the early 2000s. As Barnett and Finnemore (2004: chapter 3) have shown the essence of the change was in the development of conditions attached to lending. While until the early 2000s it was the IMF staff that worked out the details of conditions attached to lending, since the early 2000s the IMF asks local policy makers to come up with policy choices that will improve their economy's capacity-- further increasing the government's capability to repay the IMF loan. This is important from our perspective, because we argue that while there were a large number of macroprudential regulatory changes in Hungary initiated by local actors (officials from the central bank and the Ministry of Finance), nevertheless these changes were also collected and approved by the IMF staff in 2008 before the Loan Agreement was signed. That is to say, macroprudential policy making in Hungary was a result of a fusion of national and international considerations.

In mid-September 2008 the Hungarian government, faced with the drying up of internal liquidity and a loss of investors' confidence, turned to the IMF for help. The Letter of Intent (LoI) was worked out by both IMF staff and Hungarian government staff. In this document the government asked for IMF funding (600 billion HUF) in order to be able to stabilize the banking sector if needed and thus restore investor confidence. The LoI requested as conditions of the loan a complex reform package that included fiscal policy, monetary policy and banking sector-related elements.

In the LoI, the Hungarian government promised to strengthen the macroprudential capacity of both the central bank (MNB) and the bank supervisory authority (HFSA). Paragraph 14 of the letter of intent reads 'we will step up our efforts to strengthen the HFSA's and MNB's capacity to assess and address solvency and liquidity concerns in banks in a timely manner.' (LoI, 2008). In 2009 it was in this direction that the government modified the HFSA Act and provided additional legal tools to react to the threats to the stability of the financial intermediary sector (e.g., exceptional data request, lengthening the duration of monitoring) (Table 5. item 1.). Also, with the same aim in mind, in January 2010 the government established a Financial Stability Council (Table 5. item 2.). Its members are the Minister of Finance, Governor of National Bank of Hungary and the President of HFSA. The same law - again with the aim of strengthening macroprudential capacity - modified the Law on the Central Bank so that the Governor of the Central Bank has the initiative to recommend the drafting of a new law to the government, in case the stability of the financial intermediary sector requires it (Table 5. item 2.). This same promise was fulfilled in 2011 when the government authorized the HFSA with a long sought for decree power with the modification of the Act on HFSA (Table 5. item 3.). Also, in 2011 the modification of the Act on the Central Bank delegated additional powers to intervene (Table 5. item 4.). Finally, we may consider the merger of the HFSA and MNB in 2013 a step taken in this direction (Table 5. item 5.).

The Hungarian government also promised a large number of additional and more specific steps to strengthen the financial sector's regulation and supervision; some of them are clearly macroprudential in nature. Out of this list, we consider macroprudential the maximum loan-to-value and payment-to-income ratios. They were introduced in 2010 by Government Decree on 361/2009 (XII.30.) on the terms of prudent retail lending and the assessment of creditworthiness (Table 6. item 2.). We also take as macroprudential in nature the positive Credit Bureau that was established in 2011 through Act CXXII of 2011 on the central loan information system (Table 6. item 3.).

All in all, there was a tremendous amount of macroprudential changes envisaged here in the Letter of Intent. We must realize that this amount of macroprudential tools could not have been thought of only during the time of writing the LoI. Instead, many of the suggestions have been for a long time part of widespread public or expert debates. This point is also consistent with Baker's (2013/1) finding which showed that macroprudential thinking was not new after the crisis, as the most important policy papers were written in the early 2000s. But it was only after the crisis that they came to dominate the policy makers' agenda. In Hungary a very similar process ensued, while some of these considerations were part of local policy debates for quite some time, it was only after the financial crisis and with the strengthening of macroprudential thinking about banking that they became viable policy choices and were finally enacted by the government. Take the examples of the following expert debates: disputes over the merger of the central bank and the bank supervisory authority, over the granting of decree power to the bank supervisory authority and the central bank, and over the introduction of the positive credit registry for households. In all these areas the public debates considered pros and cons for at least a decade prior to the crisis--the last two since the beginning of the 1990s (Piroska, 2006; Király and Mérő, 2008; Király and Mérő, 2011).

Understanding the shift in macroprudential regulation in Slovakia is more challenging. First, the crisis impacted on Slovakia only slightly. Indeed, financial distress did not last longer than the year 2009, although unemployment rate remained higher, the banks' NPL rates are still higher, and RoE rates lower than pre-crisis levels. Therefore, one of the most important reasons that Baker (2013/1) and others used to explain the new prominence of macroprudential thinking and regulation was absent in Slovakia. However, the other explanatory factor was present:

Slovakia was part of the EMU during most of the crisis, that is why the impact of the ECB on Slovak policy makers were more immediate and Slovak policy makers learnt a lot about the gaining importance of macroprudential tools. It seems to us that this single factor (policy learning) was important enough to motivate Slovak policy makers to issue their own macroprudential tools even in the absence of a major crisis and ensuing bank bail outs.

To demonstrate this point we must recall that Slovakia joined the ERM II mechanism in 2005. Thus in Slovakia, since 2005, Slovak policy makers have followed a financial policy path very close to that of the ECB and the Commission. As Johnson (2008) argued, in 2005 ERM II locked Slovakia into maintaining fiscal rectitude because making a strong promise to introduce the euro in 2009 was Slovakia's 'central symbol of economic credibility' (Johnson, 2008: 832). Introducing the euro during the crisis in 2009 had important implications for bank regulation and supervision in Slovakia.

Two out of the three Slovak macroprudential regulations are modified versions of EU regulations. The first is the 2010 Decree of the National Bank (Table 7. item 2.) which prescribed to banks using standardized approach to compare provisioning to expected losses, and cover the difference with capital. This method was developed in the CRD for banks using Internal Rating Based (IRB) approach. Here the idea of the macroprudential regulatory tool came from the EU; the Slovak regulators simply used it differently in their home market. Second, the 2012 recommendation of the Slovak National Bank is (Table 7. item 3.) also a variation on EU rules. This time they followed selected rules from the new CRR (Regulation 575/2013/EU), the CRD (Directive 2013/36/EU) and the European Banking Authority (EBA) regulations. The Slovak loan-to-stable funding ratio is very similar in its concept to the net stable funding ratio (NSFR) of CRR. However, it will be implemented only in 2018 and is still under calibration in Europe. The restriction on profit distribution as a function of common equity tier 1 capital of the banks is in line with the CRD requirements for capital buffers (capital conservation and countercyclical buffers) but again the date of introduction is much earlier and the calibration is higher than the related CRD rules. Finally, the minimum 9 per cent core tier 1 capital requirement of Recommendation No 1/2012 is in line with the prescription of EBA for largest banks; however, this applied to all banks in Slovakia.

5.2 CEE macroprudential turn comes with a twist

One of the major claims Baker (2013/1) made in relation to the nature of macroprudential policy changes is that there is a major change in the culture of regulation. Based on our interviews with Hungarian and Slovak regulators we can certainly confirm it. As an official from the Slovak National Bank summed it up the nature of the changes were mainly at the level of thinking about the banks' riskiness and its effects on the macro-stability:

> The difference is in culture. Before and now. Before, we had macroprudential analysis, we were willing and able to understand systemic risk, but the problem was nobody was listening before the crisis. There were stress testing, macro stress testing, different systemic risk indicators. They were introduced to bank boards, to foreigners, also to the public, but NOBODY was listening. Ok, nice indicators, nice analysis – they said, but the culture was not receptive.

The same official continued on describing the current situation:

> The target of regulation is still the same: financial stability. But how we arrive at it, is very different. Even in my department, I have been responsible for macroprudential analysis for nearly 10 years, and there was a need to change in my culture. Before it was like academic work, but now it is mainly policy work, political consequences, what tools shall we use. Today, 90 per cent of our work is policymaking and 10 per cent analytical work.

Hungarian interviewees made the same observations too. We noticed in both countries that the position of the financial stability or macroprudential department within the central bank changed significantly. Its main responsibility changed from providing analysis of the banking sector's stability (pre-crisis) to actually managing the stability with more monitoring, discussions, recommendation and if necessary with more regulations (post-crisis). We consider this change an important alteration within the organization of the state, which does not necessarily increase the power of the state, but certainly makes those analysts more influential who deal with systemic risks.

5.3 Hungary – macroprudential tools, macro-risk and financial nationalism

Reviewing the institutional and regulatory changes in Table 5, 6 and 7, it seems evident that they made Hungarian state institutions significantly more powerful after 2008 vis-à-vis the banking sector. The institutional changes either granted more tools to supervise and regulate banks, or created more powerful and larger institutions.

However, before FIDESZ came to power in May 2010 the focus of regulators was on mitigating the effect of the crisis with macroprudential tools; after 2010 macroprudential policies were enacted as a side effect of the government's policy agenda priority, namely strengthening the state vis-à-vis the banks.

In 2008, as the first macroprudential policy tool, the HFSA issued individual resolutions on all real estate funds to prevent fire-sales of real estate portfolios, and consequently the collapse of the market. Individual resolutions were used because at this time HFSA still lacked decree power. However, already at this time macroprudential reasoning, that is, that the whole industry must function more carefully, empowered HFSA and its staff to find a tool to deal with systemic risk. Similarly, the establishment of the Financial Stability Council in January 2010 is a classical example of Baker's thesis regarding how macroprudential tools strengthen the state. The aim was to form a council of high level state officials so that they have a better understanding of the entire banking sector, and the result is a new state organ, which could exercise (through processing more information) greater power over banks.

However, the regulations enacted after May 2010 are more suspicious in terms of their aims and consequences. After coming to power one of the first economic policy steps of the FIDESZ government was to declare in July 2010 that Hungary did not need IMF support any more (Economist 2012). This meant effectively that the Loan Agreement the previous government signed in 2008 was no longer in power. Nevertheless, the Orbán government still enacted quite a few macroprudential items, which we have reviewed above in our discussion of the Letter of Intent. This indicates two things: one, IMF conditionality was not the only reason Hungarian actors engaged in macroprudential policy making; two, the items (promises) in the Letter of Intent were originated not by IMF staff alone, but were the result of local policymaking, reflecting local circumstances.

In December 2010, the FIDESZ government amended the HFSA Law and granted decree power to the supervisory agency. This amendment figured in the Letter of Intent sent to the IMF. Further, the HFSA had been demanding this right for long and the crisis made it finally a legitimate request in the eyes of all decision makers. Decree power however, was not only important to prevent/mitigate the crisis, but also to make the HFSA a stronger institution. What we need to keep in mind is that the governor of HFSA since May 2010 was an appointee of the Orbán government. Thus, strengthening the HFSA was a step towards strengthening the government power vis-à-vis banks.

For an example of how macroprudential policy tools were used to legitimate FIDESZ power, take the introduction of the positive credit registry, i.e., the establishment of a fully functioning Credit Bureau. The banks, the central bank and the HFSA had been demanding this institution for years, and, as we saw, it was also promised to the IMF, despite the fact the objection of Data Protection Ombudsman was treated as an insurmountable veto before. Yet, when in 2011 it finally became a law, the real reason behind its enactment was that the Orbán government wanted to make a gesture to the banks, which had been under pressure to contribute to the state budget. More precisely, the Credit Bureau was introduced to compensate for the losses the banks suffered as result of a regulation which permitted mortgage holders to pay down their FX denominated balances at fixed below-market exchange rate. This obviously meant huge losses to the banks (personal interview).

This example also points to an additional feature of macroprudential policy making in Hungary under FIDESZ government, namely that the real aim behind the implementation of macroprudential tools were not primarily controlling macro-risk, but more importantly to increase or legitimate state power over banks.

Take the example of two additional macroprudential policies, which were introduced in relation to the central bank. Again, both regulations figured already in the Letter of Intent, both of them are macroprudential in nature. The first one is the 2011 December modification of the Law on the Central Bank. This amendment created substantial tension between the Hungarian government and the ECB, as the government tried to weaken the independence of the governor of the MNB (the Hungarian central bank) in important ways. At this time, the governor of the central bank was still András Simor, an appointee of the previous Socialist government. The Orbán government aimed at strengthening the role of the Monetary Council and the amendment granted a number of rights to the Monetary Council of the central bank and aimed at strengthening its macroprudential capabilities as opposed to the governor. Similarly, the 2013 merger of the central bank and the HFSA, which was also a macroprudential step, we can identify as a side effect of a greater aim. In March 2013, a new governor was nominated to lead the central bank: György Matolcsy. The then-current Minister of Economy was a close friend and the most important economic advisor to Viktor Orbán. Merging HFSA and the central bank was primarily motivated by the desire to centralize power in reliable hands.

5.4 Slovakia – macroprudential policies to protect the Slovak markets from mother banks' contagion

In contrast to Hungary, macroprudential regulation of the Slovak banking sector since 2009 has not been the sole responsibility of Slovak authorities. Since the launch of the Banking Union

(BU) project Slovak authorities are exposed to BU related initiatives. The Slovak regulators' impression is that the Single Supervisory Mechanism will pose a big challenge for the National Bank of Slovakia (Licak, 2013). They look at this process as transferring the microprudential supervisory rights to the ECB, while retaining the macroprudential aspect of supervision. They foresee a close cooperation with the ECB and stress the need to understand local conditions (interview).

As we have argued before the most important factor behind the emergence of macroprudential policy making in Slovakia is policy learning from the European Union. Here we would like to go a bit further in the analysis for the reasons of change and investigate the nature of the new macroprudential tools.

In 2008, the National Bank of Slovakia issued its first macroprudential decree (Table 7. item 1). It introduced a new liquidity ratio with the aim of preventing the outflow of liquid assets from Slovak banks to parent banks. As we noted earlier the majority of banks in Slovakia are foreign-owned. After the collapse of the Lehman brothers, liquidity dried up everywhere in Europe. Mother banks started to withdraw liquidity from their Eastern subsidiaries in order to better manage their own liquidity. The Slovak authorities thus acted on the early signals of liquidity withdrawal (mother banks stopped pretty soon as Epstein (2013) argued). The introduced ratios are macroprudential in nature in as much as they do not focus on any single bank, but require from every bank the fulfillment of the same ratio. What we need to observe is that in 2008 this macroprudential tool was aimed primarily at protecting the stability of the whole Slovak financial market, making it a fundamentally protectionist measure. Similarly, when in 2012 the Euro crisis hit and solvency became the most important problem in banking, the Slovak authorities used a macroprudential tool to protect the Slovak financial market. The risk that they faced because of the Austrian regulatory authorities' actions and parent banks' actions was the transferring of capital from subsidiaries to parent banks. They found it a very dangerous trend. This is why the Slovak central bank, after consultation with the banks, issued a recommendation, which effectively restricted profit redistribution.

To sum up, while we found clear proof that the power of the state in Hungary and Slovakia has increased, the reason for these changes and therefore the reason for macroprudential turn is mixed. To some extent, macroprudential polices were used as effective tools to prevent or mitigate the crisis, but they were also applied for additional reasons: to increase state power per se in Hungary or to protect the local market from mother banks or home authorities of mother banks in Slovakia. In both cases, macroprudential policies implied higher cost for banks. We turn now to investigate the banks' reactions to the new macro tools.

5.5 Banking reactions to macroprudential regulation

From a bank's perspective, almost all of the Hungarian and Slovakian macroprudential regulations, listed in Table 6 and 7, maybe regarded as microprudential. For a bank, the ultimate and proximate objective of these rules would be to decrease the vulnerability of individual institutions and thus to protect the depositors of the banks. However, from this microprudential perspective the calibration of prudential controls seems exaggerated, since- if we disregard endogenity of risk and the correlations and common exposures across institutions- lower regulatory limits (for example lower LTV or PTI ratios, or less provisioning) would be adequate to protect the stability of an individual bank. Moreover, since there is no historically proven experience in the calibration of macroprudential regulation, the borderline between necessary regulation and overregulation is unclear. However, compliance with macroprudential rules makes banking more costly, since higher prudential controls mean more provisions, capital and liquid assets and may reduce lending activity.

Accordingly, banks have interests that conflict with macroprudential regulation. A stable financial system is essential to profitable banking, however in the short run macroprudential rules seems to be unjustified and too expensive and sometimes even their relation to the objectives of regulations (as defined in Table1.) is not obvious. The inherently microprudential nature of individual banks' risk management is the reason for basically microprudential prospect of the Basel II regulatory framework, which is risk based and built on the best practice of banking risk management. It was not by chance that the Basel II regulatory framework was widely blamed because of its procyclical nature, i.e., because of the lack of its systematic approach (Danielsson *et al.*, 2001). Accordingly, the risk management practice based on macroprudential perspective and the prudential regulation applying the macroprudential approach may appear for the banks only as external requirement and as the manifestation of increasing power of the government over banks. These requirements are higher than those that are in line with effective banking risk management, so under normal market conditions they seem to be exaggerated for banks. Some examples are given below to demonstrate the position of banks' in relation to macroprudential regulation from both Hungarian and Slovak banking systems.

The first set of examples consists in the macroprudential rules that are opposed only by a few banks. Since some of them are able to comply with the rules without any adjustment, they consider the new rules a source of competitive advantage. However, as for most banks it means serious adjustment and cost, the dominant part of the sector is against the regulations.

The aim of suspending the redemption of real estate mutual funds (Table 6. item 1.) definitely was macroprudential, since the Hungarian Financial Supervisory Authority (HFSA) was afraid of the forced fire-sale of real estate and, through this, the collapse of the real estate market because of mass repurchasing of real estate mutual fund shares.[7] The banks' reactions to this action were controversial. Those banks were for this regulation that –as a consequence of mass redemption after the collapse of Lehman Brothers- suffered from huge decrease in net asset value. They generally managed a portfolio with a relatively low proportion of liquid assets and high proportion of real estate, since, with the help of suspension, they could avoid resorting to amass fire-sale. As a contrasting example consider the Hungarian Erste Group, which managed the largest Hungarian real estate mutual fund. It had a portfolio containing large share of liquid assets; accordingly, in answer to inquiries by one of the largest Hungarian news sites, it issued a communiqué to the effect that the resolution of the HFSA was unreasonable and unnecessary (origo, 2008). The attitude of the Erste Group towards this regulation is also a typical example of ingrained microprudential approach of individual banks. From its point of view, the regulation was really superfluous; however in the longer run if the other banks' difficulty led to the collapse of the real estate mutual funds' market, it definitely would be affected detrimentally.

The macroprudential aim of requiring excess capital from Slovakian banks using the standardized approach for credit risk capital calculation under the Pillar I of Basel II in case of having provisions less than the expected loss (Table 7. item 2.) is also clear. The large Slovak banks that used the internal rating based (IRB) approach to capital calculation were in favor of this regulation[8]. They thought that to be allowed to operate with a lower level of provisions than expected losses, would give competitive advantages to the standardized banks, i.e., to the banks with less developed risk management practice. This tilting of the playing field would be against the concept of Basel II. However, the standardized banks were against the regulation, since it put high burden on them. Their opinion was that the capital calculation that is identical to IRB banks did not take into account that the standardized banks did not to have methods for expected loss calculation. That is exactly why they use the standardized approach to capital calculation. Consequently, they have to invest immediately in developing their risk modeling, which is

7 Individual Decisions were issued by HFSA to all the real estate mutual funds to recast their internal regulation, namely to lengthen the redemption period from the generally used T+3 days to T+90 days, which was the maximum allowed by the relevant law.

8 All the three largest Slovakian banks that have more than 50% market share together used the IRB approach.

extremely burdensome during the crisis. The authorities argued that all the banks have to have methodology for expected loss calculation in the second pillar framework of Basel II, only the methodology and other details can be less sophisticated than in case of IRB banks (interviews).This example is also interesting in the light of the fact that in this case the large foreign banks were the beneficiaries of the regulation and the small local institutions the principal sufferers.

The second set of examples is those macroprudential rules that are opposed by the full banking system. These rules are typically those that restrict those activities that were the main drivers of growth and profitability in the pre-crisis boom.

The introduction of LTV and PTI limits in January 2010 in Hungary (Table 6. item 2.) is an exemplary item in this category. They were introduced at a point in time when – as a crisis reaction- the FX retail lending completely and the HUF retail lending almost completely had stopped. Accordingly, the banks regarded as superfluous these limits that were introduced after the event, rather than to prevent the emergence of risks before the event. Nevertheless, since the banks wanted to ensure as much freedom as possible, in the debates before the codification of the new limits they lobbied for more relaxed regulation. As a result, the newly introduced macroprudential limits were compromises. The original draft legislation of the Hungarian central bank envisaged 70 % LTV limit as a maximum for HUF loans. As a compromise, the regulation set the limit at 75% and at the same time decreased the cost of capital in the 70-75 % LTV range.[9]

The new liquidity ratios and limitation of foreign exchange maturity mismatch position of banks introduced in January 2012 (Table 6. item 4.) was also opposed by all Hungarian banks, however at that time there was no compromise amendment. The Hungarian Banking Association (2012:19) summarizes the outcome of their efforts as follows: 'We did not manage to obtain a reduction either in the proposed liquidity ratios or in the FX Funding Adequacy Ratio, and our effort to achieve longer preparation time and postponement of the introduction of these measures also failed.' The last two measures reflect the different attitudes of Hungarian governments towards compromise before and after the 2010 governmental election, too.

The new liquidity ratio, which was introduced in 2008 in Slovakia (Table 7. item 1.) as an immediate response to the drying up of financial markets after the collapse of Lehman

9 At the time of introduction of Basel II regulation in Hungary, as a national discretion, the 35% preferential weight for residential retail exposures was applicable only if the LTV was below 70%. As the LTV limit was introduced in 2010 the limit for preferential risk weighting was increased to LTV below 75 %.

Brothers, also belongs to this category. In most cases the newly introduced liquidity ratio did not involve immediate adjustment. However, since it restricted the liquidity management of banks and required higher level of liquid assets, banks were against it. After the Lehman's collapse the mother banks tried to withdraw liquidity from their subsidiaries, consequently the owners of the banks were even more strongly against the regulation.

The establishment of the Hungarian Credit Bureau (Table 6. item 3.) can be classified as outlier among the macroprudential regulations, since it was supported by the banks, as well. The reason for this support was that the Credit Bureau not only makes lending safer on macro level, but it also can improve the quality of banking risk management.

The fact that banks only objected moderately to the regulatory burden of macroprudential regulation raises the question: why? We could not find simple answer. However several parts of a possible answer were revealed during the interviews. First, since the parent banks' home countries also were active in implementing macroprudential regulations they did not strongly encourage their subsidiaries to protest. Second, the banking associations in both countries seemed to be organizations with limited negotiation power. Third, Hungarian (from 2010) and Slovakian (from late 2011) banks have concentrated their efforts on reducing the fiscal burdens imposed by new bank levies, a transaction tax (Hungary) and the cost of different retail debtor consolidation packages offered by the government (Hungary).

6. Conclusions

Macroprudential policies in Central and Eastern Europe are regulators' well-established tools as of 2014. Even in the absence of a major financial crisis, severely broken banks and bank bail-outs, CEE policy makers implemented a number of regulatory tools to control systemic risk. Having examined the cases of Hungary and Slovakia– we argue –this turn to the macroprudential perspective was partly the result of the policy diffusion efforts of international organizations such as the IMF and the EU and partly the policy learning willingness of Hungarian and Slovak officials. However, macroprudential policies were used with a twist in CEE. These tools in the hands of CEE policy makers also served other interests. In the case of Hungary they helped the Orbán government to increase its power vis-à-vis the banks. In Slovakia they allowed Slovak policy makers to effectively protect their domestic market from foreign mother banks' intentions to withdraw liquidity or profit and thus weaken the stability of the Slovak market.

Since macroprudential regulatory tools usually mean additional regulatory burdens on banks, they are generally against them. Analyzing banks' reactions to macroprudential policies, we found only one case when banks were for the newly introduced regulatory tools. They favored those policies because they saw that working in more stable environment was in line with their interests. In some instances, their collective attitude was more ambivalent: those banks that could comply without additional investment were for the new regulatory tools while those who had to heavily invest into compliance were against them. These conflicting interests have implications for banking in general, primarily through a strong incentive to engage in regulatory arbitrage. As a consequence new types of risk may emerge, which questions whether the macroprudential regulation results in a more stable financial system.

There are a number of limitations to our findings. First, and most obviously, our claim regarding the locally motivated agenda of Hungarian and Slovak policy makers when implementing macroprudential tools cannot be generalized to all CEE5 countries. While we have demonstrated the spread of macroprudential tools throughout the region (see Table 4), in order to strengthen this finding we would have had to conduct more in-depth research into the actual circumstances of the locally initiated macroprudential policies in each country. Nevertheless, it seems to us that there is a more general logic that may be at work in all CEE5 countries. Namely, in the absence of a major financial crisis, even though the international organizations were active in disseminating studies and policy positions and CEE5 policy makers eager to learn, local and non-crisis related considerations played a more important role when designing financial market policies (including macroprudential tools) than in core countries. This logic may actually apply to all peripheral countries that were not harshly hit by the crisis. However, to learn more about these processes, more in-depth empirical work is needed.

Second, in this paper we have set aside the impact of Basel III, EU macroprudential regulations and the Banking Union project on CEE countries' regulatory frameworks. We did this in order to be able to analyze the locally originated macroprudential regulations. But obviously, the picture we drew of the macroprudential policy turn in CEE is partial; the magnitude of policy changes remain unknown. Moreover, macroprudential policies are still in the making both at member states level as well as at the EU level. Our expectation is that as the concrete macroprudential regulatory framework of EU -in the form of implementation of CRD/CRR regulation together with the EBA standards- will become gradually more comprehensive and the regulations are built more and more on the uniform rules of European

Single Rulebook, room for implementing nationally initiated macroprudential regulations with a twist would grow narrower.

Finally, focusing only on local policy changes we could not discover any cross-border effects of macroprudential polices. Although our Slovak case did contain policies which explicitly controlled cross-border activities of banks and home countries’ regulatory agencies, we did not discuss more general cross-border implications of the implementation of macroprudential policies. We believe that with the entering into power of the various new institutions and instruments of the Banking Union, cross-border macroprudential policies should come to the forefront of new research on this topic.

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