This paper discusses the development of the role of the European System of Central Banks (ESCB) in safeguarding financial stability. This is extremely important in the circumstances of globalised banking industry and financial market complexity and along the path to a new post-crisis world. The financial crisis forced European policy makers to reshape the institutional architecture of the European Union’s (EU) framework of financial sector and market supervision as well as to define responsibilities in macro-prudential policy-making and coordination at the EU level. The European System of Financial Supervision (ESFS) started its activities in 2011. At the same time in 2012, the Council of the EU set out its position on establishing a single supervision mechanism (SSM), conferring supervisory tasks on the European Central Bank (ECB) and modifying the responsibilities of the European Banking Authority (EBA). The EU national central banks (NCBs) play an essential role in the process of safeguarding financial stability, and it will become more complex in the near future. The new institutional architecture is a challenge for NCBs. The analysis of NCBs experience in the ESFS and their involvement in safeguarding financial stability at the national level are a good opportunity for promoting the integrity of the financial system. Following the centralisation of a part of the decision-making process, the effectiveness of the NCBs was questioned. Specific developments in the financial system of each country determine the mode of operation and the place of the NCB in the financial environment. At the same time in the context of financial market globalisation and turbulence, the NCBs are subject to financial risks. The paper pursues the aim to propose solutions for further improvements in safeguarding financial stability as well as the ESCB’s operation and policy. In the pursuit of the objectives set, the author has made use of such methods as the statistical analysis of indicators, and the graphic and monographic approach. The author builds her research on the analysis of functions of the ESFS, the ESCB and views of a number of researchers on various aspects of modern central banking and NCB role in the process of safeguarding financial stability. Some differences have been detected for the national system of safeguarding financial stability and the involvement of NCBs in the micro-prudential supervision. The institutional architecture for macro-prudential and micro-prudential supervision becomes more complex and centralised only for the group of EU countries. Therefore there is still room for improving the effectiveness and efficiency of this framework. The findings of the research suggest that there exist inconsistencies between the tasks of the ESFS and the SSM and that the integration process is gaining momentum. The innovative aspect of this paper lies in finding trends for the development of NCBs in the micro-prudential supervision and the SSM and the ESFS.

Keywords: financial stability, central banking, European System of Central Banks, single supervisory mechanism, system of financial supervision.

Introduction

National central banks (NCBs) have been charged with a dual goal, distinctive at different points of history, of providing both monetary stability and financial stability. However nowadays, it has been widely acknowledged that the primary objective of monetary institutions is to strive to ensure price stability, which also exerts an indirect driving effect on financial stability letting the economic agents, when allocating resources, place a lesser focus on macroeconomic uncertainties. NCBs shall proactively monitor the developments in the financial sector and pay attention both to the transmission mechanism of monetary policy and the intermediary function between the lender and the borrower. Conventionally, financial instability is primarily associated with a single financial institution, yet the current discourse related to financial crises and systemic risks calls for a change in such a stance relating it closer with the aspects of macro-prudential supervision. As a rule, the part played by a central bank in ensuring the stability of financial sector differs across countries, particularly so when accounting for its direct involvement or non-involvement in the supervision of financial institutions. As financial markets of various countries get ever closer entangled, the boosting of financial stability should be analysed from both the national and international positions. The European Union (EU) systemic risk cannot be associated with a single EU country any more, for it is likely to affect the EU as a uniform entity, sometimes even including non-EU economies as well, which has been testified by the housing market crisis in the US spilling over and turning into a global financial crisis. NCBs operate in the circumstances where the banking industry is globalised and the financial market is complex, both making up an essential part of the financial sector. The establishment of the European Central Bank (ECB), the
formations of the European System of Central Banks (ESCB) in 1998, including the Eurosystem, and the enlargement of the EU on 1 May 2004 and 1 January 2007 were the turning points for the NCBs.

Integration in the EU financial market, growth and innovations as well as higher risks associated with these processes figured as drivers for enhanced cooperation in managing potential financial crises, initially involving the national supervisory authorities (NSAs) and NCBs but later also national finance and other ministries of the EU countries in the process. In order to enhance financial stability, align the financial institutions’ supervisory framework and improve the assessment of macroeconomic risks as well as cut down the related public expenditure, the European System of Financial Supervision (ESFS) has been set up and improving of the Economic and Monetary Union (EMU) has been undertaken by foreseeing formation of the European Banking Union (EBU) and a single supervision mechanism (SSM) within it.

The author builds her research on the analysis of information of the ESCB, the European Systemic Risk Board (ESRB), the European Banking Authority (EBA), the European Commission (EC) and the views of a number of researchers on various aspects of modern central banking and safeguarding financial stability.

The object of research is the national and EU level activities to improve the safeguarding of financial stability and to mitigate the shocks delivered by financial crises. The subject of research is the architecture of safeguarding financial stability in the EU and the role of the ECB and NCBs in this framework. The innovative aspect of this paper lies in finding trends for the development of NCBs in the micro-prudential supervision and the SSM and the ESFS.

The paper pursues the aim to propose solutions how to further improve the safeguarding of financial stability and the operation and policy of the ESCB. To achieve this aim, four basic objectives of this paper are:

- compiling and classifying economists’ stances on the role of NCBs in enhancing financial stability;
- assessing institutional architecture for macro-prudential and micro-prudential supervision and appraising proposals for the establishment of the EBU;
- studying the capacity of the Eurosystem and NCBs to provide support in financial crisis situations and the effects of such support on the NCBs’ balance sheets;
- examining those EU credit institutions’ indicators that have encouraged a greater focus on the analysis of macro risks and measures at the EU level.

In the pursuit of the objectives set, the author, among others, has made use of such methods as statistical analysis of indicators, and the graphic and monographic approach. The author of this paper has conducted comparative analysis of a number of research papers dealing with various aspects of central bank involvement in the process of safeguarding financial stability. Due to the limited scope, the role of the ESCB and the results of payment system oversight have not been discussed.

The study has made use of ECB, ESRB and Eurostat statistical data. ISO 3166-1-alpha-2 code elements have been used for the EU country names used in this paper.

NCBs’ tasks and financial stability

Initially, the foundation of a NCB pursued the aim of aligning the framework for money issuing, centralising and managing the national gold reserves, and promoting and improving the operation of the payment systems. Due to the crucial position in the financial system, the managing capacity of the most part of national precious metal reserves and the ability to provide excess liquidity, these banks have evolved into the banks of banks. (Goodhart, C.A.E., 1990). There is a view, that financial stability was the initial motivation for setting up NCBs (Brunnermeier, M.K., 2012).

In their pursuit of monetary policy objectives, NCBs strengthened and evolved further into powerful information establishments with quite a detailed knowledge of the situation in the respective financial system (Flandreau, M., 2006). During financial crises, when the interbank market does not function properly, the role of the NCB, as a rule, is increasing.

Financial stability can be described as a public good that demands collective participation of the private sector and state policies (Schinaisi, G.J., 2006). The financial system, which includes the financial sector, financial markets and market infrastructure, is able to withstand shocks in the situation of financial stability, thus minimising the possibility of substantial interruptions in the financial intermediation process. NCBs are and always will be very concerned about and interested in financial stability which ranks among appropriate NCB commitments. In the globally integrated contemporary market, it is more important than ever for NCBs to exchange general information, provide knowledge on crisis prevention measures and get awareness of common interests in effective crisis management (Ferguson, J.R.W., 2003). Even if a NCB is not involved in the supervision of banking industry, it is highly interested in the health of the banking sector (Padoa-Schioppa, T., 1999). The role of ensuring financial stability is naturally inherent in NCBs (money issuance monopoly, smooth operation of payment systems, monetary policy transmission mechanism provided by the banking sector); for playing such a role they, however, need to be in close contact with NSAs; on the other hand, safeguarding of financial stability can pose certain risk to the NCB’s balance sheet (Schinaisi, G.J., 2006).

The development and functioning of financial markets have been notably affected by the introduction of the euro and electronic trading platforms, changes in the composition and activities of the market participants, and the supply of various assets, which, in turn, present problems to NCB policies – from strategic to operational ones (Barth III et al., 2003). The environment in which NCBs function is subject to changes, and so are the NCB functions not only in the EU but also all over the world (Padoa-Schioppa, T., 2006). The need to reassess the operation of NCBs and their place in managing the economy builds on several factors: deregulation of financial markets, globalisation of the banking industry, concentration of the banking market services, diversity and availability of financial instruments, sophistication of the financial market, etc. (Ferguson, J.R.W., 2004; Hawtrey, K.M., 1997).

According to the author, as a result of geopolitical changes and innovations, the financial complexity has increased and financial market participants are not always able to manage...
new instruments and risks related to them; this has been well-confirmed by the 1998 financial crises in Asia and Russia, the events in the US on 11 September 2001, and the turmoil of the global financial system caused by the US housing market collapse in 2007 in particular. It should be noted that the economic theory provides only limited guidelines how to manage monetary policy in the process of so complex structural corrections and institutional changes; similarly, historical knowledge is of little help to clarify the situation which seems to have no precedent (Lamfalussy, A., 1985). NCBs cannot draw lessons from historical experience, and a prudent NCB representative should be progressive and seeking for such development trends that may, in certain circumstances, turn into essential problems (Ferguson, Jr.R.W., 2006).

Institutional evolution takes place along with the development of the economy and, undoubtedly, NCBs must adjust to the new trends. In order to facilitate the functioning of financial markets in contemporary environment, NCBs should boost market liquidity, improve strategic and tactical aspects of monetary policy setting and market operations (Barth III M. J. et al., 2003). At the same time, NCBs should be realistic and pragmatic in order to correctly assess the changing financial and economic conditions, to make their political decisions on the basis of such assessments, and to present the former in a transparent way to the public (Trichet, J.C., 2005).

On most occasions, price stability is a boost for financial stability; in few cases, however, these two goals may prove to be conflicting, when it comes to diverging from the desirable inflation level in the short term for the sake of price stability in the medium term. However, to explain to the public the reasons of NCB diverging, in the name of financial stability, from its declared commitment to price stability may turn out quite problematic (Issing, O., 2003). At times of financial stress, the credible maintenance of price stability becomes even more important (Trichet, J.C., 2012).

C. A. E. Goodhart (1994) supports an assumption that sophisticated payment systems, the interbank market, and asset evaluation at market prices enable economists to look into the future, when the importance of NCB in ensuring financial stability, acting as lender of last resort (LOLR), and engaging in supervisory and other functions, is likely to fade. According to the observations of the author of this paper, such a forecast has not materialised in the course of almost past 20 years, because even though a modern EU payment system and highly developed interbank market are in place, and bank assets are being evaluated according to their market value, NCBs are actively participating in addressing financial-stability-related issues and their significance is only growing. A suggestion has been voiced to reframe the rationale for the ECB’s monetary pillar toward financial stability, for this would provide clear guidance for designing the appropriate monetary aggregates as inputs for monetary policy decisions (Brunnermeier, M.K., 2012). J. Stark (2012) supports the view per se but disagrees with the way the proposal is framed. As the ECB’s monetary pillar is an analytical framework assisting in defining not only the inflation trends but also the deviations of monetary indicators (money and credit) from their norm in such a way addressing the financial system stability issues, the ECB does not need to reframe its monetary pillar.

The current financial stability framework includes financial stability reports (FSRs), published by NCBs. The econometric analysis showed that FSRs per se do not have a robust empirical link to financial stability but what seems to matter is the quality of the FSR, in terms of its clarity, coverage, and consistency over time (Čihák, M. et. al, 2012).

There is no unanimity as to the definition of financial stability, which, accounting for the contemporary financial dynamics and various principles, should be treated as an uninterrupted process (Schinasi, G.J., 2004). Financial stability is a very broad concept comprising the different aspects of financial system, e.g. infrastructure, institutions and markets; among other things, financial stability implies that finance fulfils its role adequately via allocating resources and risks, mobilising savings and enhancing wealth accumulation, development and growth; financial stability also means that payment systems used by economic agents operate smoothly. Moreover, financial stability relates also to the ability of the financial system to limit and contain financial crises as well as to prevent the emergence of imbalances prior to their becoming a threat to the financial system itself or the economy as a whole. Financial stability can also be interpreted as a potential effect on the real economy. The author believes that financial stability denotes a situation where, while supervising the financial market and its participants and conducting the payment system oversight, the financial sector operates in concert with the other economic sectors and, using payment and securities settlement as well as other system infrastructures, ensures smooth circulation of financial resources.

In order to achieve closer working relationships between independent NCBs and almost independent NSAs as well as between these institutions and parliamentary deputies and governments, the NCB staff and financial supervisors should be more open when dealing with the contemporary risk environment, stating clearly what they do not know or understand (Kapstein, E.B., 2006). NCB staff and financial supervisors should continue cooperation with parliamentary deputies of their countries in the area of institutional reforms, thus promoting stronger stability.

While monetary policy is the issue to be addressed at the EU level, the supervision of credit institutions and other financial market participants so far has been in the competence of each EU country. As there exists single European financial market, the financial market supervisory framework (with regard to international banks at least) should be adjusted to the European level. However, the time frame to implement it cannot be accurately determined (Gulde, A.M., Wolf, H.C., 2005). Decentralised supervision can be sufficiently secure while the European banking industry remains segmented, but as such segmentation is gradually declining, decentralised supervision is also losing much of its efficiency (Danthine, J.P. et al., 1999). These issues have been in the focus since 2004, when three third-level committees were formed and charged with the task to bring closer the supervisory framework and practices of the EU banks, insurance companies and pension funds, and financial market. As the next step, these committees were transformed in the EU institutions and included in the ESFS; the EBU formation process, which will take several years, follows.
Along with the introduction of the euro, financial integration has been driven by the efforts to remove barriers for cross-border business activities, which tightened competition and, consequently, spurred centralisation. This integration in the EU gives rise to more extensive and deeper mutual systemic inter-linkages and represents signs of a single financial market that may contain transmission channels through which the scope of systemic risk in the EU may increase (Schinasi, G.J., Teixeira, P.G., 2006). Centralisation processes bring about changes in the organisation of banking activities by concentrating operational management.

**Lender of last resort or lender of only resort**

Financial crises equally affect all, they are painful and potentially contagious; even if it is assumed that banks do not make any payments, they would need some support from the NCB (Goodhart, C.A.E., 1999). Equilibrium is always connected with the consequences of its potential chain reaction and insolvency cases which may turn into a financial explosion if income is out of control; it is only the NCB with its unlimited ability to create money that may probably stop the process prior to it becoming disastrous; hence, if needed, the NCB acts as the LOLR (Greenspan, A., 2004). The NCB as the LOLR faces a problem of when and on what terms to supply emergency liquidity. The function of the LOLR is related to the stability of the entire monetary system and not to the stability of an individual bank; if, due to some reason, a bank becomes insolvent, it should be let go bankrupt (Wood, G.E., 1995). However, more often than not, the problem of too-big-to-fail or too-big-to-save emerges and needs to be addressed, which may be difficult to accomplish at the national level. The function of the LOLR may find its expression in two different ways. The first one is a general expansion of monetary policy (the so-called lending to the market), which is one of the possible reactions to an event caused by a common shock and affecting a number of banks simultaneously; the other consists in an emergency liquidity supply to an individual bank as a reaction to its individual failure, and the absence of such an emergency loan is likely to have an adverse effect, i.e. a systemic risk in its narrow sense (De Bandt, O., 2000).

Under the first expression of the function of the LOLR, the NCB applies the principle of equal opportunities without granting any privilege to any bank, which is of particular importance for the EU in the circumstances of free competition. When the event of the second expression of the said function sets in, the NCB faces a dilemma of whether the respective bank suffers only from the liquidity problem, whether it is a single financially distressed bank, whether an emergency loan to this bank will place it in a privileged position, and how to justify the request for emergency loan. This dilemma was to be addressed also by Latvijas Banka, when it granted an emergency liquidity loan at the close of 2008.

It is obvious that securing financial stability depends on NCB’s specific features, and in the crisis situation, the NCB is the sole actual LOLR (Schinasi, G.J., 2003). The financial turmoil caused by the US housing market crisis and mistrust of the financial market participants have ascertained the correctness of this statement. The ESCB uses such terminology as emergency liquidity assistance. According to the model analysed by R. Repullo (2005), when the LOLR does not charge penalty rates, the banks choose the same level of risk and a smaller liquidity buffer than in the absence of a LOLR, whereas the bank risk options increase when penalty interest rates are imposed.

The steps taken by NCBs in the situation of the global financial crisis boosted the importance of NCBs as financial intermediaries, because banks refused to lend to each other and conventional liquidity providers, e.g. money market funds, continued to invest elsewhere. As a result, with confidence eroding and the private financial market non-existent, NCBs are lenders of only resort rather than LOLR (Giles, C., 2008). NCBs cannot avoid the discussion about market maker of last resort, because recently NCBs have confronted situations where lending to intermediaries was not sufficient to sustain liquidity in the capital markets (Tucker, P., 2012). By expanding the range of securities to be used in refinancing operations of NCBs, the latter are involved, albeit indirectly, in the design of capital markets.

The above said notwithstanding, the function of the LOLR shall be a complimentary element of another regulatory mechanism, it should be taken as a unit of a broader regulatory structure, with the function itself becoming most beneficial in the situation where the NCB could commit to a policy where the price of liquidity support is always dependent on the assessment of risk that the applying bank has undertaken (Niskanen, M., 2002).

**Eurosystem’s reaction to global financial crisis**

In general, the ESCB faced the very first financial crisis in its history in 2007, which, as is known, was triggered by the US housing market collapse and proved to be the most severe financial turmoil in the post-WW II period. The global crisis has shown how a shock that originates in one country or asset class can quickly propagate to other markets and across borders (Cerutti, E. et al., 2011). At the same time, it presented an opportunity to test the so-far theoretically developed systems for financial crisis management in practice.

The crisis which lasted from 2007 to 2009, was underpinned by two factors: the macroeconomic policy, especially the interest rate policy of the US Federal Reserve, and a financial system built on the premise that there would always be too much liquidity, never too little (Huertas, T., 2010). Also according to M. Draghi (2012), the causes of the global crisis are both regulatory and monetary policy faults. Yet, regulatory flaws were at the core of the crisis, having favoured the creation of a high and misperceived level of leverage in the financial sector.

The global financial crisis has shed new light on NCBs’ role in promoting financial stability. As the crisis has not been fully overcome as yet and a short time span has elapsed since the NCBs launched measures aimed at minimising the effects of crisis, the governance arrangements needed for NCBs to fulfiull such a role continue to be debated. However, J. Caruna (2012) maintains that three general widely shared conclusions can be drawn already now. One, NCBs will almost always be the first public institution to act when a financial crisis hits. Two, NCBs must have realistic financial stability objectives that are consistent with their primary monetary policy responsibilities. Three, NCBs must have the powers and instruments to meet such objectives – or institutional
arrangements should enable them to shape the actions of the NSA that control such instruments.

The Eurosystem responded to financial instability by implementing standard measures, changing interest rates, and launching non-standard measures, including five liquidity management measures (Trichet, J.C., 2009).

As of 15 October 2008, the ECB re-engaged in conducting the main refinancing operations (MROs), using the fixed rate tender procedure with full allotment at the interest rate on the MROs of 3.75% (see Chart 1). As a result of steep reductions, the interest rate on MROs was 0.75% on 11 July 2012.

In August 2007, when first serious signs of strain surfaced in the interbank market, the ECB did not hesitate to increase the liquidity supply, using a fine-tuning operation on full allotment at policy rate mode. As with mid-October 2008, the fixed rate tenders replaced variable rate tenders used so far since 28 June 2000, when the ECB set minimum bid rates instead of fixed rates. The second building block of the Eurosystem’s new liquidity management approach was the extension of the list of those assets, which are used as collateral for securing monetary operations. In the middle of 2009, such eligible securities accounted for 12.2 trillion euro or 130% of the euro area GDP (Trichet, J.C., 2009). In order to alleviate credit institutions’ planning and render it less uncertain, the ECB extended the maturity of longer-term refinancing operations (LTROs) to six months starting with August 2007, and to 12 months starting with July 2009. In addition, the ECB offered liquidity in US dollars and launched outright purchases of covered bonds in May 2009. In December 2011 and February 2012, the ECB conducted two LTROs with a maturity 36 month and the option of early repayment after one year. Credit institutions actively used the liquidity-providing monetary operations offered by the Eurosystem. By mid-2009, there were 2,200 credit institutions in the euro area countries could use the refinancing operation facility (Trichet, J.C., 2009). In June 2009, in average 606 credit institutions participated in main refinancing operation (MROs) tenders, but 298 credit institutions – in LTROs tenders (on 11 June number of participants in the 12-month LTROs were 1,121). Total amount of the allotment in MROs tenders was 1,007.2 billion euro, but in LTROs – 538.2 billion euro (442.2 billion euro in the 12-month LTROs; see Chart 2).

When the euro area sovereign debt crisis aggravated in the second half of 2011, the ECB offered 36-month LTROs refinancing operations in December 2011 and February 2012. The first 36-month LTRO was used by 523 credit institutions for the total amount of 489.2 billion euro, but the second LTRO – by 800 credit institutions for the total amount of 529.5 billion euro. As the obtained additional liquidity was too excessive, credit institutions used time deposit facility of the ECB.

In the first three months of 2013, the Eurosystem continued to offer to credit institutions MROs running for a week (13 auctions were held), and LTROs running for one and three month (6 auctions were held).

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The Eurosystem’s monetary operations and NCB activities in the environment of the global financial crisis were reflected in the balance sheets of the ECB and NCBs. The consolidated balance sheet of the Eurosystem shows that the share of the securities of euro area residents denominated in euro increased notably (by 10.3 percentage points; 22.8% at the end of 2010) in its asset structure at the end of 2012 in comparison with the end of 2007 (see Chart 3).

Speaking about the liabilities structure of the Eurosystem’s consolidated balances sheet, the share of liabilities to euro area credit institutions in euro and revaluation accounts increased by 6.1 percentage points and 4.0 percentage points respectively, while those of euro banknotes in circulation and capital and reserves decreased by 14.1 percentage points and
1.5 percentage points respectively (see Chart 4). However, at the end of 2012 vis-à-vis the end of 2007, capital and reserves in absolute terms rose by 21.0 billion euro or 31.3%. Although legislation does not define the NCB capital and reserve requirement, the respective amount should be commensurate with the risk undertaken by or assets of each involved NCB.

Too-big-to-fail and too-big-to-save problem

Sometimes the institutions in charge have had to address the too-big-to-fail and too-big-to-save problem, which surfaces in crisis but finds its origins in the so-called peaceful time when uncontrolled and disproportionate growth takes place. The issue of financial institutions which could be systemically important and might cause systemic and moral hazard risks and substantially affect problem solution during financial crisis was a topic discussed before; lately, however, when addressing the financial difficulties of Cyprus, an opinion regarding the excess scale of the banking sector of the respective country has been voiced. Global financial integration and the EU single market have enabled the banking sector to outgrow national GDP many times.

At the end of 2012, the number of EU credit institutions posted an overall decrease of 664 or 7.8% in comparison with the end of 2008. The number of credit institutions shrank in most EU countries, with Greece recording the steepest drop by 21.2% and Germany closing down the largest number of credit institutions (120); only five EU countries saw an increase in the above number (overall 20 credit institutions, inter alia, 10 in LT). As to credit institution assets, the most substantial growth was observed in the United Kingdom (831.8 billion euro or 9.5%), while Ireland posted the largest decrease (561.5 billion euro or 32.4%; see Chart 5), and the most accelerated surge (51.5% or 204.1 billion euro) was seen in Finland. The levels of outstanding assets per credit institution differed across the EU countries (see Chart 6), with the United Kingdom and Belgium recording the highest increase (3.6 billion euro) and decrease (1.6 billion euro) in this indicator respectively.

The estimates of the ECB and the IMF suggest that the share of NCB funding in the liabilities of credit institutions of EU countries (except GB) also differed (ESRB Risk Dashboard, 2013). In September 2012, the credit institutions of Greece recorded the highest dependence on the NCB funding, with almost 35% of their liabilities accounting for NCB funding and by more than 10 percentage points exceeding the three-year average. In three EU countries (CY, ES, PT) the share of NCB funding in credit institution liabilities was within the range of 10%–15%; in one country (IE) it was within the range of 15%–20%. In September 2012, credit institutions of most countries were more dependent on the NCB funding than in the previous three years on average. In the last few years, the Latvian credit institutions have not borrowed from the NCB.
see Chart 7), 2.7 times lower than that of Luxembourg; nevertheless, it increased by 79.8 percentage points in comparison with 2008. Cyprus followed suit, with its credit institution asset-to-GDP ratio being the top third at 716.3%, 27.5 percentage points higher than in 2008. Looking at the EU by country (except LU), both increases and decreases in this ratio can be observed. In 2012, three EU countries (FI, MT and PT) posted the most pronounced rise (95.3 percentage points, 79.8 percentage points, and 56.5 percentage points respectively); the three EU countries with the most substantial fall were IE, BE and AT (252.8 percentage points, 80.5 percentage points, and 60.6 percentage points respectively).

### Table 1. Distribution of EU countries according to asset-to-GDP ratio

<table>
<thead>
<tr>
<th>Range (%)</th>
<th>2012</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 100</td>
<td>LT, PL, RO, SK</td>
<td>LT, PL, RO</td>
</tr>
<tr>
<td>101–200</td>
<td>BG, CZ, EE, HU, LV, SI</td>
<td>BG, CZ, EE, EL, HU, LV, SI, SK</td>
</tr>
<tr>
<td>201–300</td>
<td>BE, EL, IT, SE</td>
<td>BE, FI, IT, PT, SE</td>
</tr>
<tr>
<td>301–400</td>
<td>AT, DE, ES, FI, FR, PT</td>
<td>AT, DE, ES, FI, FR</td>
</tr>
<tr>
<td>401–500</td>
<td>DK, NL</td>
<td>DK, GB</td>
</tr>
<tr>
<td>501–600</td>
<td>GB</td>
<td>–</td>
</tr>
<tr>
<td>601–700</td>
<td>–</td>
<td>CY</td>
</tr>
<tr>
<td>701–800</td>
<td>CY, IE, MT</td>
<td>MT</td>
</tr>
<tr>
<td>Above 800</td>
<td>LU</td>
<td>IE, LU</td>
</tr>
</tbody>
</table>

Source: Eurostat and ECB data.

Thus the problem of too-big-to-fail and too-big-to-save may become unsolvable at a national level, requiring EU-wide and global solutions.

At the Cannes Summit in 2011, the G20 leaders endorsed the implementation of an integrated set of Policy Measures to Address Systemically Important Financial Institutions (SIFIs), and the timeline for implementation of these measures. The implementation of these measures began in 2012, but full implementation is targeted for 2019.

In November 2011, the list of G-SIFIs was approved, comprising 29 SIFIs, including Nordea. It is planned to review this list on an annual basis. The first revision took place in November 2012, including 2 SIFIs on the list (and also setting a timetable for the implementation of resolution planning requirements for them) and deleting 3 SIFIs from the list, as one SIFI was undergoing an orderly resolution process, and the global systemic importance of two SIFIs declined. In 2012, the relevant Baltic and Nordic institutions in charge took measures to implement the necessary resolution requirements with respect to Nordea.

In April 2013, the Financial Stability Board (FSB) published a thematic peer review on resolution regimes. It evaluates FSB jurisdictions’ existing resolution regimes and planned changes to those regimes using a new international standard Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes) as a benchmark, and makes recommendations to support its timely and consistent implementation. This review concludes that the global financial crisis highlighted the need to significantly enhance the existing resolution regimes, which exhibit a broad range of practices in terms of scope, mandates and powers of the authorities. At the same time, three sets of recommendations are proposed. The first of them is addressed to national authorities to ensure that their resolution regimes are fully aligned with the Key Attributes. The second set of recommendations is addressed to the FSB to develop additional guidance or to provide clarification in the assessment methodology for the Key Attributes to facilitate consistent implementation across jurisdictions. The third set is addressed to the FSB and relevant standard-setting bodies to promote effective implementation monitoring in this area. These recommendations will also help the EU to establish a more integrated resolution system, bridging the gap between the resolution regimes in EU countries and addressing the issues that the credit institutions supervised by the ECB will face.

### National and cross-border cooperation

The solutions to the implementation of bank supervisory function differ across the EU countries, while the provision of financial stability is in the focus of every NCB. The number of NCBs conducting NSA functions is not constant. The ECB’s survey (2010) highlights a clear tendency towards further enhancing the role of NCBs in supervisory activities. A single NSA for financial supervision or a fully integrated NSA is still the dominant model in the EU countries. Regression analysis suggests that fully integrated supervisory institutions tend to maintain a higher quality supervision, while the fact whether such an integrated supervisory institution is or is not an NCB does not affect the quality of supervisory process substantially (Čihák, M., Podpiera, R., 2006). Theoretical arguments regarding supervision of the banking industry resting or not resting with the NCB are not convincing enough (Di Noia, C., Di Giorgio, G., 1999).

Speaking about Latvia, the supervision of credit institutions was in the competence of the NCB until the end of June 2001. Other financial institutions and market were supervised by two other institutions. As of 1 July 2001, an autonomous and independent single NSA – the Financial and Capital Market Commission (FCMC) – was established. Complementary to the legislation regulating the duties of these institutions, Latvijas Banka and the FCMC have concluded a cooperation agreement defining general procedures for information exchange and actions to be made in the event of settlement termination at a credit institution.
Latvia’s practice suggests that a single supervisor of the financial and capital market helps reduce the differences in supervisory practices and facilitates business for the financial sector players, at the same time increasing the burden on the FCMC, as it has to ensure its participation in the work of several EU-level institutions.

Notwithstanding the fact that financial stability has not yet been included as a NCB’s objective in the Law “On the Bank of Latvia” and remains a task within the competence of FCMC, Latvijas Banka works together with and participates in the activities of several institutions in the area of ensuring financial stability (see Figure 1).

Representatives of the Latvijas Banka take part in the work of the Economic and Financial Committee (EFC), the ECB Financial Stability Committee (FSC), the ESRB, and the EBA and maintain close liaison with the FCMC, the Ministry of Finance and other local institutions. Under the agreement reached by the Ministry of Finance, the FCMC and the Latvijas Banka, a domestic standing group (DSG) for cooperation and financial crisis management has been formed. The DSGs of the EU countries are involved in safeguarding cross-border stability. The task of the DSG is to coordinate the crisis management issues with the counterparts at the national level. Meanwhile, for the coordination of the cross-border financial group supervisory activities, NSAs form colleges of supervisors.

Figure 1. NCB cooperation partners in the area of financial stability in 2013

Source: Author’s.

Latvijas Banka compiles and submits statistical data to the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) for the publications.

When Latvia becomes a full-fledged member of the Economic and Monetary Union (EMU), the role of Latvijas Banka in supervising credit institutions and securing financial stability will increase. The amendments to the Law “On the Bank of Latvia”, when coming into effect, will provide that in accordance with Article 127(5) of the Treaty on the Functioning of the European Union and Article 3.3 of the Statute of the European System of Central Banks and of the European Central Bank, Latvijas Banka shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system. At the same time, the goal of the FCMC activities shall be to protect the interests of investors, depositors and the insured, and to promote the development and stability of the financial and capital market. In such a way, the NCB and NSAs form colleges of supervisors. NSA responsibilities will overlap and an agreement on the distribution of each institution’s responsibilities in the area of financial stability shall be reached.

The number of banks operating in several EU countries and also other regions is growing. Large banks and complex financial conglomerates exhibit higher risks than smaller, less complex and specialised financial companies. That is why the rationalisation of structural trends of financial industry, based on technological innovation and deregulation, is to be complemented with a more comprehensive analysis of bank managerial incentives to take on risks and to use indirect subsidies provided by modern safety nets under different regulatory regimes (Nicolò, D. et al., 2003).

To facilitate financial stability and develop common stances in cross-border financial crisis situations, three Memoranda of Understanding (MoU) are in effect in the EU. They define a set of principles and procedures for the exchange of views, information and assessments but are not legally binding for counterparts.

In 2004, Latvijas Banka and the FCMC joined MoU on Cooperation Between Payment Systems Overseers and Banking Supervisors in Stage Three of Economic and Monetary Union and MoU on High-Level Principles of Cooperation Between the Banking Supervisors and Central Banks of the European Union in Crisis Management Situations. In 2005, NCBs, NSAs and ministries of finance signed MoU on Cooperation in Financial Crisis Situations, which was in effect from 1 July 2005 to 31 May 2008. It stipulated the principles and procedures for the exchange of information, views and assessments aiming at enhancement of financial system stability in the counterparts’ countries. NCBs, NSAs and the Ministries of Finance took part in the crisis simulation exercise organised by the Economic and Financial Committee in April 2006 to test the provisions of this MoU. This encouraged certain improvement of legislation and the development of guidelines.

In order to boost cooperation and common stances of the EU countries in cross-border crisis situations, an updated MoU on Cooperation Among the Banking Supervisors, Central Banks of the European Union an Ministries of Finance in Crisis Situations was signed in 2008 (it is in effect as of 1 June 2008 and replaced the 2005 MoU).

This MoU is more comprehensive, contains a glossary of a number of terms, provides for setting up cross-border stability groups (CBSG) and a unanimous EU framework for assessing the systemic effects of crisis situations, and foresees the conclusion of interstate cooperation agreements on cross-border financial groups to identify those that may jeopardise the financial system stability in a number of countries, and more specific terms and conditions for practical cooperation in both the so-called peaceful conditions and crisis situations.

In 2009, it was projected to conduct practical testing of this MoU and organise a financial crisis simulation; however in real life, the 2008 global financial market turmoil proceeded in circumstances that still allowed the employment of the terms and conditions of the 2008 MoU. Unfortunately, as the global crisis expanded and deepened at a high speed, the responsible national authorities failed to launch the crisis management framework stipulated in the 2008 MoU, including regional agreements on the formation and activities of cross-border stability groups. In the same year, competent authorities...
of the Nordic and Baltic countries started the preparation of such regional agreement yet again failed to accomplish it by the end of 2009. They succeeded only in 2010 when a cooperation agreement on cross-border financial stability and crisis management and prevention was signed by the respective ministries, NCBs and NSAs of Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden (in effect as of 17 August 2010). This agreement stipulates the rules and procedures for the exchange and coordination of information to boost the cooperation of the parties involved in cross-border financial supervision, crisis management and resolution. The basic commitment under this agreement is to minimise the risk of emerging cross-border financial crises and to ensure efficient crisis management in the Nordic and Baltic regions. To address these issues, the Nordic and Baltic Stability Group (NBSG) and several working groups have been set up.

The author considers that overall the MoU signed in 2008 is a positive phenomenon due to its higher-level specifications and inherent practical solutions vis-à-vis the 2005 MoU; nevertheless, it comprises a number of ambiguities as to the practical implementation of its provisions. It should be taken into account, however, that the time allotted for the signing of this MoU was too short due to the tense situation in the EU financial markets caused by the US housing market crisis. Therefore this MoU does not specify how it corresponds to the MoUs signed in 2003 and 2001; moreover, the crisis management framework incorporated in it is too complicated.

In December 2006, Sveriges Riksbank and the NCBs of the Baltic States signed a MoU on Management of a Financial Crisis in Banks with Cross-Border Subsidiaries or Branches. In autumn of 2007, a joint exercise of the Nordic and Baltic NCBs was held to appraise the concluded MoU and the 2005 MoU signed at the EU level.

The work to improve the EU financial crisis management framework has been going on. So in October 2010, the EC published an EU Framework for Crisis Management in the Financial Sector with measures at both national and EU levels for the period from 2011 to 2014. In June 2012, the EC proposed new crisis management measures to avoid future bank bail-outs. The proposal for a Directive of the European Parliament and of the Council establishing the recovery and resolution regime for credit institutions and investment companies provides for a deeper integration in the EU. The EU proposed a common system of regulations and powers to assist the EU countries in managing their distressed banks. However, the implementation process of this proposal was obstructed by clashing stances, legislation and practices regarding its effectiveness.

Therefore in September 2012, the EC published a Roadmap towards the EBU foreseeing next steps in the safeguarding financial stability.

Integration of financial system supervision

The European Monetary Institute has already been charged with the task of identifying the potential ways for the ESCB to assist the NSAs in implementing such policies that would enhance the stability of the financial system. The ESCB acts in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources and complies with such fundamental principles as price stability and stability of the national financial and monetary system and the balance of payments.

In July 2000, the Ecofin Council established the Committee of Wise Men on the Regulation of European Securities Market, whose mandate was to assess the implementation of the regulation of the EU securities market and propose improvements for adjustment of supervisory practices in order to ensure greater convergence and cooperation in the implementation of EU-level regulations. The above Committee produced the so-called Lamfalussy report, which was published in February 2001. Based on this report, a 4-level system was established, where Level 3 provided for an enhanced cooperation of the NSAs and convergence of supervision practices. In order to achieve it, three Level 3 committees were established covering the supervision of the following financial sectors and market: banks (CEBS), insurance corporations and occupational pension funds (CEIOPS), and securities market (CESR). NCBs and NSAs participated in the work of the CEBS, which was established in November 2003. The participation of NCBs was determined by the fact that those NCBs which are not engaged in banking supervision are involved in ensuring the stability of their financial sector anyway; hence, it is in their interests to have a successfully operating financial sector, the banking sector, in particular. Supervisory practices in the financial sector point to a need to coordinate proposals and recommendations not only within the framework of a single financial market sector but also across all three above-mentioned sectors. Therefore, cooperation across the three Level 3 committees also had to be strengthened. 2006 was the first year when the committees had a joint Work Programme built on the Joint Protocol, trilaterally signed by the committees on 24 November 2005.

In the subsequent years, this cooperation became increasingly stronger, which was very useful for ensuring consistent supervisory practices throughout the EU and the development of the new ESFS.

The high-level EU policy initiatives implemented during the previous years to strengthen cross-border cooperation highlighted the need for the establishment of a centralised European supervision authority (ESA). This conclusion was partly implemented in practice, as, based on a report prepared by a group chaired by Jacques de Larosière and published in February 2009, the EC proposed to change the supervisory framework of the EU financial sector. In the process of elaboration, the EC’s proposal gradually became more complicated in comparison with the framework proposed by the above report. At the turn of 2010, several legal acts governing the establishment of the new ESFS were approved. The framework became operational in 2011 and comprises three ESAs, the Joint Committee of the ESAs, the ESRB, and the NCBs in charge of supervisory issues or NSAs. In the existing crisis situation, the establishment of the ESFS followed tight deadlines; therefore, part of the issues had to be addressed already after the new institutions became operational. Further on, new solutions will be required as well. This is implied by 29 June 2012 Euro Area Summit Statement about the establishment of a SSM in the EU, involving the ECB. New changes will be brought about by the establishment of the EBU, including the SSM. The development of the European framework to safeguard financial stability (see Figure 2) is ongoing and is becoming
increasingly more complicated. It poses new challenges to NSAs, NCBs, credit institutions, ESAs and the ECB. The European framework to safeguard financial stability provides for supervision on two levels: macro-prudential oversight and micro-prudential supervision. The term “macro-supervision” is also used. It will make sense for macro-supervision to engage in two-way dialogue with micro-supervision (Huertas T., 2010). Macro-prudential oversight authorities would receive micro level data from micro-prudential supervision authorities, characterising the transmission of the monetary policy and other economic policy decisions. When analysing the information received, the macro-prudential oversight authorities would have to evaluate the potential systemic risks and provide a more in-depth assessment of the economic and financial market development, i.e. give feedback to micro-prudential supervisors by providing recommendations on micro-prudential supervision improvements to those supervisors as well as policy-makers. This two-way dialogue has already been started within the framework of the ESFS.

It is only the third year since the new ESFS has been established; therefore, it has not reached its expected capacity as yet while potential improvements have already been identified. For example, the EBA often lacks sufficient financial, material and human resources required by the scope of the tasks to be carried out. The views of the EBA staff and NSAs representatives some times are controversial. The EBA Board of Supervisors (BoS) no longer comprises NSAs (as was the case in the CEBS), but specifically includes heads or officials of NSAs. In practice, complications have been caused by the requirement for BoS participants to be the heads of NSAs and to be present at least at two meetings of the Board during the year. This means that a BoS member should have to be Governor of the relevant NCB in cases when this NCB is NSA. However, due to the busy schedules and governors having to deal with specific supervisory issues, this is not always possible. Those NCBs that do not have the supervisory function can delegate one representative to the BoS, and the candidate has to be approved by the respective NSA. This NCB representative has no voting rights in the BoS and it has no rights to participate in the discussion of issues which do not concern the operation of specific credit institutions. With the FCMC’s consent, a representative from Latvijas Banka may also participate in the work of the BoS of the EBA whose objective is to safeguard public values, supporting the short-term, medium-term and long-term stability and the financial system’s efficiency in the interests of the EU economy, its residents and businesses.

The completion of a single rulebook for supervision of credit institutions should become the priority task of the EBA. The completion of the single rulebook will significantly contribute to the single market and towards creating a level playing field by harmonising regulation at the EU level (Constâncio, V., 2013). The EBA has admitted that the supervisory colleges whose development started under the auspices of the CEBS are an effective tool for cross-border supervision. Cooperation among ESAs resulting in new solutions and opportunities to use the experience of other ESAs in order to eliminate overlapping is to be considered a positive development.

The ESRB is an independent EU body. NCBs and representatives of the respective NSAs and ESAs participate in the work of the ESRB. Macro-prudential policy also has an important national component, and the effectiveness of this policy will depend crucially on the national macro-prudential frameworks and on the proper coordination of these policies by the ESRB (Posch, M., Van der Molen, R., 2012). The ESRB is responsible for the macro-prudential oversight of the financial system within the EU in order to contribute to the prevention or mitigation of systemic risks to financial stability in the EU. The ESRB’s tasks are systemic risk analysis...
and, where such risks are deemed to be significant, issuing warnings and recommendations for remedial action. In 2011 and 2012, the ESRB issued five public recommendations on: macro-prudential mandate of national authorities, lending in foreign currencies, US dollar-denominated funding of credit institutions, money market funds and funding credit institutions.

In order to conduct risk analysis, the ESRB requires broad information primarily coming from the ECB, NSBs and NSAs. The ESRB uses information in an aggregated form; nevertheless, it may request also the information on individual institutions where they are considered systemically important. When requesting additional information, the opportunities to use the information already available should be considered and a significant increase of the reporting burden should be avoided.

In the field of micro-prudential supervision, indicators characterising the performance of credit institutions are available and have been tested in practice, whereas for macro-prudential oversight they still have to be developed and their effectiveness needs to be tested. The ESRB has started to publish selected indicators characterising the financial sector development. The views of researchers on indicators characterising macro-stability would also be welcome, and some papers on the selection of such indicators are available (Daugeliene, R., 2012; Dierick, R. et al., 2012).

To ensure that the ESRB is able to draw on a wide range of expertise, backgrounds and opinions, the European Parliament led the initiative to set up the Advisory Scientific Committee. This Committee published several reports expressing the researchers’ views on the EC’s EBU proposals, forbearance, resolution and deposit insurance (Sapir, A. et al., 2012). The independent views of researchers outlined in those reports may differ from the official stance of the ESRB or its member organisations.

In June 2012, the President of the European Council H. Van Rompuy presented a vision for the EMU to ensure stability and sustained prosperity. It does so by proposing a strong and stable architecture in the financial, fiscal, economic and political domains, underpinning the jobs and growth strategy. His report proposes a vision for a stable and prosperous EMU based on four essential building blocks, one of which is an integrated financial framework to ensure financial stability in particular in the euro area and minimise the cost of bank failures to European citizens. Such a framework elevates responsibility for supervision to the European level, and provides for common mechanisms to resolve banks and guarantee customer deposits.

The report mentions that the integrated financial framework should cover all EU countries, whilst allowing for specific differentiations between the euro and non-euro area Member States. This differentiation would be allowed in cases when the focus is on the aspects of the single European currency rather than the single financial market. As the report was written in close collaboration with the President of the EC, the President of the Eurogroup and the President of the ECB, it can be assumed that these institutions support the views of the President of the European Council. In June 2012, the Euro Area Summit also expressed support to the establishment of the SSM, as it would help to break the vicious circle between banks and sovereigns.

The implementation of H. Van Rompuy’s proposal, however, encountered problems, which remain unsolved, and the proposal received a lot of criticism. One has to agree to the view expressed by the President of Deutsche Bundesbank at March 2013 Finance Summit that one cannot expect that the establishment of the EBU, i.e. banking supervision would be a quick fix for the resolution of the current crisis, for the latter requires structural reforms. The President of De Nederlandsche Bank believes that placing banking supervision under the auspices of the ECB is a temporary solution, and this decision should be reviewed once the crisis has been overcome. Nevertheless, the reviewing of this decision should be approached cautiously. First, a careful evaluation of the advantages and disadvantages of the new supervisory architecture is required in order to identify the supervisory framework that would ensure more effective banking supervision, strengthen the single market principle, improve the competitiveness of credit institutions, and result in higher cost-efficiency.

The author believes that the following unclear issues remain: ECB’s engagement in real banking supervision and ensuring the work of the ESRB in addition to setting the monetary policy; clear segregation of duties and responsibilities between the ECB and the EBA as well as an effective decision-making and management mechanism; distribution of duties and responsibilities between the ECB and NSAs as well as ensuring the organisation of work between these institutions and the supervised credit institutions; ECB’s decision-making and adoption arrangements in the field of banking supervision as well as the financing model for the supervisory function; ECB’s capacity to implement daily banking supervision as well as obtaining the required information. It has to be taken into account that the development of the EU Deposit Guarantee System and the Single Resolution Mechanism has been postponed to the future. So far, the ECB has not been involved in daily micro-prudential supervision; therefore, it is estimated that the ECB will have to hire a considerable number of additional staff, which could cause problems to NCBs and NSAs. Based on a preliminary assessment, the ECB will conduct direct supervision of approximately 150 banks, representing around 80% of the banking sector in Europe (Constâncio, V., 2013).

The author agrees that institutional changes in the supervision of financial institutions cannot be viewed as a remedy fully curing us from any potential future financial crises, yet it is an opportunity to mitigate potential shocks and helps better prepared for addressing future challenges.

Conclusions

- Along with tackling monetary policy issues, contemporary NCBs today are involved in the activities that are related to micro-prudential supervision, financial stability, and collection and compilation of statistical information more often and more actively than ever.
- During the global financial crisis, NCBs provided considerable liquidity support to credit institutions, sometimes being the sole source of liquidity. The main causes of this financial crisis lie in underestimating the risks, imbalanced financial market development, faulty economic policies as well as weaknesses in
regulation and supervision. The EU took and is still taking relevant measures to improve the effectiveness and stability of the financial sector operation.

- The architecture of safeguarding financial stability in the EU is a complex system. The ESFS has not reached its full capacity as yet, while practice suggests that its improvement is highly desirable in order to define more precisely the duties and responsibilities of institutions, in particular when developing the SSM. The role of NCBs in macro-prudential oversight has increased.

- The development of the EBU, inter alia the SSM, will be a new challenge for the ESCB, therefore research on the changes in the role, duties and responsibilities of NCBs in the post-global crisis environment should be continued.

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