Péter Fáykiss and Anikó Szombati: Macroprudential supervision in non-euro area European countries*

In addition to monetary policy, macroprudential policy can be fundamentally used by countries to contain risks threatening the stability of their financial systems. As macroprudential policy becomes more important, European countries have also begun to consider the establishment of national macroprudential frameworks. This process is underway in two fields: creation of an institutional background, and the development and operation of an appropriate macroprudential toolkit.

Concerning the first field, three basic options are available. In countries with microprudential oversight systems embedded in the central bank, the central bank typically takes on the role of a macroprudential authority. In the case of all other institutional arrangements, either a financial stability committee composed of representatives of the supervisory authority, the government and the central bank is set up, or the earlier institutional structure is maintained and the cooperation between the parties involved is reinforced in order to ensure the well-foundedness of systemic interventions.

As for the other field, the establishment of a toolkit designed to enable the macroprudential authority to act in a direct way at the systemic level is underway. Some countries already have experience concerning the operation of such toolkits: the authorities have already made specific decisions concerning certain macroprudential interventions based on capital or liquidity requirements.

Examining the current practices of the European countries analysed in this study, we can see that the Hungarian macroprudential framework currently being established is in many ways consistent with the practices described below. In many respects, the institutional background[1] (competences and responsibilities) of the macroprudential supervision evolving in Hungary even appears to be more coherent than those set up in some of the countries discussed.

INTRODUCTION

In addition to monetary policy, countries can fundamentally use macroprudential policy to control the development of credit booms and other risks threatening the stability of their financial systems. Macroprudential policy essentially aims to mitigate the frictions and exaggerations of financial intermediation on a fundamentally preventive, pre-emptive basis. Macroprudential supervision has a double objective: (i) to rein in the frequently strongly procyclical behaviour of the financial intermediation system, and (ii) to prevent the build-up and concentration of significant systemic risks. To achieve its goal, it uses tools building on the so-called microprudential toolkit (ensuring the stability of the individual institutions), calibrated to a systemic level.

Macroprudential supervision is a relatively new area of economic policy, created largely as a result of the present crisis, and therefore its framework has not yet been perfected, even in the most developed countries and in the European Union. The European Systemic Risk Board (ESRB) only began its activity in 2011, and establishment of the macroprudential mandates at the level of the member states is still at an early stage.

* The views expressed in this article are those of the author(s) and do not necessarily reflect the offical view ot the Magyar Nemzeti Bank.

[1] The main tendencies have already been established with the adoption of the law on MNB in late 2011, building on international examples and on the unfortunate lessons drawn from the excessive spread of foreign currency lending. The primary macroprudential authority will be the central bank of Hungary (MNB), which shall be responsible for the management of the macroprudential policy by introducing measures to ensure a healthy amount of credit outflow and to decrease systemic liquidity risks and the probability of bankruptcy of systemically important institutions.

Macroprudential policies, therefore, can be considered as a branch[2] of financial stability policy. Within this, however, they specifically focus on prevention, and their main task primarily lies in the avoidance of systemic risks. The predominant objective of macroprudential policies is to reduce the cyclicality of the financial system, but they also aim to take steps to develop transparency and the infrastructure intended to boost systemic resilience. They are to act in complement to or as an alternative to interest rate policy within central banking policies, without (theoretically) ever interfering with the management of inflation targets.

As a result of the preventive nature of macroprudential policy, macroprudential decision-making – which usually implies a commitment to bear certain costs over the short term in order to achieve uncertain stability targets which are also dependent on various external factors over the long run – is subject to a great degree of uncertainty and distrust. These decisions therefore require a necessarily subjective judgment in the assessment of the risk indicators and the inevitability of the interventions, and even in the ex-post evaluation of the effectiveness of the steps taken with the aim of risk mitigation. In such a context, it is crucial that institutions with macroprudential powers should set not only general objectives, but also establish well-defined, clear and consistent intermediate objectives. Regarding the highly cyclical nature of the financial system, these intermediate objectives typically relate to the maintenance of a healthy pace of lending. Resilience may be strengthened by minimising sources of contagion, i.e. by restricting institutions or exposures representing a high threat of systemic risk. It is also recommended to limit the channels of contagion, by preventing the formation of systemic liquidity risks and by developing the infrastructures supporting interbank operations.

International experience shows that if political decision-makers designate an authority as responsible for macroprudential policy and there are a set of intermediate macroprudential objectives reflecting general public consensus, the macroprudential authority needs to be vested with specific tools and instruments to attain these objectives. If this fails to happen, the supervisory authority will not be able to fulfil its intended function, however hard they may try.

Our study provides a short overview of the macroprudential framework developed in certain European countries outside the euro area. We describe how macroprudential analysis is conducted (with the active cooperation, and sometimes predominant contribution, of the central bank), identify the institutions responsible for macroprudential supervision, and enumerate the measures taken to date as well as the instruments these central banks will be entitled to use in future.

We need to stress that as far as macroprudential frameworks are concerned, there is as yet no unequivocally recognised best practice. Each country must develop a macroprudential supervision model that best suits it, in consideration of the characteristics of its national financial markets, the structure of its national financial supervisory institutions, and any other features to be taken into account. Nevertheless, a review of international experience might prove to be particularly useful from a Hungarian point of view. In fact, the positive and negative lessons of the models applied by countries with financial systems comparable to those of Hungary may play a key role in the creation of the Hungarian macroprudential framework.

The first section of this paper presents the macroprudential supervisory systems of the non-euro area EU countries which seem to be the most relevant for Hungary. As this field is comparatively new, we shall only engage in the detailed description of countries which already have a macroprudential supervisory system of a certain level of consistency.[3] To offer a complete overview, the second part of our study briefly examines the practices of some other European countries which may be considered as relevant models for Hungary.

OVERVIEW OF THE MACROPRUDENTIAL SYSTEMS OF NON-EURO AREA EU MEMBER STATES

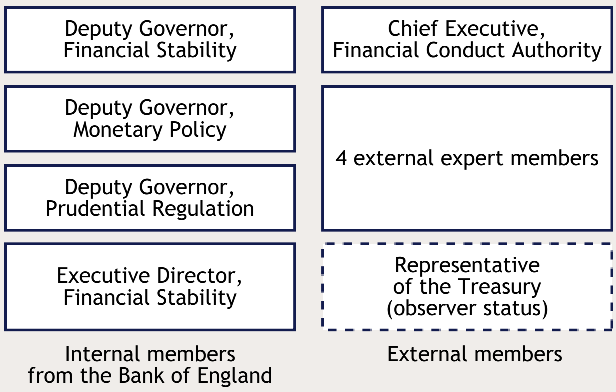
The United Kingdom

During the financial crisis, three banks had to be transferred into state ownership in the UK, and the bank rescue had a serious impact on the budget. The Turner review commissioned by the British Treasury concluded that the previous supervision model, based only on ensuring

[2] The other main sector of financial stability policies is the crisis management toolkit, including the 'lender of last resort' (LOLR) function provided by the central banks, as well as deposit insurance and bank resolution.

[3] Therefore, we shall not discuss Latvia, Lithuania, the Czech Republic, Bulgaria, Romania, Denmark and Poland. Also in Croatia, a new addition to the EU, the complex macroprudential supervision framework is only under construction.

Chart 1
Members of the British Financial Policy Committee (FPC)



Source: BoE.

compliance with the Basel capital standards, was insufficient to prevent the build-up of systemic vulnerability. The structure built on mutual and equal cooperation between the Treasury, the central bank and the supervisory authority proved inadequate. The supervisory philosophy focused on the assessment of formal compliance with the relevant regulation, but failed to tackle systemic impacts and to question the sustainability of the individual institutional practices.

The new structure was set up by mid-2013 as a result of a supervisory reform initiated by the UK government. In the new context, the Financial Policy Committee (FPC), a high level committee of the Bank of England, is responsible for the identification and management of financial systemic risks. The (micro- and macro-) prudential oversight of all entities in the financial sector is now directly exercised by the central bank, in particular by the Prudential Regulation Authority (PRA). As an independent organisation, the Financial Conduct Authority (FCA) is responsible for market conduct supervision and consumer protection, also ensuring the competition surveillance necessary to maximise consumer well-being.

Coordination between the Bank of England, the Treasury and the independent consumer protection authority (FCA) is managed within the FPC: the external bodies attend the FPC meetings, while the head of the PRA is also on the FCA Decisions Board.

Institutional responsibility

As the macroprudential decision-making body of the Bank of England, the FPC is exclusively responsible for the stability of the financial system and – in case a financial crisis should occur – for taking the necessary official measures. The mandate of the FPC defines a double set of objectives: the primary aim is to identify and monitor, and – if necessary – to take action to mitigate or manage systemic risks, with a view to protecting and enhancing the resilience of the financial system. The secondary objective is to support the economic policy of the government, including the growth and employment targets. The combination of these two sets of aims ensures that the resilience of the system may not be enhanced at any cost. The interventions of the FPC shall not exert a significant negative impact on the capability of the financial sector to contribute to the short-term and long-term growth of the British economy.[4]

Monitoring

The FPC's risk assessment will be based on several sources of data and information. For the purpose of the operation of the tools directly applicable by the FPC (see below), a basic set of indicators has been established which reflect not only the current status of the key financial indicators, but also their evolution over time. Additionally, direct institutional supervision (PRA), market supervision (FCA) and market information will be channelled into the decision-making process, as well as stress tests. The FPC communicates its opinion on the systemic risks in its financial stability report issued twice a year, and also discloses its position concerning the key risks and the recommended steps to address such risks following its quarterly meetings.

Macroprudential instruments

As far as the toolkit is concerned, the FPC may issue directly applicable decrees in three areas. These include quarterly determination of the countercyclical capital buffer (CCB) ratio, regular calibration of the sectoral capital requirements, and from 2018 (i.e. the introduction deadline set out in the Basel III framework) regular calibration of the leverage ratio. Furthermore, the FPC will have a special power to issue supervisory and regulatory recommendations

[4] Bank of England (2013), *The Financial Policy Committee's powers to supplement capital requirements. A draft policy statement.* http://www.bankofengland.co.uk/financialstability/Documents/fpc/policystatement130114.pdf.

on a comply-or-explain basis which target the responsible authorities through public calls.

The countercyclical capital buffer ratio

Since the crisis, there has been international consensus concerning the necessity of a tool to support the dynamic variation of the capital position of banks, in accordance with financial cycles. Therefore, the Basel III framework introduced the countercyclical capital buffer (CCB) as a primary macroprudential instrument. The CCB basically serves two purposes. First, it is able to build up an additional capital buffer in the ascendant phase of the financial cycles which, during a downturn in times of recession, provides a cushion for banks to absorb losses that are higher than anticipated. Second, it may provide incentives for banks to rein back on excessive or underpriced exposures in periods of boom. Pursuant to the CRD/CRR regulations enacting the Basel III requirements into European law, the designated authority must determine the countercyclical capital buffer ratio quarterly based on a standard model, a single European recommendation and other circumstances subject to the subjective judgment of the authority.

Sectoral capital requirements (SCR)

Crises may be actuated by the build-up of clearly identifiable, high-risk portfolios or by the formation of asset price bubbles. For this reason, effective risk prevention may necessitate systemic risk-based calibration of the standard risk weights of banks' balance sheet items. With this tool at its disposal, the macroprudential authority has the power to better influence banks' lending policy, enabling it to incentivise or (if appropriate) restrain lending for certain specific sectors. The FPC plans to impose a higher capital requirement than the minimal ratio on three sectors, which may be decreased during times of recession. These include loans granted for residential property; commercial property (including mortgages); and intra-financial sector loans.

Leverage ratio

The Committee assessing the potential toolkits of the FPC[5] proposed the leverage ratio as a third regulatory instrument to be transferred to the decision-making powers of the macroprudential authority. This indicator is typically well-suited for objectively identifying – and, after a certain point, stopping – any build-up of systemic risks, as it compares banks' assets (on- and off balance sheet items) to their elements of regulatory capital actually capable of bearing losses, without the consideration of risk weighting.[6] As a result, the leverage ratio also takes into account exposures considered to be low-risk according to the models used by the banks and the Basel framework, and which accordingly have a lower risk weighting.

As mentioned before, macroprudential tools can only achieve their goal if they handle the risks encountered in a given period of time in the most targeted way, preferably as part of a wider regulatory/supervisory regime. This means that the FPC cannot be entirely confident in attaining its goals by using these three tools. It is also entitled to recommend the use of further tools, either publicly or behind closed doors, and the addressee must respond to the recommendation within a given timeframe, based on the comply-or-explain principle.

Sweden

In Sweden, the Financial Crisis Committee (FCC), an intergovernmental body, has recently reviewed the organisational changes in the Swedish institutional structure necessary to prevent and, if needs be, effectively manage financial crises.[7] Although Sweden only experienced a relatively modest direct impact as a result of the crisis, the FCC considers that a dedicated macroprudential body, and clear responsibilities and close cooperation between the concerned parties are necessary to continuously monitor systemic risks, to quantify risks, to model their potential evolution, and to identify the appropriate tools to decrease systemic risks.

The FCC examined the following aspects, in order to determine the suitable organisational structure:

- sufficient experience and analytical background and the ability to develop new tools;
- the quality and well-foundedness of decision-making;
- resource efficiency;
- appropriate delimitation of responsibilities;
- compliance with EU requirements; and
- continuity.

Institutional responsibility

The FCC proposes to set up a macroprudential council to ensure close coordination between the Swedish supervision

[5] Interim FPC.

[6] Common equity tier 1 – CET1.

[7] Financial Crisis Committee (2013), *Preventing and managing financial crises*. http://www.government.se/content/1/c6/20/77/23/79d3ce4b.pdf.

(Finansinspektionen) and the central bank (Riksbank). In the council, the two authorities would regularly discuss the current status of systemic risks, and if any of the parties concludes that one of the tools allocated to it should be deployed, it would initiate a preliminary consultation on the matter in the council. In addition to the two members mentioned above, the Swedish Ministry of Finance would also act as an observer in the body, and two independent external members would guarantee the impartiality and professional quality of the decisions. The power of decision, however, would always lie with the owner of the tool, i.e. the central bank or the supervisory authority. The operating conditions of the council should be enacted into legislation, and the publication of its detailed minutes would ensure its accountability vis-à-vis the general public.

The FCC intends to expand the financial stability objectives of the Swedish supervisory authority by empowering it to ensure not only the shock-absorbing capacity of the financial system, but also its functional operation, i.e. its uninterrupted contribution to financing the real economy. The idea behind this is that the maintenance of financial stability cannot be a goal in itself, because even though system stability may be guaranteed through the use of draconian measures, this could endanger the intermediation activity itself, and consequently the financing of the real economy.

In reviewing the functions of the central bank, the FCC reached the conclusion that the role played by the central bank in ensuring financial stability should also be enhanced. While the central bank previously focussed mainly on ensuring smooth cash flow, it needs to set a more complex set of goals for the future, which also builds on the obligation to maintain a robust, functional and operational financial system. The law on the central bank will stipulate that the Swedish central bank shall be one of the centres of macroprudential policy, and as such shall also have special responsibilities in the reduction of systemic liquidity risks. In the future, the central bank shall draw on its toolkit normally used to achieve monetary policy goals for the purposes of financial stability, to ensure that the members of the financial intermediation system are less exposed to the detrimental effects of potential liquidity shocks.

Monitoring

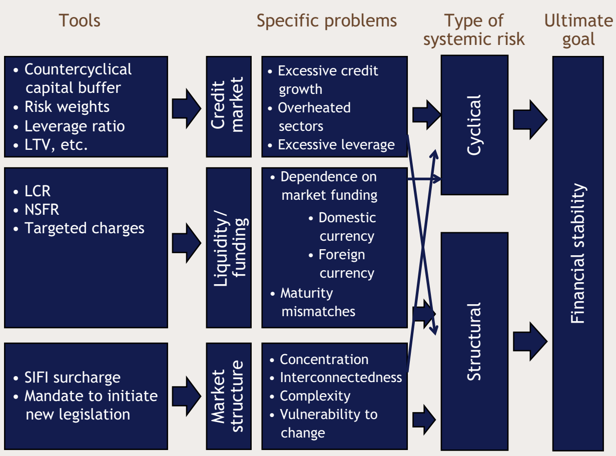
Monitoring systemic risks will be a general responsibility of both authorities. This necessitates further preparations, as the oversight of the whole financial system will represent a new field of examination for the supervisory authority. Consequently, the interactions of financial system risks with other macro variables and the assessment of the role of the mediation system in the enhancement of growth will fundamentally be the competence of the central bank, which may discuss its opinion on such with the supervisory authority on the occasion of the biannual sessions of the macroprudential council. The supervisory authority can best support this work by providing banking and market information and opinions. The general public will be able to follow these developments by way of the financial stability report to be issued twice a year.

Macroprudential instruments

The previous section outlined the creation of the macroprudential institutional background in Sweden which is currently underway. Although the toolkit to be used has not yet been enacted into law, a study published by the Riksbank in 2012[8] compiled a set of instruments it recommends for the consideration of the legislators.

Based on earlier analyses, the Swedish authorities have recently decided on the use of two instruments. First, in order to manage liquidity risks, as of 2013 they have imposed LCR (liquidity coverage ratio) requirements on the four largest banks, with an obligation to cover EUR- and USD-denominated liabilities by liquid assets also denominated in these same currencies. Second, the four largest banks will be bound to maintain a Common Equity Tier 1 (CET1) ratio of 10 per cent from 2013 and of 15 per cent from 2015 in order to decrease the probability of

Chart 2
The proposed Swedish conceptual framework



Source: Riksbank.

[8] Sveriges Riksbank (2012), "Creating a Swedish Tooklit for Macroprudential Policy", *Riksbank Studies,* November.

Table 1
Macroprudential capital requirements in Norway from July 2013

	July 2013	July 2014	July 2015	July 2016
CET1 minimum	4.5%	4.5%	4.5%	4.5%
Capital conservation buffer	2.5%	2.5%	2.5%	2.5%
Systemic risk buffer	2%	3%	3%	3%
SIFI capital buffer	–	–	1%	2%
Cumulative capital requirements	9%	10%	10%	10%
Cumulative SIFI surcharge	9%	10%	11%	12%

Note: The concepts used in the table are defined in the CRD/CRR package:
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0001:0337:EN:PDF,
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0338:0436:EN:PDF.
Source: http://www.regjeringen.no/en/dep/fin/press-center/press-releases/2013/new-legislation-on-capital-requirements-.html?id=720596.

insolvency, and thus to contain the risk they represent in relation to the entire economy.

MACROPRUDENTIAL PRACTICES OF SOME NON-EU COUNTRIES

Norway

Although Norway is not an EU Member State, it is a member of the European Economic Community (EEC), and as such, it applies the prudential regulations in force in the EU and is also a non-voting member of the macroprudential institutional system of the EU.

A report published in 2012 in Norway examined whether each macroprudential tool is used and, if applicable, in what institutional context.[9] The Norwegian model is relevant for Hungary because of a certain similarity in the institutional structure. Three institutions are responsible for the stability of the financial system: the Ministry of Finance, responsible as regulatory authority for the enactment of the appropriate prudential framework and establishing mandates in legislation; the supervisory authority (Finanstilsynet); and the central bank (Norges Bank) which functions independently from these two, and which has previously not had any macroprudential instruments to ensure financial stability.

Institutional responsibility

In Norway, the concept of financial stability is connected with the safe operation of financial markets and payment systems; therefore, the establishment of a macroprudential approach is not expected in the near future. The 2012 report analysed how the most typical macroprudential tool, the countercyclical capital buffer could be phased in, how it would interfere with the existing instruments of the authorities, and whether the use of any other tools described in international publications may be justified in Norway. The institutional responsibility therefore continues to be shared between the three authorities, and in considering the introduction of each tool, they are to examine on an ad hoc basis which authority would be best suited to propose its calibration and to make the relevant decision.

Monitoring

Likewise, the identification of systemic risks is also the competence of two institutions: the Norges Bank analyses the current exposures in the subchapter on financial stability of the inflation reports, and the supervisory authority examines the operation of financial markets and their impact on the entire economy in its risk reports published since 2003. No dedicated forum exists for the comparison and discussion of the two analyses.

Macroprudential instruments

In its 2012 report, the inter-institutional committee primarily focussed on the countercyclical capital buffer ratio. It considered its introduction quite necessary, although opinions were divided concerning its operation. Most opinions held that the central bank should be responsible for both the preparatory analyses and calibration and the decision on the value of the ratio.

It has also been proposed that the supervisory authority should have direct regulatory instruments at its disposal in order to be able to enforce responsible lending practices (LTV, PTI).

[9] Finanstilsynet and the Ministry of Finance (2012), *Macroprudential supervision of the financial system – organisation and instruments. Report of a working group consisting of representatives from Norges Bank, the Financial Supervisory Authority of Norway,* January, http://www.regjeringen.no/pages/36861944/report_makropru.pdf.

On 22 March 2013, the Norwegian government announced the introduction of a comprehensive macroprudential framework. The key elements of this framework are illustrated in Table 1.

Furthermore, the Government announced that the applicable quarterly value of the countercyclical capital buffer ratio will be determined by a decree of the Ministry of Finance, based on the risk assessment performed by the central bank in cooperation with the supervisory authority. The authorities will also pay special attention to the evolution of the leverage ratio.

SWITZERLAND

The recent financial crisis represented a great shock to the large Swiss banks. The federal budget had to spend a substantial amount, some USD 60 billion, to rescue one of the largest Swiss banking giants. Although at present it appears that the state will close the transaction with some profit,[10] the demand for a reform of the Swiss financial oversight system has emerged at the national level. As a first step in this process, the Federal Assembly (the bicameral parliament of Switzerland) drew up a report in May 2010 on the key lessons learnt from the financial crisis, proposing legislative changes to more precisely define the powers and responsibilities of the SNB (Schweizerischen Nationalbank – the Swiss central bank) and the FINMA (Finanzmarktaufsicht – the Swiss financial supervisory authority).[11] The process continued with the creation of the Financial Stability Working Group[12] by the Swiss Ministry of Finance in April 2011, with two fundamental aims: the working group was to review the current operation of Swiss macroprudential supervision and make specific proposals to strengthen oversight. Hereinafter, we mainly use the findings of this working group[13] to describe the structure and practices of Swiss macroprudential supervision.

Institutional responsibility

In the current Swiss oversight system, neither institution has a clearly delimited, exclusive responsibility in macroprudential issues. Both the central bank (SNB) and the financial supervisory authority (FINMA) perform macroprudential tasks, and based on their statutory mandates they are both responsible for the stability of the financial system. Cooperation between the two organisations is supported by a bilateral memorandum of understanding (MoU). To enhance cooperation with the regulatory authority, both institutions have also concluded a MoU with the Ministry of Finance, which sets out the process and mechanism of the initiation of macroprudential legislation.

Monitoring

The monitoring activity related to macroprudential supervision is mainly performed by FINMA, the financial supervisory authority. With regard to the substantial insurance sector, supervision also covers non-banking risks (insurance, reinsurance, investment funds, etc.) with a particular focus on systemically important institutions. The central bank has restricted access to individual institutional data, but cannot access qualitative information concerning and originating from market players (risk assessments, internal documents of credit institutions, management proposals, etc.).[14] Overall, therefore, the Swiss macroprudential supervisory framework divides the competences concerning both the responsibilities and the monitoring activity between several players, which necessitates very robust and smooth inter-institutional cooperation.

Macroprudential instruments

The Swiss authorities can make use of a substantial set of instruments in macroprudential matters. In addition to the awareness-raising (communication) activity of the central bank, the supervisory authorities may (and actually have an explicit statutory mandate[15] to) impose an additional capital buffer on institutions of systemic importance, to set more stringent capital requirements for certain activities (such as mortgage lending), and to use diversification provisions (management of SIFIs, partner limits etc.), and they may also prescribe the recourse to central clearing houses for certain OTC products.

In some cases, however, the working group set up by the Ministry of Finance considers that further tools would be

[10] http://www.nzz.ch/meinung/kommentare/der-snb-stabfund-muss-ein-mahnmal-sein-1.18042598.

[11] http://www.parlament.ch/e/dokumentation/berichte/berichte-aufsichtskommissionen/geschaeftspruefungskommission-gpk/berichte-2010/Documents/bericht-gpk-ns-ubs-kundendaten-usa-2010-05-30-res-e.pdf.

[12] The members of the working group: Eveline Widmer-Schlumpf, head of the Federal Department of Finance (Chair); Alexander Karrer, Deputy State Secretary at the State Secretariat for International Finance; Thomas Jordan, Deputy Chairman of the governing board of the SNB; Patrick Raaflaub, CEO of FINMA; Daniel Roth, Head of Legal Services at the Federal Department of Finance.

[13] http://www.efd.admin.ch/dokumentation/zahlen/00578/02460/index.html?lang=en.

[14] The SNB may only access these data through individual agreements concluded with the banks. However, the SNB does not have the power to compel the credit institutions to enter into such agreements.

[15] http://www.admin.ch/ch/d/sr/952_0/.

advisable. The most important examples are the LTV (loan-to-value) and PTI (payment-to-income) limitations, but the option of using the macroprudential tool of dynamic provisioning has also been discussed.

In the first half of 2013, Switzerland was the only developed country where one of the key macroprudential tools proposed by the Basel III framework, the so-called countercyclical capital buffer, was already in use. In order to restrain the real estate market bubble,[16] which threatened to overheat the property sector of the Swiss economy, in February 2013, the Swiss government decided, at the proposal of the SNB, to establish a capital add-on requirement on banks for their mortgage portfolios, equal to 1 per cent of their risk-weighted asset (RWA) value. This measure actually represents the first "real-life" test of the countercyclical capital buffer, and the lessons from Switzerland may also be useful for Hungary in the future.

CONCLUSIONS

As macroprudential policy becomes more important, European countries have also started to consider the establishment of national macroprudential frameworks. This process is organised around two fundamental areas: creation of the institutional background, and the development and operation of an appropriate macroprudential toolkit.

The European Systemic Risk Board (ESRB), responsible for macroprudential policy at a European level, has already issued recommendations for both areas;[17] the deadline provided for the establishment of the institutional background expired on 30 June 2013, and an assessment of conformity with the recommendations shall soon begin. Although the recommendation provides that macroprudential policy can be pursued by either a single institution or a board, we consider that ex-post accountability might be less effective in the case of macroprudential authorities taking the form of boards, which involves a higher risk of 'inaction bias' or lack of intervention. This was confirmed by several British reports inquiring into the reasons of the crisis.

On 6 June 2013, the Hungarian government also submitted to the National Assembly a proposal concerning a new law on the central bank, recommending that the MNB act as the primary macroprudential authority. Compared to the other non-euro area countries, this is a strong institutional mandate.

Actual creation of the macroprudential toolkit is expected to occur following the establishment of the institutional background and the entry into force of the relevant EU legislation (CRD/CRR) on 1 January 2014. The objectives indicated by the ESRB in these recommendations are mainly of an interim nature,[18] and the body recommends assigning at least one tool, if possible, to the competence of the macroprudential authority for each objective. International comparison shows that the toolkit of the non-euro area macroprudential authorities which have already been set up is narrower than indicated in the recommendations, and only covers the countercyclical capital buffer and some additional instruments affecting mortgage loan provision and the SIFI issue.

The toolkit proposed by the draft law on MNB is closer to the requirements set out by the ESRB, and therefore the Hungarian macroprudential authority is expected to be in a better position to effectively combat future systemic risks.

This article is based on information available in the period to 1 August 2013.

[16] Over the past ten years, Switzerland has seen a 77 per cent surge in real estate prices. The Swiss mortgage stock has now reached more than 135 per cent of GDP. (http://www.portfolio.hu/vallalatok/penzugy/drasztikus_banki_eloirassal_fekezi_svajc_az_ingatlanbuborekot.179756.html).

[17] http://www.esrb.europa.eu/pub/pdf/recommendations/2011/ESRB_2011_3.en.pdf?80b17062dcc1dd228c657e5e6ba992e1; http://www.esrb.europa.eu/pub/pdf/recommendations/2013/ESRB_2013_1.en.pdf?45aa8f7118880cd50a8b6d42c3a5195a.

[18] Prevent or minimise excessive credit growth and leverage, prevent or minimise excessive maturity mismatch and market illiquidity, contain the indirect/direct concentration of exposures, prevent dependence on the rescue of banks by the State, enhance the resilience of financial structures.