#### External assessment of Norges Bank's work on financial stability

### Introduction

Johanna Fager Wettergren has been commissioned by Norges Bank to assess the Bank's work on financial stability. The purpose of the assessment has been to provide general strategic advice and recommendations concerning analyses and communication, given Norges Bank's mandate in the area of financial stability.

The result of the assessment, which was conducted in the period between August and December 2014, is presented in this report.

To gain a deeper understanding of this work at Norges Bank, Wettergren has followed the report processes involved in the *Financial Stability Report* and the *Monetary Policy Report*. This has provided insight into meetings and decision-making processes, how the Bank's executive management team functions and how the Executive Board is advised and makes decisions. In addition, Wettergren has conducted a number of interviews with Norges Bank employees. The conclusions are also based on Norges Bank's reports, data and other publications (see list of references at the end of this report). The assessment has been focused on the Bank's work on preventing crises and does not cover its work on crisis management. Nor did the assignment include a detailed study of external perceptions of Norges Bank.

Wettergren has since 2006 held different positions with the Financial stability department of Sveriges Riksbank. Prior to conducting the assessment at Norges Bank, Wettergren was Head of Macroprudential Division at the Riksbank.

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### Summary

The global financial crisis, which erupted with full force in 2008, provided a number of important lessons for economic policy. Authorities worldwide are working on formulating new policy frameworks to increase resilience to financial crises in the future, and the new area of macroprudential policy is rapidly evolving. The objective of macroprudential policy is to mitigate risks in the financial system as a whole. Macroprudential policy involves, in part, strengthening the institutional framework, i.e. designating and organising authorities with a clear responsibility for macroprudential policy. It also involves putting in place new tools to mitigate risk and reduce vulnerability in the financial sector.

When the global financial crisis erupted with full force in 2008, Norway was in a stronger position than many other countries. The economy had strong fundamentals and the Norwegian authorities were quick to take action to mitigate the effects of the crisis. As a result, the economic downturn was relatively mild.

The Norwegian authorities have adopted a number of macroprudential measures to counteract systemic risk. For example, a countercyclical capital buffer has been introduced and banks' capital requirements have been raised. At the same time, a coherent approach to macroprudential policy is lacking. There is no analytical framework that clearly specifies the objectives of macroprudential policy, objectives for adopted measures or follow-up actions that systematically measure the effectiveness of measures already implemented. This is a need that Norway shares with many other countries. At the same time, Norway has a history of being at the forefront of analysing and dealing with risks that affect financial stability. It would serve the country well if the Norwegian authorities continued to maintain the initiative in this area, not least as a number of indicators point to high systemic risk in a number of areas.

A coherent approach would be facilitated by closer collaboration between the Ministry of Finance, Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank and a clearer division of responsibilities regarding macroprudential policy and its tools. However, a proposal for such an approach would extend beyond the scope of this assessment. The aim here is to provide strategic advice and recommendations, given Norges Bank's mandate in the area of financial stability and given the current division of responsibilities among the country's authorities.

Thus, one of the relevant issues will be to analyse how Norges Bank can best contribute to strengthening the analytical framework for macroprudential policy. In addition to its independent position, Norges Bank has both capacity and years of experience in this area. There are also linkages to monetary policy and a well-developed analytical framework and work processes for formulating advice regarding one of the key macroprudential policy instruments, the countercyclical capital buffer. This makes Norges Bank particularly suited to taking a coherent approach to macroprudential analysis and also to openly communicating its conclusions.

Norges Bank has a long tradition of being among the pioneers in the central banking world with regard to work on financial stability. Over the years, both the analysis and the manner in which it is communicated have been characterised by innovation. The reason the Bank was quick to build up extensive analytical capacity in the area of financial stability was the domestic financial crisis that

Norway experienced at the beginning of the 1990s. Through the years, the Bank's *Financial Stability Report* (FSR) has been an anchor in financial stability work and communication, and external assessments have frequently confirmed that this report is of high quality and is a leader in its field.

The financial crisis showed clear linkages between monetary policy and financial stability. Norges Bank was also given the new task of providing advice on the countercyclical capital buffer, a task requiring expertise and experience from both financial stability and macroeconomics. In view of this, the Bank's management saw an increased need for closer integration between the two policy areas. The Bank chose to innovate and overhauled its organisation, analytical methods and report structure. Experience shows that the changes have resulted in a better decision basis and more informed discussions, where financial stability and monetary policy and their interlinkages are taken account of in a more integrated manner.

As a part of these change efforts, Norges Bank chose a new approach in its policy reports. The assessment of financial stability was divided across two reports, where the "traditional" *Financial Stability Report* (FSR) was given a more structural character. The Bank's *Monetary Policy Report* (MPR) with financial stability assessment contains a more cyclical assessment. This approach has resulted in a considerable degree of integration of financial stability and monetary policy in terms of analysis and decision-making. It has clearly resulted in benefits from a monetary policy perspective. The assessment has also facilitated work on compiling a decision basis for the countercyclical capital buffer. However, from a broader financial stability perspective, the disadvantage is that it is difficult to obtain a picture of Norges Bank's overall assessment of financial stability. Drawing a line between cyclical and structural risks is also problematic, since they are in practice difficult to separate.

This assessment of Norges Bank's work focuses primarily on general and topical issues. The most relevant issues identified in the process have been concentrated into two general areas related to:

- The new, emerging field of <u>macroprudential policy</u>. How can Norges Bank best contribute in this field given the current division of responsibilities in Norway and given Norges Bank's mandate?
- 2) Since Norges Bank has no compulsory tools at its disposal to prevent financial instability, <a href="mailto:communication">communication</a> is key. By producing high-quality analyses and maintaining clear communication, the Bank can influence developments in the desired direction. This raises questions: how can the Bank best communicate its message? The FSR has been re-shaped, where does its potential for development lie?

The assessment has resulted in a number of recommendations applicable to Norges Bank:

#### Recommendation 1. Coherent approach to macroprudential analysis

Norges Bank has a unique role and capacity in the area of financial stability analysis in Norway. Given the Bank's mandate, it is only logical that the Bank takes a coherent approach to macroprudential analysis and broadens its analysis of appropriate countermeasures, in line with the European Systemic Risk Board (ESRB) recommendations. This kind of analysis has already been initiated in project form at Norges Bank and touches upon all the areas of expertise that the financial stability department covers. As a next step, it would be appropriate for the Bank to publish this coherent approach to analysis in its publications, with the FSR as the most obvious choice. Work to develop macroprudential analysis would benefit from a more formalised collaboration with Finanstilsynet to combine and utilise the expertise of both authorities.

#### Recommendation 2. Broaden and develop the FSR

The inclusion of the analysis of the countercyclical capital buffer in the monetary policy analysis has been a step forward in several respects and a change that should be retained. However, from a financial stability perspective, there is a need for a more "overall financial stability assessment" that provides a clear answer to the question: What is Norges Bank's assessment of the function of the financial system? What is the Bank's overall assessment of cyclical and structural risks? Against this background, the Bank should assess appropriate countermeasures from a preventive perspective. This is in line with the recommendation of a coherent approach to macroprudential policy. The overall financial stability assessment should be published in one place, and the FSR is clearly the most appropriate channel for such a coherent approach. To facilitate communication the Bank can illustrate the financial stability diagnosis using communication tools. A reader survey could provide valuable input.

#### Recommendation 3. Further develop the work on policy recommendations

One way of communicating clearly, and thereby increasing the potential for influence, is to formulate policy recommendations specifically directed towards the institutions or authorities the Bank wishes to influence. The Bank's communication related to the recommendations was made clearer in Norges Bank's latest FSR. There is further potential for development and the assessor presents a number of proposals and criteria that can be followed in the work to develop recommendations.

### Recommendation 4. Issue a publication providing an overview of financial stability – concepts and the Bank's responsibilities

Financial stability is a large and complex area featuring a large number of concepts and definitions, e.g.: What is financial stability? What is systemic risk? What do we mean when we say a system is resilient? There are no crystal clear answers to these questions, but there are a number of interpretations and more or less accepted definitions. These can often vary within organisations, which in turn can confuse both discussions and decision-making. What are Norges Bank's definitions? By gathering these together in a single publication, the Bank would have a guideline for both external and internal use. The Bank could also provide a description of how its mandate is interpreted and the elements included in the Bank's financial stability analysis.

The first section of this report contains a description of the Norwegian financial system, the division of responsibilities between the authorities and the emergence of the new macroprudential policy area. The following section presents a more detailed description of Norges Bank's financial stability role and mandate and how the Bank has become one of the pioneers in an international context in the work on financial stability, in terms of both analysis and communication. Section 3 describes the changes in organisation, working processes and report structure implemented by the Bank following the crisis with the aim of increasing the integration between financial stability and monetary policy. Section 4 presents a more detailed review of the new report structure, focusing in particular on the new FSR. The next section contains an analysis and assessment of the FSR, partly based on a method developed by the International Monetary Fund (IMF). The background description and analysis in the four introductory sections are followed by four general recommendations, which are described in detail.

## 1. Background: The same task, but new tools and experience

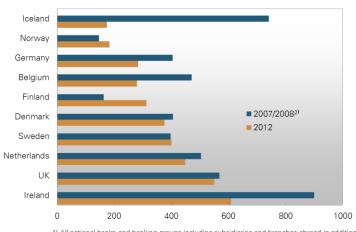
This introductory section primarily provides background information. It describes the specific features of the Norwegian financial system and the division of responsibilities among authorities. The design of the Norwegian financial system explains to some extent why Norway, unlike many other countries, was relatively unaffected by the impact of the financial crisis. This section also provides a description of how experience from the financial crisis has provided an impetus for the new policy area macroprudential policy.

#### The Norwegian financial system

One characteristic of the Norwegian financial system is that the banking sector dominates credit provision: as much as 80 percent of credit to enterprises and households is provided by banks. In countries such as the UK and the US, a considerable share of lending takes place via the bond market. Banks' dominance represents a vulnerability to the financial system: a shock to the banking system results in a shock to the real economy.

In an international comparison, Norway has a relatively small banking sector compared with the size of its economy (see Chart 1.1). This is partly because bank lending to customers outside Norway is relatively limited. Norwegian banks' total capital is equal to around twice GDP. This can be compared with Sweden, for example, where the banking sector is four times GDP. The size of the banking sector is an important indicator of systemic risk. The larger the banking sector, the more vulnerable is the financial system.

Chart 1.1 Total banking sector assets as a share of GDP. 1) Percent. 2012



 All national banks and banking groups including subsidiaries and branches abroad in addition to subsidiaries and branches of foreign banks. Norwegian GDP includes the oil sector.
Data for Belgium, Finland and Norway are for 2007, while data for the rest are for 2008.
Sources: ECB, Central Bank of Iceland and Norges Bank

The Norwegian banking market is characterised by the presence of a large number of smaller banks, the majority of which are savings banks. Despite this, the market is fairly highly concentrated. Norwegian DNB dominates the domestic market, with a market share of nearly 30 percent of corporate and retail lending (see Chart 1.2 and 1.3). In addition, foreign subsidiary banks and branches have substantial market shares. Many of the Scandinavian financial groups are active in the

Norwegian market, including Swedish-owned Nordea's subsidiary, which accounts for 13 percent of lending, and the branches of Danish-owned Danske Bank and Swedish-owned Handelsbanken.

Chart 1.2 Lending market shares in the Norwegian banking sector. Retail market. Percent. As at 15 March 2015

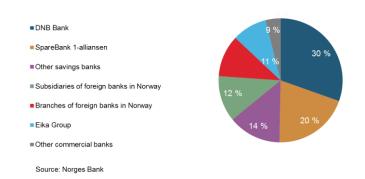
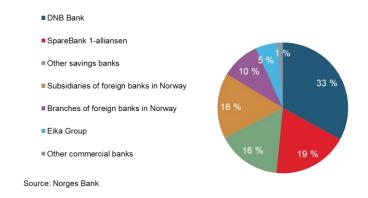


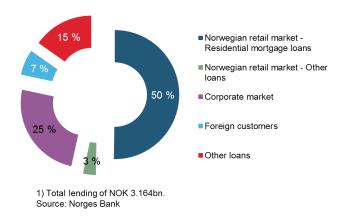
Chart 1.3 Lending market shares in the Norwegian banking sector. Corporate market. Percent. As at 15 March 2015



Lending accounts for a substantial portion of banks' assets, and a review of major borrower groups provides a picture of banks' credit risk. Bank lending is dominated by residential mortgages (see Chart 1.3). Over 60 percent of banks' and mortgage companies' lending goes to residential mortgages and other retail loans. Other important groups of borrowers are commercial real estate and shipping. Even though households account for a substantial portion of bank borrowing, the judgement of Norwegian authorities has long been that overall credit risk associated with residential mortgages is relatively limited, since Norwegian households in general have solid financial margins.

The next relevant question is how banks fund their lending. The financial crisis showed that liquidity risks can quickly create problems in the financial system. Deposits and wholesale funding constitute the most important forms of funding for Norwegian banks. Both of these funding sources normally have shorter maturities than lending. Long-term liabilities comprise bank bonds and covered bonds. In 2007, banks were allowed to fund lending with covered bonds, and covered bonds have since emerged as one of banks' primary funding sources, and they have also made possible a broader investor base, not least beyond Norway's borders. At the same time, a consequence of banks' funding with covered bonds is that substantial portions of their assets are encumbered.

Chart 1.4 Lending<sup>1</sup> by Norwegian banks and covered bond mortgage companies. Percent. As at 31 March 2015



A considerable share of banks' funding is foreign currency-based. This means that while credit risk is primarily associated with developments in the domestic economy, turbulence in global financial markets can quickly adversely impact financial stability in Norway, as experienced in 2008.

#### Norway well equipped when the financial crisis hit

Norway was relatively well equipped to face the global financial crisis that erupted with full force in autumn 2008. Norges Bank and the other Norwegian authorities had had fairly recent experience of crises. Like Sweden, Finland and the UK, Norway underwent a banking crisis at the end of the 1980s and beginning of the 1990s, owing to massive lending growth and extensive deregulation. With the crisis fresh in the memories of the authorities, Norway worked actively on crisis prevention measures. At the same time, macroeconomic fundamentals were better than in many other countries when the crisis erupted. As Norway has generally had stricter regulations than the EU, Norwegian institutions were better capitalised than their counterparts in many other countries. However, following the bankruptcy of Lehman Brothers in September, liquidity also evaporated from Norwegian financial markets and lending slowed to a crawl. Norges Bank was quick to supply liquidity to the markets while quickly lowering the key policy rate. Collateral requirements for central bank loans were relaxed, and an agreement was entered into with the Federal Reserve to provide USD liquidity to Norwegian banks. Norges Bank also introduced an arrangement for swapping covered bonds for government securities, referred to as the "swap arrangement". <sup>1</sup> The fact that all these measures were put in place quickly helped to calm the markets, and banks gradually became less restrictive in issuing new loans.

The Norwegian economy was also affected when Norway's trading partners were hit hard by the impact of the financial crisis. But the Norwegian economy was relatively successful in sustaining domestic consumption and the production of goods and services, and the rise in unemployment was relatively limited. Key support came from the government's decision to increase oil revenue spending. Overall, these quick and extensive measures by the authorities helped to limit the adverse effects on the economy and on the financial system.

<sup>1</sup> For more details regarding the swap arrangement see e.g. Norges Bank, Circular No. 1/7 January 2009.

The area of macroprudential policy emerges in Norway and globally

Financial and economic developments in recent years have provided important lessons for economic policy. Worldwide, the authorities have developed a new framework for more appropriate regulation of the financial system, referred to as macroprudential policy. The objective of macroprudential policy is to counteract risks to the financial system as a whole, with the ultimate goal of supporting developments in the real economy. This involves both reducing the probability of new crises and counteracting harmful effects in the financial system and the economy.<sup>2</sup>

Work in macroprudential policy involves, in part, strengthening *the institutional framework*, both nationally and internationally, i.e. designating authorities with a clear responsibility for macroprudential policy. It also involves putting in place *new tools* to counteract risks and reduce vulnerability in the financial sector.

With regard to *the institutional framework*, a number of countries, in line with recommendations from the International Monetary Fund (IMF) and the European Systemic Risk Board (ESRB), have designated a responsible authority or body and clarified the mandate for macroprudential policy.<sup>3</sup> How responsibilities for macroprudential policy are divided among authorities varies across countries and each system requires its own unique solutions. Nevertheless, there is broad international agreement that central banks should have a key role in this work.<sup>4</sup>,<sup>5</sup>

In Norway, work on financial stability is already divided between the Ministry of Finance, Finanstilsynet (Financial Supervisory Authority) and Norges Bank. The Ministry of Finance has an overall responsibility for ensuring that Norway has a well-functioning financial system. Constitutionally, the Ministry of Finance is responsible for financial market regulation, which includes macroprudential regulation. Finanstilsynet has a particular responsibility related to solvency, governance and control in financial institutions. Norges Bank is responsible for ensuring that the financial system is robust and efficient (more about this in Section 2). The collaboration between the Ministry of Finance, Finanstilsynet and Norges Bank became more formalised in 2006, when the authorities began regular three-party meetings. The Ministry of Finance chairs the meetings, which are held twice a year, or more often as needed.

However, unlike in many other countries, no fundamental institutional changes have taken place in Norway following the crisis. Nor has any formal decision been taken to clarify responsibility for

<sup>&</sup>lt;sup>2</sup> The exact definition of macroprudential policy varies, but some international practice exists. According to a joint report from the BIS, FSB and IMF, the aim of macroprudential policy is to limit systemic risk defined as "the risk of widespread disruptions to the provision of financial services that have serious negative consequences for the economy at large" (BIS-FSB-IMF Progress Report to G20, Macroprudential Policy Tools and Frameworks, October 2011) A CGFS report begins with this definition of macroprudential policy, but divides it into two intermediate operational objectives: "The first is to strengthen the financial system's resilience to economic downturns and other adverse aggregate shocks. The second is to actively limit the build-up of financial risks. Such leaning against the financial cycle seeks to reduce the probability or magnitude of a financial bust." (CGFS Papers No. 38, 'Macroprudential instruments and frameworks: a stocktaking of issues and experiences', May 2010).

<sup>&</sup>lt;sup>3</sup> Recommendation of the European Systemic Risk Board on the macro-prudential mandate of national authorities (ESRB/2011/3).

<sup>&</sup>lt;sup>4</sup> Ingves (2011), "Central Bank Governance and Financial Stability", BIS.

<sup>&</sup>lt;sup>5</sup> Towards Effective Macroprudential Policy Frameworks – An Assessment of Stylized Institutional Models, IMF, 2011.

<sup>&</sup>lt;sup>6</sup> Norges Bank's and Kredittilsynet's letter of 16 December 2005 to the Ministry of Finance (Norges Bank, 2005).

macroprudential policy. Currently, the Ministry of Finance issues decisions regarding macroprudential measures, with input in the form of advice and recommendations from Norges Bank and Finanstilsynet. The Ministry of Finance has stated that it may delegate responsibility for macroprudential policy instruments once more experience in this area has been gained.

With regard to new tools and regulations, there have been changes in Norway, and in certain regards, Norway has stricter regulations than many other countries. Higher capital requirements were introduced in 2013 owing to early implementation of the EU's new capital requirements. Additional capital buffer requirements have been imposed on banks in the form of a 3 percent systemic risk buffer as from July 2014 and a 2 percent capital buffer for D-SIBs (domestic systemically important banks) as from July 2016.

The new regulations also resulted in the introduction of the countercyclical capital buffer, which means that Norway has preceded most other countries in implementing this. <sup>7</sup> Unlike other buffers, the countercyclical capital buffer will vary over time. It should be built up when systemic risks build up, and then be drawn on when risks are realised to dampen losses and counteract credit tightening. The construction of the buffer requires a thorough analysis of systemic risk and a decision on the level of the buffer must be issued once per quarter. In each country, an authority has responsibility for issuing decisions on the buffer, usually the same authority that is responsible for macroprudential policy. In Norway, the decision-making authority is the Ministry of Finance. Norges Bank is tasked with providing background analysis and a decision basis and advising the Ministry of Finance on the level of the buffer four times a year. In this work, Norges Bank and Finanstilsynet are to exchange relevant information and assessments. Work on the countercyclical capital buffer entails a new task for Norges Bank (more on this in Section 2).

In addition to strengthening bank capital, further macroprudential policy measures have been approved to counteract systemic risk. Residential mortgages risk weights have been raised by up to 20-25 percent, and the guidelines for bank lending to mortgage borrowers have been tightened, with a recommended loan-to-value ceiling of 85 percent, though with certain exceptions. There are also guidelines for banks' means testing of new mortgage borrowers. To a certain extent, financial imbalances have also been taken into account in monetary policy decisions.

From having a considerable focus on banks' capital, the authorities' focus has now shifted to banks' liquidity risks. For example, in its most recent financial stability report, Norges Bank recommended that Norway should take the lead in this legislative area too.

<sup>&</sup>lt;sup>7</sup> According to the Basel Agreement, the buffer is to be introduced gradually between 2016 and 2019. However, individual EU member states can choose to introduce it earlier.

<sup>&</sup>lt;sup>8</sup> See Regulation on the Countercyclical Capital Buffer, No 36/2013, Norwegian Government.

# 2. Financial stability at Norges Bank – pioneering work

This second section provides a detailed account of Norges Bank's roles and tasks. The Bank's own experience of the far-reaching consequences of the domestic financial crisis at the beginning of the 1990s fostered efforts to develop work on financial stability. As a result, Norges Bank was among the pioneers in its financial stability work, with regard to both analysis and the way the analysis is communicated, as confirmed by external assessments over the years. The Bank's FSR was put to the test during the financial crisis. In retrospect, it can be concluded that it in many respects served its purpose.

#### Norges Bank's role and tasks in the area of financial stability

Financial stability represents one of Norges Bank's primary objectives in its work to promote economic stability. The domestic banking crisis at the beginning of the 1990s raised awareness of this area, and work on financial stability was then given greater priority. Thus, analysis, methodologies and communication all evolved considerably in the years that followed. In many regards, this was pioneering work in which Norges Bank, along with the Riksbank and the Bank of England, was at the forefront of developments, three central banks whose common denominator was recent experience of domestic financial crises. In many other countries, financial stability issues continued to have low priority.

Norges Bank's tasks in the area of financial stability have since 1985 been anchored in Section 1 of the Norges Bank Act, according to which the Bank shall: "...promote an efficient payment system domestically as well as vis-à-vis other countries, and monitor developments in the money, credit and foreign exchange markets". Section 3 states: "The Bank shall inform the ministry when, in the opinion of the Bank, there is a need for measures to be taken by others than the Bank in the field of monetary, credit or foreign exchange policy." If a situation should arise where the financial system is seriously threatened, Norges Bank may provide liquidity to individual banks or to the system as a whole.

Norges Bank interprets this as a responsibility for contributing to robust and efficient financial markets and payment systems, i.e. contributing to financial stability. In the FSR, Norges Bank describes how it performs its task of promoting stability in the system by monitoring and providing information on conditions in financial markets and, if necessary, indicating measures that can strengthen financial stability. 10

#### Norges Bank's work on financial stability reporting

For more than 15 years, the FSR has been a vital part of Norges Bank work on financial stability. Together with the Bank of England and the Riksbank, Norges Bank was one of the first central banks to publish a report on financial stability. All three countries had a vision that enhanced communication and transparency regarding risks to the financial system would have a positive

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<sup>&</sup>lt;sup>9</sup> See letter to the Ministry of Finance of 17 December 1999.

<sup>&</sup>lt;sup>10</sup> See e.g. *Financial Stability Report* 2014.

impact on prevention. At the time, the decision to publish judgements of that sort was controversial, and many were of the opinion that such publication risked defeating its purpose, even possibly contributing to *instability*. Since then, however, most central banks worldwide have chosen to follow the same path, and today, over 80 central banks publish financial stability reports.<sup>11</sup>

The embryo of what gradually evolved into separate monetary policy reports and financial stability reports existed in the quarterly publication *Economic Bulletin*. Beginning in 1997, an analysis of financial stability was included in every other issue. In 2000, the name was changed *to Financial Stability* and it was issued as a separate publication to boost publicity. Work on the report served as a catalyst for work on financial stability analysis at Norges Bank.

Over the years, the structure of the report was changed many times, depending on the risks that were deemed to be most important and other factors. For example, international developments have sometimes been included in a separate section and sometimes as part of the other sections. For a period, a description of conditions in the financial infrastructure was included in the FSR. This was later published as a separate report on payment systems. The aim of the FSR has varied little over time. In 1997, this was formulated as follows:

"This report is intended to provide a comprehensive picture of the situation in the financial sector and the outlook for the sector. The report includes both analyses of developments in the sector, with particular emphasis on banks, and the effects of macroeconomic developments on financial sector developments. Analyses of the financial positions of households and enterprises are key elements of this work."

For a time, the Bank wrote: "The purpose of the report is to increase knowledge and contribute to the debate on conditions of importance to financial stability among authorities, participants in the financial sector, enterprises and households."

#### External assessments of Norges Bank's Financial Stability Report

Over the years, Norges Bank has invited external experts to assess the FSR, with regard to both development of methodology and structure/presentation. A panel comprising three external assessors (Bowen from the Bank of England, Brian from the IMF and Steigum from BI Norwegian Business School) noted in 2003 that Norges Bank's FSR compared well with other financial stability reports. Among its strengths according to the panel were the use of macro models, modelling credit risk and the use of disaggregated data. The report was regarded as clear and easily accessible for its target group. At the same time, the panel noted the absence of an explanation of the risk assessment and how risks develop over time, a clearer definition of financial stability and a better description of the linkages between the Norwegian and the international financial system. The panel also saw potential in further developing the Bank's stress tests.

In 2005, a follow-up was conducted by the same panel. They noted that nearly all of the recommendations from the previous review had either been implemented or were planned for implementation. In particular, the assessors encouraged the Bank's work in developing its stress tests, judging the Bank to be at the forefront of international developments. Some less extensive

<sup>11</sup> Čihák, Muñoz, Sharifuddin and Tintchev (2012), Financial Stability Reports: What are they good for? IMF. <sup>12</sup> The report of the panel comprising Bowen, Brian and Steigum was published as a supplement to *Financial Stability* report 1/03. See also their follow-up analysis, published in 2005, http://www.norgesbank.no/upload/Finansiell\_stabilitet/fs\_review2006.pdf.

recommendations were made, including a review and analysis of risks associated with multinational banks and concentration in the banking sector.

Two years later, it was time for a new assessment of the report. This time, the panel consisted solely of representatives of the Norwegian financial sector. They welcomed the shift in focus from more general macroeconomic conditions to a greater weight on financial institutions. In their view, the reports should contain more in-depth economic analyses of the regulations and pointed out that Norges Bank had a less restricted role than Finanstilsynet.

The same year, the IMF conducted a comprehensive review and assessment of the Norwegian financial system. The assessment described actions taken since the domestic banking crisis, took particular note of the increased surveillance of financial stability and highlighted the Norwegian financial stability report as "exemplary".<sup>14</sup>

#### The financial stability report served its purpose during the crisis

Prior to and during the global financial crisis, central banks' stability analyses and financial stability reports were put to the test. How successful were they at foreseeing the risks that existed and their scope? Christensson et al. published a working paper containing a detailed study of five central banks' financial stability reports, including Norges Bank's. The general conclusion was that the central banks were relatively successful in foreseeing the risks leading to the financial crisis. On the other hand, they underestimated their extent.

A detailed study of the Norwegian FSR prior to and during the crisis shows that in many respects it served its purpose. At that time, the following parts of the report were included as separate sections: International financial markets and global challenges, the Norwegian financial sector, the outlook for Norwegian borrowers and stress tests of banks' capital/losses/gains. In addition, the FSR contained short articles or boxes on specific issues or topics that were described in more detail. The report also contained an appendix with data.

In the issues of the FSR published up to and including spring 2007, Norges Bank assessed the outlook for financial stability as stable, but highlighted some long-term and increasing risks. The Bank pointed to rising house and commercial property prices, global trade imbalances, historically low credit risk premiums and a weak US housing market. Beginning in December 2007, Norges Bank sharpened its focus on risk assessment and highlighted four risks in particular. International risks comprised a global recession and high liquidity risk in money and credit markets. National risks were assessed to consist of households' high indebtedness and excessive optimism in the commercial property market. Norges Bank continued to highlight these four risks in its FSR throughout the crisis. However, the Bank noted that liquidity risk was declining as the actions by national and international authorities helped to reduce the turbulence. In December 2009, Norges Bank communicated a brighter outlook in its FSR and a number of proposals for reforms and stricter regulation. In May 2010, the situation for Norwegian banks was assessed as having improved, but concern was

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<sup>&</sup>lt;sup>13</sup> Roar Hoff (DnB NOR), Torbjörn Martinsen (Sparebank 1 Group) and Erik Johansen (Finance Norway).

 $<sup>^{14}</sup>$  IMF Country Report No. 05/200, Norway Financial System Stability Assessment.

<sup>&</sup>lt;sup>15</sup> See Christensson, Spong and Wilkinson (2010), "What can financial stability reports tell us about macro-prudential supervision?" Working Paper, Federal Reserve Bank of Kansas City. The authors compare risk assessments in five European countries: the Netherlands, Norway, Spain, Sweden and the UK. One conclusion is that Norges Bank was fairly successful in this regard.

expressed regarding renewed market turbulence on account of high public indebtedness in other countries.

# 3. Financial stability and monetary policy more closely integrated

The financial crisis showed the existence of clear linkages between monetary policy and financial stability. Norges Bank was also given a new task: providing advice on the countercyclical capital buffer four times a year, a task that required expertise and experience in both financial stability and macroeconomics. In view of this, Norges Bank was in need of a closer integration of the two policy areas. The Bank chose to innovate, overhauling its organisation, analysis methods and report structure. Experience shows that the changes have resulted in a better decision basis and more informed discussions, where financial stability and monetary policy and the linkages between them are taken into account in a more integrated manner.

New approach to the interaction between monetary policy and financial stability

Many central banks, like Norges Bank, have a mandate involving price stability and a mandate to safeguard financial stability. A common organisational model for central banks has one department for financial stability and one department for monetary policy that both work on their respective mandates. This is also the structure of Norges Bank. There are a number of points of contact between the analysis work taking place in the respective departments, and while there is normally some form of collaboration, the extent of this collaboration varies considerably. At Norges Bank, there has long been a structure for facilitating interdepartmental collaboration. An external assessment in 2003 highlighted this collaboration between departments as an area where Norges Bank had made substantial progress.<sup>16</sup>

In the years after the most acute phase of the financial crisis, the need for more integration made itself increasingly felt at Norges Bank. With new challenges on the table and with the aim of bolstering collaboration and linking the analyses closer together, the Bank has made several fundamental changes.

Perhaps the most fundamental change was implemented during 2012 in the form of a major reorganisation and management "reshuffle". Alongside the Financial Stability and Monetary Policy departments, a new department was created to bring together work on the Bank's operational functions and market analysis, the Markets and Banking Services department. Some market monitoring activities previously performed by the Financial Stability department were moved to the new department and new forms of collaboration were established. The previous head of Financial Stability was appointed the new executive director. At the same time, the Bank created a general secretariat with responsibility for strategy and governance processes for central banking operations. The head of the general secretariat was the former executive director of Monetary Policy, the same person who less than two years later was appointed deputy governor. The Financial Stability department was assigned a new executive director with years of experience from the Bank's Monetary Policy department, most recently as deputy executive director. And similarly, the Monetary Policy department was assigned an executive director with a long background at the Bank, most recently as deputy executive director with a long background at the Bank, most recently as deputy executive director of Financial Stability. This meant that all executive directors were new to their areas, with in-depth knowledge of one another's policy areas. This is a

<sup>&</sup>lt;sup>16</sup> The panel comprised Bowen, Brian and Steigum. The conclusions were published as a supplement to *Financial Stability* report 1/03.

unique move in the world of central banking and the consequences therefore make for an interesting study.

With the reshuffle of the Bank's operational management, a number of key persons have also moved between departments. Many employees report that the changes have had a number of positive consequences for the Bank. They note that their contact networks have been broadened considerably, that understanding and knowledge regarding one another's areas have increased and that the Bank has been able to make better use of its overall expertise. A key component in the success of the reorganisation and reassignment of personnel seems to be that the Bank's management has been successful in creating a positive attitude towards the changes.

#### New analytical framework and changes in communication

In recent years, Norges Bank has focused on putting in place the analytical framework and establishing new work processes for the countercyclical capital buffer.<sup>17</sup> Four times a year, the Bank's Executive Board<sup>18</sup> decides on the advice on the level of the countercyclical capital buffer to be submitted to the Ministry of Finance. The Board also decides on the key policy rate on these occasions.

At the same time, models and methodologies have been developed further to improve integration between the two areas of analysis. For example, Norges Bank has enlarged the macroeconomic model used for forecasts in the monetary policy decision process to include the banking sector and a number of financial frictions.

The Bank has also overhauled its communication, implementing relatively substantial changes. The changes carried out in both of the Bank's flagship reports are unique in an international perspective. With a desire to improve the integration of monetary policy analysis with the analysis of financial stability, it was decided to include an assessment of cyclical risks to financial stability in the Monetary Policy Report, with publication four times a year. At the same time, the Financial Stability Report would focus more on structural risks, and the frequency of publication decreased from twice to once a year. The next section contains a more in-depth review of the changes in the published financial stability analysis.

In its change efforts, the Bank has taken account of the points of contact between monetary policy and the countercyclical capital buffer. Norges Bank describes the linkage between instruments as follows:

"Even though the objectives differ, both the key policy rate and the buffer work through banks' responses. The buffer will be set on the basis of an assessment of the risk that financial imbalances build up and trigger or amplify an economic downturn. Capital requirements, and their effect on bank interest margins, will be one of many factors underlying the monetary policy analyses. Buffer decisions will be based on an assessment of the current situation in the Norwegian economy, with particular weight on various credit and asset prices. The countercyclical buffer will strengthen the

<sup>18</sup> The Executive Board has seven members, all appointed by the government (Council of State). The governor and deputy governor are ordinarily the chairman and deputy chairman of the Executive Board. The Executive Board meets six times per year to decide on the key policy rate and on four of these occasions a decision is also made on the countercyclical capital buffer.

<sup>&</sup>lt;sup>17</sup> Norges Bank's analytical framework for the countercyclical capital buffer has been presented in various contexts (see e.g. "Criteria for an appropriate countercyclical capital buffer", *Norges Bank Memo* No. 1, 2013, and *Monetary Policy Report with financial stability assessment* 1/2013).

resilience of the banking sector during an upturn. It may also, to some extent, counteract the build-up of financial imbalances, but the effect is uncertain. Thus, Norges Bank cannot disregard taking financial imbalances into consideration when setting the key policy rate." <sup>19</sup>

Experience at Norges Bank shows that the changes in work processes and decision-making processes have resulted in a better decision basis and more informed discussions, where financial stability and monetary policy and the linkages between them are taken into account in a more integrated manner.

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<sup>&</sup>lt;sup>19</sup> Monetary Policy Report with financial stability assessment 1/2013.

### 4. New report structure

Communication plays a key role in central banks' work in the area of financial stability, and financial stability reports traditionally represent by far the most important communications channel. Norges Bank has taken a new approach with its reports by including a financial stability assessment in its MPR, while the traditional FSR has focused on more structural risks. In view of this, it is particularly interesting to look at the effects of the new approach. This section presents a review of the changes, while the next section analyses the consequences.

#### Financial stability report a key communication channel for central banks

Most are now in agreement that transparency is a benefit to financial stability. However, the degree of transparency varies across countries. Norges Bank is often regarded as one of the world's most transparent central banks in the area of financial stability.<sup>20</sup>

The manner in which the Bank communicates is crucial for central banks' work on financial stability, and a sound communication strategy is an important foundation. For most of the world's central banks, the financial stability report is by far the most important communication channel for communication regarding financial stability. In principle, this applies regardless of the tools central banks have or do not have in their toolbox. In the financial stability report, central banks provide an overall assessment of the risks and threats to the financial system and assess the financial system's resilience to them. Many central banks also analyse preventive measures, often in terms of macroprudential policy tools.

Many market participants may be aware of individual risks, but it is more difficult for them to have an overall view of risks on a broader plane that cuts through the entire system. This requires a more coherent approach, which the financial stability report provides. Increased awareness of risks also enhances the ability to respond to them. With a greater understanding of the risks in the system, there is also greater potential for a good working relationship among the authorities, both nationally and internationally. Financial stability reports also serve to increase central bank transparency regarding its assessments and contribute to building confidence.

Research has shown that there is a correlation between raising the quality of a central bank's financial stability reports and greater stability in the country's financial system. Which is the cause and which is the effect has, however, not been ascertained. <sup>22</sup> Research into the market effects of publishing financial stability reports has also been carried out. Studies show that financial stability reports often contribute to reducing volatility, but also that banks' share prices are affected in the

<sup>21</sup> The Riksbank's previous head of communication, Pernilla Meyersson, develops her views on communication and financial stability in her book *En resa i kommunikation: Fallet Sveriges Riksbank* [A journey through communication: The case of the Riksbank], Meyersson and Karlberg, SNS förlag 2012.

<sup>&</sup>lt;sup>20</sup> See e.g. Horváth and Vaško (2012), Transparency and Financial Stability: Measurement, Determinants and Effects", Working Paper, Institute of Economic Studies, Prague. The authors compare, with the aid of a transparency index, the transparency of 110 central banks worldwide.

<sup>&</sup>lt;sup>22</sup> In the period 1996-2005, the number of central banks that published a financial stability report grew from one to 50. Since 2005, the number has grown at a slower pace, picking up speed after the financial crisis. Several central banks have also increased the frequency of publication, with some exceptions. (Čihák, Muñoz, Sharifuddin and Tintchev 2012).

expected direction. The magnitude of the impact of publication depends on the prevailing market situation.<sup>23</sup>

Overall, it can thus be concluded that the publication of financial stability reports is a piece of communications craftsmanship that requires striking a balance. Common to most central banks is that in the wake of the financial crisis, financial stability analysis has been refined, broadened and deepened. Authorities worldwide are also working to improve the quality of the data.

#### Innovative thinking regarding Norges Bank's reports

In Norway, it was decided that fundamental changes in Norges Bank's report structure would be introduced as from 2013. Instead of having two separate reports, one for monetary policy and one for financial stability, the Bank chose to combine them to some extent in a single report. The motivation for the decision was as follows: <sup>24</sup>

"The experiences of the financial crisis clearly demonstrated that developments in the real and financial economy are closely interwoven. The Bank has concluded that it is of benefit to incorporate these analyses into a joint report with a view to their further development. At the same time, the Ministry of Finance has communicated that Norges Bank will be tasked, as from 2013, with elaborating a decision basis and issuing advice to the Ministry on countercyclical capital buffer requirements for banks."

This decision entails publishing four reports annually that would contain both a decision basis for monetary policy and a decision basis for advice to the Ministry of Finance on the countercyclical capital buffer. In addition, the FSR would be recast as an annual report on the structure of and vulnerabilities in the financial system.

The new report structure, including the ambition to combine monetary policy analysis with analysis of financial stability, and divide the analysis of risks into cyclical and structural risk, is the only one of its kind in the central banking world. In addition, few countries have reduced the frequency of their financial stability reports; the trend has rather been the opposite, i.e. the frequency has risen. At the same time, however, Norges Bank's ambition is to increase the frequency of cyclical assessments.

#### The new FSR with a focus on structural risks

In view of these changes, it will be particularly relevant to analyse the two most recent issues of the FSR, i.e. the reports (published in autumn 2013 and autumn 2014) that the Bank published following the changes in the report structure, and the portion of the MPR that contains a financial stability assessment.

Below is a detailed description of the changes that have taken place in recent years in the FSR, followed by a similar description of the financial stability portion of the MPR. Overall, the changes have resulted in a substantially greater focus on structural risks in the FSR and the report is more thematic, in line with the stated aim. Even so, there has been a slight shift towards including somewhat more content on cyclical risks. The cyclical assessment in the MPR has gradually found its form. The analysis is specifically focused on providing a decision basis for the countercyclical capital

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<sup>&</sup>lt;sup>23</sup> Born, Ehrmann and Fratzcher (2011), Central Bank Communication on Financial Stability, ECB.

<sup>&</sup>lt;sup>24</sup> Financial Stability, Norges Bank, 2/2012.

buffer and for that reason is focused especially on the particular criteria and indicators for setting the buffer. Both reports contain policy discussions relating to financial stability.

#### Financial Stability Report 2013

After the change in report structure in 2013, Norges Bank stated that the aim of the new FSR was to examine *long-term and structural trends* in the banking sector of importance for financial stability. *Current developments in financial imbalances and the banking sector* would be described in the MPR with financial stability assessment. In line with this statement of aim, important parts of the basis of the Bank's assessment of financial stability, which had previously been included in the FSR, were taken out. Examples of major areas not included in the 2013 FSR are national and international financial market developments, various types of risk indicator and an assessment of the current situation.

The report begins with a one-page introduction, signed by the governor of Norges Bank. An introductory description of the Bank's tasks and the structure of the banking sector are followed by a short assessment of banking sector resilience. The governor highlights in general terms a number of weaknesses that banks should strengthen in the areas of liquidity, capital levels and transparency. In conclusion, and as a separate theme, the regulatory framework for banking crisis resolution is emphasised as an important issue that must be addressed in Norway.

Section 1 describes the structure of the Norwegian banking sector and its national characteristics (in line with the statement of aim). Section 2 also focuses on the banking sector: funding and solvency. Both subsections contain both analysis and policy, including a description of current regulations. The solvency subsection contains a long retrospective review of developments stretching as far back as the past 25 years and the effects of changes made in the Basel regulatory framework over the years. Section 3 provides an account of Norges Bank's stress test of bank solvency. The final section of the report is an in-depth review on the subject of a new crisis resolution regime.

Household credit risk, traditionally a central issue in the financial stability report, appears to a very limited extent in the main text. Instead, problem loans among households and household purchasing power are dealt with in separate boxes. There is no overall assessment of the financial infrastructure in the FSR. A separate report on the payment system is published instead. A key issue relating to financial infrastructures, i.e. the issue of central counterparties is, however, discussed in a box. Other boxes deal with banks' foreign currency funding, adjustment to stricter capital requirements and crisis management. In contrast to earlier reports, there is no analysis of developments in Norwegian or global financial markets, or related issues such as the functioning of risk premium markets.

Overall, the report is considerably more structural, thematic and descriptive than previous financial stability reports issued by Norges Bank.

#### Financial Stability Report 2014

The following year saw a shift in the orientation of the report, which now included somewhat more current analysis/risk analysis. The 2014 FSR has a subtitle: *Vulnerabilities and risks*. An addition was made to the report's introductory statement of aim, noting that Norges Bank *assesses vulnerabilities and risks in the financial system*, with *particular focus on the long-term*, *structural features of banks*, *financial markets and the Norwegian economy*.

The design of this report differs from the previous report in some respects. The Bank's policy recommendations were more specific and were given a more prominent position, and the sections were to some extent filled with other content.

The report's introductory text is the "Executive Board's assessment" (compare with the previous year's introductory "leader" signed by the governor). This text concretises the bank's view concerning appropriate measures to counteract identified risks in the financial system. A number of policy recommendations on bank liquidity and transparency are highlighted. A number of developments on which the Executive Board places particular emphasis are also presented, including risks related to household debt growth, profitability and funding structures in the banking sector in a macro perspective, and the results of a stress test.

The Executive Board's assessment is followed by a one-page summary, which is also a new addition since the previous year. The report's four sections are summarised here.

The summary is followed by Section 1, which perhaps constitutes the largest difference from the previous year's report. Instead of describing the Norwegian banking system, Section 1 deals with risks and vulnerabilities in the financial system and the Norwegian economy. The section contains an assessment of domestic risks and vulnerabilities and the related weaknesses in the Norwegian financial system and a description of the international risk picture. Section 2 focuses on banks and their funding and liquidity risk. A considerable amount of space is devoted to new liquidity requirements and banks' adjustment to these requirements. Policy recommendations are also included in this section. Section 3 describes bank solvency and how banks are meeting the new capital requirements. A stress test of banks' resilience to a pronounced downturn in the economy is also included here. There is a subsection on credit risk, and an analysis of losses on loans to households in a historical perspective is presented in a box. A second box describes new equity issues by banks. Section 4 (which in the previous year's report dealt with crisis management) again highlights a particular theme. In line with the Bank's focus on domestic risk, this section contains an in-depth study using microdata of the high level of household debt in Norway.

#### Monetary policy report with financial stability assessment

The first MPR in its new format, i.e. with a financial stability assessment, was published in March 2013. The introductory description of the "Executive Board's assessment" includes an overall assessment of the need for a countercyclical capital buffer. As the regulatory framework was not yet in place at this time, Norges Bank simply stated in general terms that banks' capital levels should be increased. The Bank would issue concrete advice on the level and timing of the buffer when the regulatory framework had been established in Norway.

In its discussion, the Executive Board pointed to a number of parameters as key to its assessment and as a source of turbulence, all of which inherently involve cyclical risks: high household debt and rising house and commercial property prices. Structural risk, such as banks' dependence on wholesale funding, was also discussed.

The main text includes a new section on financial stability. The introduction does not include any "statement of aim" for the section. Instead, the forthcoming regulations relating to the countercyclical capital buffer and Norges Bank's advisory role in setting the buffer level are described. It is evident from the text that this section has a distinct bias towards the assessment of

the countercyclical capital buffer. This section does not contain any overall assessment of financial stability, although important elements are included.

The section opens with a box presenting and arguing in favour of the three criteria the countercyclical capital buffer should fulfil.<sup>25</sup> This is followed by a presentation of the four key indicators on which, in Norges Bank's assessment, the buffer decision should be based and which as a whole are considered to provide early warning signals of vulnerabilities and financial imbalances.<sup>26</sup>

The main text in this section has a clear focus on risks, and the analysis is primarily centred on risks related to household debt and house price developments. A general connection is made to banks' credit risk, but without a more detailed description. A short analysis of corporate credit is then presented with a particular focus on commercial property. In one of the subsections, banks' wholesale funding in terms of ratio and current access is analysed. The section concludes with a policy discussion on the topic of bank solvency and the need to further improve capital ratios.

Since the first report with the new structure was published at the beginning of 2013, Norges Bank's task has been formalised. The Regulation on the Countercyclical Capital Buffer was laid down by the Norwegian Government in October 2013. The Ministry of Finance decides on the level of the buffer four times a year. Before this decision is taken, Norges Bank presents a decision basis and advises the Ministry on the level of the buffer. In drawing up the basis, Norges Bank and Finanstilsynet exchange information and assessments. Norges Bank's advice is submitted to the Ministry in connection with the publication of the MPR. However, the advice is not published until after the Ministry has made its decision, usually the Friday of the following week. This delay has an unfavourable effect on the communicational aspect of the report since the conclusion of the assessment cannot be published.

Since the first joint report was published in 2013, a total of eight reports have been published and the shape of the new report has begun to settle. After the second report, the section entitled "Financial stability" was renamed "Decision basis for the countercyclical capital buffer", further emphasising that the aim is to present the reasoning behind the countercyclical capital buffer. The new framework, including the key criteria and indicators, has been extensively explained throughout the report. In several cases, changes in the regulations have been presented in more detail in boxes. The current analysis is concentrated on the four key indicators. The analysis of banks' capital levels has also been lengthened and included as a subsection entitled "Banks' adjustment process".

#### Other channels of communication

Another important channel of communication for Norges Bank is the speeches and lectures given by the governor, deputy governor and, occasionally, departmental directors. The governor's annual address, given in February every year, is a long-standing tradition. Its main themes vary, but traditionally include monetary and foreign exchange policy and assessments of economic policy and developments. Issues related to financial stability and financial markets are included to a varying extent, more frequently in periods of problems in the financial sector. There are also a number of more thematic publications where for example more detailed studies and analyses can be published. The annual Financial Infrastructure Report describes Norges Bank's responsibility for overseeing the

<sup>25</sup> i) Banks should become more resilient during an upturn ii) The size of the buffer should be viewed in the light of other requirements applying to banks iii) Stress in the financial system should be alleviated.

<sup>&</sup>lt;sup>26</sup> The four indicators are: i) the ratio of total credit to mainland GDP ii) the ratio of house prices to household disposable income iii) commercial property prices and iv) the wholesale funding ratio of Norwegian credit institutions.

financial infrastructure and includes the latest assessment of how well Norwegian financial market infrastructures comply with the international principles drawn up by CPMI-IOSCO.<sup>27</sup>

 $<sup>^{27}</sup>$  CPMI (previously CPSS) stands for Committee on Payments and Market Infrastructures. IOSCO stands for International Organization of Securities Commissions.

# 5. What are the components of a financial stability assessment and how to communicate?

Financial stability analysis by central banks has shown dramatic developments over the past ten years in terms of developments in analytical method and in terms of the resources allocated. This places new demands on communication, and financial stability reports have become increasingly sophisticated. This section describes a method of assessing financial stability reports developed by the IMF that includes an analysis of important components of the financial stability assessment. It also includes a description of cyclical and structural risks and the difficulty of making a distinction between them. Norges Bank's new report structure is analysed against this background.

#### What should a financial stability report contain?

The analyses and methods used to construct financial stability reports are becoming increasingly advanced, placing high demands on the ability to highlight the most important aspects and convey this in the report. It has become increasingly common to link the analysis to a

risk assessment, which in turn is linked to policy. <sup>28</sup>

To achieve its aim, the financial stability report must communicate its message to the receiver. This means it must be clear, consistent and cover the "right" areas. Čihák (IMF) developed a methodology for assessing central banks' financial stability reports in 2006, distinguishing five main elements of a financial stability report: 1) the report's aims 2) the overall financial stability assessment 3) the issues covered 4) the data, assumptions and tools used 5) other features such as the report's structure.

Another important component is to what extent the financial stability report is forward-looking, as reflected in several of the above elements. A description of these elements is summarised as follows:

#### 1. Aims

The aims of the report and the definition of financial stability should be clearly indicated and be included in each report, presented consistently throughout the report.

#### 2. Overall assessment

The overall assessment should be presented clearly and in candid terms and should be clearly linked to the remainder of the report. There should also be a clear link between the assessments over time, making it clear where the main changes took place.

#### 3. Issues

The report should clearly identify the main macro-relevant stability issues/risks and cover these consistently throughout the report. All relevant components of the financial system should be covered adequately. Financial stability reports typically cover the banking system in the greatest

<sup>&</sup>lt;sup>28</sup> Čihák, Muñoz, Sharifuddin and Tintchev (2012) Financial Stability Reports; What are they good for?, IMF

depth, but nonbank financial system and payment infrastructure issues are typically also covered. When some issues are not covered, the lack of coverage should be indicated and justified.

#### 4. Data, assumptions and tools

It should be clear which data, which assumptions and which methodological tools are used to arrive at the results and conclusions presented in the report. The data and tools should be publicly available and the results should be presented in a consistent way across reports.

#### 5. Structure and other features

The structure of the report should make the report easy to follow and should support its aims. The same applies to frequency, timing and public availability. The structure of the report should be consistent over time to make it easier to follow for repeat users.

#### Important components of a financial stability assessment

As pointed out above, all relevant components of the financial system should be covered in the published financial stability assessment. This raises the question of which components are relevant. The analysis should be focused on those components assessed to be systemically important and their interconnectedness.

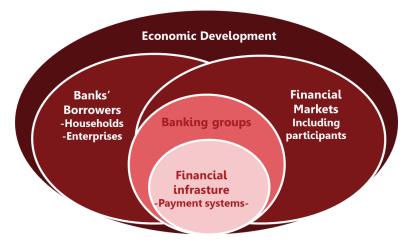
Financial systems look different in different countries, all have their national characteristics. Nonetheless, there are a number of components that are naturally included in financial stability assessments based on what are known as the three basic functions of the financial system: the system should i) provide payment services ii) manage and redistribute risk iii) convert savings into funding.

The financial system consists of a number of closely connected components. The functionality of the payment system and the financial infrastructure are essential for the system to work. The financial system is where all transactions take place. Banking groups play an important role in the system as they are involved in all the basic functions (providing payment services, managing risk and converting savings into funding). Banks are in their turn dependent on their borrowers, of which the most important groups can vary across countries. Households and businesses are the two dominant categories of borrowers and are usually analysed separately. Separate analyses are also usually conducted of particularly important groups of borrowers within these categories, for example indepth analyses of commercial property enterprises. Financial markets are key as they are important sources of funding and risk management for banks, as well as for businesses. Price-setting in financial markets and their different asset classes are an important indication of risk. Economic developments in their turn play a crucial role for both financial markets and bank borrowers. The Riksbank illustrates its stability analysis as shown in Chart 5.1 (with some minor adjustments):<sup>29</sup>

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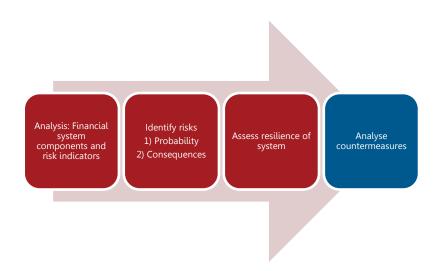
<sup>&</sup>lt;sup>29</sup> The Riksbank and Financial Stability 2013, the Riksbank

Chart 5.1 Components of the Riksbank's financial stability assessment



A stability analysis is usually conducted in a more or less given order (see Chart 5.2). The Riksbank conducts its analysis of the main components of the financial system, and other types of risk indicator, to identify various types of systemic risk that over time could have a negative impact on financial stability – at worst, so severely that some of the system's basic functions would be disrupted or adversely affected. An important part of the risk analysis is to assess *the probability* that the risk will actually materialise and its expected negative *consequences*. These assessments are often based on both quantitative and qualitative analysis. A common method used to assess consequences is to test banks' resilience to various types of stress scenario. Given the combined risk assessment, some form of ranking of risk can often be performed, i.e. which risk or risks constitute the most severe threat to the financial system. Given the risk assessment, the next step is to analyse appropriate countermeasures, looking at cost efficiency and comparing various types of measure.

Chart 5.2 The Riksbank's financial stability assessment, process



Cyclical and structural risk and the difficulty of making a distinction between them

Risks to financial stability are commonly divided into *cyclical* and *structural* risks. <sup>30</sup> *Cyclical* risk is risk to the system as a whole that can build up over time. This type of risk can arise either through interlinkages between financial participants or through feedback effects from the financial system to the real economy. Substantial increases and declines in prices for access to or in the supply of credit are a common pattern in financial cycles. Systemic risk usually builds up in the upswing. The upswing is often characterised by strong optimism leading to an underestimation – and thereby an underpricing – of risk. <sup>31</sup> Bubbles then tend to arise in the funding market, a typical example being the commercial property market, often in combination with rapid credit growth. <sup>32</sup>

Structural risk refers to the way in which the concentration of risk and the interlinkages between different parts of the financial system at any given time affect the risk that a crisis will impact the system as a whole. A typical form of structural risk arises when there is extensive interconnectedness between financial institutions (often banks), through counterparty exposures, for example. There is thereby a risk that problems arising in one institution can spread rapidly and with considerable force to other institutions. Another form of structural risk is related to the degree of concentration in the financial system. If, for example, there is a high degree of exposure to the same risks or dependence on the same funding sources in the financial system, the vulnerability of the system as a whole will increase.

In practice, it is often difficult to make a distinction between cyclical and structural risk. Structural problems can sometimes lead to the emergence of cyclical problems. For example, the degree of competition between financial institutions can have an impact on risk appetite.<sup>33</sup> Cyclical factors can also affect structural factors. In an upswing, for example, with strong expansion and a high level of risk-taking, risk in the financial system can become more concentrated and connectivity can increase and become more complicated.<sup>34</sup>

Because of the difficulty of making a distinction between cyclical and structural risk, an assessment should include *both* cyclical and structural risks. An overall assessment can only be made when all risks are taken into account together.

However, in some cases it can be useful to divide systemic risk into cyclical and structural risk, not least as countermeasures are often targeted on different types of risk. In the case of cyclical risk, tools are intended to counteract tendencies towards a gradual build-up of systemic risk during upswings. Tools to address structural risk are aimed at structures whose high concentration and contagion risk could cause problems in one part of the financial system to spread rapidly and with considerable force, crippling the system as a whole.<sup>35</sup>

<sup>&</sup>lt;sup>30</sup> See e.g. Borio Claudio, 2003, Towards a macroprudential framework for financial supervision and regulation BIS Working Papers, No 128. HM Treasury

<sup>&</sup>lt;sup>31</sup> Se e.g. Shiller, Robert J., 2000, Irrational Exuberance, Princeton University Press, 2000.

<sup>&</sup>lt;sup>32</sup> Aikman, David, Andrew G. Haldane and Benjamin Nelson, 2010 (revised 2011), "Curbing the Credit Cycle", Columbia University Center on Capitalism and Society Annual Conference Microfoundations for Modern Macroeconomics, New York.

<sup>&</sup>lt;sup>33</sup> Goodhart, Charles, 2012, "Goodhart hits out at current macroprudential focus", Centralbanking.com, 1 March 2012.

<sup>&</sup>lt;sup>34</sup> Shin, 2010, Macroprudential Policies Beyond Basel III, Policy memo, Princeton University

<sup>&</sup>lt;sup>35</sup> Molin, Nordh-Berntsson, 2012, Att skapa en svensk verktygslåda för makrotillsyn [Creating a Swedish tool box for macroprudential policy], Riksbanksstudie, the Riksbank

Norges Bank's report structure- assessor's analysis

In addition to the possibility of providing liquidity support to individual banks or to all participants in the system when a crisis has already arisen, Norges Bank has in practice only one tool to promote financial stability, known in the world of authorities as moral suasion, i.e. exercising influence through sound argumentation and distinct communication. The following section presents an analysis of Norges Bank's central "financial stability communication" on the basis of the above criteria.

Restricting the analysis to Norges Bank's FSR would not provide an entirely correct picture, given that the Bank's analysis is divided across two reports. As mentioned above, assessment and analysis of cyclical risks are primarily presented in the MPR, while analysis and assessment of structural risks are primarily presented in the FSR. The discussion below therefore refers to both reports, albeit with main emphasis on the FSR.

The <u>aim</u> of the financial stability analysis is clearly described in an introductory box at the beginning of the report which also includes a definition of financial stability. However, neither of the reports contains an explanation of the elements included in the financial stability analysis or what the assessment is based on.

Overall financial stability assessment: Given the division of the assessment across two reports, there is no publication of an overall assessment of financial stability that jointly takes account of both cyclical and structural risks. Instead, a review of cyclical risks, with emphasis on the indicators deemed to be most relevant for the countercyclical capital buffer, is presented in connection with the MPR with financial stability assessment. The FSR primarily assesses structural risks. As mentioned in the previous section, it is difficult to make a distinction between cyclical and structural risks, which also involves the underlying issue of making a distinction between the risk assessments.

In the MPR, a range of cyclical risks can be observed over time. In the FSR, on the other hand, it is more difficult to clearly observe risk developments over time, which partly reflects the aim of the report, given its focus on structural risks.

With regard to policy and the analysis of appropriate countermeasures, the MPR with financial stability assessment has a clear structure, given its focus on the countercyclical capital buffer. The links to policy recommendations have become increasingly clear in the FSR. So far, the recommendations have almost exclusively affected banks.

Reports' combined coverage: The FSR is particularly focused on banks. It provides an in-depth analysis of Norwegian banks and contains an extensive analysis of banks' funding and liquidity risk and bank solvency. The assessment of bank credit risk primarily focuses on debt among households, which is Norwegian banks' largest group of borrowers. In the latest FSR, a brief assessment of financial market risk and an international outlook were added. The financial market analysis is, however, limited. The financial infrastructure is not mentioned in any of the reports, with the exception of a box in one issue.

In both reports, analysis is linked to policy, which exclusively refers to regulatory changes affecting banks. Other types of measure are not analysed in the report. For example, the possibility of counteracting high household debt growth using instruments other than the countercyclical capital buffer is not considered, in spite of the fact that this is one of the more important risks highlighted in the report.

<u>Data, assumptions and tools:</u> Both reports reflect a high degree of transparency around the basis of results and conclusions. Underlying data for all the charts can be accessed from separate Excel sheets published in connection with the reports.

<u>Structure and other features:</u> The reports differ in their structure given their different aims. The part of the analysis that is presented in the MPR follows a clear structure that is consistent over time. Only two issues of the FSR, with its new aim, have been published so far and both of these have varied somewhat in character and structure, as pointed out earlier.

The above review shows that there are a number of areas that would benefit from further development, the details of which are provided in the assessor's recommendations in the next section.

# Recommendation 1: Coherent approach to macroprudential policy

Broad approach important

The lack of a specific macroprudential body in Norway combined with the considerable focus given to the countercyclical capital buffer as a macroprudential instrument may involve certain risks. It is important to keep in mind that the countercyclical capital buffer is a relatively blunt instrument to address cyclical risks. There is an abundance of different risks that could threaten financial stability. And there are a number of possible countermeasures. Deciding which countermeasures to implement depends on a number of aspects. The benefit of the measure must be weighed against its social cost. The decision also depends on which measures are possible to implement in practice and which are most appropriate in light of the specific conditions prevailing in the individual country. <sup>36</sup>

In a European context, the European Systemic Risk Board (ESRB), has long emphasised the importance of a toolbox of advanced instruments for use by EU and EEA countries to prevent or mitigate risks to the stability of the financial system. An ESRB recommendation published in summer 2013 requires EU and EEA countries to base macroprudential policy on at least four intermediate objectives, which should be linked to instruments appropriate to each country given its specific conditions. This work would include using appropriate indicators. Finally, countries should develop an overall policy strategy linking together final objectives, intermediate objectives, instruments and indicators.<sup>37</sup>

As described in Section 1, a number of macroprudential measures have been adopted in Norway in recent years. However, no impact assessments have been published or overall assessments that link specific risks to adopted measures. How have the measures worked individually and in combination? Are they adequate? What more is needed? When will the authorities be "satisfied"? Such assessments are best carried out by the various authorities in cooperation; it is particularly important to combine the competence of central banks with the competence of supervisory authorities.

Basis for coherent approach in place at Norges Bank

Norges Bank has, as described earlier, an independent role and a statutory responsibility in the area of financial stability. Statutory provisions clearly state that the Bank shall promote financial stability and inform the Ministry of Finance when there is a need for measures to be taken. This responsibility includes assessing financial stability and identifying risks that could constitute a threat in the long term. Possible measures are analysed and assessed on the basis of the risk assessment.

The existence of a framework and processes for the countercyclical capital buffer at Norges Bank should facilitate further development of macroprudential analysis. Much of this work is already carried out in the financial stability department. The Bank has also frequently published policy

<sup>&</sup>lt;sup>36</sup> See for example "IMF, Macroprudential Policy: What Instruments and How to Use them? Lessons from Country Experiences", Working Paper 11/238, IMF, 2011.

<sup>&</sup>lt;sup>37</sup> Recommendation of the European Systemic Risk Board on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1)

recommendations, primarily those affecting banks. But there is a need for a coherent approach and systematic analysis with frequent evaluation that is also communicated externally.

Supervisory authority and central bank complement each other in terms of expertise

Macroprudential analysis stands to benefit from combining the competence traditionally found at the central bank with that of the supervisory authority.

Finanstilsynet has important expertise with regard to the management of systemic risk. By drawing up regulations and issuing financial activity licences, supervising compliance with the regulations and intervening as necessary in the event of violations, Finanstilsynet is responsible for many of the regulations that currently govern the financial sector in Norway. The authority has detailed information about individual financial institutions and their risk models, and operational knowledge and practical experience of regulation and implementation of supervisory measures. At the same time, microprudential and macroprudential decisions differ not only in their purpose but also with regard to the type of analysis on which they are based.

Macroprudential policy has an analytical focus which, to a greater extent than microprudential policy, requires an advanced analytical framework for studying macroeconomic developments and financial stability, as well as their interaction, which is in line with the work carried out at Norges Bank. One of the lessons learned from many financial crises is that the build-up of systemic risk often begins outside the regulated sector, in companies that are not formally subject to supervision. A difficult, although important, task for macroprudential policy is therefore to identify risks that arise outside the formal area of supervision. Macroprudential policy should also supplement microprudential policy with monitoring and analysis to assess financial cycles that could affect the probability and extent of imbalances in the financial system as a whole. To conduct macroprudential policy, we must in other words expand our field of vision compared with microprudential policy.

Recommendation 1 a: Adopt a coherent approach to macroprudential policy and communicate it

There are a number of arguments to suggest that the time is right for Norges Bank to adopt a more coherent approach to macroprudential analysis and broaden its focus beyond banks. This recommendation is independent of the fact that Norges Bank does not have any macroprudential tools at its disposal. Conducting this kind of macroprudential analysis and communicating its conclusions is one of the tasks assigned to the Bank. In addition, Norges Bank has unique, in Norwegian terms, analytical capacity and an autonomous position. The type of analysis required is already being conducted at Norges Bank today. The Bank's work on macroprudential analysis would benefit from closer cooperation with Finanstilsynet, with its complementary expertise (see Recommendation 1 b).

It would be useful to base the analysis on the structure recommended by the ESRB, albeit adjusted to the Norwegian system. Such an analysis should gradually result in a clear opinion on appropriate macroprudential tools in Norway, given the specific structural and cyclical risks that characterise the financial system. This assessment should be conducted on an ongoing basis at Norges Bank. In addition, macroprudential measures adopted in Norway should be followed up on an ongoing basis to determine their individual and combined effects.

In addition, there is the challenge of communicating the assessment in a structured and pedagogical manner on a frequent basis. This assessor's advice is to recommend that this becomes part of the FSR. However, this places demands on the structure of the report and is in line with Recommendation 2 below.

Recommendation 1 b Develop forms of cooperation with Finanstilsynet with regard to macroprudential analysis

Norges Bank's know-how and that of the supervisory authority complement each other, as described in the section above. Finanstilsynet and Norges Bank cooperate on an ongoing basis on a number of issues related to financial stability, such as the coordination of views and exchange of information in connection with assessment of the countercyclical capital buffer. However, there is no formalised cooperation with regard to a coherent macroprudential analysis.

It would probably benefit future work on macroprudential analysis to connect the Bank's work on developing macroprudential policy with the work carried out by Finanstilsynet in a more systematic manner, perhaps in the form of a project.

# Recommendation 2: Broaden and develop the Financial Stability Report

Need for an overall assessment of financial stability and clear communication

Norges Bank has taken a new approach to the FSR and divided the financial stability assessment across two reports, giving the "traditional" FSR a more structural character. The Bank's MPR with financial stability assessment features a more cyclical assessment.

With the inclusion of the decision basis for the countercyclical capital buffer in the MPR, the monetary policy work process runs parallel with the corresponding buffer process. This has led to a considerable degree of integration between financial stability and monetary policy in terms of analysis and decision-making, which has clearly yielded advantages, not least from a monetary policy perspective, as financial stability considerations are now an integral part of the monetary policy decision.

From a broader financial stability perspective, the disadvantage is that it is difficult to obtain a picture of the overall financial stability assessment. It is also difficult to draw a line between cyclical and structural risks as they are closely connected and one is frequently a consequence of the other. Work on the new FSR shows that it is moving in the direction of including more cyclical assessments, which is probably inevitable.

Recommendation 2 a: Publish an overall financial stability assessment that links cyclical and structural risks

There is a need for a more "overall financial stability assessment" that provides a clear answer to the question: What is Norges Bank's assessment of the function of the financial system? The assessment should clearly reflect those elements that constitute and influence the financial system in Norway: banks and other relevant institutions, financial markets, the payment system/financial infrastructure, the economy and external factors.

The analysis should also provide an overall assessment of cyclical and structural risks and their interlinkages. An important part of the risk assessment is to assess the extent of risk in terms of the probability that risk will materialise and its consequences. How resilient is the financial system to these risks?

Based on the overall financial stability assessment, the Bank should describe appropriate countermeasures (see Recommendations 1 and 3).

Recommendation 2 b: Use the Financial Stability Report as a communications channel for the financial stability assessment

The overall financial stability assessment should be published in one place and the FSR is clearly the most appropriate channel for such a coherent approach. In addition, the form of the new approach in the MPR with the integrated decision basis for the countercyclical capital buffer seems to function well (from a financial stability perspective, which is the issue at hand here).

This should imply some change in the character, aim and structure of the FSR. This does *not* imply that every component of the financial stability analysis should necessarily be reported in detail in every report. Keeping the report short and concise has clear advantages (see also Recommendation 2c).

Nevertheless, it is important to provide a clear statement of aim, showing the basis for the conclusions. If some issues are not covered, the lack of coverage should be justified. For example, Norges Bank publishes a separate report on the financial infrastructure, reducing the need to explain that assessment. However, reference should be made to the report's conclusions. In the same way, links should be made to the financial stability part of the MPR.

One advantage of including cyclical risks more clearly in the report is that the report then becomes more topical, which will probably boost external interest. It could be said that a disadvantage of changing the focus of the FSR is that there will not be quite the same room for in-depth discussion of major structural issues. However, this issue can be resolved by using other channels of communication, which are then clearly referred to in the FSR.

Recommendation 2 c: Illustrate the financial stability diagnosis using communications tools

Increasingly advanced analyses and methods combined with the constantly increasing complexity of the financial system places high demands on communication of the financial stability analysis and how it is "packaged".

There are advantages of not "locking" the structure too firmly and being able to adjust the report to relevant themes in current financial stability assessment. At the same time, it is important to find an approach with which the reader can identify and which allows him or her to quickly absorb the report's main message. One does not need to exclude the other, but the reader needs help to easily understand the Bank's diagnosis of the financial system, i.e. which risks are the most important and how these risks have developed over time. The receiver is also probably a more or less stressed reader who needs to be able to understand the report's main message quickly.

All in all, this suggests that the report structure should clearly illustrate the overall financial stability assessment and the main message of the report. One way of doing this is to allow the introductory section to reflect the overall financial stability assessment, where the risk assessment provides the focus for the approach and the more detailed discussions in the rest of the report. The assessment should as far as possible discuss risks in terms of the probability of a risk materialising and the consequences of such a scenario. Both of these parameters change over time and are linked to both cyclical and structural factors.

It may be very helpful to make use of communication tools to help convey the message and illustrate the Bank's financial stability diagnosis. One example is the so-called spidergram, which can be used to illustrate the assessment of a number of pre-defined key risks and how these risks develop over time. The IMF, for example, uses this kind of visual tool in its Global Financial Stability Report. Even so-called heat maps can be used to illustrate how risks develop over time. Work to develop this type of visual indicator is in progress at Norges Bank and could also fruitfully be used in published form.

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<sup>&</sup>lt;sup>38</sup> See e.g. Global Financial Stability Report, IMF, October 2014

#### Recommendation 2 d: Conduct a reader survey

The aim of the FSR is to influence key target groups, and a financial stability report should always be designed to fit the target group as accurately as possible. This increases its potential for conveying its message. Key target groups for financial stability reports are primarily to be found in the financial sector, including both the authorities and private institutions. The media is an important target group as media coverage helps to convey the message to a wider audience.

Adjusting to a target group's needs in the best possible way requires a relatively advanced understanding of the target group not least in terms of level of knowledge and reading habits. How is the report read? Is it read from cover to cover, or is the focus primarily on the summary, or does the reader go straight to the section he or she is most interested in? Or simply read the summary and nothing else? Does the reader understand the Bank's message? How does the reader assess the credibility of the content of the report?

The more a publisher knows about the answers to this type of questions, the better are the chances of designing a report that will get its message across to the important target groups.

When changes are made to key reports, such as those made by Norges Bank, how readers perceive the report in terms of structure and content and how the report is used should be examined. One way of eliciting this kind of information is to conduct reader surveys, either in the form of questionnaires or interviews or a combination. A thorough reader survey can provide valuable input that can be used as a basis for any future changes.

# Recommendation 3: Further develop the work on policy recommendations

Policy recommendations - a way of strengthening communication

There are a number of factors suggesting that it can be difficult for central bank communication regarding financial stability to have an impact, particularly if there are no preventive tools available to the central bank. This is significantly different from monetary policy, where the policy rate weapon is often the focus of considerable interest from both financial market participants and the general public. It is also difficult to attract attention and build up knowledge in an area where most of the components seem to function. Changes often occur slowly over time and are thereby not as "newsworthy". At the same time, the periods when risks are building up may be precisely when attention is most needed.

Communication is required to be clear, consistent and to convey a message. One way of communicating clearly, and thereby increasing the potential for influence, is to formulate policy recommendations specifically directed towards the institutions or authorities the Bank wishes to influence. Norges Bank has a long tradition of including policy standpoints in its FSR. In FSR 2014, the "packaging" was changed and these policy standpoints were renamed recommendations. These were also formulated more clearly than previously.

In addition, communication plays a key role in the operationalisation of new tools and proposed measures, typically those classified as macroprudential measures.<sup>39</sup> The challenge consists of translating abstract regulatory changes into practical measures and consequences. Good communication is important both to explain and translate abstract measures and build the necessary political support.

#### Riksbank experience of work on policy recommendations

The Riksbank has published recommendations since 2011 and has since then worked on their further development. The decision to publish recommendations was part of the Riksbank's work to increase the clarity of its communication on issues related to financial stability in the wake of the financial crisis. <sup>40</sup> Since then, the Riksbank has published a range of different types of recommendation, most often addressed to banks, but also to other authorities. Most of the published recommendations have been complied with, while others have existed for some time. One recurrent theme has been recommendations related to transparency. The Riksbank has published a study showing that the four largest Swedish banks have improved their transparency to a relatively great extent since the financial crisis. <sup>41</sup> The Riksbank has taken an active role in driving these developments, where the primary tool has been the recommendations addressed to participants in the Swedish financial system in the Financial Stability Report.

<sup>&</sup>lt;sup>39</sup> For a detailed discussion, see Ng T (2010), "Communicating macroprudential policy", Central Banking (November: pages 41-46).

<sup>&</sup>lt;sup>40</sup> Read more about the Riksbank and communication in the speech by Ekholm, 2012, "Macroprudential policy and clear communication contribute to financial stability" and Öberg, 2011, "My views on the Riksbank and financial stability".

<sup>&</sup>lt;sup>41</sup> Pettersson, 2014, "Transparency in the major banks is increasing", the Riksbank

A review of the key criteria in the formulation of recommendations based on the Riksbank's experience follow below.

How should a successful policy recommendation be constructed?

To achieve the desired effect, a recommendation should be well founded and thought through. A number of factors must be in place for a policy recommendation to succeed. These are related to groundwork, publication and follow-up.

Groundwork is key. A basic premise is a clear definition of the issue. This is fundamentally a matter of counteracting risk or a weakness in the financial system based on the central banks financial stability analysis. The next step is to clearly define the change the Bank seeks to achieve and assess whether a recommendation is the right measure to implement. It is important to establish which participant/participants the recommendation is addressed to. When the central bank publicly expresses an intention, the recommendation must generally have an identified addressee/addressees. In addition, it is essential that this addressee can actually adopt measures that reduce or eliminate the risk or weakness identified by the central bank.

It is important to carry out a thorough examination of the suitability of the recommendation. All the risks/weaknesses identified by the central bank and that otherwise have the potential to be included in a recommendation are not necessarily suitable. A recommendation can be unsuitable if it is i) difficult to formulate as a clear message; ii) difficult to assess.

It should also be kept in mind that a recommendation – once published – can exist for some time and require follow-up and an "exit strategy". There is an interplay between these aspects, and ultimately it is a question of assessing suitability. In the assessment, ways of communicating the issue other than through recommendations should also be considered. In some cases, it may for example be more appropriate to raise the issue in the summary of the FSR but without formulating it as a recommendation.

With regard to the <u>actual publication</u> of the recommendation, its form is crucial. The basic principle is that the more clearly the recommendation is structured and worded, the greater is its potential for influence in the desired direction. In the reasons given for the recommendation, it is important that the Bank explains the risk and/or weakness it wishes to counteract. A recommendation should be so clear that the addressee understands the problem identified by the Bank, has a clear perception of the type of measure the Bank expects it to adopt and the extent of the changes required. It would probably also make it easier if the Bank is as concrete as possible with regard to the expected time frame for the implementation of the measure. How concrete a recommendation may be will vary from case to case and depends on the nature of the recommendation.

Criteria for the <u>assessment of the recommendation</u> should be determined when the recommendation is being formulated. The assessment aims to i) provide the Bank with an internal guideline in the next step of the process; ii) assist the Bank in publicly explaining why the recommendation stands, is being tightened or is being removed. In order for the assessment to provide a guideline, it is very important that there are clear criteria to assess whether the risk or weakness has changed. In most cases, this will involve a qualitative assessment and some degree of "laying on of hands". But quantitative criteria such as indicators or, even better, specific targets should be set up to act as supports in the decision process. Since a recommendation can be relevant for quite some time, the possibility of assessment is also an important factor in the decision whether

to issue a recommendation and how it can be formulated. A minimum requirement is that a recommendation should be followed up in a subsequent report, which should probably be the next report. How extensive the follow-up should be depends on the nature of the recommendation.

#### Recommendation 3: Further development of work on policy recommendations

The work on policy recommendations at Norges Bank could be further developed to make them clearer to external partners, which in turn could increase their potential to influence developments in the desired direction. One positive side-effect of publishing recommendations is that it probably strengthens internal work and further improves the analysis.

Successful work on policy recommendations requires some basic premises (see above). In short, these are: a clearly defined issue, clear objectives and addressees, a follow-up plan and an assessment of the recommendation's appropriateness. The groundwork should be thorough and publication well thought out, and follow-up is crucial.

# Recommendation 4: Build up knowledge about financial stability and Norges Bank's role

Financial stability - a complex area that is difficult to define

Financial stability is a large and complex area of analysis with issues that are difficult to define and many concepts that are open to interpretation. It is an area that takes a long time to learn, understand and grasp. For example, there is a whole host of definitions of the terms financial stability and macroprudential supervision. At best, the competent authority/organisation has its own conceptual apparatus, but most often there are also different interpretations and perspectives within the organisation. They are not necessarily very different, but sufficiently so to cause confusion.

The complexity and the difficulty in defining this area is a fact which there is no real possibility of changing. On the other hand, it is possible to increase the consensus on concepts and definitions within an organisation and in external communication. In the same way, it would benefit a central bank to describe in a pedagogical manner how it interprets its responsibilities within the area of financial stability and what the analytical framework looks like. Norges Bank has in various contexts published its definition of financial stability and how it interprets its responsibilities in this area. However, there is no coherent approach. And there is no summary of the elements included in the financial stability analysis and the financial stability assessment.

Recommendation 4: Issue a publication providing an overview of financial stability and Norges Bank's role

Norges Bank can increase public understanding of financial stability and how the Bank sees its role by combining these topics in a publication. Norges Bank could describe its role and responsibilities in promoting financial stability and in crisis management, in terms of both principle and practice.

In this publication, it would also be appropriate to describe the financial system, both in terms of the functions it includes and the elements that make up the system. Key concepts related to financial stability, such as financial stability, systemic risk, cyclical and structural risk, externalities etc., can be described here. It would also be appropriate to describe the most important building blocks in the Bank's financial stability analysis and how they are connected. Such a publication would help readers to understand what it entails when the Bank assesses the financial system as stable. It should also answer questions such as: What is resilience? What do stress tests involve? and other central issues in the Bank's financial stability assessments.

This publication would have a role in popular education, given the proper pedagogical approach. It would have an equally important function as a "guideline" in both internal discussions and decision-making processes and in external communication.

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