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Macro-prudential policy in the European Union: an experiment in unknown territory

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Content:

Global overview

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This paper focuses on the challenges ahead to implement a macro-prudential policy. Indeed, while there is a broad consensus since the financial crisis in 2008 that financial stability is not a natural consequence of good micro-prudential supervision and market conduct supervision, it is less clear how the new macro-prudential approach will fit within the traditional architecture of financial supervision. Micro-prudential instruments have to be used as a tool of macro-prudential policy, but conflicting goals of the micro and macro approach may create difficulties. Coordination of macro-prudential policies at worldwide, regional and local levels are essential but could become challenging. Especially within the European Union, the macro-prudential procedures of resolution of systemic banks are complex, while decisions in crisis have to be taken urgently.

Financial stability or systemic risk policy is a well-known concept for years, but became only formally recognized as an essential part of the financial supervisory framework since the crisis of 2008. Before that crisis, there was academic research about systemic risks, and central banks and supranational organizations such as the IMF or the OECD published "Financial stability" reports, pointing to dangerous developments in the financial sector. These sometimes interesting reports were most of the time not leading to specific regulatory or supervisory actions, as it was unclear which institution was responsible to manage systemic risks or even what could or should be done about these risks.

Since the crisis, the world has changed. The Financial Stability Board (FSB) was already established in 1999, but has now a formal mandate from the G20 to supervise worldwide financial stability issues, and to publish recommendations for new regulations. At the European level, the European Systemic Risk Board has been established in 2010, as an independent institution, close to the ECB, in charge of analysing European systemic financial risks. In addition, according to the Capital Requirement Regulation (CRR), EU Member States must designate an authority to monitor macro-prudential or systemic risks in the financial sector (art 458). In most Member States, including Belgium, the local central bank is the competent macro-prudential authority.

This paper analyses how macro-prudential policy fits within the financial supervisory architecture. In a first part, the problem of clear definitions is discussed. Part 2 explains why macro-prudential supervision can be considered as de "Copernican" revolution in the

organization of the financial supervisory framework. Part 3 lists some challenges and dilemmas of macro-prudential policy in practice, with a focus on the European Union and the Banking Union.

1. The concepts of financial stability policy and macro-prudential policy clarified

1.1. Problems with the definition of financial stability policy

Intuitively it seems easy to understand what "financial stability" is, but unfortunately there is no commonly shared definition (Galati, Moessner, 2011). The concept of systemic risk is often used referring to financial stability. Systemic risks are defined as risk, which pose a threat to financial stability. However, this definition is not helpful unless there is a clear definition of financial stability. The purpose of this paper is not to give a complete overview of academic definitions of financial stability, which can be found in Alawode and Al Sadek (2008). But some examples can illustrate the diverging views and remaining confusion.

Mishkin (1999) defines financial instability as opposed to stability, as a situation where the financial system is no longer correctly fulfilling its mission of channelling funds to those operators with productive investment opportunities. Ferguson (2003) points to asset prices deviating from fundamentals, distorted markets and aggregate spending deviating the economy's ability to produce as indicators of financial instability. Crockett (1997) characterizes financial stability by a high degree of confidence. Finally Allen and Wood (2006) describe financial stability as a state of affairs in which financial instability is unlikely to occur. The problem with all these definitions is that they are based on an uncertain appreciation of an uncertain future. Who is going to define which borrowers have "productive investment opportunities"? Who is going to decide when asset prices deviate from fundamentals? Asset prices reflect expectations and because of the nature of expectations in an uncertain future, they always carry the risk of exaggerations in the positive or negative direction. After a collapse, it will always be easy to identify past exaggerations. But macro-prudential policy is about preventing a collapse to happen and/or to reduce the social costs if an accident happens. It requires ex ante identifications and regulatory action, so that the excesses are mitigated and the collapse is avoided or its impact reduced.

Trying to define systemic risk directly seems as tricky as defining financial stability. There are of course a number of objectively identifiable risks, like pro-cyclical regulations, wrong incentives in the principal-agent relationships in the financial industry, poorly organized financial infrastructure, bubbles in housing or financial markets, excessive leverage in and outside the financial sector, and many others. But this methodology of establishing a non-exhaustive list of risks is not the same as having a definition. A definition should be a general reference frame against which any situation can objectively be screened. A major difficulty is that in reality, it appears that a certain

event can pose a systemic risk under certain conditions, but not in other circumstances. For example, the collapse of a relatively small UK bank, Northern Rock in the early days of the crisis, suddenly became a trigger for systemic risk because of the already fragile confidence at that time. If as a consequence, macro-prudential policy, should tackle any development that potentially could become systemically relevant, it would hurt market dynamics and probably be disastrous for economic growth. This remains a very difficult dilemma.

We will come back on these examples among others in part 3 of this paper but it should already be clear that urgent fundamental academic and political work is needed to clarify the concepts of stability and systemic risk, before they are used for regulatory action. Confidence in financial markets and systems requires clearly defined concepts and legal certainty.

Table 1 Alternative sets of tools to foster financial stability

Tool set	Goal	Instruments
Prudential policy: Microprudential	limit distress of individual institutions	e.g. quality/quantity of capital, leverage ratio
Prudential policy: Macroprudential	limit financial system-wide distress	e.g. countercyclical capital charges
Monetary policy	Price stability	policy rate, standard repos
	Liquidity management	Collateral policies; interest on reserves; policy corridors
	Lean against financial imbalances	policy rate; reserve requirements; mop-up of liquidity; FX reserve buffers
Fiscal policy	Manage aggregate demand	Taxes; automatic stabilizers; discretionary countercyclical measures
	Build fiscal buffers in good times	e.g. measures to reduce debt levels; taxes/levies on the financial system
Capital controls	Limit system-wide currency mismatches	e.g. limits on open foreign exchange positions; constraints on the type of foreign currency assets
Infrastructure policies	Strengthen the resilience of the infrastructure of the financial system	e.g. move derivative trading on exchanges

Source: Adapted from Hannoun (2010).

1.2. The toolset for financial stability policy

Table 1 (Galati and Moessner, 2011) gives an overview of tools to foster financial stability. The potential toolbox is extremely wide. Prudential regulation of the financial sector is an important tool, but also elements of monetary policy and fiscal policy can have an impact on financial stability. Even capital controls are sometimes used for example to stabilise the exchange rate. It is clear that financial stability policy is the responsibility of several authorities, who all have their specific goals, besides financial stability: for example fiscal policy is directly the responsibility of government and monetary policy is the territory of an "independent" central bank. There is a structural problem between financial stability policy which requires a coherent approach, and the tools to implement such a policy, which belong to independent authorities who can have other, conflicting priorities. Financial stability or systemic risk "authorities" therefore often have a coordinating and advisory role, above all the other authorities. It remains a political choice in how far the recommendations of the financial stability authority are binding.

Also the EU, setting up the European Systemic Risk Board (ESRB), independent but close to the ECB, has tried to find a delicate compromise between an advisory function and a real authority for the ESRB.

1.3. Focus on the macro-prudential aspects of financial stability

If we focus only on the prudential aspects within the financial stability policy, the toolbox remains quite impressive, as illustrated in Table 2 (Galati and Moessner, 2011). Some of the tools, such as the implementation of the Basel rules, are clearly within the power of the micro-prudential authority. Others require the intervention of the accounting authority, and some, such as a resolution regime, require a specific legal framework, allowing for the "orderly liquidation" of financial institutions.

Anyhow an important element of macro-prudential regulation is directly linked to the micro-prudential regulatory framework whose traditional architecture is further detailed in section 2. This can lead to conflicts between micro and macro-prudential use of the same legislation. For example selectively increasing capital requirements of banks to stop a growing real estate bubble is useful for macro-prudential reasons, but can create micro-prudential problems for weakly capitalised banks. In such cases, a trade-off between micro- and macro-prudential goals is necessary.

Table 2 Macro-prudential instruments	
1. Risk measurement methodologies	
By banks	Risk measures calibrated through the cycle or to the cyclical trough
By supervisors	Cyclical conditionality in supervisory ratings of firms; Develop measures of systemic vulnerability (e.g. commonality of exposures and risk profiles, intensity of inter-firm linkages) as basis for calibration of prudential tools; Communication of official assessments of systemic vulnerability and outcomes of macro stress tests;
2. Financial reporting	
Accounting standards	Use of less procyclical accounting standards; dynamic provisions
Prudential filters	Adjust accounting figures as a basis for calibration of prudential tools; Prudential provisions as add-on to capital; smoothing via moving averages of such measures; time-varying target for provisions or for maximum provision rate
Disclosures	Disclosures of various types of risk (e.g. credit, liquidity), and of uncertainty about risk estimates and valuations in financial reports or disclosures
3. Regulatory capital	
Pillar 1	Systemic capital surcharge; Reduce sensitivity of regulatory capital requirements to current point in the cycle and with respect to movements in measured risk; Introduce cycle-dependent multiplier to the point-in-time capital figure; Increased regulatory capital requirements for particular exposure types (higher risk weights than on the basis of Basel II, for macroprudential reasons)
Pillar 2	Link of supervisory review to state of the cycle
4. Funding liquidity standards	Cyclically-dependent funding liquidity requirements; Concentration limits; FX lending restrictions; FX reserve requirements; currency mismatch limits; open FX position limits
5. Collateral arrangements	Time-varying Loan-to-value (LTV) ratios; Conservative maximum loan-to-value ratios and valuation methodologies for collateral; Limit extension of credit based on increases in asset values; Through-the-cycle margining
6. Risk concentration limits	Quantitative limits to growth of individual types of exposures; (Time-varying) interest rate surcharges to particular types of loans
7. Compensation schemes	Guidelines linking performance-related pay to ex ante longer-horizon measures of risk; back-loading of pay-offs; Use of supervisory review process for enforcement
8. Profit distribution restrictions	Limit dividend payments in good times to help build up capital buffers in bad times
9. Insurance mechanisms	Contingent capital infusions; Pre-funded systemic risk insurance schemes financed by levy related to bank asset growth beyond certain allowance; Pre-funded deposit insurance with premia sensitive to macro (systemic risk) in addition to micro (institution specific) parameters
10. Managing failure and resolution	Exit management policy conditional on systemic strength; Trigger points for supervisory intervention stricter in booms than in periods of systemic distress
Source: Adapted from BIS (2008).	

2. Macro-prudential regulation and supervision: a Copernican revolution?

2.1. The traditional supervisory architecture

The traditional financial supervisory architecture consists of five elements, each acting independently, and with their own goals and tools: micro-prudential supervision, monetary policy, market conduct supervision, deposit guarantee schemes and the lender of last resort function.

2.1.1. Micro-prudential supervision

The micro-prudential supervisor should look at the stability and safety of the individual financial firm, essentially banks and insurance companies. It should guarantee that the bank can fulfil its contractual obligations. The micro-prudential supervisor should be close to the operators and have access to all information in order to be able to understand all aspects of the risks that are taken: financial risks, operational risks, etc. Because of the nature of the information, the supervisor is bound by a duty of professional confidentiality. That supervisor should have the power to intervene, occasionally by withdrawing the license as bank or insurance company.

Essential parameters for the stability of the individual firm are its solvency and its liquidity position. Own capital should be high enough to absorb occasional losses on the assets, and the liquidity of the assets should be high enough to generate cash if liabilities (deposits) are withdrawn.

In order to avoid arbitrary behaviour of the supervisor, which could undermine the competitive level playing field, a formal framework of standards for capital and liquidity requirements is established. That is essentially the purpose of the Basel Committee requirements for banks worldwide, and the Solvency II requirements for insurance companies in the EU.

In order to support trust in the micro-prudential supervisor, it is in most cases established as a public function, while independent from immediate political pressure and government. Micro-prudential supervision should create confidence of the public at large in the soundness of the financial institutions, and would therefore support financial stability.

2.1.2. Monetary policy

The goal of the monetary policy is to create an environment of economic growth and stability of the currency. Since the end of the 19th century, there is a broad consensus, but not unanimity, that this function should be executed by a politically independent organization – a central bank – in order to be credible. A basic legal framework defines the exact goals and the tools for its actions.

Goals of monetary policy can be defined in terms of inflation levels, growth levels or foreign exchange rate levels.

Some of the most important tools of the central bank are to decide upon the level of the short term interest rate and to influence the money supply. The crisis of 2008 has forced central banks to use a broader range of "unconventional" tools such as quantitative easing.

In order to be successful, the central bank uses the commercial financial firms, essentially the banks, as a transmission mechanism to the whole economy of its monetary policy actions. Lower interest rates, set by the central bank, lead to lower rates on deposits and loans. During the actual crisis, the traditional transmission channel did not function properly, another reason for "unconventional" instruments of monetary policy.

A well-managed monetary policy should be an important element of overall financial stability.

2.1.3. Market conduct supervision

The market conduct regulation and occasionally a market conduct supervisor is a third element contributing to confidence and stability. It aims at guaranteeing that financial markets operate in an honest and transparent way, so that the pricing mechanism is efficient. Rules to eliminate inside trading or market manipulation should protect the integrity of the market mechanism. Operators on the market acting as agents, such as brokers, investment advisors or asset managers should act in the interests of their clients.

In some countries, market conduct rules are part of the general legal framework. In others, a specific market conduct regulator/supervisor is established.

Financial markets, operating in a reliable and open way, with a smooth and transparent pricing mechanism, should add to the confidence of the public in the financial system, and indirectly to financial stability.

2.1.4. Deposit guarantee schemes

While the first three elements of the traditional financial architecture should help financial stability by preventing confidence to collapse, two other essential modules are available in case accidents happen notwithstanding the supervisory framework.

The deposit guarantee scheme protects the deposit holders of a bank in case of a collapse. The guarantee is limited to a certain maximum amount to keep the scheme financially affordable and to avoid moral hazard. The deposit guarantee scheme is in principle financed by the banks, but it is clear that such a fund will never have enough reserves to cope with the collapse of a big (systemic) bank. Therefore, the back-up of

the government, say the tax payer is essential, as was also illustrated during the crisis of 2008.

A deposit guarantee scheme should stabilize the deposit market in rough times, as deposit holders should feel protected, which should avoid that they run away in panic and destabilize further the banking system.

2.1.5. Lender of last resort

Finally, the central banks plays a role as ultimate stabilizer of the banking system by providing additional liquidity to solvent banks with liquidity problems, at a market conform interest rate or higher. The only institution that can provide such a guarantee is indeed the central bank because it is the only institution which has an unlimited capacity to issue new currency.

Thanks to this ultimate weapon, banks, confronted with unexpected liquidity problems should be rescued, and deposit holders should not lose confidence, which should again stabilize the financial system in case of problems.

2.1.6. Rationale and consequences of the traditional supervisory architecture

The consensus about how to set up the supervisory architecture of the financial system was the result of centuries of experience with consecutive crises. Monetary policy was understood_by the end of the 19th century. The micro-prudential supervisor for the banking system was in many countries created after the deep crisis of the 1930's. Market conduct supervision was becoming an important part of the framework towards the end of the 20th century. The reference for the lender of last resort function is still Bagehot, a 19th century economist (Wood, 2003). And deposit guarantee schemes became generalized after the crisis of the 1930's, with as a major example the set-up of the FDIC in the US in 1933.

Since the 1930's, this architecture had functioned well. There were growing concerns about "systemic" risks since the 1990's, especially after the collapse of the hedge fund LTCM in 1998. But that was not leading to a change in the supervisory framework. There seemed to be a firm believe that strengthening micro-prudential supervision, for example by improving the Basel framework for banks, would be enough to mitigate systemic risks. The general tendency in many EU countries was to strengthen the micro-prudential supervisor by separating it from the central bank: the FSA in the UK, Bafin in Germany are some of the many examples. The idea was that separating the micro-prudential supervision from the central bank would eliminate the potential conflict of interest in the central bank between the monetary policy function and the supervisory function.

Financial stability was still considered to be the natural result if each of the five building blocks was strong enough. Because systemic risks were thought to be under control, the impact of stability reports published by Central Banks or supranational institutions like the IMF, remained rather weak. Only for specific technical issues, like for example the

problems in the organization of back offices were the warnings in stability reports sometimes leading to regulatory initiatives. The growing shadow banking system was a concern, and the fast development of financial innovation in risk transfer products like CDS was clearly identified as dangerous by the joint forum, a group of supervisors working within the BIS, as early as 2004 (BIS, 2004). But the supervisory framework was not adapted.

In line with this consensus of non-action, there was no political willingness in the EU to adapt the supervisory framework to the reality of an increasingly cross border integrated financial sector. The creation of an EU banking supervisor was rejected by most member states, eager to keep their sovereign independence. The political compromise was the creation of CEBS (Committee of European Banking Supervisors), a platform where European banking supervisors would meet, exchange practices, and try to get to pan European supervisory harmonization. The aim was to achieve coordination between all the involved supervisors in a gradual way. Supervision of a cross border bank should happen within the college of all involved supervisors, under the leadership of the home supervisor. In practice, this process failed, as all involved supervisors had no incentive to cooperate (Dhulster, 2012). And in case of crisis, nothing was prepared, except a series of "Memorandum of understanding" between member states, which were kept secret, and which did not work well when the crisis started in 2008.

The crisis demonstrated that financial stability is not a natural consequence of micro-prudential supervision but should become a discipline in itself. At the same time, the cross border complexities within the EU were identified as a supplementary hurdle that should be tackled at the institutional level, with stronger pan-European coordination, and the transformation of CEBS into EBA (European Banking Authority). Since 2014, a further step towards full harmonisation of micro-prudential supervision within the Eurozone was achieved with the Single Supervisory Mechanism of the Banking Union.

2.2. The new elements of the financial architecture

2.2.1. Macro-prudential supervision including crisis management as the central elements of the new framework: who is in charge?

The experience of the crisis has fundamentally changed the philosophy of how to set up a financial system. That change is comparable to a Copernican revolution. Two new elements are now taking the central place: macro-prudential supervision, in order to avoid a systemic crisis and crisis management in case the supervisory framework fails. Politicians, regulators, supervisors and operators still miss experience about how this system will work. But meanwhile, a legal framework is developed.

Macro-prudential regulation and supervision is a very ambitious new discipline. Its goal is not only to point to potentially dangerous developments, as the traditional stability reports of many institutions did, but also to take decisions or give (binding)

recommendations to mitigate these developments before they become a material threat to stability.

Given the nature of the sudden change, and the complexity of the aims, it is not surprising that all the newly established organizations to monitor and regulate market developments struggle to define their exact mission.

At the worldwide level, the Financial Stability Board has no decisive power, but gives recommendations to the G20, the meeting of the heads of state of the 20 most important economies of the world. The political decisions have to be taken by the G20, even if that organization is not democratically empowered to do so. Perhaps the IMF, which is a formal organization in which all countries are represented, could be better placed to take such decisions.

In the US, the FSOC (Financial Stability Oversight Council) has a monitoring role for the financial system, but has also the power to identify the so-called systemic institutions, and to issue binding regulatory recommendations. According to its internet site "the Financial Stability Oversight Council (FSOC) will provide, for the first time, comprehensive monitoring to ensure the stability of our nation's financial system. The Council is charged with identifying threats to the financial stability of the United States; promoting market discipline; and responding to emerging risks to the stability of the United States financial system".

In the EU, the ESRB (European Systemic Risk Board) is established in 2010. According to the ESRB Regulation (2010): "The ESRB shall be responsible for the macro-prudential oversight of the financial system within the Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union that arise from developments within the financial system and taking into account macro-economic developments, so as to avoid periods of widespread financial distress. It shall contribute to the smooth functioning of the internal market and thereby ensure a sustainable contribution of the financial sector to economic growth". The ESRB can only issue recommendations to the EU institutions and to the individual Members states. These recommendations can become binding if imposed at the EU level.

In the EU, according to the CRR (art458), all member states must designate an authority in charge of monitoring local systemic risks and with the competence to strengthen the micro-prudential rules if they perceive growing macro-prudential risks. In Belgium, the National Bank of Belgium (NBB) is the designated macro-prudential authority

The same CRR (art. 459) defines the competence of the European Commission (EC) to take macro-prudential decisions concerning CRR/CRD for the whole EU territory.

Also the EBA has its role to play, as it has to draft the "single rule book", which should fully harmonize the micro-prudential supervisory practices, including those linked to macro-prudential issues, throughout the EU.

As an important part of the tools for macro-prudential supervision are within the micro-prudential competence, also the micro-prudential supervisors have to play a role in implementing the macro-prudential policy, which means in the EU the national micro-prudential supervisors and the ECB for the Banking Union.

Crisis management has become a discipline in itself since the crisis: the fact that no country was well prepared to manage a crisis like the one of 2008 increased the social costs significantly. Especially in the European Union the complex balances between national and European competences, made crisis management and the set-up of an institutional framework even more difficult.

One of the major causes of the complexity of crisis management was the existence of big banks for which the normal bankruptcy procedures are unacceptable. The so-called "Too big to fail" (TBTF) banks are not allowed to go bankrupt because of the key role they play in the economy, the fact that they hold a major part of the savings of the population, and the interconnection with the other financial operators, which means that a bankruptcy would provoke a chain reaction, destroying the whole financial sector. Injecting public money to rescue the bank becomes the only solution.

A lot of work has been done since than to cope with this TBTF problem. First of all the FSB started to develop a methodology to identify the systemic banks at a worldwide level. Similar methodologies have been developed in the EU to identify "other systemically important institutions".

For the TBTF banks, a specific regime of "orderly liquidation" or resolution has been developed.

Managing a resolution process requires the intervention of a specific authority, the "Resolution authority".

In the US, the designated resolution authority is the FDIC, the deposit guarantee fund.

In the EU, the Banking Recovery and Resolution Directive (BRRD) is the legal framework for crisis management that has to be implemented by all Member States. According to the BRRD, every Member state of the EU must designate a Resolution Authority, which should, according to Art 3, be a "public administrative authority or any authority entrusted with public administrative powers". In this broad definition, it can as well be the ministry of finance as any other public body. In Belgium the NBB fulfils the functions of the resolution authority.

Within the Banking Union, a Single Resolution Mechanism (SRM) is established, consisting of a Single Resolution Board (SRB) which acts as the Resolution Authority. The SRB is composed of a Chair, a vice-chair and representatives of all National resolution Authorities. Within the SRM, the decision that a bank is failing will be taken by the ECB, as the single micro-prudential supervisor. The SRB can then decide that resolution is in the best public interest, after which it can start the resolution process, after approval of the Commission and the Council.

Besides the resolution mechanism, the BRRD also sets the framework for Resolution Funds in each Member State, which have to be funded by the banks, the resources of which can be used in case a resolution process requires additional financing. For the Member States participating in the Banking Union, a Single Resolution Fund will gradually be built, starting in 2016 and completed after 8 years.

2.2.2. The toolkit for macro-prudential supervision including crisis management in the EU

The EU legal framework for micro-prudential supervision, the CRR/CRD contains a number of articles concerning macro-prudential aspects of supervision. EBA (2014) lists the following macro-prudential elements within CRD/CRR:

- The Capital Conservation Buffer (Art. 129 of CRD) imposes banks to build an additional buffer of 2.5% of Risk Weighted Assets on top of the core CRR/CRD capital requirements. This buffer increases the resilience of the banks against losses in stressed periods. According to Art 458 of CRR, the level of the buffer can be increased in case of macro-prudential concerns.
- The Countercyclical Capital Buffer (Art 130 of CRD) allows forcing the banks to build an additional capital buffer in case of excess aggregate credit growth.
- The Global Systemically Important Institutions buffer (Art 131 of CRD) imposes higher capital requirements of potentially up to 3.5% for G-SII's, in line with the FSB agreements.
- The Other Systemically Important Institutions Buffer (Art 131 of CRD) imposes higher capital requirements of up to 2% for the "other" or "local" systemic banks.
- The Systemic Risk Buffer (Art 133 of CRD) can be applied to the whole financial sector or to a subset in case structural systemic risks.
- Higher risk weightings or loss given default floors for mortgages (Art 124 and 164 of CRR) increasing the capital requirements for real estate transactions in order to avoid overheating of real estate markets.
- Given the very broad definition of Pillar 2 measures (Art 102 – 104 of CRD), also Pillar 2 can potentially be used as a macro-prudential tool, even if it is not specifically conceived for that purpose.
- Art 458 of CRR imposes Member States to designate a national authority for macro-prudential risks, and allows that authority to deviate from the general rules of CRR/CRD. In case of increasing systemic risk it can strengthen for all or a subset of credit institutions:
    - The level of own funds,
    - requirements for large exposures
    - The public disclosure requirements
    - The level of the capital conservation buffer
    - The liquidity requirements
    - The risk weights for targeting asset bubbles in the residential of commercial property sector
    - The risk weights for intra financial sector exposures.

  These measures have to be justified, and can be rejected by the European Council (art. 458 of CRR)
- According to art 459, the European Commission can also deviate from the general rules of the CRR by imposing stricter prudential requirements in case of

increasing microprudential or macroprudential risks, and this for all Member states.

The major EU framework for crisis management is the BRRD. It focuses on systemic banks for which a normal bancruptcy procedure in case of problems is not socially acceptable. First of all, for all these banks a "recovery" and a "resolution" plan has to be drafted. For banks which are not considered systemic, simplified obligations may be applied.

The bank should draft a recovery plan which should describe the measures which the bank intends to take in case of a significant deterioration of its financial situation. The microprudential supervisor must assess the plan. If the bank is not able to propose an acceptable plan, the microprudential supervisor can impose a series of measures, such as:

- To reduce the risk profile of the institution,
- To enable recapitalisation measures,
- To review the banks' strategy and structure,
- To make changes to the funding strategy,
- To make changes to the governance structure.

The micro-prudential supervisor must inform the resolution authority, which can recommend supplementary measures to facilitate occasional resolution.

The resolution authority will draft a resolution plan and can impose on the bank to remove impediments to resolution, such as:

- Revise intra-group agreements
- Limit exposures,
- Divest assets,
- Limit or exit activities,
- Prevent development of new business,
- Require changes to legal or operational structure,
- Require to set up a parent holding company,
- Require the issue of eligible liabilities for bail-in.

When a bank infringes or is likely to infringe the requirements of CRR/CRD, the microprudential supervisor will take "early intervention" measures, which include:

- To execute the recovery plan,
- To remove senior management and to appoint a temporary manager,
- To require management to draw up a plan for restructuring debt,
- To change the business strategy,
- To change the legal or operational structure.

When a bank is considered by the microprudential supervisor or the resolution authority to fail or to be likely to fail, and when no private sector solutions are available and

normal insolvency procedures are considered unacceptable, the resolution process will start. That includes:

- Appointment of a special management,
- Sale of certain business,
- Transfer critical functions to a "bridge institution",
- Transfer assets or liabilities to an asset management vehicle,
- Bail-in of eligible liabilities.

Despite the fact that BRRD already provides the microprudential supervisor and the Resolution authority with the power to impose to a bank to change its structure or to reduce certain activities, a number of EU Member States has decided to have stricter "structural" rules by legally imposing to stop, split or ring fence certain market activities from traditional commercial banking activities. The UK, France, Germany and Belgium have introduced such measures in their national framework.

At the EU level, a study by a high-level group, chaired by Erkki Liikanen (2012) proposes:

- Prohibition of proprietary trading for banks,
- A clear definition of which trading activities are acceptable for banks,
- Ring fencing of trading activity if it reaches certain thresholds.

The political discussion is still going on to decide if the EU will impose a harmonized regime for all Member States.

An indirect, almost ultimate tool of crisis management is to rescue the bank in trouble with government money. The aim of all preceding instruments is exactly to avoid such help, but it is still available if all other measures fail. State aid in the EU is strictly controlled by the EC, as it is considered as an important source for distortion of competition in the internal market. Any state aid is only acceptable after a bail-in of at least 8% of the balance sheet, if there are no other solutions, and is always accompanied by remedies from the commission, to reduce the competitive distortion.

2.2.3. All other elements of the architecture have to act in the interest of financial stability

The development of macro-prudential supervision and crisis management can be considered as a kind of a Copernican revolution as the goal of the reform is that all parts of the framework have to focus on the same ultimate goal: preserving financial stability and facilitate occasional crisis management.

For example, many initiatives of central banks during the crisis, within the framework of monetary policy, were in reality inspired by concerns of stability. The ECB, accepting Greek government bonds as "good collateral", while the rating agencies were downgrading it to "junk" is not in line with the role of the ECB as conceived in the Treaty of Maastricht. The Quantitative easing of the Fed is not in line with the normal goal of a central bank of avoiding monetary financing of government debt.

The same fundamental shift can also be observed in micro-prudential supervision. While in October 2011, EU banks were considered to be undercapitalized, given the sovereign risk of some member States, micro-prudential supervisors encouraged banks to accept a "voluntary" reduction or haircut on their holdings of Greek debt. Such a haircut would not be acceptable for the supervisor in the traditional framework, as it would further weaken the already fragile banks. But clearly since the crisis, stability of the European system overrules the importance of the soundness of the individual banks.

Another striking example is to be found in the European Institutions. Until 2014, the financial sector was regulated by the European Commission by the Commissioner of the "Internal Market". Since 2014, the Financial sector has its specific Commissioner, and his mandate is defined as "Financial stability, Financial services and Capital markets". Clearly "financial stability" is considered to be a key responsibility of the European commission.

This shift of ideas has important consequences on the design and functioning of the financial architecture. In several Member States, the independent micro-prudential supervisor has been reintegrated into the central bank. Being close to monetary policy and Stability supervision is now considered essential, in order to prevent conflicts between the micro supervisor and the other elements of the architecture. As stability becomes the most important goal, the micro-prudential supervisor can be overruled by macro-prudential concerns. This creates a new type of uncertainty, for which banks and supervisors lack experience about the unintended consequences. But any intervention of the macro-prudential supervisor will influence the balance sheet, P&L, and pricing in markets.

3. Challenges of systemic risk supervision

3.1. How to identify systemic risks and avoid the costs of errors?

We pointed already in §1.1 to the problems of identifying systemic risks. That is not surprising as the collapse of systems is in general not the consequence of one event, but of the interaction in a chain of events. The chaos theory gave us the example of a butterfly in Europe, which by moving its wings, creates a hurricane in America because of an unpredictable and unlikely chain reaction of moving molecules of air. In this example, the butterfly poses a systemic risk, but it would of course be nonsense to monitor all butterflies in the world in order to avoid hurricanes. Nevertheless, the natural ambition of systemic risk supervisors could well be to do exactly that and to get as much information as possible about financial flows or financial operators as an input for models which could fail just like the sophisticated risk models which were used for Basel II.

Probably a better approach to control systemic risks is to build circuit breakers into the system, so that chain reactions are stopped automatically once they risk getting out of control. Reduction of the interconnectedness of operators in the financial system seems

to respond to this concern. Circuit breakers can also be helpful to control the price development in case of asset bubbles, which are considered to be a consequence of self-fulfilling optimism.

Increasing buffers in each element of the financial system, so that they become more resilient in times of stress and less pro-cyclical, can be a major contributor to reduce systemic risks. In that way, each element becomes a buffer, stopping the chain reaction instead of an accelerator.

The problem with all these interventions is that they are costly, in terms of required resources, in terms of opportunity costs or in terms of disturbing normal market mechanisms. Lamfalussy (2008) pointed to the fact that financial efficiency does not automatically go hand in hand with financial stability. If stability supervisors want to make the world more stable, they will have to make the system somewhat less efficient. The tricky question is who will take the decision about the optimal trade-off between stability and efficiency. A fully stable financial system could become so restrictive that it no longer fulfils its essential function within the economy as a risk transformer, at the cost of growth. It will be quite challenging to find the right balance in a democratic and transparent way.

3.2. The unintended consequences of stability supervision

Stability supervision can have far-reaching unintended effects on the functioning of markets and on the economy as a whole. Macro-prudential policy could become very pro-cyclical. An obvious example is when the supervisor identifies a market as overvalued. If this opinion is known by the market operators, it could well provoke what stability supervision intends to avoid: a collapse of the market. Investors will hurry to exit the market before it is too late, and as such create a crash for which the stability supervisor could be considered responsible.

But the intervention of stability supervision could also disturb market functioning in other circumstances. For example when capital requirements for systemic banks are increased in order to protect stability, the competitive level playing field will shift in either of two directions: either the markets will consider that these banks are indeed too big to fail, which will increase their competitiveness, or these banks will no longer be competitive because of the higher capital requirements. Both effects could compensate each other, but calculating the right balance is an impossible task, as the balance will shift depending on the economic conditions.

3.3. The complexity of the toolkit for systemic risk supervision and the problem of coordination

The range of instruments, available to control systemic risk supervisors is very broad, ranging from recommendations to concrete decisions. Some will address banks directly, bank supervisors or market regulators. Some could address governments or perhaps

even central banks. It should be made clear how the arbitrage between conflicting goals of all these operators will happen.

Furthermore, systemic risk supervision is organized at several levels: the global, the European, the Banking Union and the national level. If it is to achieve its goals, all these levels should deliver the same or at least consistent messages and act together, as most of the systemic banks are global. But streamlining the process will be very complicated, and diverging views cannot be excluded. Even within the EU, with its long tradition of cooperation, the coordination will be very delicate, as the ESRB, the Commission and the Member States are responsible for financial stability.

A specific problem for coordination of stability policy in the EU is that competences, being part of financial stability policy are not only split over different authorities, but are also organised at different geographic levels:

- Fiscal policy remains essentially a Member State competence
- General regulations and laws are increasingly designed at EU level, occasionally with a possibility for member states to add specific national characteristics
- Monetary policy is decided at member state level, except for the Eurozone
- Micro-prudential supervision is also organized at member state level, or at Eurozone level for the participating member states. The European banking authority should draft a single rule book
- Macro-prudential responsibilities are at Member state level, but the EC has also the competence to strengthen the micro-prudential rules for all Member states in certain circumstances.

The best way to get an idea of the complexity of coordination in the EU is to imagine a crisis, similar to the one in October 2008. If a big cross-border EU bank would fail, it would require the cooperation of:

- The micro-prudential supervisors, including the ECB in a college,
- The macro-prudential authority (s),
- The central bank(s) as lenders of last resort,
- The resolution authority(s),
- The resolution fund(s),
- The EC
- The European Council
- The deposit guarantee schemes
- The National Governments which will continue to defend their perceived own interests.

And this in a crisis environment where decisions have to be taken urgently.

3.4. And the ultimate problem: moral hazard

One of the major causes of the actual crisis is the underestimation of risk. This was partly the result of overconfidence in the monetary policy, among other elements, being capable of eliminating the big swings in the business cycle. 'The great moderation" (Bernanke, 2004) became a popular idea, which created general optimism and lower risk

premiums. A similar risk is facing stability supervision: if it would be successful for a long period, it could create a sentiment of definitely achieved stability. That would lead to lower risk premiums, exactly in the same way as the overconfidence in monetary policy until 2008.

The paradox is thus that extreme successful implementation of stability supervision could lead to overconfidence and new excessive risk taking, which would ultimately destabilize the system. In other words, successful stability supervision could become self-destructive, as most models about human behaviour.

4. Conclusion

After every deep financial crisis in history, the financial architecture has been redesigned. Of all the changes that have been envisaged since the crisis of 2008, the concept of systemic risk supervision is certainly the most innovative and far-reaching. Given the major financial imbalances that were growing since the 1990's and which were well identified in time, but neglected, it is not surprising that there is now a broad consensus to intervene in the future before such unsustainable situations become again a threat for society as a whole.

However systemic risk supervision is a difficult new territory without established practices. It will be challenging to develop the credibility of this new discipline given its complexity and the potential consequences if it is not well implemented. Academics, practitioners, regulators and supervisors should all work together to clarify all aspects of stability supervision: definitions, processes and tools, risks of unintended consequences and the organization to allow all levels of supervision to work together towards a more stable financial future. Moreover, all measures taken should contain enough flexibility to adapt to the always surprising path that a crisis follows.

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Workshop report

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This section summarizes the content of the presentations and discussions of the 3rd Vlerick regulatory workshop which took place on 31 March 2015 at Vlerick Business School on the following topic:

MACRO-PRUDENTIAL SUPERVISION: UNKNOWN TERRITORY FOR BANKS, INSURERS AND THEIR SUPERVISORS

25 experts participated to the workshop, from different horizons: regulatory authorities (ESRB: European Systemic Risk Board, NBB: National Bank of Belgium), financial institutions (Ageas, Belfius, BNP Paribas, BNP Paribas Fortis, Dexia Group, Euroclear, KBC,), a financial federation (European Banking Federation), consultants (Deloitte, KPMG, Price Waterhouse Coopers), lawyers (Allen & Overy), academia (Université Libre de Bruxelles, Vlerick Business School). The workshop was organized as follows. In a first part, Luc Coene (NBB) presented the new regulation, the NBB role and coordination within the EU. In a second part, André Sapir (ESRB) presented the complexity within the EU and future developments. In a third part, Hedwige Nuyens (BNP Paribas) elaborated on the impact on banks. Presentations were followed by a panel discussion between the three speakers and a debate with the audience. Workshop participants were invited to express their view on macro-prudential supervision by means of a survey, whose results are reported in figures 1 and 2.

Figure 1 - Respondents' profile

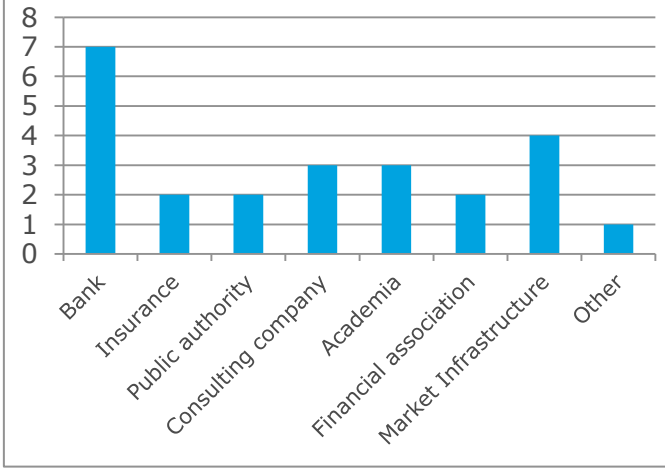
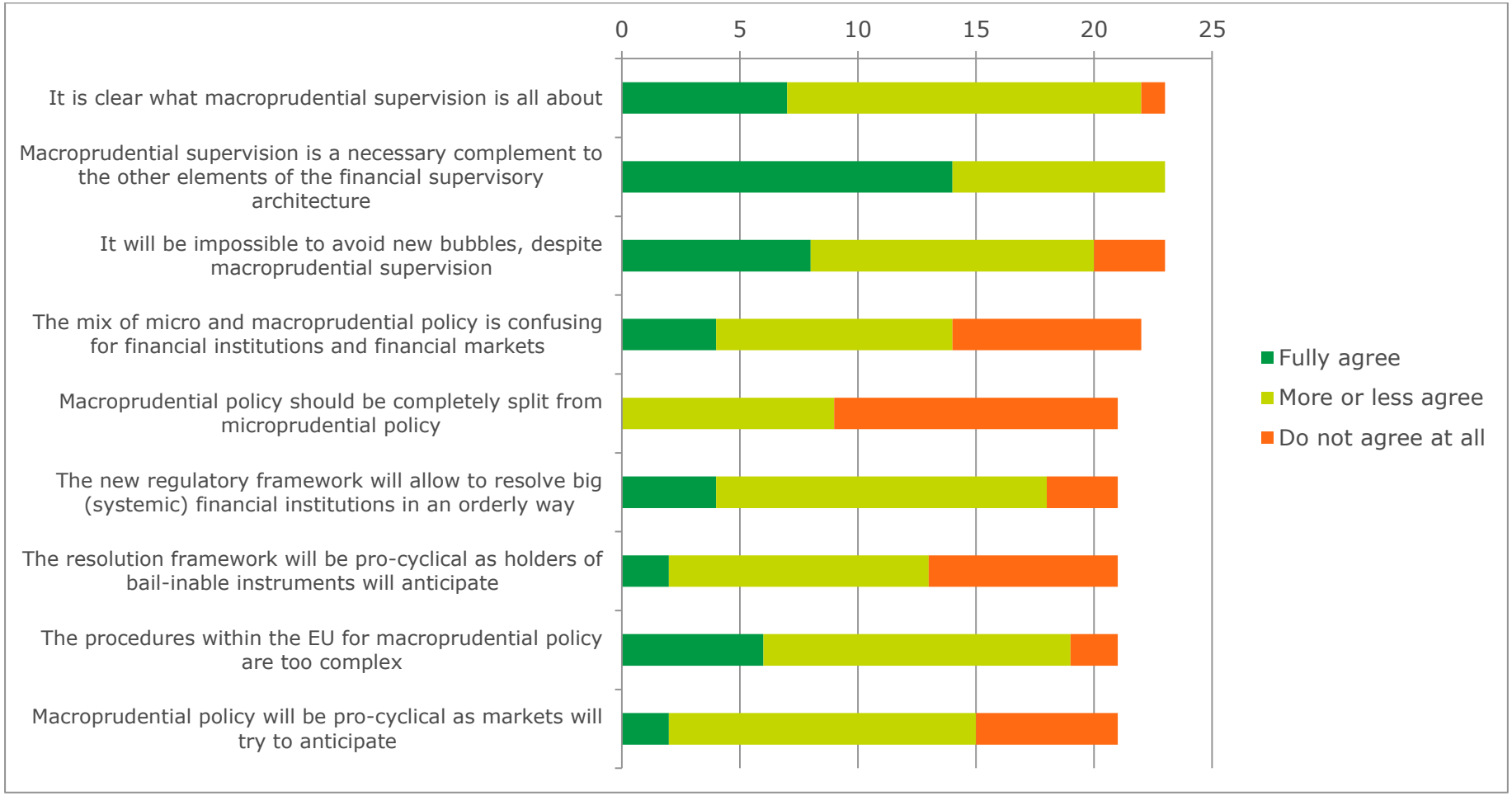


Figure 2 – Survey Results



Introduction

Freddy Van den Spiegel, Professor at Vlerick Business School

Financial stability and macro-prudential issues are not new. Economists have been discussing this for centuries pointing to the risks and the vulnerabilities of financial systems, the speed at which crashes appear and their consequences. The Financial Stability Board (FSB) has been established in 1999. The FSB was writing reports about financial stability on the question "what are we going to do?", but nothing actually happened. Economists did not agree on whether it was useful to tackle crises before they appear or whether it was better to let crises happen and then clean up the mess. Crises are inherent to economic growth and if you kill economic crises then you could kill growth. That all changed fundamentally with the 2008 crisis. Suddenly the FSB became the motor for a new regulatory architecture of the whole financial system: new Basel rules and macro-prudential supervision as a new discipline.

It is interesting to see now that everyone agrees on the necessity of macro-prudential stability although the exact definition of macro-prudential stability is not actually clear. In other terms, we are clear about the necessity to clear up something which we cannot define. That is not a good start to regulate, nevertheless that is where we are.

New regulation, NBB role and coordination within the EU

Luc Coene, governor of the National Bank of Belgium (NBB)

Macro-prudential policy: what and why?

One of the lessons of the financial crisis is that it is not because individual institutions are in balance, that the whole system is in balance. In other terms, the accumulation of the individual positions may give rise to an imbalanced situation at the macroeconomic level. The prudential supervisors looking at each individual institution were not looking at the common denominators for all institutions in terms of excessive credit. And from a systemic level, excessive credit creates problematic bubbles.

One of the lessons is also that poor regulation, macroeconomic and macro-prudential policies can amplify shocks. In the US, the combination of both an unregulated mortgage sector and a too expansionary macro-economic policy has led to major disturbances in terms of financial stability.

Ensuring the soundness of individual institutions is not sufficient to safeguard the stability of the whole financial system. It is necessary to look at different elements than in micro-prudential supervision. Individual institutions might be systemic given their

interconnectedness. Nevertheless it is very important to identify institutions which are important market makers, because if these institutions get into trouble the whole market is affected and the effect is amplified across the whole system. Some institutions are therefore simply systemic by nature, such as Lehman Brothers for example.

Overall, financial shocks can spread quite quickly to the rest of the financial system and the real economy (e.g. subprime crisis). Even before you realise it, the economy is already touched and finding solutions becomes even more complex. Thus, what we need now is to look at systemic developments in the financial markets, identify the elements that drive these systemic developments, assess the extent to which this represents a risk for the system as a whole and see what policies can be applied to make sure that systemic risks are brought under control.

A macro-prudential policy should aim at **contributing to the safeguard of the financial system as a whole, including by strengthening the resilience of the financial system and decreasing the build-up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth**.

Examples of systemic risks include:

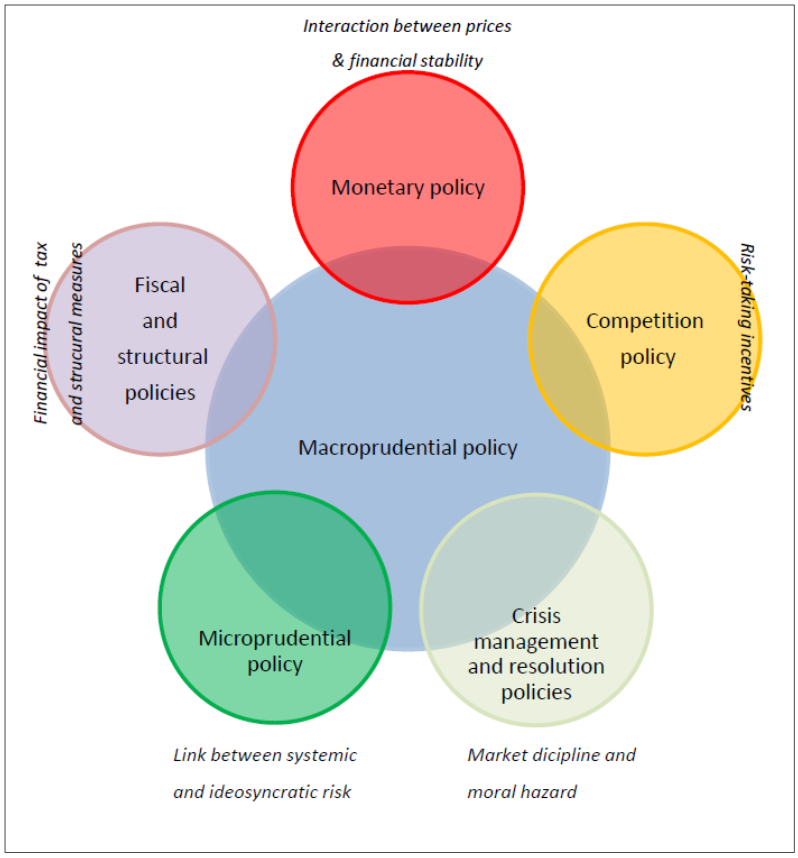
- Contagion risk due to the failure of a systemically important institution (too big/interconnected to fail).
- Build-up of imbalances and asset price misalignments (e.g., housing market bubble).
- Concentration of institutions' exposures to similar sectors and/or risks (eg sovereign).
- Dry-up of funding markets following evaporated market confidence.
- Contagion effects following the disruption in an important market infrastructure (e.g., CCP, clearing and settlement).

All these different examples are not mutually exclusive, they generally happen together in groups such as one leads to the other. And systemic risks often come from inside the systems from the (joint) characteristics and behaviour of institutions and market participants themselves.

The important question is: what are the links with other economic policies (i.e. monetary and micro-prudential policies)? It is clear that strong monetary policies are needed as a framework. But when you have a multiplicity of elements explaining certain imbalances, it is much easier to focalise each of these instruments on its main objective. For monetary policies, the focus is on interest rates and price stability while fiscal and micro-prudential policies address other issues. Macro-prudential policy can help these policies achieve their goals.

However, strong institutional and governance frameworks are essential for the effective conduct of macro-prudential policy. There are indeed overlapping responsibilities and a good institutional framework is needed. Cooperation among all authorities is also essential given potential spill over effects and the importance of cross border groups.

Figure 3 – Interferences with other policies



The different interferences are presented in Figure 3. Macro-prudential policies interfere with almost all kinds of policies. For example, too low interest rates (monetary level) may create financial instability (macro-prudential level). Or lax fiscal policies can lead to excessive debt and macroeconomic imbalances (housing bubble, consumption booms, current account deficits…). Macro-prudential policy is therefore a diffuse area which tries to capture everything that is systemic in nature.

Institutional framework

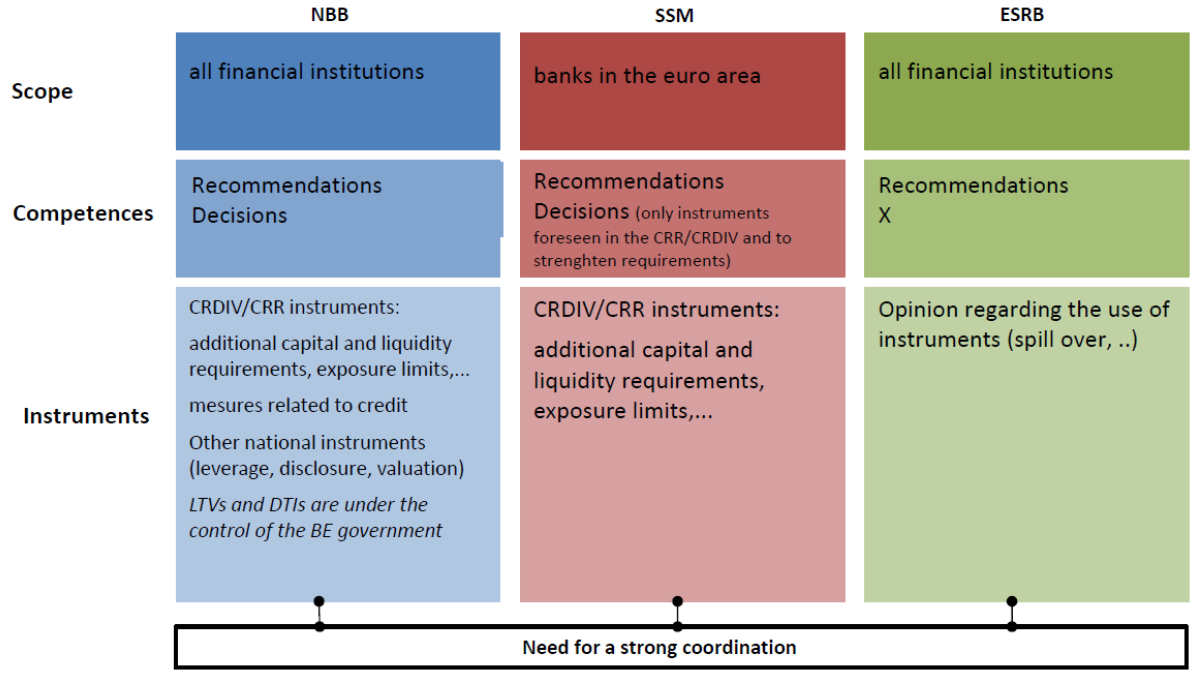
In view of all the different policy areas, a very coherent institutional framework is key to ensure efficient macro-prudential policies. Three conditions need to be fulfilled:

1. Support effective identification of risks through access to information and relevant expertise
2. Provide incentives for the timely and effective use of policy tools, in other terms avoid the "inaction bias"
3. Ensure the cooperation across policies in a manner that preserves the autonomy of established policy functions

However, there is no one-size-fits-all. There are centralized (as in Belgium, Ireland, Portugal and UK) and decentralized models (as in Austria, Denmark, France, Netherlands, Germany, Italy, Spain and US). What is common in most systems is that there is a key role given to the central bank because of its knowledge of the financial markets. The second model takes much more into consideration the fact that there are different authorities working together.

A precondition for macro-prudential policies to be effective is that authorities in charge have clearly defined objectives and powers. Sufficient powers are also needed to achieve objectives but we have no direct control over all macro-prudential instruments. We sometimes have to rely on recommendations where we can impose a "comply or explain". Another difficulty is the access to relevant information both inside and outside the regulatory perimeter. In Belgium and in Europe, macro-prudential policy is organized as represented in Figure 4.

Figure 4 – Macro-prudential policy in Belgium and in Europe



At the EU level, ESRB is much broader than SSM since it focuses on all financial institutions while SSM focuses on banks only. But both have received the same macro-prudential responsibilities. On the Belgian side, it is basically a copy-paste of the European side. An enormously strong coordination is needed to make this work because there is a lot of overlapping.

Recent Experience in Belgium

On the residential real estate, the NBB has decided on a capital add-on on the risk weights that banks apply on the mortgage lending. Prices on the housing market have risen in Belgium over the recent years, even during the crisis. In parallel, indicators indicate overvaluation of the real estate market in Belgium and Belgian households' debt is continuously increasing. As a consequence, a very detailed micro-analysis was made to find out where the difficulties were. Granular data have highlighted some pockets of vulnerabilities, with large heterogeneities across banks.

Given the importance of the housing market in Belgium and potential impact of a housing shock on financial stability, NBB has considered both macro- and micro-prudential measures. More specifically, a common buffer of 5% was imposed to all the existing risk weights, keeping the different risk profiles. Banks were not only asked to apply this buffer, but additionally to back-test their models, taking into consideration stress tests, and really verify that their risk-weights were really adequate. The application of a number of credit standards, designed by the EBA, was also imposed to make sure that banks would be more selective in granting new credits. It was indeed discovered that banks used mortgage lending as an instrument to attract new clients, so they were willing to give mortgages with negative margins, which was considered as an unacceptable practice.

What this example actually illustrates is the complexity of macro-prudential policies: it has been necessary to dig very deep to avoid any mistakes, and avoid distortions within the financial sector. Nevertheless, this kind of macro-prudential measure can possibly lead to unintended consequences which needs to be closely monitored. Firstly, banks transfer mortgage loans to other sectors, such as the insurance sector and other financial intermediaries, which is passing on the problem to somebody else instead of solving it. Secondly, banks transform subsidiaries into branches and transfer their mortgage portfolio from subsidiaries to branches. Other problems with the measure are that it is pro-cyclical in character, it changes internal models and leads to increased securitization.

Conclusions

There has been major progress in setting up macro-prudential policies. It has the advantage to mix micro- and macro-prudential policies because knowledge from both sides can then easily be combined. The major challenges are the coordination of all supervisory authorities, the risk of inaction bias, the lack of experience in terms of transmission mechanisms and potential unintended consequences, the lack of appropriate instruments for real estate overheating and communication.

Q&As

A question was addressed to Mr. Luc Coene on the systemic importance of insurers compared to banks and on what should be done in their regards. Mr. Coene emphasized the fundamental difference between the functioning of insurance companies and banks. Insurers have a more long-term perspective and very important liquidity constraints. The question of how far the same rules should be applied to insurers and banks is still an open issue. The systemic risk of insurance companies is very high because of low interest rates for a long period of time. There is an erosion of portfolios with high interest rates at the benefit of portfolios with low interest rates. And the regulators can see this coming far ahead, so they need to make sure to have enough buffers so that it does not cause any problems. Therefore, insurance companies should certainly be included into the systemic analysis but the instruments should be different as for banks.

The complexity within the EU and future developments

André Sapir, previous chairman of the Scientific Board of the ESRB

Introduction

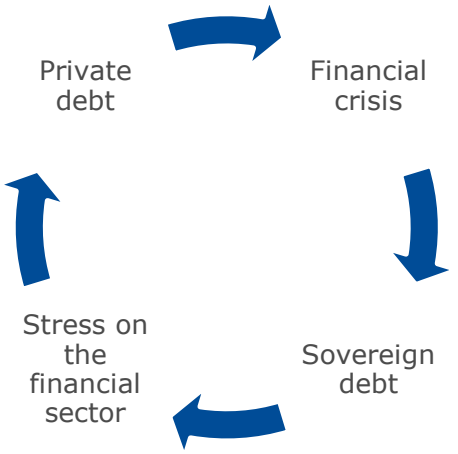
As a result of the financial crisis, an increase of rules has been observed in the regulatory arena. In the euro area, it has not only been a financial crisis, but it has also been a sovereign crisis.

In advanced economies, it is very clear that financial crises result from over-indebtedness in the private sector, and not so much from public debt problems. Greece is an exception for developed economies. It does not mean that public debt do not play a role in financial crises but most of the time, public debt increases as a result of financial crises. In advanced economies, financial crises indeed typically lead to bail-out and recession.

In many countries, when we compare the year before the crisis to three years after the start of the crisis, it is quite common to observe a 30 percentage point of GDP increase in public debt. But all this generally started from excessive debt levels in the private sector. And once the sovereign is at risk, the entire financial sector is further at risk, through a number of channels (e.g. the ratings' channel).

There is therefore a feedback loop effect from the sovereign to the financial health of the system. This vicious circle (as illustrated in Figure 5) originates in part from the exposure of the banks themselves to the holding of sovereign debt.

Figure 5 – The vicious circle from sovereign to financial health



The financial stability issue

There are three levels to address the issue of financial stability: -1- Prevention, -2- Resilience, -3- Resolution.

At each of these levels, there is macro-prudential policy. Macro-prudential supervision can be of two types, one is of structural nature, the other is of counter-cyclical nature. There is a tendency to focus only on the latter when talking about macro-prudential policy, but the other part is also about structural issues. Indeed all the matters that relate to having more capital and less leverage in the system are also important. For instance the fact that current fiscal policies create incentives for debt through tax deduction is a problem that needs to be addressed. These are of structural macro-prudential nature and they are crucial to give more resilience to the system.

In general, macro-prudential policy needs to be taken much more seriously in our advanced economies. When you look at emerging countries, you realise that they have already been using macro-prudential policies. This was the case for Korea after the Asian crisis at the end of the 1990s for instance. The latest crisis in emerging economies is Argentina in 2001, there has been nothing since then because these economies became much more prudent. Emerging countries are at the forefront of macro-prudential policy and we have to learn from them.

The issue of resilience is very important, loss absorption capacity is crucial. One of the problems that we have had in our countries, especially during the crisis itself, is the exposition of banks to the sovereign debt. The Cyprus case is one example in which the regulator did a very poor job in this respect. Cyprus is a tiny economy, between a third and a quarter of the economy of Brussels. The two banks that went bust had anodyne balance sheets of 10 billion euros. The problem was that those banks were very exposed to the Greek sovereign debt, and after the start of the Greek crisis, they even became much more exposed than what they were before because they were gambling with Greek

papers. Regulators made a fault there. With the banking union, this problem would have probably been solved. Now a mechanism is put in place to give the regulators the ability to deal with this kind of problem.

Macro-prudential policy in the EU

Today there are three levels of macro-supervision in Europe: the national level, the SSM and the ESRB. The ESRB was created in 2010, as a result of the de Larosière report, to deal with systemic risks. In the US, the equivalent institution was created at the same time, called FSOC (Financial Stability Oversight Committee). It is interesting to compare how both are organized. The ESRB is a large body of 35 people, with an overwhelming majority of central bankers and very little representation of the governments. In the US, the model is slightly different. It is a smaller body composed of the heads of all the financial regulatory institutions and chaired by the Treasury Secretary (i.e. the Minister of Finance. Government is therefore much more involved in FSOC than in ESRB.

How should the SSM deal with macro-prudential issues?

As far as the macro-prudential side of the SSM is concerned, two questions arise: -1- what would be the division of responsibility between the ECB as a macro-prudential authority and the national authorities, -2- within the ECB, what should be the relationship between the macro- and the micro-prudential parts.

With respect to the first issue, there were two possible models: a decentralized model where the ECB coordinates national authorities, or a centralized model where the ECB is in charge of macro-prudential instruments at the national level with the national authorities playing a complementary role. The solution that was adopted was in between: neither fully decentralized nor fully centralized. The national authorities remain competent and keep the macro-prudential instruments, but the ECB may apply higher requirements for capital buffers, then applied by the national authorities. So the ECB has the same instruments as the national authorities.

Regarding the second question on the relationship within the SSM between macro- and micro-level policies. The ESRB was in favour of a model with a clear division of both responsibilities. There may be conflicts of interest and there should be a hierarchy towards the macro-level, such that priority is given to the macro- when there is a conflict with the micro-level. The inaction bias argument also supports the division between micro- and macro-level.

Has the ESRB become irrelevant?

From one perspective, there is an overlap between the ECB and the ESRB. The ESRB deals with the entire financial sector while the ECB deals with EU banks only. On the other hand, the ECB deals with micro- and macro-policies while the ESRB only deals with macro-prudential issues. The role of both ECB and ESRB is therefore different, broader

on some dimensions, narrower on some others. There is little overlap between the two and both can coexist very well.

Another vision is that people dealing with macro-prudential issues at the ECB are also going to the ESRB. In other terms, the same people go to the same meetings to discuss the same things. One view is that the individual problems should be discussed at the ECB and not at the ESRB, and that the ESRB can issue recommendations to the ECB itself.

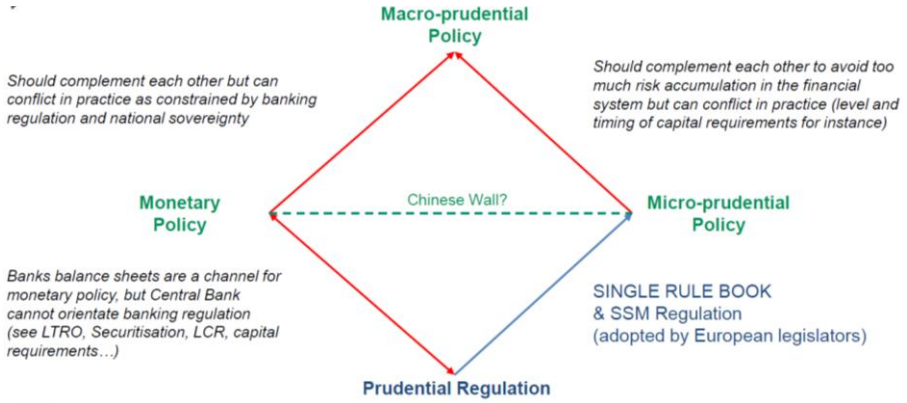
ESRB is a relatively weak institution but soft power can be turned into an advantage. One strength of the ESRB is that it has an independent scientific committee which can raise controversial issues that can then be discussed at the General Board with central bank governors and other officials. One example was the issue of overbanking in Europe. In my view therefore the ESRB should not be suppressed. It is a very useful institution to discuss new ideas and remind decision-makers that there is always a risk of inaction bias.

The impact on banks

Hedwige Nuyens, Head of BNP Paribas Group Prudential Affairs

What are the consequences for banks of macro-prudential policies? Banks need to deal with different authorities, conflicting policies can occur are presented in Figure 6.

Figure 6 – Conflicting Central Bank Policies



Conflicting policies include macro-prudential, monetary, micro-prudential policies and prudential regulation. A Chinese wall is foreseen between Monetary Policy and Micro-prudential Supervision. The ECB has multiple roles and is for some parts somewhat in competition with the EBA, the European Commission and the European Parliament. How do all these authorities work together? And when should the central bank or any other public authority interfere?

One relevant example is the mortgage market in Belgium, which is very significant for BNP Paribas Fortis. In Belgium, mortgages have been stimulated for years by the government. Banks have been granting mortgages for years, enabling them to develop a very deep knowledge of risk profiles and real estate markets. Based on the very long historical data series, one can conclude that Belgian mortgages are one of the best risks you can have.

Notwithstanding this, supervisors have a part of the micro-prudential policy, added margins for possible future uncertainty, hence leading to increased risk-weighted assets. The bottom-line of increasing the mortgages' risk-weighted assets (i.e. increasing the capital needed to lend) is that prices go up, as a consequence banks need to be more selective in what they finance. When credit availability decreases, the economy slows down such that it becomes more difficult for citizens to buy a first or a second home, there is a stress on the demand and prices eventually go down. That is exactly what happened. Now prices have reached good levels, but the add-on is not yet abolished. This example demonstrates the issue of inaction bias, where buffers and add-ons are not adjusted quickly enough to boost the economy. It is therefore very important to have a coherence in the four corners of public policies. Otherwise, the consequences on the economy are very harmful.

A second example is the too-big-to-fail issue. Banking Structural Reforms (BSR) are one of the very hot topics in the current macro-prudential and financial stability debates. The too-big-to-fail argument is that the larger a bank is, the more risky it would be for the economy. A set of measures are taken to reduce the size of banks and more specifically to separate the trading part from other activities. Is this going to empower stability, or on the contrary to make it more fragile? Banks, supervisors and politicians have different opinions on this. Banks have a very important market-making activity. If they no longer have an important role in market-making, there are two kinds of consequences: the reduction of market liquidity will create more volatility, and over-regulation will give rise to shadow banking. The problem of shadow banking is that it creates systemic risk outside the banking sector, and from the supervisors' point of view this is very difficult to regulate. The only way in which supervisors regulate shadow banking is to regulate banks dealing with shadow banking. But the shadow banking part that is outside the banking industry has not been properly addressed yet and that, again, is an important issue for the economy.

In summary, macro-prudential policy is an essential tool but it should be coherent with the other public policies. When the ECB says that it is going to encourage banks to lend, and at the same time penalizes lending banks in terms of capital needs and liquidity ratios, it is an example of adverse effect with plenty of liquidity available but no room to use the money. Overall, coherence and consistency between the four conflicting policies of Figure 6 are therefore the main challenges.

Panel discussion and debate with the audience

The first point discussed with the audience was the effectiveness of the macro-prudential measures and the risk of inaction. Inaction can be positive as well, it is indeed the responsibility of macro-prudential policies to be silent and cautious about its work. Inaction can therefore have its merit, in contrast to the **risk of over-action or wrong action**. ESRB should not come up every week with risk warnings or recommendations to the financial sector, and wrong actions may have unintended consequences. On the other hand, as observed by Luc Coene, transparency on the analysis of regulators is needed. And the risk of wrong or over- action does not undermine the need for macro-prudential supervision. Moreover, most of the time, regulatory committees are composed of several members (typically 6 or 7) and if there is no consensus then no action is taken. From one point of view, the elements to protect us from the issue of over- or wrong action are therefore already in place.

The second issue that was discussed is **cross-border consistency**. As major banks have a lot cross-border activities, it complicates a lot the regulatory complexity. A lot of this complexity comes from national discretions, as Hedwige Nuyens pointed out. The objective of the SSM is to move banking regulation to a broader level. But what is needed in this respect is to have the appropriate incentives at the country-level. We need to deal with national issues with one Eurozone authority, the ECB, which does not always have the tools to really address this. That is one of the reasons why, as emphasized by André Sapir, although macro-prudential supervision should preferably be centralized and managed at the European level it should nonetheless be differentiated across countries. The monetary union justifies the one-size-fits-all monetary policy, but we need macro-prudential policies to differentiate national idiosyncrasies. Luc Coene highlighted that part of this process is already in place: national authorities formulate regulatory proposals, and to make sure that there is no abuse, the SSM has to agree on country-level proposals and can intervene if necessary. Macro-prudential policy is therefore an intermediary that allows to deal with the imperfections of the European convergence.

The third issue was about the "other animal" besides micro- and macro-prudential authorities which is the **resolution authority**, imposing a lot of schizophrenia on behalf of the banks. In this respect, Luc Coene pointed out that on the one hand, in the absence of external parties involved there is a problem of conflict of interest in the resolution, and on the other hand the availability of information is an enormous asset. In the SSM there is no close connection between micro-, macro- and monetary policies, so there is a clear advantage to have a full picture of the entire thing, and that is one of the assets of the Single Resolution Board.

To respond to the arguments advanced by Hedwige Nuyens in her presentation, Luc Coene emphasized that the crisis proved that **self-regulation does not work**. Relying on banks to take corrective measures may lead to another crisis. The purpose of the add-on on the real estate market was indeed exactly to make the prices go up. Otherwise there would still be margin increases and speculative developments. On the ECB monetary policy and the excess liquidity, regulators were perfectly aware of the risk

in terms of asset bubbles. The decision to intervene was made because authorities considered that doing nothing would kill the economy even further.

Also in response to the arguments of Hedwige Nuyens, André Sapir questioned whether **increasing capital requirements** really constrains banks to lend less. The purpose of having more capital is to reduce risks. It is not only an issue of reducing the size of the balance sheets, it is also an issue of enhancing the quality of the balance sheets. Referring to the **too-big-to-fail issue**, banks indeed benefit from implicit guarantees. It is true that there may be some benefits for banks to have both commercial and non-commercial activities, in terms of economies of scale or economies of scope. But the question is: do we want to extend the implicit guarantees for the commercial activities as for the financial ones. The answer is clearly no.

One argument that was pushed forward by Hedwige Nuyens is that regulation on banks has a much bigger economic impact in Europe where 70% of the economy is financed by banks while it is only 30% in the US for example. In Europe, there is a **need to develop capital markets**. The Capital Market Union should not be confused with banking union and is very important as well. But to strengthen capital markets we **need strong banks**, especially given the rise of new competitors such as crowdfunding platforms, peer lending… etc. A more diversified market would be a good thing but regulations should enable banks to diversify as well, and to have their own business model. Nevertheless André Sapir raised a question mark on whether the fact that banks play a much bigger role in our economies today necessarily leads to the conclusion that there should be less regulatory pressure on them. One could indeed argue the opposite: because we are so much dependent on banks, we have to be more careful with banks. We may have to be more careful with banks than in the US because the impact of a problem with banks would be much stronger in Europe than in the US.

As Luc Coene then pointed out, banks are still too big for the moment. And this is an issue that we are still carrying from the past. A second issue is the very high concentration of sovereign debt in the balance sheets of the banks. What is still missing is a review of the **business models of banks**. The business models of the past do not apply anymore, the conditions have totally changed over the recent years and the type of profitability that banks can generate has fundamentally changed. A reflexion has started in the banking sector, some banks already made important decisions in this respect such as Deutsche Bank for example. What is sure is that the first movers will have an advantage.

A question was raised from the audience about the **nationalisation of financial actors** in some countries (e.g. Spain or the Netherlands) following the financial crisis and the potential conflicts of interests that could arise there. The question of how European authorities were looking at this issue was addressed to Mr. Sapir, who emphasized that this is one of the reasons why the Single Resolution Mechanism is so important. There is a worry that the banking union might run into conflict with bank nationalism. Nationalisations were one manifestation of this issue, but they are not compatible with the new banking union. If we had had a single resolution authority taking care of the

banks that needed to be resorted, it would have been done in a different manner. In that sense the Single Resolution Mechanism can be considered as a huge progress.