Institutional and operational aspects of macroprudential policy in central and eastern European EU member states

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Abstract

Challenges to macroprudential policy are mainly of a universal nature and encompass, in particular, difficulties in the pre-emptive identification of looming imbalances; interactions with the political cycle; asymmetry in the perception of costs and benefits of using macroprudential instruments; and inaction bias. However, in open central and Eastern Europe (CEE) economies that are hosts to foreign banks, some specific features should be taken into account when designing the architecture of the macroprudential institutional framework.

This note – drawing on the experience of Poland in this field – analyses important characteristics of effective macroprudential policy, with particular attention paid to the institutional conditions of Poland and other small, open and integrated EU economies that are not members of the EU banking union or the euro area. The author finds that, in some circumstances, CEE countries hosting large foreign banks may need recourse to instruments that are non-standard and non-harmonised in EU law. The note concludes that entrusting macroprudential policy to a committee with the leading role of the central bank could prove to be the most effective option, as it enables the smooth coordination of financial safety net institutions and facilitates the use of some non-harmonised or unorthodox instruments. Such an institutional arrangement provides for multifaceted know-how and superior capability compared with a single institution. A collegial body employed with soft powers also accommodates the phenomenon of fiscal dominance, as the inclusion of government representatives reduces the risk of divergent actions, shares accountability and allows for some scrutiny over the use of fiscal instruments.

Keywords: central bank, bank regulation, Basel Accords, capital requirements, macroprudential policy, policymaking, credit supply, financial crises, systemic risk

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Introduction

Prior to the Great Financial Crisis (GFC), macroeconomic management assigned pivotal roles to monetary policy and microprudential supervision. The main focus of monetary policy was on price stability and the prevailing regime was based on inflation targeting (explicit or implicit). The most common modus operandi was targeting a given level of the short-term interbank interest rate. At the same time, the main objective of supervision was to mitigate risks and prevent the failure of individual financial institutions (IMF (2013)). Intermittent, damaging episodes of boom and bust cycles in credit and asset markets should have sounded a clear warning signal to this consensus. Unfortunately, they did not challenge the prevailing paradigm. Instead, the cycles only triggered a rather academic discussion on the role of asset prices in monetary policy. By then, policymakers and academics encouraging measures that leaned against the wind (White (2006)) had been sidelined, while the mainstream consolidated its position by arguing that monetary policy should remain exclusively focused on price stability (Bernanke and Gertler (1999, 2001)).

As time passed, however, the shortcomings of the predominant paradigm – based on monetary policies aimed at maintaining price stability and on prudential policies that focused narrowly on the soundness of individual financial institutions – became ever more acute. The recent crisis showed that macroeconomic stability is not guaranteed even when these two objectives are achieved. Instead, it turned out that dangerous financial imbalances can also develop in an environment of low inflation, small output gaps and originally stable financial institutions (Sławiński (2009)). Since financial instability unveiled its potential to precipitate severe distortions in the level and composition of output, it has become clear that welfare maximisation requires the inclusion of financial stability as an intermediate goal for economic policy (Goodhart (2011)). In other words, to ensure sustainable economic growth, macroeconomic management must include financial stability as an additional objective (IMF (2013)).

New policies demand new institutions and a new toolkit – one that allow for leverage to be constrained and the balance sheet structures of banks and other financial intermediaries to be reshaped in order to mitigate risks ex ante and help build buffers against potential shocks. For macroprudential policy to work, a comprehensive analysis of systemic risk is needed, taking into account different kinds of financial imbalance, and followed by the smooth deployment of laser-cut macroprudential tools that precisely target particular sources of systemic risk. Prior to the GFC, central banks regularly monitored systemic risks and published the results of those analyses in their financial stability reports. Nevertheless, no institution was unequivocally mandated or empowered to use macroprudential tools that could have mitigated systemic risks. Macroprudential supervision was virtually non-existent (Szpunar (2014)).

In 2009, this deficiency was accurately identified in the de Larosière Group report on financial supervision in the EU. According to the report, the objective of macroprudential supervision is to limit the distress of the financial system as a whole to protect the overall economy from critical distortions in real output. Generally, risks to the financial system arise from the failure of a single local financial institution due its size (including subsidiaries in other countries) in relation to the GDP of the country of residence. However, in the light of the high interconnectedness of EU financial markets, many more important global systemic risks arise from financial institutions being exposed to the same risk factors. Therefore, macroprudential analysis needed to incorporate a cross-border dimension and should pay particular attention to common or correlated shocks that could trigger contagious knock-on or feedback effects.[2]

As the follow-up to the recommendations outlined in the de Larosière Group report, the European Systemic Risk Board (ESRB) was established in 2010. The ESRB was tasked with the macroprudential oversight of the EU financial system, particularly in preventing and mitigating systemic risks. The ESRB was equipped with a toolkit of soft powers only, ie warnings and recommendations. In those days, the network of national macroprudential supervisors did not exist; therefore, the ESRB, in its capacity as an EU-wide macroprudential watchdog, issued the recommendation on the macroprudential mandate of national authorities.[3] Member States were recommended to designate – by means of binding legislation – an authority entrusted with carrying out macroprudential policy. This authority could be either a single institution or a college comprising representatives of safety net authorities. In addition, the regulatory package that comprises the Capital Requirement Directive (CRD) IV and the Capital Requirements Regulation (CRR), enacted in 2013 also required designated authorities to be established at the country level. In response, all EU Member States established relevant macroprudential supervisory authorities. However, due to historical, political and legal circumstances, the institutional shape of macroprudential arrangements differs from country to country (Nier et al (2011)).

This paper shows that the efficient conduct of macroprudential policies in Poland and other small, open and integrated EU economies that are not members of the EU banking union or the euro area may differ from the model case (if there is, indeed, a jurisdiction which serves as a model case). This issue focuses on some central and eastern European (CEE) Member States. CEE countries face specific challenges; thus for macroprudential policy to prove effective they require tailored institutional arrangements and instruments.

This note refers to the example of Poland, as it is the biggest CEE Member State, although the resulting findings might also be useful for the other CEE countries. The note is structured as follows: Section I presents a historical background of macroprudential supervision in Poland; Section II describes the country's new macroprudential supervision framework; Section III highlights challenges for macroprudential policy, with a focus on CEE specificities and refers to anoptimal institutional mix; Section IV addresses these challenges by trying to define an adequate toolkit for CEE countries; and Section V concludes.

Macroprudential supervision in Poland: a history

The establishment of macroprudential supervision in Poland was preceded by lengthy and lively discussions. Nevertheless, it must be noted that those discussions might have been based on experience of quasi-macroprudential policies that had previously been conducted by microprudential supervisors. Although not in a formal way, microprudential supervision in Poland had used many measures to mitigate systemic

2 See de Larosière Group (2009), p 38.

3 European Systemic Risk Board (2011).

risks. This was not an easy task, especially given the structural changes in the institutional architecture of banking supervision. In 1998, banking supervision in Poland shifted away from the central bank to the Banking Supervision Commission (although Narodowy Bank Polski (NBP) retained its key role in the new body). Starting from 2008, that commission was completely separated from the NBP and placed in the hands of the newly created integrated Financial Supervision Authority (KNF). The latter move has since been heavily criticised – a broad consensus on bringing banking supervision back to the NBP seems to be gaining momentum.

At least three factors have contributed to Poland's hitherto effective supervision, also in regard to its macroprudential dimension. Two of them are related to the structure of the banking sector and one to the regulatory model itself. First, the broad presence of strategic investors in the banking sector, contrary to a fragmented shareholder structure, allowed for a single entry point and thus facilitated effective implementation of supervisory requests – at the end of the supervisory process, the strategic bank shareholder could always be approached for a corrective action. In this context, the position of the banking supervisor (since 2008 the Financial Supervision Commission, the KNF) was reinforced by some serious firepower enshrined in Polish banking law. For instance, the law enables the KNF to suspend ownership rights in cases where a bank shareholder cannot assure cautious and safe management of the bank. Secondly, the dominant role of foreign investors significantly reduced regulatory capture and supervisory forbearance, as there were no direct links between bank owners and local politicians. Finally, the way that the remit of supervision was defined in the law provided for broad discretion in pursuing financial stability – including a mandate for macroprudential actions.[4]

Under the banking law, the national banking supervisor had active recourse to a wide range of instruments, which were used to correct excessively risky behaviour or to protect the autonomy of management in local subsidiaries from excessively far-reaching, group-level interventions. The focus on soft powers was crucial for the efficacy of such activity. The banking supervisor (the KNF since 2008) developed a very efficient way of conduct, based mostly on recommendations. Interventions were made in two principal forms; either as informal advice (eg in the form of so-called pastoral letters[5]) or fully fledged recommendations – ie formal documents issued on the basis of the banking law.[6]

Notwithstanding that the recommendations were not legally binding, the reputation and credibility of the KNF made for widespread compliance on the part of banks. This has helped to improve market standards and introduce good practices without the need for sanctions such as administrative decisions addressed to individual banks or politically sensitive legislative changes. In addition, by means of soft power, some macroprudential measures were introduced via back-door

4 According to Article 2 of the *Act on financial market supervision*, one of the objectives of the supervision is "to ensure the proper functioning of the market, its stability, security and transparency, confidence in the financial market…". This can be understood as a broader remit than a sole supervision over individual institutions.

5 The example list of such guidelines issued in 2014 can be found in the *Report on the activities of the Polish Financial Supervision Authority in 2014*, Warsaw, 2014, p 112 and following.

6 To date, there are 18 such sets of recommendations containing mostly detailed guidelines for bank risk management.

approaches – long before macroprudential authority was formally established.[7] Recommendations usually addressed various dimensions of banks' risk management – including lending standards such as loan-to-value (LTV) or debt service-to-income (DSTI) limits. Before issuance, drafts of recommendations were subject to a consultation process with the banking sector and other safety-net institutions, including the central bank. This approach was and still is often welcomed by the banks, as it encourages peer review – which inhibits risky behaviour by competitors and secures a level playing field. Recommendations played an important role in reinforcing the stability of the Polish banking system in the past. They seem not to have gone out of fashion; while the adoption of EU rules has introduced changes, such recommendations, eg in the context of stricter harmonisation at the EU level, allow for more national flexibility.

Using its implicit authority, the KNF successfully obliged banks to hold strong capital positions (also with a view to quality, eg no hybrid instruments were accepted) and to keep leverage in check (through conservative risk weights). Credit institutions had to maintain high liquidity ratios and adopt prudent dividend policies. This mix of achievements contributed to the Polish banking system's high shock resilience. Some measures that had been put in place in Poland later appeared in the Basel III recommendations. For example, in 2007, the KNF set explicit liquidity requirements for banks, immunising the banking system against shocks – the well contained interbank market breakdown in late 2008 shows that these measures were effective and forward-looking. They were structured along the lines recommended in Basel III (ie the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR)). However, the Polish measures were more precise and, importantly, were implemented before the outbreak of the GFC. Moreover, despite its rigour, Poland's regulatory regime on liquidity appears to be more friendly to banks than the Basel III solutions, as it allows some flexibility on differences between business models and the liquidity profiles of individual institutions. The LCR and (yet to be finalised) NSFR, which will be introduced across the European Union, will narrow the scope for tried and tested domestic measures.

The new macroprudential supervision framework in Poland

The *Act on macroprudential supervision over the financial system and crisis management*, which came into force in 2015, has established for the first time a formal macroprudential framework in Poland. On the basis of the Act, the Financial Stability Committee (KSF) became the designated authority responsible for both macroprudential supervision and crisis management in Poland. The KSF is composed of the NBP Governor, the Chair of the KNF, the Minister of Finance and the President of the Bank Guarantee Fund (BFG) (which is responsible for operating the deposit guarantee scheme and resolution authority). The KSF has a dual mandate and dual chairmanship. The meetings devoted to macroprudential issues are called and chaired by the NBP Governor, while crisis management meetings are called and presided over by the Minister of Finance. In the former case, decisions are taken by majority voting

[7] The relevant legislation for macroprudential supervision in Poland has been effective only since 1 November 2015.

with the casting vote of the NBP Governor; in the latter case, decisions are reached by consensus.

In regard to macroprudential supervision, the Act defines the tasks and powers conferred on the KSF, which include:

- the application of macroprudential instruments (including presenting statements and issuing recommendations);
- the identification of financial institutions posing significant systemic risks;
- cooperation with EU and national institutions; and
- the facilitation of a seamless flow of information between KSF member institutions.

The KSF has only soft powers at its disposal, ie it presents statements and issues recommendations backed by the "act or explain" mechanism. This means that the KSF can only indirectly influence the financial sector. The Act establishes a two-stage process of implementing macroprudential instruments. At the first stage, the KSF issues a recommendation either to the Minister of Finance, the KNF, the BFG or the NBP, indicating which legal instrument should be deployed in a particular setting. Then, in the second step, the addressee fulfils the KSF recommendation or explains the reasons for not taking the required action. Hard powers, ie those which are legally binding, rest only with individual KSF members. The Minister of Finance is responsible for implementing, via regulations, the countercyclical buffer, systemic risk buffer and measures provided in Article 458 of the CRR. The KNF has the power to set buffers for systemically important institutions by means of an administrative decision. The KNF has also maintained the power to issue formal recommendations to banks regarding a broad scope of risk management practices (eg LTVs).

The Act does not explicitly specify the frequency of the meetings; however, due to the obligation to calculate the reference value indicator for the countercyclical buffer, the meetings are held no less than once a quarter. The Act further requires the KSF to notify EU institutions (in particular, the European Commission and the ESRB) about the instruments used. The NBP is responsible for providing administrative services to the KSF and a variety of analytical activities, including the preparation and conveyance of notifications. The NBP also prepares the draft of the annual report to be presented by the NBP Governor to parliament.

The institutional setup of Poland's macroprudential policy embodies most of the principles defined in international standards. First, the macroprudential policy is entrusted to a committee equipped with formal, guaranteed independence. Formal independence is imperative as the macroprudential policymaker is expected to lean against the wind by taking unpopular decisions (such as requiring banks to reduce risk in the upward phase of the cycle). Second, the central bank maintains a key role within the framework and carries weight with the conduct of macroprudential policy, as its Governor holds the prerogative to call meetings and propose measures, and also chairs the committee with the casting vote during majority voting. The KSF – in its capacity as a macroprudential supervisor – has also been granted a clear mandate, which is accompanied by an appropriate set of necessary instruments. The mandate ensures transparency and accountability. Moreover, the KSF has been given access to the information and data necessary to identify risks to financial stability, including data on individual financial entities. And last but not least, the KSF has access to expertise, as all member institutions are required to provide analytical resources on request.

Macroprudential policy and institutional setup: universal and specific challenges

The challenges for macroprudential policy derive mainly from its fundamental characteristics. These encompass, in particular, such heterogeneous factors as (i) difficulty in the pre-emptive identification of looming imbalances; (ii) interactions with the political cycle; (iii) asymmetry in the perception of costs and benefits of using macroprudential instruments; and (iv) inaction bias (Szpunar (2014)).

Even in the clear case of an economic boom, macroprudential authorities are prone to inaction bias. First, a boom is difficult to identify (Borio and Lowe (2002)). Even a sharp increase in asset prices is usually accompanied by factors that seem to justify it, such as persistent disinflation and low interest rates, demographic changes, catching-up processes etc. Second, due to the political cycle there is usually strong resistance to any attempts to limit credit expansion (Houben (2012)). Third, it is difficult, if not impossible, to estimate ex ante the cost/benefit balance of macroprudential action aimed at restricting credit growth. Fourth, the incentives to take costly actions are weak and questionable. A decisive action that really prevents a crisis can easily become the subject of strong criticism as the high costs incurred are clearly visible while the benefits are rather vague (a crisis avoided does not convince critics). Finally, in cases where such action is taken in a timely fashion, it could prove not to be effective due to circumvention (ie Goodhart's law) or simply bad luck.

Apart from these universal challenges, macroprudential policy often faces an idiosyncratic backdrop, such as the EU's financial and regulatory interconnectedness. This aspect is especially important for smaller countries, eg CEE Member States. The experience of many central banks demonstrates that monetary policy in small, open economies confronts different and additional challenges to those experienced in a large, closely tied economic block (Szpunar (2000)). The task of pursuing macroprudential policy, which operates along the lines of monetary, fiscal and supervisory (microprudential) policies, could be much more nuanced in such economies.

Poland's economy is relatively small (in terms of EU standards based on GDP and size), open and strongly integrated with the European Union. Additionally, the Polish banking system still (despite some recent significant changes to the structure of the market) remains strongly influenced by strategic EU investors, which frames Poland as a host country. Some specific challenges arise from this background, including:

- vulnerability to regulatory arbitrage, particularly in the context of only partial reciprocity and coordination in the European Union;
- group-level risk management, additionally encouraged by the creation of the EU banking union and the single supervisory mechanism (SSM) of the European Central Bank, which can result in an inadequate assessment of the situation of a subsidiary that is a systemic institution in the host country;
- the possibility of uncontrolled transfers of capital and liquidity within cross-border financial groups;
- ubiquity of risks stemming from the free movement of capital in the economy and its potential to cause destabilisation; and
- the corset of harmonisation provided for by the CRD IV/CRR package.

Smaller countries hosting foreign financial institutions remain more prone to the above-mentioned risks. At the same time, they are characterised by less developed financial intermediation. On the one hand, this means that their financial systems generate limited systemic risk – but on the other hand, it makes them more vulnerable to regulatory arbitrage and the propagation of shocks induced by the business models and strategies of international financial groups. Moreover, the financial entities from host countries do not have a significant presence in the EU single market, which means that regulatory arbitrage is being exercised in a one-way direction. The risks stemming from the activity of subsidiaries could also be under a lesser degree of surveillance on the part of the SSM, which has a natural focus on risks developing at the group level. This approach can be derived from *Council Regulation (EU) No 1024/2013*, where Article 4 (paragraph 1(g)) states that the SSM is responsible for carrying out supervision on a consolidated basis over credit institutions' parents established in the Member States participating in the banking union. Such a framework may result in pressure on capital and liquidity transfers within banking groups in distressed situations. Smaller economies also remain more vulnerable to capital flows, which can be illustrated by, for example, the case of Spain and its real estate market crisis (Spanish banks financed mortgage loans on the EU financial market). Finally, the CRD IV/CRR package constrains the leeway of macroprudential policies at the level of particular Member States. The limitations resulting from the harmonisation process apply to all countries; however, they affect host countries to a greater extent. This is because small, open economies may need to conduct a more active macroprudential policy due to higher risks stemming from ia volatile capital flows or credit booms etc. These issues also relate to Poland and its financial system.

Due to the universal challenges described above (present in virtually all countries, regardless of their home or host status), the authorities responsible for macroprudential supervision should remain independent from the political cycle and demonstrate a high level of economic expertise and market insight. The central bank is well suited to this role – it is independent, effective, credible, has the appropriate capabilities (in terms of economic and market expertise) and is active on the financial markets. With regard to the particular challenges facing small and open economies, the importance of regulatory and fiscal policy should not be ignored, however. There are at least three reasons why this angle should be included, with equal weighting.

First, there may be a need to use fiscal tools for macroprudential purposes. Circumstances specific to small, integrated economies may require the deployment of non-standardised and non-harmonised instruments, including taxation (eg thin capitalisation, regulatory charges, transaction taxes, taxes on assets etc). This means that effective coordination between macroprudential and fiscal policies must be established. To define this more clearly, we should not focus on fiscal policy, but rather the fiscal actions needed for the macroprudential purpose (which is nothing unusual, since macroprudential policy often has recourse to measures that are not strictly macroprudential).

Second, for legal reasons, the use of hard powers may require the involvement of government – this is the case in Poland, where the constitution defines a closed catalogue of commonly binding legal acts and the list of bodies that can enact them.

Lastly, should fiscal and macroprudential policies conflict, the effectiveness of the latter could be substantially impaired in the case of diverging goals. Along with the concept of unpleasant monetarist arithmetic, fiscal domination hinders monetary policy in pursuing its inflation target (Sargent (1981)). Likewise, the same dependency can be expected to hold for macroprudential policy. In this context, fiscal domination would have a clearly destructive dimension, as it could prove immensely effective in destabilising the financial system. Excessive fiscal imbalances may rapidly send ripples across even a healthy banking system, leading to liquidity drainage and insolvency.

These are the reasons why cooperation, common understanding and the broad acceptance of financial stability goals by the fiscal authorities are so crucial. The best way to achieve all these desiderata is to establish a collegial body that includes the Ministry of Finance. Such an arrangement will not automatically guarantee the body's effectiveness, but it will definitely enable a proper exchange of information, better understanding and seamless cooperation between the safety-net authorities. Thus, the inclusion of the Ministry of Finance allows the issue of fiscal dominance to be addressed in two ways – on the one hand, the risk of divergent actions is reduced, and on the other, the Ministry of Finance's participation makes it accountable for the decisions undertaken by the macroprudential committee (reducing the risk of political recriminations at a later stage).

Instruments: defining the optimal mix

The ultimate goal of macroprudential policy is to safeguard financial stability. To achieve this objective, macroprudential policy strives to constrain the build-up of systemic risk. The powers of macroprudential policy may be labelled as soft or hard. Although soft tools such as recommendations based on the "comply or explain" principle may prove useful, it is sometimes necessary to exercise hard powers.

Macroprudential instruments can generally be classified in terms of two dimensions of systemic risk. The first is the time dimension, in which authorities concentrate on limiting the build-up of financial risk. The second is the structural dimension, where emphasis is placed on promoting financial system resilience (CGFS (2010)). Instruments in the first group need to be adjusted to different phases of the financial cycle with the aim of smoothing it out (Lim et al (2011)), whereas structural measures remain fixed over time and are meant to strengthen resilience to systemic shocks in the long run. This distinction is, however, rather blurred, as many other ways of classification have been suggested. As an example of a different approach, the ESRB groups specific instruments in relation to the intermediate objectives of macroprudential policy. This approach can be derived from the *ESRB recommendation on intermediate objectives and instruments of macroprudential policy* (ESRB/2013/1), which advocates that macroprudential authorities should specify particular objectives and match them with concrete instruments.[8]

Taking stock of the many approaches, let us distinguish the four most fundamental intermediate objectives of macroprudential policy:

- preventing excessive credit growth and leverage – in this regard, several instruments might be applied including, among others, the countercyclical capital buffer, higher risk weights and caps on the leverage, LTV and debt-to-income (DTI) ratios;

[8] European Systemic Risk Board (2013).

- securing ample liquidity and reliable funding models – the objective here is to prevent episodes of market illiquidity and excessive maturity mismatch via liquidity ratios such as the LCR and NSFR, as well as the loan-to-deposit ratio;
- constraining excessive concentration of direct and indirect exposures – additional requirements on the disclosure of information, limits on large exposures or central counterparty clearing requirements are examples of macroprudential instruments that might target this problem; and
- strengthening the resilience of the financial infrastructure – this can be achieved by imposing additional capital requirements, including those on systemically important financial institutions, and establishing resolution regimes and deposit guarantee schemes financed with ex ante risk-based contributions.

What is apparent from the classification above is that most macroprudential instruments have so far been included in the microprudential toolkit (Osiński (2013)). However, in the conduct of macroprudential policy, those instruments are used in a systemic perspective, and thus they also need to be calibrated differently. Macroprudential authorities should look at the consequences of applying certain instruments for the whole financial system, not just for an individual institution. Some of those instruments are known and have already been used, like risk weights or LTV and DTI ratios. Some instruments are new and purely macroprudential in nature, like the Basel III countercyclical capital buffer.

Moving forward, let us now turn our attention to some already tested macroprudential tools. The most popular ones are LTV and DTI caps, which have been used, for example, in Asian countries to address imbalances in mortgage lending (Lim et al (2011)). Restrictions on the LTV ratio limit the loan amount relative to the value of the property, while caps on the DTI ratio are aimed at constraining the debt servicing cost for the borrower relative to disposable income. These instruments impact the supply and demand for housing loans. As LTV and DTI restrictions translate into lower loss-given-default (LGD) and probability of default (PD), they can contribute to an improvement in the quality of banks' housing loan portfolios and, consequently, to banks' resilience to negative shocks stemming from real estate sector developments (Crowe et al (2011)). An interesting example of a country that actively applied restrictions on LTV and DTI ratios is Korea, where LTV and DTI ceilings have been tightened and relaxed several times. In 2002, due to rising house prices, Korean authorities introduced an LTV cap that was later supplemented by a DTI cap in 2005 (Igan et al (2011)). The specific levels of the LTV and DTI caps were contingent on the type of property (house or apartment), the location of the property (speculative zone or not), loan maturity and collateral value. These well-tailored measures helped to stabilise house prices and proved effective in preventing price bubbles. LTV and DTI restrictions have also been used by a number of other Asian countries, including Hong Kong SAR, Malaysia, Singapore, Turkey and several advanced economies such as Canada, the United States, Norway and Sweden (Lim et al (2001)).

A completely new instrument, designed specifically for macroprudential purposes, is the countercyclical capital buffer. This buffer is meant to inhibit the build-up of systemic risk connected with credit booms. The imposition of the buffer should increase the cost of credit and thus constrain its supply. The buffer proposed by the Basel Committee on Banking Supervision (BCBS) in its standard version varies from 0% to 2.5%. One might question whether the maximum level of this buffer, set at

2.5%, would be sufficient to prevent a credit boom, taking into account the differences in economic dynamics in EU countries. Therefore, to ensure that national authorities can react to the threats arising from excessive credit growth properly, the CRD IV/CRR package allows a higher buffer rate to be set. Such augmented measures will not, however, be subject to the reciprocity rule and thus might offer some room for regulatory arbitrage. Notwithstanding the novelty of this instrument, there is already some experience in its deployment. Switzerland and Norway imposed the buffer on banks operating in their jurisdictions in 2012 and 2013, respectively. In both cases, the buffer rate was set at 1%. But the outcome of these decisions and the effectiveness of the countercyclical buffer are still difficult to evaluate.

Another new instrument, also introduced by the BCBS, is the leverage ratio, ie the ratio of bank's capital to its total non-risk adjusted exposure. The GFC showed that the risk-based capital adequacy ratio had not prevented the build-up of risks within banks. It showed too that banks may have strong capital ratios and, at the same time, be highly leveraged, making them vulnerable even in cases of only marginal losses. The outbreak of the GFC forced banks to deleverage, which had a destabilising effect on the financial system and the real economy as banks' capital positions weakened and credit availability deteriorated (BCBS (2014)). Therefore, the basic idea behind this new measure is to limit banks' assets in relation to their capital. It is meant to complement, not substitute for, the existing capital risk-based ratios. As initially proposed by the BCBS, the leverage ratio limit should not be lower than 3%; however, its ultimate calibration will be finalised only in 2017. Starting from 2018, the ratio will become a Pillar I measure.

The revolutionary proposal of Basel III to incorporate specific, purely macroprudential instruments into the framework of capital regulations seems to properly address the needs identified in the aftermath of the GFC. The CRD IV/CRR package also appears to provide an extensive set of macroprudential instruments, which could potentially be efficient in counteracting systemic risk. However, the operational aspect of this harmonised toolkit leaves room for improvement once analysed in depth. Looking more diligently at the regulatory framework in the European Union, one can identify some substantial flaws. The effectiveness of capital buffers is narrowed as the reciprocity mechanism is limited. In the case of the countercyclical buffer, the reciprocity is guaranteed only up to a level of 2.5% (national authorities are allowed to set it higher). The systemic risk buffer may be set unconditionally only up to 3% – the possibility to set it higher is restricted by the complicated validation procedure requiring the involvement of EU institutions. It also needs to be noted that the implementation of capital buffers may cause some overlapping, as they can consume banks' voluntary capital above the regulatory required capital stipulated in some jurisdictions due to soft suggestions from local supervisors or in connection with the outcomes of the European Banking Authority's (EBA) stress tests.

The CRD IV/CRR package also allows the use of Pillar II measures for the purpose of addressing systemic risk. As the scope of Pillar II is very broad (it covers the level of own funds, provisioning policy, business lines, dividend policy and liquidity), it is often perceived as useful in mitigating macroprudential risk. This, however, can be misleading. Pillar II measures can only be imposed on an individual basis in the form of an administrative decision and must be preceded by comprehensive risk-mapping in the framework of the supervisory review process. Legal hurdles may emerge in such cases, as these individual decisions may be contested in court and their fast implementation may prove challenging. The issue is even more acute with regard to cross-border banking groups, as any increase in capital requirement via Pillar II should be discussed within the joint supervisory college (in the case of disagreements, the EBA may make the ultimate decision via a binding mediation process). This procedural complexity makes the whole process unduly risky and time-consuming. Moreover, the Pillar II instruments rest in the hands of microprudential authorities, who tend to be more focused on the stability of an individual institution than the system as a whole.

Article 458 of the CRR also needs to be mentioned. This article defines the list of additional measures that may be applied to limit systemic risk by supplementing requirements set within Pillar I and II (ie the level of own funds, requirements for large exposures, public disclosure requirements, the level of the capital conservation buffer, liquidity requirements, risk weights for targeting asset bubbles in the residential and commercial property sector and intra-financial sector exposures). In principle, the competent authority of a Member State is responsible for activating these macroprudential measures; however, the final word in this area stays with the Council of the European Union , which may de facto reject the draft national measures with a view to single market stability. That is because the relevant domestic authority has to notify planned measures to the European Parliament, European Commission (EC), EU Council, ESRB and EBA, and provide an appropriate and thorough justification (outlining why the measures are relevant to counteracting the systemic risk and why other harmonised measures are not sufficient). All the institutions have the right to issue opinions, which are later put together by the EC, which makes a proposal to the EU Council to either accept or reject the submitted draft measures. The final clearance comes from the EU Council and, in the event that the assessment is positive, the country may apply the measures for a period of up to two years. This procedure, requiring the involvement of many high-level European institutions, makes the whole process highly complicated and discouraging. In addition, as applicants must first explain why all other measures included in the CRD IV/CRR package are not sufficient to tackle the macroprudential risks, the tools envisaged in Article 458 of the CRR can be de facto described as the last resort. Ironically, when first proposed, Article 458 was described as a flexibility mechanism. In practice, despite some rare cases of the use of Pillar II or Article 458, these instruments are difficult to use effectively.

To summarise, the corset of harmonisation, limited reciprocity, legal constraints on Pillar II and complex authorisation procedure for the use of Article 458 measures appear to make the CRD IV/CRR framework too rigid for the proper and effective control of systemic risk arising in EU Member States. To make the framework more effective, reliance on non-harmonised microprudential instruments used for macroprudential purposes should be taken into consideration. This holds especially for CEE Member States. Having at one's disposal a comprehensive set of supervisory tools and ample leeway in their use seems to be an essential prerequisite. Frait (2012) points out that, in the Czech Republic, for example, the set of instruments which can be employed to reduce the systemic risk is relatively narrow. Many analyses also support the idea of a preferred use of a few tested instruments that are well tailored to the specificity of local risks (Claessens (2014)). As such, it can be noted that in the case of Poland, particular attention should be drawn to the risks of a credit boom and capital flows, as these risks seem to be particularly acute for a small and open economy. The best way to address these risks should include, in particular, the use of the following:

- capital buffers accompanied by leverage limits;
- selective setting of conservative risk weights for exposures to real estate;

- liquidity requirements (including non-harmonised ratios of loans to deposits);
- LTV and DSTI limits; and
- fiscal measures.

Further research is needed into an effective combination and calibration of the above-mentioned instruments in actual economic conditions; nevertheless, such a defined supervisory mindset would appear to be the most promising forward-looking response.

Conclusions

This note reviewed some important characteristics of effective macroprudential policy, with particular attention to the institutional conditions of Poland and other CEE Member States that are small, open and integrated EU economies outside the EU banking union and the euro area. In such economies, there might be a need to have recourse to some instruments that are non-standard and non-harmonised in EU law. These considerations lead to the conclusion that entrusting the macroprudential policy to a committee with the leading role of the central bank could be a relatively more attractive option, as it enables better coordination of financial safety-net institutions and facilitates the use of some non-harmonised or unorthodox instruments.

Such an institutional arrangement also accommodates the issue of fiscal dominance, as the inclusion of government representative reduces the risk of divergent actions, shares accountability and allows for some scrutiny over the use of fiscal instruments. These benefits are usually contrasted with the costs, ie a weakening of the central bank's role, increased vulnerability to the political cycle, or even a stronger temptation to refrain from any action at all (ie inaction bias). On closer analysis, however, it can be shown that these costs are more of a potential than an actual character. Putting the responsibility for macroprudential policy solely in the hands of the central bank would not guarantee immunity from political influences, as its autonomy in this regard would still remain exposed to potential fiscal dominance. Obviously, macroprudential supervision has to prove itself in action and work out the culture of autonomy, which in the case of monetary policy took decades to mature.

Challenges for macroprudential policy are of a universal nature and may result in an inaction bias. In small, open CEE economies that host foreign banks, some additional specific challenges to macroprudential policy may also arise. These challenges boil down to, among others, regulatory arbitrage (due to only partial reciprocity and deficient coordination of macroprudential policies in the European Union), preference for risk management at a group level (exacerbated by the creation of the SSM), volatile capital flows and the corset of harmonisation (the CRD IV/CRR package limits the discretion of national competent authorities). A collegial committee such as the macroprudential authority appears to be a more suitable solution for such a case. First of all, it is more conducive to the targeted use of fiscal tools, which may be a last resort in the context of the CRD IV/CRR corset. In addition, due to legal constraints (as is the case in Poland), exercising hard powers may necessitate the involvement of the Ministry of Finance in any case. This is why the most appropriate choice seems to be to set up a committee equipped solely with soft powers. Soft powers – in the form of "comply or explain" recommendations – can paradoxically prove more effective, as they reduce the inaction bias given that the implementation of concrete measures rests with individual committee members, not with the committee itself.

The complex nature of systemic risk requires complex pre-emptive action to be taken by competent decision-makers with a view to the economy's long-term sustainable growth. It cannot be guaranteed that the authorities will always successfully fulfil their mandates. However, the scope for mishaps can be effectively narrowed by providing a wide range of instruments and a proper decision-making structure. It would seem that establishing a collegial authority and entrusting it with soft powers allows this issue to be addressed adequately. A collegial body disposes of multifaceted know-how and a wider range of capabilities than a single institution, while the risk of unilateral action from the Ministry of Finance or fiscal domination remains inherent to all potential organisational compositions.

To conclude, it can be said that the Polish model of macroprudential supervision draws on successful outcomes and fulfils specific requirements while keeping the risk of inaction or ineffective responses to a minimum. In the past, Poland's supervisory authorities often overreached their microprudential mandate, and this proved to be effective. Therefore, the recent restructuring can be regarded rather as a formalisation and legitimisation of their activity in this area in compliance with new EU standards. It should be complemented by shifting microprudential supervision to the control of the central bank with the aim of establishing a solid and coherent institutional setup for even better co-ordinated prudential policy.

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