

Macroprudential supervision of the financial system – organisation and instruments

Report from a working group consisting of representatives from Norges Bank, the Financial Supervisory Authority of Norway – Finanstilsynet and the Ministry of Finance

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1 Background

The working group on macroprudential supervision hereby submits its report. The report contains a description of the development of macroprudential supervision and macroprudential instruments. The working group has considered how work on a countercyclical capital buffer should be organised in Norway and describes, among other things, the relationship between a countercyclical capital buffer and the conduct of monetary policy and the relationship between a countercyclical capital buffer and the supervisory authority's Pillar II review. The majority of the working group propose that Norges Bank be responsible for both preparing the basis for decisions and making decisions on the countercyclical capital buffer. A minority propose that both Finanstilsynet and Norges Bank prepare assessments of the need to impose and lift countercyclical buffers requirements, and that the decision be made by the Ministry of Finance, or possibly Finanstilsynet.

The working group has also discussed other possible discretionary countercyclical measures, but does not propose introducing other such measures at the present time. In the group's opinion, if, later on, the need arises for additional macroprudential instruments, a separate assessment ought to be undertaken to determine where the competence to decide on the use of such instruments should lie. The working group was appointed on 15 September 2011 with the following mandate:

"The working group shall consider how the work on the buffer requirements and macroprudential supervision should be organised in Norway, including questions concerning the design of a countercyclical capital buffer. The group shall propose rules that implement the expected obligations under the EEA Agreement, assuming that the European Commission's proposed CRD IV legislation is incorporated into the EEA Agreement. The working group shall further consider and, as appropriate, propose other discretionary instruments that may be relevant in connection with the organisation of a system for macroprudential supervision in Norway.

In its study of a countercyclical capital buffer, the working group shall consider the following:

- which criteria should form the basis for the decision to increase or decrease the required countercyclical buffer rate and for its design*
- the relationship between the use of a countercyclical capital buffer and the conduct of monetary policy, and the relationship between a countercyclical capital buffer and the supervisory authorities' Pillar II review*
- the supervisory authorities' sanctions*
- other related issues*

The working group shall submit a report to the Ministry of Finance by 15 January 2012 containing a set of draft regulations which, among other things, implement the Basel Committee's and the European Commission's proposed requirements concerning buffer capital and macroprudential supervision. In its work on drafting new regulations, the group

shall refer to the Banking Law Commission's proposal for new financial legislation presented in Official Norwegian Report NOU 2011: 8.

The Ministry of Finance can change the mandate, deadline, etc."

On 30 September, the Ministry of Finance commissioned the group to assess "*Finanstilsynet's proposal for a statutory basis to issue regulations on prudent lending practices as an integral part of the working group's study.*"

On 12 December, the Ministry of Finance extended the deadline for the report to 15 January 2012. In early January, the working group learnt that the European Systemic Risk Board (ESRB) was planning to send recommendations to the Economic and Financial Affairs Council (ECOFIN) on the "macroprudential mandate of national authorities" on Monday 16 January. In light of this, the working group agreed to postpone submission of the report to allow the group to take this new information into account.

The working group has consisted of the following members: Birger Vikøren, Director at Norges Bank; Ingvild Svendsen, Director at Norges Bank; Erik Lind Iversen, Acting Deputy Director General at Finanstilsynet; Harald Johansen, Senior Adviser at Finanstilsynet; Erling G. Rikheim, Deputy Director General, Ministry of Finance (chair); Mirella E. Wassiluk, Deputy Director, Ministry of Finance; and Yngvar Tveit, Deputy Director General, Ministry of Finance. Kari Anne Haugen, senior adviser, and Remy Edseth, adviser, served as secretaries for the working group.

In its work, the group has had meetings with the management of Finance Norway (FNO) and representatives of the banking industry, and also with Professor Steinar Holden. The group has had a total of 11 meetings.

2 Macprudential supervision

2.1 What is macroprudential supervision?

Financial stability requires that the financial system mediates credit, executes payments and redistributes risk in a satisfactory manner. Although each individual financial institution may appear robust, imbalances can create and increase systemic risk in financial markets and increase the risk of financial instability. The international financial crisis also demonstrated that it is difficult to maintain financial stability through the traditional combination of macroeconomic policy instruments and microprudential supervision of individual financial institutions.

There is broad international consensus that, in addition to improving regulation of the financial system on the micro level, there is a need to strengthen supervision of the financial system as a whole, i.e. on the macro level, in order to identify and reduce systemic risk.

The Bank for International Settlements (BIS) defines macroprudential supervision as:

"the use of prudential tools with the explicit objective of promoting the stability of the financial system as a whole, not necessarily of the individual institutions within it. The objective of macroprudential policy is to reduce systemic risk by explicitly addressing the interlinkages between, and the common exposures of, all financial institutions, and the procyclicality of the financial system".¹

The International Monetary Fund (IMF) explains the objective of macroprudential supervision thus:

"Macroprudential policy uses primarily prudential tools to limit systemic or system-wide financial risk, thereby minimizing the incidence of disruptions in the provision of key financial services that can have serious consequences for the real economy, by (i) dampening the build-up of financial imbalances; (ii) building defenses that contain the speed and sharpness of subsequent downswings and their effects on the economy; and (iii) identifying and addressing common exposures, risk concentrations, linkages, and interdependencies that are sources of contagion and spillover risks that may jeopardize the functioning of the system as a whole."²

The objective of macroprudential supervision can be formulated as monitoring, identifying and reducing systemic risk in the financial system, with a view to making the system more resilient to financial instability. Systemic risk arises along both a time dimension and a cross-sectional dimension. Typically, systemic risk arises as a result of imbalances building up over time on the system level, often in connection with rises in asset prices and debt in the economy. The risk arising from such imbalances may be further amplified by the financial institutions having similar exposures and by growing volumes of claims between financial - institutions. This in turn increases the possible contagion effects between financial institutions, fuelling the risk of a serious crisis.

¹ Speech by Jaime Caruana, 23 April 2010: "Macroprudential policy: working towards a new consensus".

² IMF. Note dated 14 March 2011: "Macroprudential Policy: An Organizing Framework".

Macroprudential supervision should address in particular the risks associated with cyclical fluctuations in financial institutions and financial markets (procyclicality) and the risks associated with the linkages between financial institutions and markets (cross-sectional risk). Work is underway to develop both the monitoring of these forms of risk and instruments that will help reduce them.

There may be interaction between the risk in the time dimension and the risk in the cross-sectional dimension, since the potential for contagion effects is largely determined by structural factors. It is therefore important to have rules and regulations in place that limit this potential. Macroprudential supervision also has a broad interface with microprudential regulation. Macroprudential supervision also has a broad interface with microprudential regulation. Macroprudential supervision requires – and cannot replace – robust microprudential regulation. Appropriate regulation of financial institutions requires good coordination between macroprudential supervision and microprudential regulation.

2.1.1 Monitoring and identifying systemic risk

Macroprudential supervision assumes that it is possible to identify the build-up of systemic risk at an early enough stage to be able to take the steps necessary to maintain – or prevent disruption of – financial stability. This supervision must primarily be based on empirical indicators that are known to provide information about economic cycles, the accumulation of imbalances and the probability of financial crises, including data from financial institutions.

It is important to understand the correlations between the risk exposures of major financial - institutions. Analyses of potential contagion effects should not only include exposures between institutions, but also common exposures on both the liabilities and the assets side. Much of the contagion between financial institutions in the first phase of the recent international financial crisis came through the way in which prices are set in markets where most of the financial institutions had very similar positions (i.e. similar types of assets).

During periods of rapid credit growth and asset price inflation, the risk in the economy increases. Imbalances in the debt and asset markets can accumulate more rapidly in the periods of economic growth, making the financial system increasingly vulnerable to shocks, the longer the upswing lasts. A key element of macroprudential supervision of the financial sector is the analysis of imbalances in the debt markets and in the market for housing and other assets. In addition to monitoring the magnitude of imbalances on the system level in the current situation, analyses must also assess the risk of future accumulation of such imbalances. It is important to identify the interdependencies that lead to these kinds of imbalances.

The analyses must provide data that enable an informed decision to be made on the choice of instruments. The analyses must have a macroeconomic perspective, in the sense that it is the total exposure and the effects measures may have throughout the entire financial system that are assessed. At the same time, knowledge about the banks' assets and earnings and

knowledge about the situation in the banks' lending and borrowing markets are essential for all types of macroprudential supervision.

2.1.2 Reducing systemic risk

Procyclicality refers to the fact that through their behaviour banks and other financial institutions may amplify a cyclical upturn through more lenient lending standards and increased risk willingness in good economic times. This in turn can lead to increased demand and rising asset prices, further reinforcing the upswing with the result that assets become overpriced, creating a "bubble". Conversely, financial institutions can also fuel a recession by tightening their credit standards. Depending on their design, capital adequacy and liquidity rules, accounting rules and the rules on premiums to guarantee funds may reinforce the financial institutions' procyclical behaviour and thus magnify the fluctuations in the economy.

Ideally, regulation of the financial markets should serve to mitigate procyclicality in the financial institutions' behaviour. In other words, the regulations should be "tougher" when there is high risk of imbalances building up. The objective is twofold: to reduce the risk of imbalances building up and to make the financial institutions better able to function normally in a situation where the imbalances are reversed.

It is also important to reduce or prevent the development of systemic instability and the risk of regulatory arbitrage.

2.2 Work on financial stability and policy instruments in Norway today

2.2.1 Institutional framework

In Norway, the Ministry of Finance, Norges Bank and the Financial Supervisory Authority of Norway – Finanstilsynet all perform tasks to ensure financial stability. The Ministry of Finance has the primary responsibility for monitoring financial stability and defining the regulatory framework for the financial sector. Norges Bank and Finanstilsynet shall help ensure that the financial system is robust and efficient and monitor the financial institutions, securities markets and payment systems in order to identify matters that could pose a threat to financial stability. Finanstilsynet oversees the individual financial institutions and has the authority to intervene in crises or imminent crises by issuing requirements and instructions to individual institutions. Norges Bank is responsible for monitoring the financial system as a whole, and acts as lender of last resort.

For many years, the Norwegian authorities have given priority to ensuring Norway has a robust regulatory framework that covers all the financial institutions and the entire financial market and which contributes to the soundness and resilience of the financial sector. Norway also has a joint supervisory body that oversees the entire financial market. This helps ensure common standards and consistent regulation for different types of financial institutions, based on the principle of "same risk, same regulation".

To reduce the likelihood and magnitude of liquidity or solidity problems in financial institutions, comprehensive requirements have been established covering aspects such as financial soundness, liquidity and supervision of financial institutions. Experience has shown that low liquidity and insufficient resilience can pose a threat to financial stability even in countries with comprehensive regulation and supervision of institutions' financial soundness, and that the situation can deteriorate if it is not handled properly or if appropriate measures are not implemented in time. It is therefore also important to have good emergency plans for situations where financial stability is threatened. In the light of the current situation, attention will also be given to the efficient functioning of the markets.

Regular tripartite meetings between the Ministry of Finance, Finanstilsynet and Norges Bank are held to exchange information, discuss the outlook for financial stability and coordinate the organisations' crisis response systems. The first tripartite meeting was held on 30 October 2006. Normally, there are two meetings a year, unless needs dictate more often. As a result of uncertainty in the financial markets, there have been more frequent tripartite meetings in the last two years. The executive management of Finanstilsynet and Norges Bank meet twice a year. Meetings are held between the Finance and Insurance Supervision department of Finanstilsynet and Norges Bank Financial Stability approximately every six weeks. A significant part of the exchange of information is done through the exchange of reports and analyses. Norges Bank has had a permanent observer on the board of Finanstilsynet since 1 January 1994.

Institutions and markets are primarily dealt with by Finanstilsynet and Norges Bank, within the specified limits of their respective policy instruments. In accordance with the current Norges Bank Act, Norges 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. Norges Bank monitors the financial system as a whole, and twice a year, the Bank sends a letter to the Ministry of Finance with its assessment of the financial stability outlook and recommendations on measures to counteract the build-up of systemic risk. The Bank is also responsible for the conduct of monetary policy. Norges Bank monitors and controls the liquidity of the banking system and provides banks with loans. Thus Norges Bank has a special role as overseer of liquidity risk in the banking system. As lender of last resort, Norges Bank has an important role to play in dealing with liquidity crises. In accordance with the Financial Supervision Act, Finanstilsynet shall prepare all cases falling within its area of responsibility in which the final decision rests with the King or a ministry. The Ministry of Finance makes decisions, including decisions relating to financial stability, on the basis of, among other things, recommendations and input from Norges Bank and Finanstilsynet.

2.2.2 Monitoring of systemic risk in Norway

The Ministry of Finance's monitoring of systemic risk

The Ministry of Finance analyses economic developments internationally and in Norway on an ongoing basis. Estimates of future developments in production, employment and nominal

factors are important premises for the formulation of economic policy. Central to this work is a good understanding of the functioning of the economy, including the interactions between the real economy and financial markets. The international financial crisis highlighted how quickly problems in the financial markets can spread among markets and countries and the importance of well-functioning financial markets for developments in the rest of the economy. Recent developments have also illustrated some of the potential consequences of build-up of imbalances in debt and asset prices.

Against this backdrop, the Ministry follows developments in the real economy and the financial markets very closely. The Ministry's analyses are based on a wide range of statistics and information from many different sources, both internationally and in Norway. Norges Bank and Finanstilsynet provide information and assessments of relevant developments in the financial markets, banks and financial institutions (see below). The Ministry of Finance's assessments are published in a number of arenas, including national budget documents every six months and the annual Financial Market Report.

Norges Bank's monitoring of systemic risk

Norges Bank publishes a semi-annual report on financial stability. The report assesses the financial stability outlook and whether systemic risk is building up. On the basis of the analyses, recommendations are made concerning measures that ought to be implemented to counteract the build-up of systemic risk. The assessments are based on analyses of vulnerabilities in the financial system and risk factors outside the financial system, using compilations of statistics and data on the banks' balance sheets, the financial position of companies and households, and indicators of developments in the real economy and financial markets in Norway and abroad. The Bank conducts a quarterly survey of bank lending that provides important information on developments in the banks' lending practices. In addition, the Bank regularly obtains information about banks' funding situation in a separate liquidity survey. As necessary, information obtained from the Bank's regional network is used to shed light on companies' financing situation.

The financial stability outlook is summarised in a diagram showing seven different aspects of the financial system's vulnerabilities and risk factors. The diagram is based on more than 40 individual indicators. There is documentation of the assessment system on Norges Bank's website. The financial stability report also contains a number of in-depth studies of relevant issues such as different aspects of the new international regulations for financial institutions. Studies and research work are published regularly in dedicated series of publications on the bank's website.

Norges Bank uses a broad set of models in its analysis of the Norwegian and the international economy. The model portfolio includes several different types of models. In its work on financial stability, Norges Bank has developed a special suite of models to analyse the interaction between the financial sector, the real economy and the banking system's resilience to shock. This suite of models consists of a macroeconomic model covering the interaction between asset prices, household debt and the real economy. This macroeconomic model

provides projections for house prices, household debt and household interest burden. The model also includes the banks' capital adequacy. In addition, the suite of models incorporates micro-based models for the banking sector, the household sector and the corporate sector.

The suite of models is used to perform macro stress tests of the banking system. These stress tests are intended to test the banking sector's resilience in a scenario that is unlikely, but still plausible. The main findings of the stress tests are published in the reports on financial stability. The stress tests are described in more detail in the publication "Penger og kreditt".

Finanstilsynet's monitoring of systemic risk

Finanstilsynet has supplemented its supervision of the individual financial institutions with macro-level supervision for many years.

Finanstilsynet's work on the macro level concentrates on a survey of the economic shocks that could cause problems in the financial sector. Particular attention is paid to the risk of bubbles, especially in the credit and property markets. The monitoring builds largely on a set of indicators and analyses that broadly cover six main categories, capturing both macro and micro factors:

1. Economic developments in the Norwegian and international economies.
2. Market developments, including in the markets for housing and commercial properties, commodities, currency and securities.
3. Developments in the household and corporate sectors.
4. The financial sector (banking and life insurance) with analyses of profitability, liquidity and solvency of individual institutions, groups of institutions and the industry as a whole.
5. Structural and competitive elements in the financial sector and the financial markets.
6. Ad hoc studies, stress tests, etc.

This macroeconomic monitoring benefits from its broad interface with the (on-site) inspection activities, partly because sources of risk can then be identified. At the same time, assessments made in connection with macroeconomic monitoring are an important source of information for the assessment of special analyses and as background information for on-site inspections.

Macroeconomic analyses are used in the supervisory review and evaluation process (SREP) and in the review of banks' ICAAP (internal capital adequacy assessment process). The assessments of capital needs are based on the risk in the individual bank and the risk in the economy as a whole. It is assessed whether the banks' capital adequacy and future capital plans will ensure sufficient financial strength to sustain lending even through a recession lasting several years. Future macroeconomic developments and the uncertainties associated with this are therefore very important.

Since 1995, Finanstilsynet has prepared six-monthly reports on the banks' risk, which also cover macroeconomic aspects and assessments of the outlook for financial stability. Since

2002, Finanstilsynet has published reports on developments in the economy, markets and institutions.

2.2.3 The current financial market regulation and capital requirements

Financial market regulation

The Norwegian authorities set minimum capital requirements to promote financial soundness and minimum liquidity requirements to promote liquidity in the financial institutions. There is also a comprehensive code of conduct for financial institutions and agents in the financial markets. Finanstilsynet ensures that the rules are observed. The Norwegian authorities have attached importance to uniformity in their regulation of the financial market, ensuring that it covers the entire financial sector and that it regulates different parts of the financial market in a consistent and comprehensive manner. As a main rule, equal risk should be regulated equally, regardless of what type of financial institution bears the risk. This contributes to more robust institutions and prevents the build-up of risk in institutions with weaker regulations. Group rules shall ensure that both the group as a whole and the individual firms in the group are sound and liquid. Furthermore, the Norwegian authorities have emphasised that the rules shall be consistent over time, to avoid a situation where regulations are eased in good times and tightened in bad times. We also have a single joint supervisory authority for the entire financial sector. This contributes to consistency in the supervision across industries, a good overview of developments in the financial services industry, and a good basis for assessing risk in the financial sector as a whole.

Since the Second World War, developments in the regulation of the financial markets can be divided into four distinct phases:

- Up until the mid-1980s, the regulatory regime in Norway – and in many other countries too – was characterised by strict, quantitative rules for the supply of credit.
- In the 1980s, financial markets were subject to extensive deregulation of credit controls, where political micro-management was largely replaced by market mechanisms, and the regulation of the financial institutions was subject to major changes.
- For the past 20 years, regulatory developments in Norway have been characterised by implementation of an increasing number of EU / EEA rules in Norwegian law, but in important areas, the regulatory requirements in Norway differ from the EU minima, and Norway has developed an independent national style of regulation.
- The international financial crisis in 2007–2009 revealed weaknesses in the regulation of the financial markets in many countries, and an extensive international effort was immediately launched to strengthen the regulation of global financial markets.

Capital adequacy requirements

The current capital adequacy regulation in Norway came into force on 1 January 2007 and implements the EEA rules as defined in the EU directives 2006/48/EC (CRD) and 2006/49/EC (CAD), which in turn are based on the Basel II rules. The statutory provisions,

which contain general, overarching provisions on capital adequacy and provide the legal basis for further regulations, were adopted by the Storting on 16 June³ and sanctioned on 30 June 2006. The Ministry of Finance has established detailed rules for the calculation of the risk-weighted exposures to be used for determining the capital requirements in the regulation of 14 December 2006 no. 1506 on capital adequacy for commercial banks, savings banks, finance - companies, mortgage credit institutions, parent companies in financial groups, investments firms, management companies for securities funds etc. (the Capital Adequacy Regulations). Rules have also been established for large exposures in the regulation of 22 December 2006 no. 1615 on credit institutions' and investment firms' large exposures. The purpose of the Regulation on Large Exposures is to limit the size of the loss that an institution can suffer if the counterparty cannot fulfil its obligations.

The capital adequacy rules are based on three pillars. The pillars should be mutually supportive and together shall help promote financial stability. Pillar I contains the technical formula for calculating the capital adequacy requirements and defines the minimum regulatory capital requirement. These requirements should cover the minimum credit risk, market risk and operational risk that institutions take. The banks can calculate the minimum requirements for credit risk using two alternative methods: the standard approach or the internal ratings based (IRB) approach.

Pillar II deals with the supervisory authority's own, supplementary assessment of an individual institution's overall risk. The institutions shall assess their capital needs relative to their overall risk exposure. The supervisory authorities shall review these processes and can set more stringent capital requirements at the institutional level than those required under Pillar I.

Pillar III contains rules about information that the institution must disclose publicly. The purpose of the requirements for public disclosure of information is to strengthen market discipline.

Banks that calculate their capital requirements using risk-based, internal models under the new Basel II regulations (IRB banks) shall, as a transitional arrangement, include a denominator in their calculation of their capital adequacy that corresponds to at least 80 per cent of the denominator for calculating the minimum capital requirement under the less sophisticated Basel I rules. This transitional rule was originally intended to apply up until 31 December 2011, but was extended until further notice in December 2011. This transitional rule is commonly referred to as the "Basel I floor".

Any unintended effects of the current capital requirements calculated under Pillar I can also be offset by Pillar II (and to some extent also by Pillar III) in the regulations. As stated previously, Finanstilsynet can set capital requirements at the institutional level, and under Pillar II already requires that IRB banks set aside capital in a countercyclical buffer during good economic times so that there is a buffer between the minimum required capital and actual capital.

³ Decision no. 81 by the Odelsting (2005–2006), 13 June 2006, approved by the Lagting on 16 June 2006.

The distribution of roles among institutions in the work on macroprudential supervision in Norway and systemic aspects of the current regulations are discussed in Box 19.1 in Official Norwegian Report NOU 2011: 1 "Better positioned against financial crises".

2.3 Credit regulations and a policy of low interest rates

Attempts to control lending for a period of time are not new. Throughout much of the postwar period, Norwegian credit policy has aimed to control both the volume and composition of credit. The Credit Act, Act of 25 June 1965 authorising the regulation of monetary and credit conditions, granted the authorities the right to adopt a number of different policy instruments to regulate monetary and credit policy. The King could issue rules for liquidity reserves, reserves against foreign liabilities, supplementary reserves on loan growth, obligatory investment in bonds, direct regulation of lending by certain credit institutions, regulation of guarantees for loans, maximum interest rates for loans and control of bond issues. Furthermore, the Ministry of Finance could issue rules on the disclosure obligation for certain credit institutions and could require information on interest rates.

The Credit Act laid down important foundations for monetary and credit policy in Norway from 1965, when the first comprehensive credit budget was published as part of the national and fiscal budget for the following year. The credit budgets specified quantitative limits for the total supply of credit to the private sector and the local government sector, and the allocation of this total supply on different categories of credit institutions.. The Banking Crisis Commission (see NOU 1992: 30) summarised the goals of Norway's monetary and credit policy during the regulatory period into three objectives:

1. To maintain a stable interest rate
2. To ensure a balanced credit supply. i.e. to prevent excessive expansion of lending by credit institutions
3. To channel credit to the desired sectors of the real economy.

The details of the regulations changed over time. A key task for the authorities during much of the regulatory period was to rein in increases in lending by banks and finance companies. This must be viewed in the context of the Government's low interest rate policy. The credit market was thus subject to detailed regulation with restrictions on both interest rates and lending volumes.

The banks' lending was controlled by a number of means, including managing the total liquidity in the banking system, primarily through requirements for primary and secondary liquidity reserves proportional to the banks' total assets (section 4-6). If it should become necessary, the Act also authorised obliging banks to hold supplementary reserves of liquid funds (section 8). These supplementary reserves were organised as a specified percentage of the increase in lending, once it passed a defined threshold. A third main provision in the Act was section 9 on the banks' obligatory investment in bonds, in which banks could be required to place a certain percentage of the increase in their total assets in bearer bonds. The purpose of this was to bind liquidity, and also ensure the financing of the state banks.

The regulatory system in general came under increasing pressure in the 1970s. Higher inflation, coupled with an increase in marginal tax on wage earners' net income, led to a sharp fall in borrowing costs after taxes, increasing the demand for credit. Parallel to these developments, an unregulated credit market emerged partly as a result of the low interest rate policy. This market grew partly alongside, but also in association with, the ordinary credit institutions. Furthermore, there was an increase in lending across national borders and the emergence of a more efficient international money market. Last but not least, developments in computer technology meant that the costs of payment transactions were cut and that transactions could be made much more quickly.

The deregulation of the credit market happened gradually over several years. By 1988, almost all of the remaining regulations had been removed. For a more detailed description of the use and discontinuation of the credit regulations in Norway, see, for example, Official Norwegian Report NOU 1989:1 "Money and credit in changing times" and Report no. 39 (1993–94) to the Storting "The banking crisis and the development of the Norwegian banking industry".

2.4 New international recommendations and rules in Basel III and CRD IV

2.4.1 New capital requirements etc.

On 16 December 2010, the Basel Committee on Banking Supervision adopted new recommendations for capital adequacy and liquidity requirements for banks, the so-called Basel III standards. The Basel III standards entail more stringent requirements for the level of and the quality of bank's core capital, where Common Equity Tier 1 capital (CET1) shall constitute 4.5 per cent (compared with 2 per cent at present) and Tier 1 capital shall constitute 6 per cent (currently 4 per cent) of risk-weighted assets (RWA). Pursuant to these standards, the total minimum capital requirement remains unchanged at 8 per cent of the calculation basis (risk-weighted assets). The Basel Committee also proposes introduction of a new, unweighted leverage ratio, a mandatory capital conservation buffer, a countercyclical capital buffer, and quantitative liquidity requirements. The requirement for a capital conservation buffer entails that banks shall hold Common Equity Tier 1 capital equivalent to 2.5 per cent of risk-weighted assets, in addition to the minimum capital requirement. In order to protect the banking system against the consequences of strong credit growth, the banks shall also maintain a countercyclical buffer during periods of strong credit growth. The size of this countercyclical buffer may vary over time.

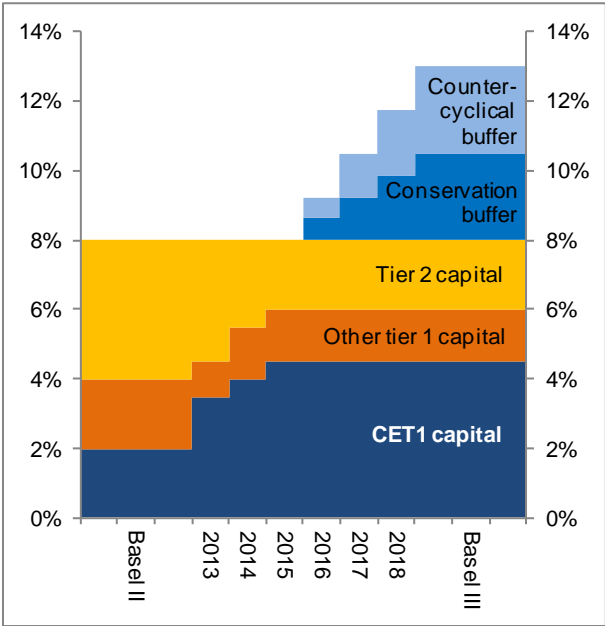
It has also been proposed to tighten the definition of Common Equity Tier 1 capital, Tier 1 capital and additional Tier 1 capital.

The Basel III standards also contain two quantitative liquidity requirements: a liquidity coverage ratio Tier 1 (LCR) and a net stable funding ratio (NSFR). The first concerns the required level of liquid assets a bank must have in order to be able to withstand periods of downturn in the markets for funding. The second concerns the composition of sources of funding or the stability of the funding.

In accordance with Basel III, the new requirements shall be phased in gradually and will not come into full effect until 1 January 2019. Capital that no longer qualifies as Tier 1 capital or additional Tier 1 capital should be phased out by the end of 2023.

Figure 2.1 illustrates the proposed transition from the Basel II standards for capital requirements to the Basel III standards.

Figure 2.1 Schedule for phasing in the new capital requirements.



According to the European Commission's proposals, the total minimum capital requirement shall remain at 8 per cent of risk-weighted assets, but must include a higher proportion of CET1 or equity (the remainder may consist of other Tier 1 capital and Tier 2 capital). On top of this come a mandatory capital conservation buffer of at least 2.5 per cent and a time-varying countercyclical buffer of between 0 and 2.5 per cent.

Source: Basel Committee, Finansmarknadsmeldinga 2010 (Norwegian only).

On 20 July 2011 the European Commission presented its proposal for implementing the Basel III standards for credit institutions and investment firms in the EU zone. This is the third revision of the European Union's Capital Requirements Directive and is generally called CRD IV. The proposal means that the current EU regulations, including the capital requirements for credit institutions and investment firms, will be replaced by:

- (1) a regulation containing requirements regarding the institutions' financial soundness and liquidity management, etc.⁴ and
- (2) a new directive with requirements concerning national regulation of the right to operate as a credit institution, capital requirements for credit institutions and investment firms, etc.⁵

These two laws are now being considered by the European Parliament and the Council.⁶ The proposed directive is scheduled to be implemented into national law by 31 December 2012,

⁴ COM (2011) 452: Proposal for a Regulation of the European Parliament and of the Council on prudential requirements for credit institutions and investment companies, submitted on 20 July 2011.

⁵ COM (2011) 453: Proposal for a Directive of the European Parliament and of the Council on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and amending Directive 2002/87/EC of the European Parliament and of the Council on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate, submitted on 20 July 2011.

and the national rules shall come into force on 1 January 2013. The regulation is also proposed to be applied from 1 January 2013.

CRD IV is considered EEA relevant, and the new EEA rules corresponding to CRD IV must be expected to require that Norway introduces capital requirements for banks, among others, in line with the new Basel standards and the new CRD IV package.

At the meeting on 26 October 2011, the members of European Council agreed that banks ought to have at least a 9 per cent CET1 ratio.⁷ On 8 December 2011, the European Banking Authority (EBA) issued a recommendation to the EU member states, requiring that the 71 largest banks in the EEA have a CET1 ratio of 9 per cent by 1 July 2012:

*"The formal Recommendation adopted by the EBA's Board of Supervisors states that national supervisory authorities should require the banks included in the sample to strengthen their capital positions by building up an exceptional and temporary capital buffer against sovereign debt exposures to reflect market prices as at the end of September. In addition, banks will be required to establish an exceptional and temporary buffer such that the Core Tier 1 capital ratio reaches a level of 9% by the end of June 2012."*⁸

According to the recommendation, the member states can to some extent themselves determine the calculation basis for this requirement.⁹

The relationship between the EBA recommendation for a Tier 1 capital ratio of at least 9 per cent for major banks and the new requirements in the proposed CRD IV package has not been clarified. In its annex to the press release about the CRD IV proposal of 20 July 2011, the European Commission envisages that both any special requirements for systemically important banks and additional requirements as a result of the supervisory authorities' Pillar II review will be imposed on top of the regulatory minimum requirements and required buffer rates (see figure 2.2).

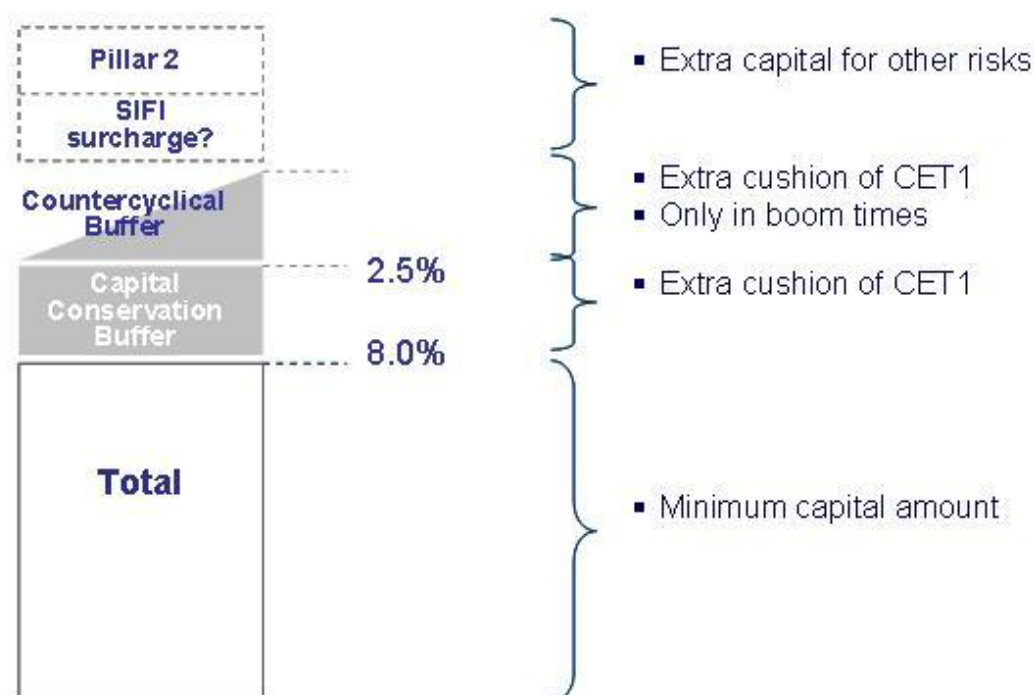
⁶ In their programme for the Presidency, the Danish authorities stated that they will work to achieve consensus in the Council on CRD IV during the first half of 2012.

⁷ Euro Summit Statement, Brussels, 26 October 2011 Annex 2 paragraph 4: "Capital target: There is broad agreement on requiring a significantly higher capital ratio of 9 % of the highest quality capital and after accounting for market valuation of sovereign debt exposures, both as of 30 September 2011, to create a temporary buffer, which is justified by the exceptional circumstances."

⁸ EBA press release, 8 December 2011.

⁹ EBA Recommendation on the creation and supervisory oversight of temporary capital buffers to restore market confidence (EBA/REC/2011/1) (London, 8 December 2011) Annex II.

Figure 2.2 Overview of the capital structure under Basel III and CRD IV



SIFI stands for systemically important financial institutions "SIFI surcharge" is a possible add-on capital requirement for these kinds of institutions.

Source: European Commission (CRD IV – Frequently Asked Questions, MEMO/11/527, 20 July 2011).

2.4.2 The proposed buffer requirements in Basel III and CRD IV

As already mentioned, in accordance with the Basel Committee's recommendation and the European Commission's proposal for new legislation (CRD IV), new buffer requirements are to be introduced requiring financial institutions to hold capital beyond the minimum level under Pillar I. The capital buffer shall consist of two components – a fixed buffer the level of which remains constant over time (*capital conservation buffer*) and a variable buffer where the level is adjusted up or down depending on the economic cycle (*countercyclical buffer*).

The Basel Committee has stated the following about countercyclical buffers:

"A countercyclical buffer within a range of 0 %–2.5 % of common equity or other fully loss absorbing capital will be implemented according to national circumstances. The purpose of the countercyclical buffer is to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth. For any given country, this buffer will only be in effect when there is excess credit growth that is resulting in a system wide build up of risk. The countercyclical buffer, when in effect, would be introduced as an extension of the conservation buffer range."¹⁰

¹⁰ Basel Committee. Press release, 12 September 2010: "Group of Governors and Heads of Supervision announces higher global minimum capital standards".

*"The primary aim of the countercyclical capital buffer regime is to use a buffer of capital to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth that have often been associated with the build up of system-wide risk. Protecting the banking sector in this context is not simply ensuring that individual banks remain solvent through a period of stress, as the minimum capital requirement and capital conservation buffer are together designed to fulfil this objective. Rather, the aim is to ensure that the banking sector in aggregate has the capital on hand to help maintain the flow of credit in the economy without its solvency being questioned, when the broader financial system experiences stress after a period of excess credit growth. This should help to reduce the risk of the supply of credit being constrained by regulatory capital requirements that could undermine the performance of the real economy and result in additional credit losses in the banking system."*¹¹

In line with the Basel III recommendations, the European Commission's proposed new legislation (CRD IV) introduces requirements for the establishment of a capital conservation buffer equal to 2.5 per cent of risk-weighted assets (on top of the minimum capital requirement). The capital conservation buffer shall consist of CET1. It also calls for national establishment of a countercyclical buffer whereby banks are required to hold additional capital when there is growing risk in the financial system, typically in periods of strong credit growth that leads to the build-up of imbalances and increases the risk of debt and housing bubbles. In difficult times, the countercyclical buffer requirement can be set to zero. The required buffer level will generally be between 0 and 2.5 per cent of risk-weighted assets. It can be changed in instalments of 0.25 percentage points. In special cases, the required buffer level may also be set to higher than 2.5 per cent. The countercyclical buffer requirement must also be met with CET1 on top of the previously mentioned minimum requirements and the capital conservation buffer.

The European Commission defines the purpose of the countercyclical capital buffer thus:

*"The purpose of the countercyclical capital buffer is to achieve the broader macro-prudential goal of protecting the banking sector and the real economy from the system-wide risks stemming from the boom-bust evolution in aggregate credit growth and more generally from any other structural variables and from the exposure of the banking sector to any other risk factors related to risks to financial stability."*¹²

If a bank does not fulfil the capital conservation buffer requirement or the countercyclical buffer requirement, restrictions shall be imposed on the bank's right to pay dividends to shareholders and bonuses to employees. Banks must also prepare a capital conservation plan.

The required countercyclical buffer rate shall be set by an authority designated for this purpose in the individual member state. The same authority shall also calculate a quarterly

¹¹ Basel Committee, 16 December 2010: "Guidance for national authorities operating the countercyclical capital buffer".

¹² European Commission, 20 July 2011: "CRD IV – Frequently Asked Questions, MEMO/11/527)."

"buffer guide", which shall be the authorities' own reference when setting the required countercyclical buffer rate.

The calculation of the buffer guide and setting of the required buffer rate shall both generally be based on the ratio of credit to GDP and its deviation from the long-term trend, but other relevant indicators may also be used. The background data used to calculate the buffer guide and the buffer rate shall be disclosed.

Decisions to increase the required buffer rate shall normally be announced at least 12 months before the increase takes effect. A reduction in the requirement can be made with immediate effect. In the event of a lowering of the required buffer rate, the authority shall also indicate when it is likely that the buffer will be raised again.

In line with the Basel III standards, the European Commission proposes in the draft CRD IV that a required countercyclical buffer rate laid down in a country shall apply to all institutions operating in that country (including branches and banks with other cross-border activity), and not only to institutions that are domiciled in that country.

However, if a country's government establishes a countercyclical buffer level that is higher than 2.5 per cent, the home state authority for an institution with operations in that country can decide whether the institution shall fulfil the higher requirement or whether it can maintain the required level for domiciled institutions of 2.5 per cent.

The proposal for CRD IV also requires that information about the buffer rate, buffer guide, and the basis for the preparation of the buffer guide and the buffer rate are submitted to the European Systemic Risk Board ("ESRB"). According to the proposal, the ESRB shall also have the opportunity to make recommendations concerning the quarterly setting of the countercyclical buffer rate in the individual EU member states.

The relevant passage concerning countercyclical capital buffers in the draft CRD IV *Article 126 Setting countercyclical buffer rates* is reproduced in appendix 1.

As mentioned above, the proposed new CRD IV package is considered EEA relevant. The working group finds that a discretionary countercyclical capital buffer ought to be introduced in Norway at the latest at the same time as it is introduced in other European countries. Prior to this, we must ensure that we have an appropriate institutional framework in place and should determine the details of this kind of discretionary tool.

2.4.3 The supervisory authorities' sanctions if the buffer requirements are not met

If the requirements for a capital conservation buffer and countercyclical buffer are not met, automatic restrictions are imposed on, among others, payments of dividends, share buybacks and payments of variable remuneration.¹³ The larger the capital buffer shortfall, the greater the share of profits to be withheld. There are four levels of withholding of funds (100 per cent, 80 per cent, 60 per cent and 40 per cent of the profits).

¹³ New Article 131 of the Commission's proposal for CRD IV (Directive). Replaces Article 123 of CRD I.

The proposal also requires institutions to have a capital conservation plan.¹⁴ If an institution fails to fulfil the buffer requirements, the institution shall within five days submit a capital conservation plan for approval by the national prudential authorities. The plan shall provide an estimate of the institution's profit and balance sheet performance, measures to strengthen its capital adequacy, and shall indicate when the buffer requirement is expected to be fully satisfied. If the supervisory authorities do not consider the plan to be adequate, it may order the institution to raise its capital ratio within a given time. It may also require the withholding of funds *beyond* the levels that ensue from the rules on withholding mentioned above (see Article 99). Article 99 basically states that the government shall intervene at an early stage if an institution breaches, or is likely soon to breach, the requirements of the Directive. The article refers to Article 64, which deals with the powers to impose remedies and requirements that the supervisory authorities shall have as a minimum. According to the Financial - Institutions Act, section 2-9b fourth paragraph and section 2-9d, which implements Article 64 in Norwegian law, the supervisory authority may impose the following requirements on institutions:

- to hold funds higher than the statutory minimum,
- to limit the activity and reduce the level of activity,
- to reduce the risks inherent in the activities, products and systems,
- to limit variable remuneration,
- to report additional information and increase the frequency of reporting,
- to restrict maturity mismatches between assets and liabilities.

2.4.4 Pillar II in CRD IV

CRD IV upholds the principles laid down in CRD I that, in addition to meeting defined minimum capital adequacy requirements, institutions shall also have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.¹⁵ Among other things, Pillar II grants national supervisory authorities wide-ranging powers to set additional requirements beyond the minimum capital requirements for national banks. Branches of foreign-owned banks shall observe the Pillar II requirements set by its home state authorities.

CRD IV lays down requirements concerning the supervisory authorities' review and evaluation of the institution's processes for assessing risk and capital adequacy.¹⁶ The supervisory authority shall monitor and evaluate the institution's assessment of its capital requirements and associated strategy and intervene if they do not consider this process to be satisfactory. The draft CRD IV proposes that in addition to assessing the risks the bank faces, the bank and the supervisory authorities shall also assess the risk that the institution constitutes to the entire financial system.

¹⁴ Article 132.

¹⁵ Article 72.

¹⁶ Article 92. Replaces Article 124 of CRD I.

The proposal also allows for the introduction of special supervisory requirements in a Pillar II context, including capital requirements, for a group of institutions that are exposed to or constitute similar risks.¹⁷ For example, this would enable national supervisory authorities to set specific requirements for groups of banks that have a low risk weight for home loans.

The European Commission has explained this as follows:

"What is "Pillar 2"? What do you propose to change?"

*Pillar 2 refers to the possibility for national supervisors to impose a wide range of measures – including additional capital requirements – on individual institutions or groups of institutions in order to address higher-than-normal risk. They do so on the basis of a supervisory review and evaluation process, during which they assess how institutions are complying with EU banking law, the risks they face and the risks they pose to the financial system. Following this review, supervisors decide whether e.g. the institution's risk management arrangements and level of own funds ensure a sound management and coverage of the risks they face and pose. If the supervisor finds that the institution faces higher risk, it can then require the institution to hold more capital. In taking this decision, supervisors should notably take into account the potential impact of their decisions on the stability of the financial system in all other Member States concerned. The proposal clarifies that supervisors can extend their conclusions to types of institutions that, belonging to the same region or sector, face and/or pose similar risks."*¹⁸

2.4.5 Framework for systemically important financial institutions

In July 2011, the Basel Committee issued a consultative document on the assessment methodology to determine the global systemic importance of individual financial institutions and proposed additional loss absorbency requirements for globally systemically important financial institutions.

To date, the Basel Committee has categorised 29 banks as globally systemically important. These institutions should, according to the Committee, be subject to internationally harmonised additional requirements for loss absorbency on top of the ordinary requirements for ability to absorb losses (i.e. capital adequacy). The Committee believes that globally systemically important banks ought to be grouped according to how systemically important they are and be subject to progressive additional requirements for a CET1 ratio of between 1 and 2.5 percentage points. According to the Basel Committee, these kinds of additional requirements should be introduced in parallel with the new buffer requirements entailed by the Basel III standards, i.e. from 2016 and with full effect from 1 January 2019.

The Financial Stability Board (FSB) presented a final set of recommendations at the G20 summit in November 2011. In addition to more stringent capital requirements for globally systemically important banks than are required under Basel III, the recommendations also included an international standard for resolution regimes to prevent taxpayers from having to foot the bill for financial institutions in crisis and recommendations on cooperation in

¹⁷ New article 95

¹⁸ European Commission, 20 July 2011: "CRD IV – Frequently Asked Questions, MEMO/11/527".

connection with cross-border activity in systemically important financial institutions. The G-20 countries endorsed the implementation of the FSB recommendations ("*...we endorse the FSB comprehensive policy framework, comprising a new international standard for resolution regimes, more intensive and effective supervision, and requirements for cross-border cooperation and recovery and resolution planning as well as, from 2016, additional loss absorbency for those banks determined as global systemically important financial institutions (G-SIFIs)*").¹⁹

On commission from the FSB, the Basel Committee shall, contribute to the development of further criteria and propose additional requirements for banks that are systemically important on the regional or national level.

2.5 Developments in selected other countries

2.5.1 Sweden

Efforts to promote financial stability in Sweden are divided between the Ministry of Finance (FD), the central bank the Riksbank (RB) and the financial supervisory authority Finansinspektionen (FI). Although there is not currently a specific mandate for macroprudential supervision, in practice all three institutions are involved in it.

In February 2011, the government established a committee to consider "revision of the regulations for handling financial crises". The committee shall consider the distribution of tasks and policy instruments between Finansinspektionen and the Riksbank in light of the Basel Committee's proposals for a countercyclical capital buffer and the establishment of a body for macroprudential supervision at the European level (ESRB). The committee's work is scheduled to be completed in August 2012.

Several reports and statements have been published in Sweden regarding the organisation of macroprudential supervision.

One of the conclusions of the Swedish Fiscal Policy Council's report on 2011 is that:

*"A stronger framework for financial stability is needed. The division of responsibility between different public bodies is currently blurred. Either the Riksbank should be given clearer responsibility or a fiscal stability council should be established."*²⁰

Each November, Finansinspektionen publishes a report on risks in the financial system. The report also contains a review of the economic situation and the financial system from an international perspective. The expert panel that assessed the economy and the financial system from an international perspective in November 2011 said the following on macroprudential supervision, in its discussion of the desired and expected regulatory changes and actions by authorities:

¹⁹ Final Statement of G-20 summit in Cannes, 4 November 2011.

²⁰ Swedish fiscal policy, Report of the Swedish Fiscal Policy Council 2011, Stockholm, 10 May 2011.

"The majority of the panel agrees that macroprudential tools such as countercyclical buffers should be entrusted with an independent authority rather than placed under political control.²¹ The major reason for this is because the setting of macroprudential policies must be coordinated with monetary policy. But it is also recognised that a distinction between micro- and macroprudential regulations may lead to operational problems."

On commission from the Riksdag (parliament), Professors Charles Goodhart and Jean-Charles Rochet submitted a report (Report from the Riksdag 2010/11: RFR5) "Evaluation of the Riksbank's monetary policy and work with financial stability 2005–2010". Section 3.2 of the report discusses macroprudential regulation of the financial sector. Four different models for allocation of responsibilities among agencies are discussed. The report recommends a model where the Riksbank has prime responsibility for macroprudential supervision. According to the proposal in the report, the Riksbank shall set up a special financial stability committee headed by the governor of the Riksbank and with one representative from each of the four institutions: the Riksbank, Finansinspektionen, the Swedish National Debt Office and the Ministry of Finance, and two external members. The final decisions on the use of measures would be made by the executive board of the Riksbank. Under this model, the decision-making process is completely independent from the conduct of monetary policy, and any coordination will be determined by the executive board of the Riksbank. The responsibilities ascribed to Finansinspektionen are limited to the supervision of individual institutions.

The report proposes amendment of the Sveriges Riksbank Act to provide a more precise mandate for the work on financial stability, including the policy instruments and measures that can be used and what role other institutions should play in decision-making process.

In identical press releases on 18 January 2012, the Riksbank and Finansinspektionen announced the establishment of an independent council for cooperation on macro-prudential policy to improve efforts to prevent systemic risk. The Council for Cooperation on Macro-Prudential Policy should consist of the Governor of the Riksbank (chair), the Director General of Finansinspektionen, a Vice Governor of the Riksbank, the Head of the Riksbank's Financial Stability Department, Finansinspektionen's Chief Economist and Finansinspektionen's Chief Legal Counsel. The Council shall meet twice a year, with the first meeting scheduled for 24 February 2012. Finansinspektionen and the Riksbank will continue to have autonomy to make independent decisions in their respective areas of responsibility. The memorandum will cease to apply if responsibilities and powers concerning macroprudential policy are regulated by law in some other way.

2.5.2 Denmark

In Denmark too, the work to ensure financial stability is organised as a partnership between several public institutions. The main agencies involved are the central bank Danmarks

²¹Finansinspektionen; Risks in the financial system 2011, Stockholm, 15 November 2011. The expert panel consisted of Markus K. Brunnermeier (Princeton University), Douglas W. Diamond (University of Chicago), Albert S. Kyle (University of Maryland), Marco Pagano (University of Naples Federico II) and Raghuram G. Rajan (University of Chicago).

Nationalbank, the Danish Financial Supervisory Authority, the Ministry of Economic and Business Affairs (ØEM), the Ministry of Finance (FM) and Finansiell Stabilitet AS (FS). These institutions each work according to their own mandate, but they also have a duty to cooperate as formalised in the "Coordination Committee on Financial Stability". Several of the institutions' work encompasses macroprudential regulation and supervision, although these tasks are not currently defined in the individual agencies' mandates.

In autumn 2010, a committee was established in Denmark to consider the future organisational structure of financial supervision and regulation in Denmark. In its work, the committee shall take into account the interaction between supervision of the financial system as a whole (macroprudential supervision) and supervision of individual financial institutions (microprudential supervision). The committee consists of members from Denmark's Nationalbank, the Danish Financial Supervisory Authority, the Ministry of Economic and Business Affairs, the Ministry of Finance and selected independent members. The Committee's report was scheduled to have been completed in October 2011, but the Committee has requested an extension until February 2012.

2.5.3 United Kingdom

To date, the work on financial stability has been based on a tripartite cooperation between the Treasury, the Bank of England and the Financial Services Authority (FSA). The Standing Committee, consisting of the Chancellor of the Exchequer, the Governor of the Bank of England and the Chief Executive of the FSA, coordinates the three institutions' work in this area. Relevant publications in this context include the Bank of England's "Financial Stability Report", which is published twice a year and FSA's annual "Financial Risk Outlook". The institutions also participate in international forums on financial stability, including the Financial Stability Board (FSB).

It has now been decided to create a separate independent agency in the Bank of England, called the Financial Policy Committee (FPC), which will be responsible for identifying, monitoring, and taking action to remove or reduce, systemic risks in the financial system. Until a formal framework for the new structure is finally in place, an interim FPC has been formed to perform the same functions. The FPC shall operate independently of the Bank of England's conduct of monetary policy.

The current FSA is going to be replaced by two new regulatory bodies: the Prudential Regulatory Authority (PRA) and the Financial Conduct Authority (FCA). The former will be organised as a subsidiary of the Bank of England and will be responsible for macroprudential policy and supervision of systemically important banks, insurance companies and certain investment firms. The FCA will be responsible for the regulation of market conduct and consumer protection, as well as having the supervisory responsibility for those financial institutions not monitored by the PRA. The activities of the two bodies shall be coordinated so as to avoid conflicts of interest in the regulation of the financial sector.

FPC has the authority to make recommendations to and give directions to the PRA and the FCA on actions that must be taken to reduce systemic risk. If the recommendations are not

followed, an account must be provided by the agencies that received the recommendation justifying the reason for not taking the recommended actions.

2.5.4 USA

The supervisory structure in the United States has been reformed in the wake of the adoption of the "Dodd–Frank Wall Street Reform and Consumer Protection Act". The Federal Reserve now has the formal responsibility for identifying, measuring, monitoring and reducing risks in the U.S. financial system. The Vice Chairman of the Board of the Federal Reserve is responsible for supervision and regulation of the major banks and reports to Congress twice a year. The Comptroller General (the head of the General Accounting Office, i.e. the auditor general) has been commissioned to compile a report evaluating a number of issues linked to the governance structure of the Federal Reserve. Formally, the new supervisory body for consumer protection, the Consumer Financial Protection Bureau, is subordinate to the Federal Reserve, but it has a very independent position.

A new Financial Stability Oversight Council has also been established, to monitor systemic risk in the U.S. financial system. The Council can propose stricter regulation (both capital and liquidity) of systemically important financial institutions, approve proposals from the Federal Reserve concerning splitting up large banks, and require non-bank financial institutions to be placed under the supervision of the Federal Reserve if they are considered important to the financial system. The Council is chaired by the Secretary of the Treasury and comprises members from the Federal Reserve Board, the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Federal Housing Finance Agency and the newly established Consumer Financial Protection Bureau, plus an independent member appointed by the President.

2.5.5 Australia

The four main public bodies responsible for the regulation and supervision of the financial sector in Australia are the Australian Treasury, the Reserve Bank of Australia (RBA) the Australian Prudential Regulation Authority (APRA) and Australian Securities and Investments Commission (ASIC).

The Treasury is responsible for advising the Government on financial stability and for legislation and regulations for the financial sector. APRA is responsible for the prudential supervision of the banking and insurance sector and pension funds. The ASIC is responsible for market integrity and consumer protection.

In addition to facilitating financial stability through its monetary policy mandate, the RBA monitors and assesses the financial stability outlook and publishes a half-yearly Financial Stability Review. The RBA is also responsible for ensuring that the payment system is secure and robust.

The Council of Financial Regulators (CFR) is the coordinating body for the four main financial regulatory agencies. As specified in its charter, the Council shall contribute to the

efficiency and effectiveness of financial regulation by providing a high-level forum for cooperation and collaboration among its members. It operates as an informal body in which members are able to share information and views, discuss regulatory reforms or issues where responsibilities overlap and, if the need arises, coordinate responses to potential threats to financial stability. The Council also has a role in advising the Government on the adequacy of Australia's financial system architecture in light of ongoing developments. Membership of the Council comprises two representatives – the chief executive and a senior representative – from each of the four member agencies. The Chairman is the Governor of the RBA.

The organisation of the cooperation and coordination is supervised by the Council of Financial Regulators itself. In addition to meetings of the CFR, at the highest level, there is overlapping Board representation: one APRA member has representation on the Payment System Board of the RBA; and the Secretary to the Treasury has a seat on the RBA Board. In addition, various bilateral memoranda of understanding have been signed: APRA–ASIC, APRA–Treasury, RBA–APRA, and RBA–ASIC. In 2008, a memorandum of understanding was also drawn up for crisis management (Council of Financial Regulators Understanding of Financial Distress Management). The APRA–RBA memorandum of understanding also covers international participation. Australia is a member of both the Basel Committee and the Financial Stability Board.

In its Financial Stability Review from September 2011, the RBA discussed the organisation of macroprudential supervision. The bank points to the fact that macroprudential policy is a component of the work on financial stability, and that separate institutional arrangements are not necessary:

"If the framework for financial stability is effective and there is strong inter-agency co-operation and co-ordination, separate governance arrangements for macroprudential policy are not necessary".

The RBA also stated:

"Some of the advocacy of separate macroprudential policy is based on a lack of recognition as to how prudential supervisors do their work. Many are not solely microprudential in outlook, focusing only on individual institutions' adherence to regulation: they can and do take account of system-wide, or macroprudential considerations."

The RBA also highlights the grey area between microprudential and macroprudential supervision:

"ideally, both microprudential and macroprudential policies and responsibilities should be integrated. More generally, most macroprudential tools being discussed are essentially normal prudential tools used for macroprudential purposes, which also means a clear distinction between macro- and microprudential policy is impractical."

The RBA also notes that new bodies have been established to monitor financial stability and have been made responsible for macroprudential supervision "...typically...in countries where weakness in existing co-ordination arrangements became evident during the global financial crisis".

The RBA points out that this was not the case in Australia and refers to the established cooperation based on, among other things, the memoranda of understanding and the Council of Financial Regulators, as mentioned above.

2.6 International cooperation

2.6.1 Organisation of macroprudential supervision in the European Union

1 January 2011 saw the establishment of a new European supervisory structure, the objective of which is to strengthen supervision of the entire financial sector in Europe and promote financial stability. The aim is to ensure that the rules that apply to the financial sector are implemented and enforced consistently in all member states, that systemic risk is identified at an early stage, that the various European authorities are able to collaborate on measures promptly in crisis situations, and that any disagreement among national supervisory authorities can be resolved in a overarching body.

The new system is based on the distinct separation of microprudential and macroprudential supervision (see figure 2.3). One part of the system is composed of three new supervisory bodies on the microprudential level, responsible for the supervision of individual institutions. The new bodies were created by a restructuring of the former Level 3 committees for financial supervision (CEBS, CEIOPS and CESR), which were only advisory bodies. One body has been established for banking (the European Banking Authority, EBA), one for insurance and pensions (European Insurance and Occupational Pensions Authority, EIOPA) and one for the securities market (European Securities and Markets Authority, ESMA). These three new authorities are going to continue the operations of the three Level 3 Committees, but also have extended powers.

The other part of the new system consists of the new European Systemic Risk Board (ESRB) which will be responsible for macroprudential supervision, i.e. monitoring systemic risk in the entire European financial market, with a view to preventing or mitigating systemic risks that arise from developments within the financial system or from macroeconomic developments. The goal is to avoid financial crises and thereby ensure a sustainable contribution of the financial sector to economic growth.

The ESRB shall monitor developments, identify and issue warnings concerning possible systemic risks, and propose measures that European bodies or national governments ought to implement to mitigate the risks. Although ESRB recommendations are not legally binding, the addressees are subject to an "act or explain" mechanism: the addressees have to report to the ESRB on the actions taken to ensure compliance with the recommendation or to explain why they have chosen not to.

The President of the European Central Bank (ECB) is the chairman of the General Board of the ESRB. The other Board members are the heads of the central banks in the EU member states, the chairs of the three microprudential supervision authorities and a representative of the European Commission. One representative of the competent national supervisory -

authorities of each Member State can attend meetings of the Board, without voting rights. The ECB provides secretariat resources for the ESRB.

It is envisaged that the EFTA / EEA countries, including Norway, will have a permanent observer position in the new bodies that will conduct supervision on the micro level, but they will not be able to take part in discussions about individual institutions, unless the countries have a direct interest in the matter.²²

The Regulation that establishes the ESRB paves the way for the participation of representatives from the EFTA / EEA countries in the work of the ESRB on an ad hoc basis and only in matters of particular relevance to them:

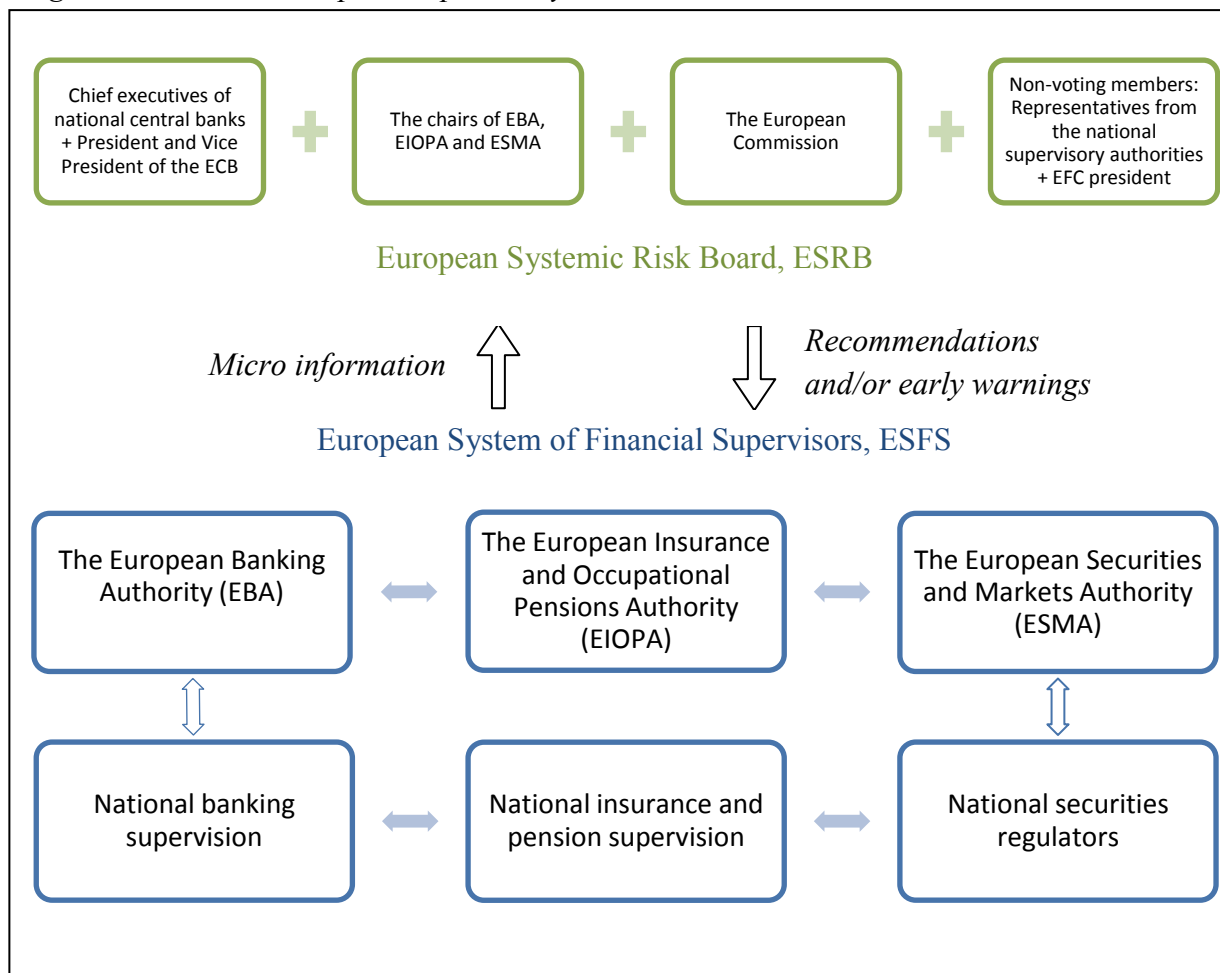
*"Participation in the work of the ESRB may be open to high-level representatives of the relevant authorities from third countries, in particular from EEA countries, strictly limited to issues of particular relevance to those countries. Arrangements may be made by the ESRB specifying, in particular, the nature, scope and procedural aspects of the involvement of those third countries in the work of the ESRB. Such arrangements may provide for representation, on an ad-hoc basis, as an observer, on the General Board and should concern only items of relevance to those countries, excluding any case where the situation of individual financial institutions or Member States may be discussed."*²³

The practical aspects of the implementation of the relationship between the EFTA / EEA countries on the one hand and the three supervisory authorities and the ESRB on the other have not yet been clarified. This is currently being discussed by EFTA and the EU.

²² Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC (EBA Regulation) Article 75. There are similar provisions in the regulations that establish EIOPA and ESMA.

²³ Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board Article 9 section 5

Figur 2.1 The new European supervisory structure



"ECB" means the European Central Bank.

Source: Finansmarknadsmeldinga 2010

2.6.2 Nordic cooperation on CRD IV

The ongoing regulatory reform in international fora, including the Basel Committee and the European Commission, still allows for a certain degree of national autonomy and the opportunity to introduce stricter financial market regulation in some areas. In this context, it has been queried whether the Nordic countries should cooperate more closely on regulation of the financial sector, and especially on coordination of capital requirements.

The Financial Crisis Commission (reference?) proposes that the Norwegian authorities take steps to expand Nordic cooperation on financial market regulation, including cooperation on stricter capital adequacy and liquidity requirements for banks than the EU minima and special requirements for systemically important financial institutions.

In the design of capital adequacy and liquidity rules for Norwegian financial institutions, importance has been attached to assessing financial soundness against other considerations, such as competitiveness with other financial institutions, both in and outside of Norway. Norwegian financial institutions face extensive competition from financial institutions

domiciled in other Nordic countries. Hence, relatively uniform application of rules for capital adequacy in the Nordic countries would yield benefits.

At the meeting of the Council of Ministers for Finance on 1 November 2011 in Copenhagen, it was agreed to establish a Nordic working group to assess various aspects of Basel III / CRD IV, including the possibilities for cooperation between the Nordic countries in connection with the implementation of the new regulations.

It may be particularly relevant to consider various aspects of Basel III / CRD IV and the impending incorporation of this legislation into national law, including common implementation of the countercyclical capital buffer and possible cooperation between the Nordic countries on the implementation of the new national regulations.

3 Assessment of the need for new macroprudential tools

3.1 Introduction

In principle, there are many different instruments that can be used to make financial institutions more robust and to influence developments in the economy and thereby also the financial system. Theoretically, they can include anything from capital adequacy requirements, liquidity requirements, reserve requirements and monetary policy to fiscal policy, tax policy and structural policies, etc.

Financial imbalances have usually been building up for quite some time before they trigger a crisis. The most important measures to prevent financial instability will continue to be framework conditions that ensure that each individual financial institution is financially sound in its own right. The regulatory framework should be designed such that it contributes to the robustness of the system as a whole. For example, the regulatory framework should prevent regulatory arbitrage. Equal risk should be regulated equally regardless of the type of institution operating the business. The rules should also serve to temper rapid debt accumulation.

Macroprudential supervision requires a set of macroprudential tools. At times, it can be difficult to distinguish between microprudential and macroprudential tools, partly because the same tools may serve multiple objectives depending on how they are used. General rules that apply to all financial institutions regardless of the economic situation are not usually counted as macroprudential policy instruments.

A capital requirement that applies to all banks and that is not adjusted over time is usually regarded as a microprudential tool. Both a variable capital requirement for all banks that is adjusted over time and a fixed, higher-rate capital requirement for systemically important banks are usually regarded as macroprudential instruments.

3.2 Overview of possible macroprudential instruments

It is common to divide macroprudential instruments into two main categories: measures to counteract the build-up of systemic risk over time (the time dimension of risk) and measures to prevent systemic risk across and between institutions (the cross-sectional dimension). Typically, the former type of policy instrument will vary over time, whereas cross-sectional measures tend to remain unchanged. The IMF has drawn up a list of temporal and cross-sectional instruments. The tools are also organised according to whether the individual instrument constitutes an adjustment of the current regulation or whether it is a special instrument designed specifically to prevent systemic risk.

Table 3.1 Macroprudential instruments

Tools	Risk Dimensions	
	<i>Time-dimension</i>	<i>Cross-Sectoral Dimension</i>
Category 1. Instruments developed specifically to mitigate systemic risk		
	<ul style="list-style-type: none"> ▪ Countercyclical capital buffers ▪ Through-the-cycle valuation of margins or haircuts for repos ▪ Levy on non-core liabilities ▪ Countercyclical change in risk weights for exposure to certain sectors ▪ Time-varying systemic liquidity surcharges 	<ul style="list-style-type: none"> ▪ Systemic capital surcharges ▪ Systemic liquidity surcharges ▪ Levy on non-core liabilities ▪ Higher capital charges for trades not cleared through CCPs
Category 2. Recalibrated instruments		
	<ul style="list-style-type: none"> ▪ Time-varying LTV, Debt-To-Income (DTI) and Loan-To-Income (LTI) caps ▪ Time-varying limits in currency mismatch or exposure (e.g. real estate) ▪ Time-varying limits on loan-to-deposit ratio ▪ Time-varying caps and limits on credit or credit growth ▪ Dynamic provisioning ▪ Stressed VaR to build additional capital buffer against market risk during a boom ▪ Rescaling risk-weights by incorporating recessionary conditions in the probability of default assumptions (PDs) 	<ul style="list-style-type: none"> ▪ Powers to break up financial firms on systemic risk concerns ▪ Capital charge on derivative payables ▪ Deposit insurance risk premiums sensitive to systemic risk ▪ Restrictions on permissible activities (e.g. ban on proprietary trading for systemically important banks)

Source: IMF. Note dated 14 March 2011: "Macroprudential Policy: An Organizing Framework".

3.3 Choice of instruments

The choice of instruments to be implemented must be based on what one wants to achieve and what other effects the instrument may have. If borrowers are borrowing too much relative to their income, credit growth can be curbed through restrictions that make credit less available. This might include requirements for collateral or limits on the loan-to-value ratio.

Alternatively, credit can be made more expensive or less attractive by, for example, changing the tax treatment of debt and debt service, or the taxation of housing and other real estate.

Tightening of capital adequacy and liquidity requirements may be considered if the goal is to make the banking sector more robust in anticipation of periods of stress. More stringent capital requirements can be achieved by altering the numerators or denominators used in the calculation of the capital adequacy ratio. Risks associated with high exposure, high levels of short-term market funding and high leverage can also be addressed through capital and liquidity requirements. If the objective is to influence lending in general and limit the emergence of shadow banking systems, it may be most appropriate to consider regulating the

financial sector as a whole. If the goal is greater transparency, requirements concerning disclosure of banks' risk positions may be relevant. The size of and interconnectedness between individual institutions can also be influenced through regulation, either directly or by setting more stringent requirements for risk-bearing capacity when there is greater risk.

The most important international processes to develop macroprudential policy and instruments take place under the auspices of the G20, which has ascribed central roles to the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision.

In its Financial Stability report no. 2/10 (30 November 2010), Norges Bank described countercyclical capital requirements and stated that Norges Bank will on a regular basis:

"...assess whether the situation in the Norwegian economy warrants discretionary use of countercyclical measures in the financial sector. In connection with the semi-annual publication of the Financial Stability report, Norges Bank will submit recommendations for relevant measures to the Ministry of Finance and Finanstilsynet."

In its report (NOU 2011:1), the Financial Crisis Commission made a number of recommendations on macroprudential policy and instruments. The Commission has emphasised that countercyclical measures may be useful, and specifically proposed a countercyclical buffer, a cap on home loans relative to the value of the collateral, and compulsory repayment of instalments on home loans as potential measures. The Financial Crisis Commission has also proposed higher capital requirements for systemically important banks, preferably in cooperation with other countries.

In their consultative comments on NOU 2011:1, Finanstilsynet, the Confederation of Norwegian Business and Industry (NHO) and Norges Bank have referred to the fact that predefined criteria for the use of instruments in macroprudential regulation must be supplemented with the use of judgement. Folketrygdfondet (the National Insurance Fund) stresses the importance of predictability for the institutions affected by the regulation.

In the consultation, Finanstilsynet and Norges Bank were in favour of introducing a countercyclical capital buffer, but also believed that this should be supplemented with other macroprudential measures and tools. Finanstilsynet believes that countercyclical capital requirements can be introduced in Norway or the Nordic region from 1 January 2013 at the earliest, based on the European Commission's timetable for CRD IV (in accordance with the Basel III Accord, the new buffer requirements are scheduled to be introduced from 2016).

Norges Bank stated that a countercyclical capital buffer will have a relatively modest impact on overall credit growth and suggested additional measures, such as limits on loans relative to income and the value of the collateral (LTI and LTV), limits on the right to grant interest-only loans, additional capital requirements for systemically important banks, and floors for risk weights for use in calculating capital requirements.

Finance Norway (FNO) claimed that the introduction of a countercyclical capital buffer will entail significant challenges. Finance Norway held that a study should be undertaken of this kind of requirement and that the findings of this study should form the basis for the Norwegian views in the international discussion on countercyclical capital requirements. It

also stated that international harmonisation of regulations is essential, including in terms of when requirements are implemented.

Finanstilsynet supported the Commission's proposal to clarify the statutory authority for Finanstilsynet to implement measures in the macroprudential regulation of the financial sector.

In March 2010, Finanstilsynet issued guidelines for banks and other financial institutions on prudent mortgage lending practices for home loans. The guidelines are an elaboration of generally accepted good credit practice. The guidelines contain a general rule that home-secured loans shall not be granted for more than 90 per cent of the value of the property, without additional collateral. In December 2011, Finanstilsynet further tightened these guidelines, lowering the cap on the loan-to-value ratio to 85 per cent. The loan-to-value ratio cap shall apply to all home-secured loans. The guidelines also stipulate that loans exceeding 70 per cent of the value of the property should not have an interest-only period. The working group assumes that as a general rule these guidelines will remain unchanged and that Finanstilsynet will not change the guidelines based on the position in the economic cycle.

3.3.1 Countercyclical capital buffer

The working group points out that new European rules on a countercyclical capital buffer based on the Basel III recommendations are likely to be adopted in the European Union and incorporated into the EEA Agreement (see section 2.4 above). Accordingly, it will be necessary to devise Norwegian rules for a countercyclical capital buffer. How this should be done is discussed in more detail in chapter 4 below. Institutional issues are discussed in chapter 6.

3.3.2 Other instruments

In addition to the countercyclical capital buffer, a number of other measures could be introduced to counteract the accumulation of systemic risk. Possible time-varying instruments include a tax on banks' market funding and regulation of banks' lending practices. In principle, the Basel III requirements for stable funding and holding of liquid assets can also be used to reduce systemic risk. The central bank can affect the bank's holdings of liquid assets by the criteria it sets for access to loans from the central bank and the interest rate on the banks' deposits with the central bank.

The various countercyclical measures will serve different purposes. They can be categorised as follows:

- Increase robustness (more capital for a given portfolio when the risk in the portfolio is strongly pro-cyclical)
 - Countercyclical capital buffer
 - Increased risk weights
 - Countercyclical liquidity requirements

- Dampen credit growth / the credit cycle (reduce risk of credit growth and rising house prices becoming self-reinforcing):
 - Loan-to-value ratio (LTV) – restrictions on loan size relative to the value of the collateral
 - Debt ratio (LTI) – restrictions on loan size relative to income
- Curbing rapid growth in lending (to reduce the procyclicality of the banks' use of market funding):
 - Stability fee (levy on market funding)

Some of these instruments can be fixed over time (cross-sectional measures).

The regulatory measures will affect banks differently depending on whether the regulation directly restricts an activity (directly affecting volumes) or whether it works by increasing the costs of one or several activities. In addition, the impact will also depend on whether the regulatory measures apply to specific parts of the bank's assets or whether they are more general. Table 3.2 provides a simplified classification of the instruments.

Table 3.2 Types of macroprudential regulation instruments

Effects	Costs	Volume
Efficiency range		
General	Capital buffer Stability fee	
Specific	Risk weighting	LTV or LTI caps

Authority to issue regulations on prudent lending practices

In a letter to the Ministry of Finance dated 28 September 2011, Finanstilsynet proposed the establishment of a statutory authority to issue regulations on prudent lending practices. In a letter to the working group dated 30 September, the Ministry asked the working group to consider the proposed statutory authority as part of the working group's report. These letters are attached to the report in appendix 2. This issue is discussed in more detail in section 7.1 below.

Calculation of capital requirements for banks' home loans

Under Basel II, banks can estimate their capital requirements for residential loans using their own internal models. It has been found that there are major differences in the calculation of capital requirements associated with residential mortgage loans depending on whether a bank

uses the so-called standard approach or their own internal ratings based approach (IRB). There are also differences between banks that use their own IRB models, both within and outside Norway. In the interests of financial stability, there are good grounds not to reduce the capital requirements associated with residential mortgage loans. To reduce systemic risk, banks should be required to have more capital backing their residential loans. This question is discussed in more detail in section 7.2 below.

Banks' funding

Banks finance their operations through customer deposits and loans in the market (market funding). The deposit-to-loan ratio in Norwegian banking groups (banks and credit institutions taken together) has fallen from roughly 100 per cent in 1993 to 40 per cent in 2011. This sharp decline is attributable to the fact that lending has grown faster than deposits. In order to finance their lending, the banks have obtained funding in the market. At the end of the third quarter of 2011, market funding constituted almost 60 per cent of the funding of Norwegian-owned banks and credit institutions issuing covered bonds (OMF institutions). Approximately 45 per cent of this was short-term market funding²⁴. Market funding in foreign currency accounted for roughly 45 per cent, of which some 55 per cent was short-term.²⁵

The financial turmoil in 2007–2008 led to a liquidity crisis in the international banking system. This crisis demonstrated clearly that the banks had taken too much liquidity risk. Liquidity risk generally arises as a result of a mismatch in the maturities of assets and liabilities. A key feature of the business of banks is that the bank's market funding have much shorter maturities than their customer loans. This maturity mismatch makes banks vulnerable to fluctuations in the monetary and credit markets and can trigger a crisis if the banks cannot renew their loans in the market when they fall due. The shorter the bank's funding, the more sensitive it is to access to and the price of new funding. Because banks also borrow large sums of money from each other, liquidity problems in one bank can quickly lead to liquidity problems in another bank, and thus spread throughout the entire banking system. Good liquidity management and maintaining sufficiently large liquidity buffers are therefore essential to the ongoing operation of any bank. Norwegian banks were hit by the financial crisis both because they had problems renewing the short-term market funding, and because their financial assets turned out to be illiquid during the crisis.

In section 2.4, the Basel recommendations on new quantitative liquidity requirements are also mentioned. Depending on how the requirements for liquidity rules are formulated and implemented in national law, it might also be appropriate to link macroprudential measures to the framework for financial institutions' liquidity and liquidity management. The issue of quantitative rules on liquidity and other measures aimed at influencing the banks' market funding are discussed in more detail in section 7.4 below.

²⁴ Remaining maturity of less than one year.

²⁵ Norges Bank.

Capital requirements for systemically important banks

As mentioned in section 2.4, stricter capital requirements for systemically important financial institutions are being proposed internationally. The Financial Crisis Commission has advised the Norwegian authorities to undertake an independent assessment of whether it is appropriate to introduce stricter requirements for some Norwegian institutions because they are systemically important. Switzerland has already introduced new, tighter capital requirements for systemically important banks. The Swedish government has announced that it is going to introduce new capital adequacy requirements for the four largest banks in Sweden. In Denmark, a committee was appointed in January 2012 to consider the criteria and requirements for systemically important institutions.²⁶ See the more detailed discussion in section 7.3 below.

²⁶ Press release dated 12 January 2012 from the Danish Ministry of Business and Growth.

4 Countercyclical capital requirements

4.1 Effects of a countercyclical capital buffer regime

The purpose of a countercyclical capital buffer is to make banks' lending less pro-cyclical. Requiring banks to hold more capital during periods of rapid credit growth will render them more robust to a possible subsequent period of large loan losses. This in turn reduces the risk of reduced lending by banks reinforcing a possible downswing. In addition, higher capital requirements can serve to curb credit growth. The magnitude of this latter effect depends on several factors, including competition in the relevant loan market. The impact of capital requirements will also largely depend on the denominators used to calculate capital adequacy.

When using an internal ratings based approach, the denominator of the capital ratio (the risk-weighted assets) can be reduced significantly. The impact of a countercyclical capital buffer will largely depend on the size of risk-weighted assets, and the effects of the buffer will therefore differ, depending on the risk weights a bank uses. The impact of the buffer will also depend on how banks choose to adapt to meet the requirement for increased capital adequacy.

According to the European Commission's proposal²⁷ for a countercyclical capital buffer in the EU and the EEA area, a national buffer requirement shall be set by the national prudential authorities, and must be between 0 and 2.5 per cent of the risk-weighted assets. The buffer requirement will not be absolute, but banks that do not meet this requirement will be subject to restrictions on payments of dividends and other payments that are not contractual and will have to draw up a capital conservation plan for approval by Finanstilsynet. Changes in the required buffer requirement shall be announced publicly at least twelve months before they are implemented.

In a survey conducted in spring 2011, roughly three-quarters of the 105 Norwegian banks that participated responded that they believe that they will maintain sufficient capital at all times to be able to comply with a countercyclical buffer requirement of 2.5 per cent.²⁸ The remaining respondents, mainly the largest banks, stated that they will adjust their capital to meet the required countercyclical capital buffer requirement in force at any time. None of the banks stated that restrictions on payments of dividends would be preferable to satisfying all or parts of the buffer requirement.²⁹

There are a number of ways in which banks can increase their capital adequacy ratio: they can retain a larger share of the profits, they can issue new equity, or they can reduce their risk-weighted assets (see figure 4.1).

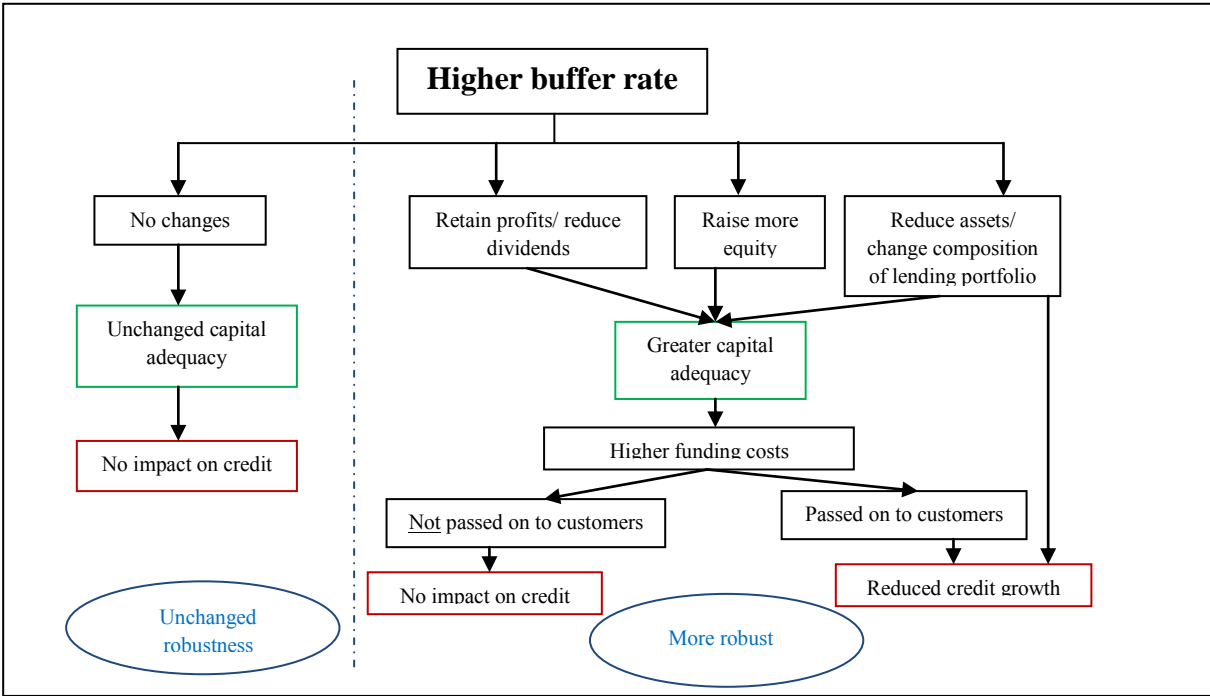
²⁷ Based on the Basel Committee's recommendations (Basel III).

²⁸ This does not preclude the banks from choosing to further increase their capital adequacy when the countercyclical buffer requirement is activated.

²⁹ Andreassen and Gulestø (2011). Master's thesis, Norwegian School of Economics and Business Administration. This survey was conducted before the European Commission had presented its draft Capital Requirements Directive (CRD IV).

The buffer requirement shall be increased when lending growth is high. In these situations, banks normally have high earnings. In light of this, it is reasonable to assume that banks would generally choose to raise their capital adequacy ratio by retaining a larger share of the profits. If the banks had retained all their profits in 2010 and added it to equity, the total capital adequacy ratio would have risen by 1.5 percentage points. (If the capital was also supposed to allow for lending growth of 10 per cent, profits in 2010 would have increased the capital adequacy ratio by nearly 0.8 percentage points.)

Figure 4.1 Possible effects of a higher countercyclical capital buffer rate.



Source: Jacobsen, D.H. et al. (2011): "Macroeconomic effects of higher capital requirements for banks", Staff memo 14/2011, Norges Bank.

Banks with share capital or equity certificates can also raise capital in the market. If these banks, of which there are 46 in Norway, had wanted to increase their capital adequacy ratio by 1 percentage point in 2010 by raising capital in the market, they would have had to raise a total of NOK 15 billion in equity (calculated based on the parent bank's risk-weighted assets). By comparison, share issues with a total value of approx. NOK 110 billion were registered with the Norwegian Central Securities Depository (VPS) in 2010. Normally, there will be good opportunities to raise new equity in the market in periods when the required buffer rate is raised. Increasing their capital adequacy ratio by reducing their risk-weighted assets would necessitate major changes in the banks' portfolios. For example, a decrease in assets of almost NOK 250 billion would be required for the capital holdings that the banks had at the end of 2010 to yield a 1 percentage point increase in capital adequacy ratio (assuming no change in average risk weight).

A higher capital adequacy ratio in banks as a result of the countercyclical capital buffer will probably, although not necessarily, increase the banks' costs of funding. Modigliani and

Miller (1958)³⁰ showed that an enterprise's funding costs are not affected by how the enterprise is financed, using idealised assumptions such as the absence of bankruptcy costs, equal tax treatment of equity and debt, and that all the parties involved (owners, management and lenders) have the same information. The Modigliani & Miller theorem (MM) implies that an increase in the equity ratio will lower the volatility of the return on equity and make the debt safer. This reduces the required rates of return on both equity and debt, so that the average cost of capital remains the same as before the increase in equity.

However, it is not certain that MM is completely valid for the banking industry. The main reasons for this uncertainty are the existence of implicit and explicit government guarantees, deposit guarantees, rules of priority in the event of losses and liquidation, differential tax treatment of debt and equity, and the prevalence of asymmetric information. The existence of guarantees etc. reduces risk for lenders and makes debt financing cheaper than it would otherwise have been. Generally, government guarantees can cause some lenders to regard investments in banks as basically risk-free, with the result that increasing the equity ratio does not increase the perceived safety of the debt.³¹ This can be illustrated by the fact that the credit rating agencies explicitly take into account the likelihood and value of government support schemes for financial institutions and financial markets when determining credit ratings. The Financial Crisis Commission (NOU 2011:1) estimated the value of the implicit government guarantee at between NOK 1 and 4 billion a year for DNB Bank. Although government guarantees can prevent banks' risk premium on debt from decreasing when the equity ratio increases, the shareholders' required rate of return will be reduced.

Norwegian banks' return on equity after taxes has been higher than 8 per cent for the last seven years (and higher than 12 per cent for five of them).³² This is, at times, considerably higher than the cost of debt financing. Normally, the costs of debt financing would fall when the equity ratio increases, but because of tax rules, guarantees and asymmetric information, these costs will not fall sufficiently to offset the costs of holding more equity. The overall funding costs for banks must therefore be expected to increase with a higher equity ratio.

Several different analyses have been carried out internationally of the impact of an increase in banks' core capital adequacy ratios on banks' lending margins and overall credit growth.³³ The results vary, depending on aspects such as method used, period of analysis and how quickly the requirements are to be met. Common to the empirical analyses that BIS has performed or refers to, however, is that an increase in capital ratios leads to increased lending margins and reduced credit volume, see table 4.1.

³⁰ Modigliani, F. and Miller, M. (1958): "The Cost of Capital, Corporation Finance and the Theory of Investment". *American Economic Review* 48 (3): 261–297.

³¹ See Vale, Bent (2011): "Effects of higher equity ratio on a bank's total funding costs and lending". Staff Memo 10/2011, Norges Bank, for a discussion of the effects on the bank's total private funding cost versus total social funding cost when there is a guarantor.

³² DNB has a target of return on equity of more than 14 per cent in the long term.

³³ BIS/Macroeconomic Assessment Group (2010): "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements" and the Riksbank (2011): "Monetary policy report".

Table 4.1 Estimated change in lending margins and lending volume of an increase in core capital ratio of 1 percentage point over two years. Impact after 18 and 32 quarters. Basis points and percentages.

	Lending margin (basis points)		Lending volume (per cent)	
	18 quarters	32 quarters	18 quarters	32 quarters
Median ¹⁾	17 (5 to 25)	15 (5 to 26)	-1.4 (-0.7 to -3.6)	-1.9 (-0.8 to -3.6)

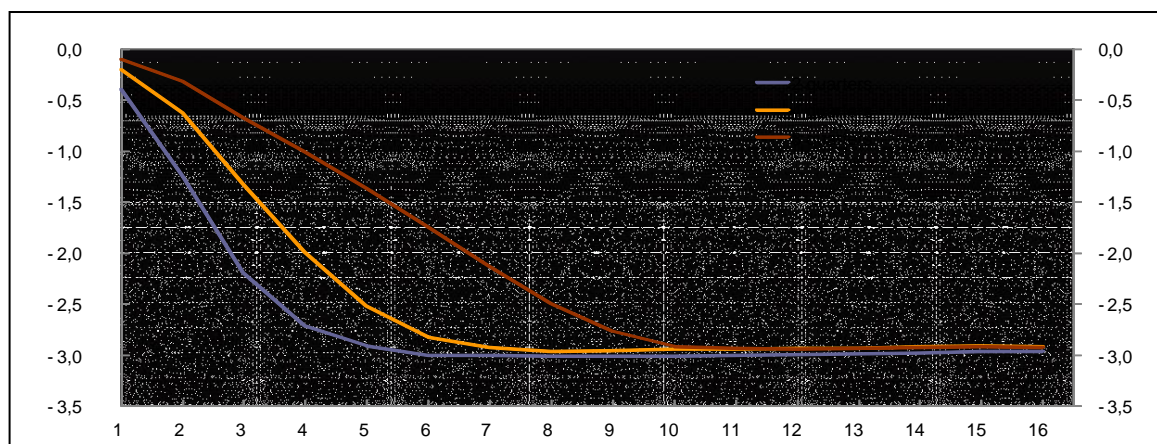
1) Based on a broad set of analyses from different countries. The figures in brackets indicate the range of the results from the different analyses.

Source: BIS/Macroeconomic Assessment Group: Interim Report: "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements". Table 1.

Norges Bank has conducted similar analyses of the impacts of an increase in the Tier 1 capital adequacy ratio. One of the analyses looks at the impact on short-term credit growth and explicitly takes into account the fact that the impact will vary depending on how quickly the capital ratio is increased. The analysis is based on covariations between the core (Tier 1) capital ratio and a number of key variables in the economy in the period 1993–2010.³⁴ It is assumed that the banks will adjust to an increase in the additional requirements relatively quickly, and the analysis looks at situations where the increase in the Tier 1 capital ratio occurs over two, four and eight quarters respectively. The calculations indicate that an increase in the Tier 1 capital ratio of one percentage point over the two quarters may lead to a decline in credit volume after one year of 2.7 per cent compared with a baseline scenario without an increase in Tier 1 capital ratio (see figure 4.2). The longer implementation period the banks are given to increase their capital ratio, the smaller the impact on lending during the first few years.

³⁴ A VAR analysis using consumer prices (CPI-ATE – consumer price index adjusted for tax changes and excluding energy products), Tier 1 capital ratio, GDP, credit volume, the real exchange rate and domestic interest rates as endogenous variables. In addition, the trade-weighted interest rate for Norway's main trading partners was included as an exogenous variable. See Jacobsen, Kloster, Kvinlog and Larsen (2011): "Makroøkonomiske virkninger av høyere kapitalkrav for bankene," Norges Bank Staff Memo 14/2011 (in Norwegian only).

Figure 4.2 Change in total credit of an increase in Tier 1 capital ratio of 1 percentage point at different implementation periods. Percentage deviation from baseline.



Source: Norges Bank.

The members Lind Iversen and Johansen made the following comment on the purpose of a countercyclical buffer:

"The banks' access to capital is good in boom times, but very difficult in downturns, when banks suffer large losses. The primary purpose of the introduction of a countercyclical buffer is therefore to build up banks' resilience during periods of unusually strong credit growth so that they are better equipped to withstand a subsequent decline with higher loan losses without having to reduce their lending.

Whilst it cannot be precluded that higher capital requirements might serve to curb credit growth in an upturn, there is scarce empirical evidence of such a relationship. Furthermore, it must be assumed that an increase in capital requirements will have a limited impact on banks' lending rates. Assuming that the countercyclical buffer is implemented in full, that bank shareholders' have a required rate of return of 10 per cent, that the bank's creditors require 5 per cent, and ignoring the risk weighting of assets, the banks' average funding cost increases by roughly 12.5 basis points (0.125 percentage points). Taking into account the fact that the calculation basis is risk weighted, the increase in the average funding cost can be estimated to be about 6 basis points (0.06 percentage points). This means that only very small increases in lending rates are necessary. In both these calculations it is assumed that either the shareholders' or creditors' required rate of return is reduced when the banks' financial strength increases and the risk for investors is reduced. Taking these factors into account, the impact on banks' lending rates will be even smaller than outlined above. Changes in a countercyclical capital buffer rate are therefore not a good tool to restrain credit growth. If the purpose of a countercyclical buffer is to improve the financial soundness of banks, there is little reason to draw an institutional line between the management of ordinary and countercyclical capital requirements. Nor does the fact that the international regulatory framework assumes a close correlation between the buffer rate and the credit/GDP ratio relative to trend provide grounds for establishment of such a distinction."

4.2 Basis for determining the level of the countercyclical capital buffer

4.2.1 Introduction

The basis for determining the size of the countercyclical capital buffer must build on analyses of developments in the risk in the financial system. Norges Bank's financial stability reports and Finanstilsynet's financial outlook reports present these kinds of analyses. The assessments in these reports are largely based on three main pillars:

1. Indicators on trends in key markets, the banks' adjustments, and the economy form the basis for assessment of the main developments in the financial system, and are the starting point for evaluating whether the developments in the system as a whole give grounds for concern.
2. Macro and micro models used to stress-test banks provide a basis for assessing the vulnerability of the system to external shocks.
3. Information about the status of the individual institutions can identify factors that can be significant for financial stability and that do not appear in more aggregate numbers.

An overall assessment of all these factors provides a broad basis for identifying trends in and the outlook for financial stability. The three pillars ensure that the aggregate trends, the interaction between the different parts of the economy and the financial sector, and factors in the individual institutions are all taken into account. The analysis provides a foundation for decisions on the need to implement measures.

In this section, we look specifically at which indicators should be included in the background analytical material for setting the countercyclical capital buffer rate. Much of the same calculation basis will also be relevant when considering other measures. This section begins with a review of the constraints imposed by the Basel III regulations and the European Commission's proposed new Capital Requirements Directive (CRD IV) for the setting of the countercyclical capital buffer. This is followed by a review of the tools and assessments it may be appropriate to use, and a framework for setting the countercyclical capital buffer is presented.

The level of capital buffer will manifest itself in the banks' capital requirements with a delay. In addition, imbalances are built up gradually over time and can be hard to reverse. A framework must therefore be based on the current situation, but must also attach great importance to the outlook. The following process for setting the level of the countercyclical capital buffer is proposed:

1. A set of indicators is used to assess current imbalances in the financial system. This assessment must also include information about the state of the financial institutions.
2. A macroeconomic model is used to provide projections of the relevant variables, say, three years ahead in order to assess how the imbalances would develop without changes in the countercyclical capital buffer rate.

3. A suite of models, which includes macroeconomic models, is used to analyse two stress scenarios: one where the imbalances are reversed immediately and one in which they are reversed after three years.
4. Based on the indicator values, projections and the results of the stress tests, the need to adjust the level of the countercyclical capital buffer is assessed. The suite of models under item 3 can also be used to assess the impact of the changes in the buffer rate.

The framework will have to be evolved over time, for example by introducing new indicators and models. Considerable work is being done in academia, central banks and under the auspices of the European Systemic Risk Board (ESRB) to develop good indicators and models to identify the build-up of systemic risk and for use in considering the implementation of a countercyclical buffer or other macroprudential policy instruments. In time, these R&D projects will provide us with an even better basis for setting the countercyclical capital buffer in Norway.

4.2.2 Guidance from Basel III and the European Commission's draft CRD IV

Both the Basel III regulations and the European Commission's proposals for implementation of the regulations in CRD IV lay down constraints concerning what information can be used as a basis for setting the countercyclical capital buffer rate.

According to the Basel III rules, the countercyclical capital buffer shall be activated in situations where the competent authorities consider that credit growth is excessive and is leading to the build-up of system-wide risk. This kind of assessment shall be undertaken and published four times a year. Increases in the buffer rate shall be announced 12 months in advance. Reductions in the buffer rate or complete release can be announced with immediate effect.

The Basel Committee has published guidelines describing specific criteria for setting the level of the countercyclical capital buffer.³⁵ The starting point should be an indicator of the deviation of the private-sector credit-to-GDP ratio from its long-term trend (the credit-to-GDP gap). The Basel Committee provides a specific method for measuring this gap (see the more detailed discussion in section 4.2.4). The guidelines also call for this indicator to be complemented with other indicators and good professional judgement. For example, the Committee writes:

*"Rather than rely mechanistically on the credit/GDP guide, authorities are expected to apply judgement in the setting of the buffer in their jurisdiction after using the best information available to gauge the build-up of system wide risk."*³⁶

The guidelines emphasise that the exercise of judgement must be founded on a clear set of principles³⁷:

³⁵ Basel Committee on Banking Supervision, BIS (2010): "Guidance for national authorities operating the countercyclical capital buffer".

³⁶ BIS (2010) p. 3.

- *Objective.* Buffer decisions should be guided by the objectives to be achieved by the buffer, namely to protect the banking system against potential future losses when excess credit growth is associated with an increase in system-wide risk
- *Common reference guide.* The credit/GDP guide is a useful common reference point in taking buffer decisions. It does not need to play a dominant role in the analysis behind the buffer decisions, however. Authorities should explain the information used, and how it is taken into account when making buffer decisions.
- *Risk of misleading signals.* Assessments of the information contained in the credit/GDP guide and any other guides should be mindful of the fact that the indicators may give misleading signals.
- *Prompt release.* Promptly releasing the buffer in times of stress can help to reduce the risk of the supply of credit being constrained by regulatory capital requirements. When a decision is taken to release the buffer, it is recommended that the relevant authorities indicate how long they expect the release to last.
- *Other macroprudential tools.* The level of the buffer should be seen in relation to other macroprudential tools at the disposal of the authorities.

Overall, the Basel III regulations set few binding rules regarding the decision-making basis for setting the level of the countercyclical capital buffer. The guidelines state that while the credit-to-GDP gap shall be used as a starting point for the analysis, this indicator does not need to play a dominant role. The main principle of the Basel Committee's guidelines appears to be that the assessment of whether credit growth will lead to excessive risk in the financial system must be based on a broad analysis. In other words, this suggests that rather than developing a mechanical rule, national authorities should use a system where clear principles ensure predictability in the exercise of judgement.

The European Commission's draft Capital Requirements Directive is more restrictive than the Basel Committee's proposals in terms of the background analysis that can be used in the setting of the countercyclical capital buffer.

According to the Commission's proposal for a Directive, the following information can be used in the setting of the countercyclical capital buffer:

- a) The deviation of the credit-to-GDP ratio from its long-term trend (including other indicators of credit growth)
- b) Indicators of systemic risk proposed by the ESRB³⁸
- c) Other variables that the competent national authority responsible for operating the countercyclical capital buffer deems relevant.

The EBA and the ESRB³⁹ shall be informed if "other indicators" (group c above) play a significant role in the setting of the buffer rate, and they will then determine whether this kind

³⁷ BIS (2010) pp. 3–5.

³⁸ There are various working groups under the ESRB, one of which has been tasked with proposing possible indicators.

of assessment is consistent with the fundamental principles of an internal market for financial services. "Other indicators" can only be considered once a year, and that part of the buffer that originates from these assessments will not apply to banks with a different home state.

Although the Commission's proposed directive allows for slightly less use of discretion than the Basel Committee's proposal, it does not require a mechanical rule for setting the countercyclical capital buffer.

4.2.3 The Basel Committee's proposed indicators

The Basel Committee has proposed that the credit-to-GDP gap be used as a starting point for setting the level of the countercyclical capital buffer. The "credit" concept in this indicator is the total credit extended to the private sector in an economy, i.e. it also includes credit in the form of bond loans and loans from sectors other than financial institutions. The gap is obtained by subtracting the observed value of the credit/GDP ratio, measured as a percentage, from the calculated long-term trend. The trend is calculated using a one-sided Hodrick-Prescott filter where the smoothing parameter, lambda, is set to 400,000⁴⁰.

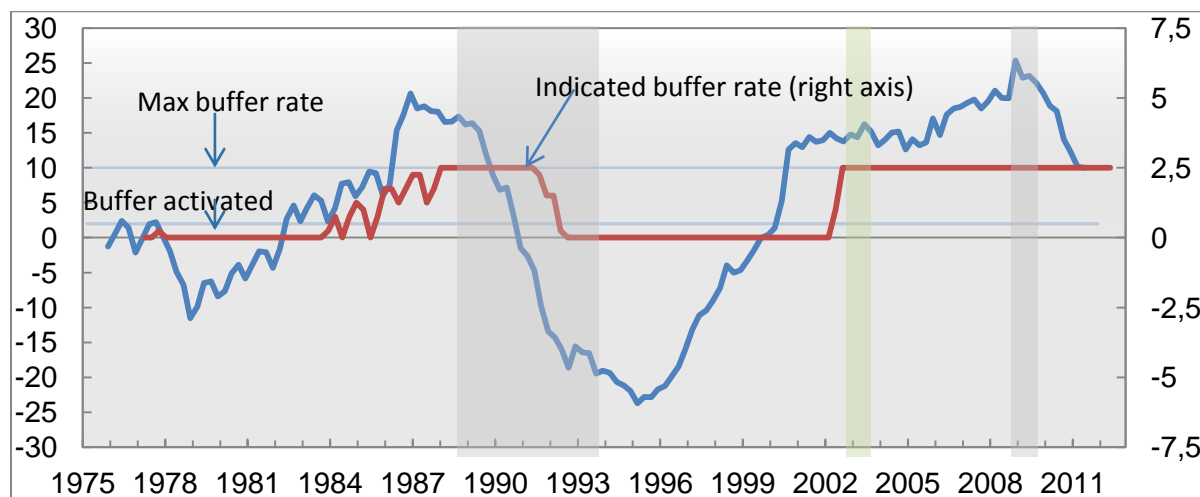
In the guidelines, the Basel Committee sets the threshold values for setting the level of the required buffer rate on the basis of the value of the indicator. If the value of credit/GDP gap is below 2, the buffer shall be set to zero. If it is 10 or above, the buffer shall be set to 2.5 per cent. Between these two values, the required buffer rate shall be raised linearly with the value of the gap.

The figure below shows a credit-to-GDP gap in line with the Basel Committee's proposal for Norway and the associated level of the countercyclical capital buffer, based on data from 1975 to the present day. Grey shaded areas indicate the banking crisis at the end of the 1980s and early 1990s and the 2008 financial crisis of 2008. The period with high losses in the banking sector in 2002–2003 is shaded in green.

³⁹ Norway's relationship to the ESRB has not yet been clarified in this area. The ESRB is an independent European body. The EFTA countries are allowed to participate on an ad hoc basis, but not during discussion of individual countries or institutions. In principle, the ESRB does not have the authority to impose requirements on Norwegian authorities or institutions.

⁴⁰ A Hodrick-Prescott filter attempts to decompose a time series (Y_t) into a trend component (τ_t) and a cycle (C_t) such that at any time t , $Y_t = \tau_t + C_t$. The trend is obtained by minimising the expression $\sum_{t=1}^T (y_t - \tau_t)^2 + \lambda \sum_{t=2}^{T-1} [(\tau_{t+1} - \tau_t) - (\tau_t - \tau_{t-1})]^2$. The smoothing parameter λ controls the smoothness of the trend series. If $\lambda = 0$, the trend series will equal the actual time series; if $\lambda = \infty$ the trend series is a straight line. In a one-sided trend filter, only the information up until each point in time t is used in the calculation of the trend value at that time. This means that the trend value for each observation is the most recent observation value in a normal Hodrick-Prescott filter based on data up to that observation.

Figure 4.3 Credit gap¹ (blue, left axis) and indicated countercyclical capital buffer² (red, right axis). Percentage points and percentage of risk-weighted assets. Interim figures for 4th quarter of 1975 to 2nd quarter of 2011.



1) Credit extended to the public as a percentage of GDP. Credit in mainland Norway as a percentage of GDP for mainland Norway as of 4th quarter 1995.

2) The buffer has a five quarter lag relative to the indicator value. This is to take into account the fact that advance notification of the indicator should be given at least 12 months before it enters into force and that the statistics needed to produce the indicator are published with a delay of roughly three months.

Source: Norges Bank.

The indicator proposed by the Basel Committee seems to be a useful starting point for determining the level of the countercyclical capital buffer. It seems that the indicator is especially good at capturing the beginning of an upswing in the credit cycle. Analyses of long historical time series for Norway show that the indicator is also able to identify financial vulnerability (see Riiser (2005, 2008, 2010)).

Some challenges and shortcomings of the indicator

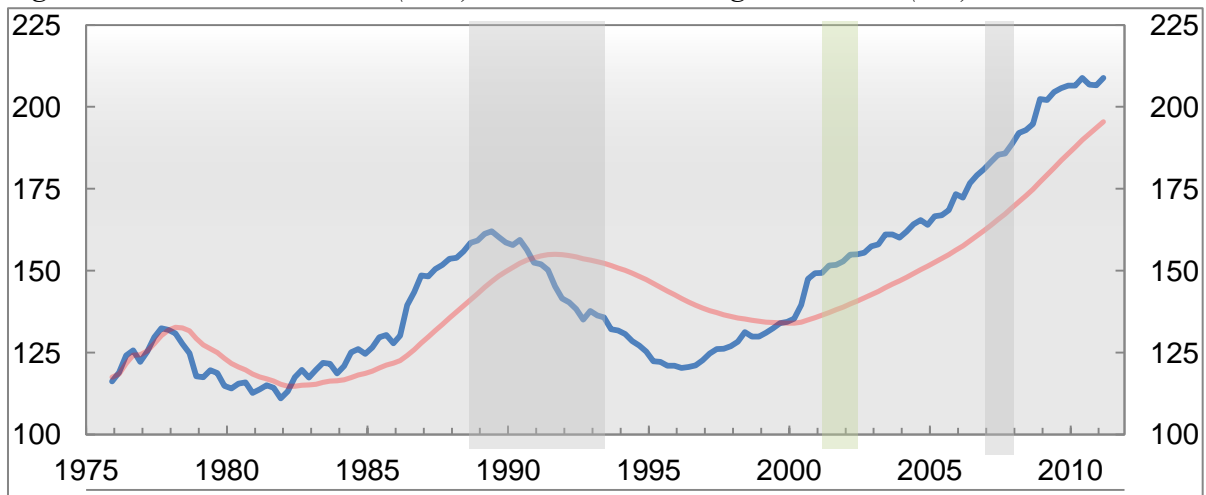
Like all mechanically calculated gaps, the credit/GDP ratio indicator has a number of weaknesses. Other factors too mean that an analysis based solely on one single indicator may give a false or incomplete impression of the developments in risk in the financial system:

1. The trend included in the indicator has been calculated mechanically. It therefore does not contain any assessment of whether the observed trend represents a sustainable or desirable relationship between debt and GDP. This has consequences for the assessment of the deviation from the long-term trend.
 - a. Structural changes, for example, changes in the tax system, business structure and regulations, may lead to the ratio of credit to GDP deviating from its previously observed trend. This may be unproblematic if the structural changes have led to a new sustainable credit-to-GDP ratio. However, it will take a long time before this is captured in the trend model, and in the meantime, movement towards a new

"equilibrium" may appear as changes in the gap.

- b. In a one-sided Hodrick-Prescott filter, growth in the most recent periods will quickly affect the estimated trend growth rate.⁴¹ If growth is maintained at roughly the same level, the gap will gradually close. In Norway, credit has grown much faster than nominal GDP for several years (see figure 4.4). The trend series is now rising at a rate of roughly 8 percentage points a year. This means that the gap is currently closing rapidly, despite the fact that credit growth is still stronger than the growth in nominal GDP. Whether a closing of the gap implies lower systemic risk depends, among other things, on whether (i) continued growth of 8 per cent, or (ii) the level of the credit volume relative to GDP, is sustainable in the long run.

Figure 4.4 Credit/GDP ratio (blue) and calculated long-term trend (red). Per cent.



Source: Norges Bank.

⁴¹ The reason that this is a particular problem associated with one-sided Hodrick-Prescott filters is related to how the method tries to solve the so-called end-point problem. The end-point problem of Hodrick-Prescott filters is related to the fact that the most recent observations in the data set are assigned a disproportionately higher weight in the calculation. Thus, the trend will approach the actual level at the end of a trend series artificially quickly.

The trend calculations for, for example, the GDP gap and the indicators included in the structural, non-oil budget deficit resolve this problem by using a two-sided Hodrick-Prescott filter with long-term projections of indicators in the trend analysis. In this way, it is possible to avoid the last actual observations being assigned too much weight in the calculation, although it is then necessary to estimate the future development and thus what can be assumed to constitute a reasonable long-term level.

One-sided filters solve the problem differently. They let the observations in the trend series consist of the end-points in a Hodrick-Prescott filter calculated up until the time of observation. The end-point problem is then the same for all observations in the series. The advantage of this method is that it is not necessary to place constraints on the calculations by estimating a long-term level. Thus, it is easy to see what the gap would have been historically based on the available information at the time, and whether the gap would have had an impact prior to earlier periods of financial vulnerability. A disadvantage is that the trend series will closely follow the developments in the actual series, and adjusting the smoothing parameter in the calculation, λ , does little to resolve this.

2. The size of the gap can have very different implications for the outlook for financial stability, depending on the underlying factors that are driving the development:
 - a. Is it credit or GDP that is fuelling the change? An increase in the credit/GDP ratio caused by unchanged credit growth and a fall in GDP does not have the same implications for the build-up of risk as an increase in the credit/GDP ratio caused by strong growth in debt and unchanged GDP.
 - b. The composition of the credit growth. An unproblematic trend in the aggregate indicator may conceal that developments in debt in one or more sectors are of such a nature that they might lead to accumulation of risk in the financial system as a whole.

3. Not all factors that entail build-up of systemic risk are captured by the indicator.
 - a. Historically, long-term strong growth in asset prices such as house prices has been an accurate signal of a build-up of risk in the financial system.⁴² This will not be captured in the Basel Committee's proposed indicator until the growth in asset prices makes a significant impact on debt growth. Norges Bank's calculations indicate that this may take a relatively long time.
 - b. Factors related to the banks' funding may provide a good indication that the risk in the financial system is beginning to build up. A high degree of market funding may be indicative of a late stage in the financial cycle and that there is a high risk of a period of significant losses in the banking sector.

4. A number of economic variables have a delayed impact on credit and GDP, such as interest rates and growth in house prices. By only using current statistics on credit and GDP, a great deal of available and highly relevant information for developments in the credit/GDP ratio is thus not being used. Realised values of, for example, interest rates and house prices can be used to project future developments in the relationship between credit and GDP.

⁴² See, for example:

Borio, Claudio and Mathias Drehmann (2009): "Assessing the risk of banking crises – revisited", BIS Quarterly Review.

Barrell, Ray, E. Philip Davis, Dilruba Karim and Iana Liadze (2010): "Bank regulation, property prices and early warning systems for banking crises in OECD countries", *Journal of Banking and Finance* 34, pp. 2255–2264.

Mendoza, Enrique G. and Marco E. Terrones (2008): "An Anatomy of Credit booms: Evidence From Macro Aggregates and Micro Data". IMF Working Paper 08/226.

Reinhart, Carmen and Kenneth S. Rogoff (2009): "Reflections on early warnings, graduation, policy response, and the foible of human nature", *This Time is Different*, p. 277–292.

Previous studies have shown that this also applies to Norway, see, for example:

Riiser, Magdalena D. (2005): "House prices, equity prices, investment and credit – what do they tell us about banking crises?", *Economic Bulletin* 3/2005, Norges Bank, pp. 98-106.

Riiser, Magdalena D. (2008): "Asset prices, investments and credit – what do they tell us about financial vulnerability?" *Economic commentaries* 6/2008, Norges Bank.

Riiser, Magdalena D. (2010): "Asset prices, investments, credit and financial vulnerability?" *Economic commentaries* 4/2010, Norges Bank.

Altogether, these factors suggest that it would be advisable to use a broader base of information than only the last observed value of a mechanically calculated credit-to-GDP gap. This will yield a more robust framework. Arguments in favour of this approach are:

- Firstly, there should be an ongoing assessment of whether the observed developments in the credit gap actually reflect the developments in the risk associated with lending (see points 1 and 2a above). This requires, among other things, ascertaining whether there are any structural changes that are affecting the gap, and whether the underlying trend growth rate in the calculation is compatible with a balanced development in the long run. This requires good professional judgement.
- Furthermore, it should be investigated whether the aggregate credit trend is hiding build-up of risk in parts of the economy (see point 2b above). Indicators of the overall trend in credit growth ought therefore to be supplemented by credit market development indicators for households and non-financial corporations, and as applicable also for subsectors that can play a critical role in banks' losses.
- The credit-to-GDP gap ought to be supplemented with other indicators that can shed light on the build-up of risks in the financial system (see point 3 above). A number of relevant indicators are listed in section □ below. Furthermore, use ought to be made of the information that Finanstilsynet has about the individual financial institutions to provide a more comprehensive picture of risk accumulation in the financial system.
- Developments in indicators ought to be assessed in light of the overall macroeconomic situation and outlook. Furthermore, there should be an assessment of how the current economic situation will affect future developments in credit and risk in the financial system (see point 4 above). Projections using macroeconomic models will be useful in this context. When the government lowers or sets the countercyclical capital buffer to zero, projections will also be necessary to indicate the length of the period before the buffer can be expected to be raised again.

4.2.4 Alternative / additional indicators

Indicators that are going to be used as a starting point for the assessment of the countercyclical capital buffer rate must signal when systemic risk is starting to become so high that banks ought to be required to hold more capital than normal. An ideal indicator will also indicate when there is a need to lower the required buffer rate. However, it is not certain that the same indicators can be used to indicate when to raise the required buffer rate and when to release the buffer. Possible criteria for selecting indicators to determine the level of the countercyclical capital buffer include:

- *The indicators should signal when systemic risk is starting to rise to undesirable levels.* Empirically, it ought to be possible to determine threshold values where an indicator value above the threshold will usually be followed by a period where the financial system is vulnerable.
- *The indicators should be sufficiently forward-looking.* Increases in the countercyclical capital buffer rate must be announced 12 months in advance, and a number of the relevant

sources of data have a time lag of several months. In addition, systemic risk builds up gradually over several years. It is therefore important that the indicators capture the build-up of systemic risk at an early stage. The indicators should issue a warning well before the risk becomes too high and it is too late to order the banks to increase their capital. It must also be possible to project the indicators into the future. This is particularly important since, when they lower the required buffer rate, the regulatory authorities shall specify when they expect it to be necessary to raise the required buffer rate again.

- *The indicators should have a firm theoretical foundation.* A good theoretical foundation reduces the risk of use of indicators that demonstrated good statistical properties in the past, but where, for example, changes in the regulatory framework or structural changes in the economy entail significant changes in the correlations. Furthermore, a firm theoretical foundation is important when justifying and communicating a decision to change the buffer rate.
- *The indicators should be verifiable.* Documentation of how the indicators have been calculated must be publicly available, and the indicators ought preferably to be reproducible for others. Where possible, publicly available statistics should be used in the indicators.

Below is a list of a number of possible additional indicators that meet these criteria. The final selection of additional indicators ought to be limited, and the set of indicators should remain relatively fixed over time. A large and constantly changing set of indicators reduces predictability and undermines the credibility of the conduct of policy.

Credit in the economy as a whole

In general, the underlying series and trend series that form the basis for calculation of the credit-to-GDP gap ought to be assessed separately (see 0 above), in order to assess whether the gap that emerges seems reasonable. This can be supplemented by an indicator of the annual growth of the credit-to-GDP ratio, as suggested in chapter 3 of the IMF GFSR (2011).⁴³ According to the IMF data, it is extremely rare that an increase in the credit/GDP ratio of more than five percentage points per year is not followed by a period of financial vulnerability. One such indicator for mainland Norway is presented in appendix 2. However, it is important to note that this indicator does not take into account the level of credit relative to GDP. The initial level is central to how concerned we should be about a given level of growth.

Credit developments in different sectors of the economy

Periodically, debt developments in individual sectors, such as households and non-financial corporations, give cause for concern. After periods of rapid debt growth, the ability to service the debt can become extremely sensitive to major changes in the participants' financial

⁴³ IMF (2011): "Global Financial Stability Report". September 2011.

situation. This can give rise to financial instability. Rapid build-up of debt in individual sectors may also indicate the development of asset price bubbles.

Household debt ratio can be an appropriate indicator. This can be measured as a level or as a gap. In addition, the aggregate figures ought to be interpreted in the light of the existing microeconomic data on household debt. The distribution of the debt is a significant determinant of whether a given level of debt in the household sector gives cause for concern or not.

Similarly, developments in the credit/GDP ratio can be assessed for non-financial corporations. There are figures illustrating this in appendix 3

Asset prices

A number of studies, internationally and in Norway, have shown that periods of financial instability are often preceded by extended periods of rapid house price inflation. This suggests that these kinds of indicators ought also to be included in the setting of the countercyclical capital buffer. Possible indicators could be house prices deflated by CPI or house prices deflated by disposable income. Both the rate of growth in these indicators and the level can be useful. There are figures illustrating this in appendix 3.

Indicators of market funding

During periods of rapid credit growth, growth in lending often outstrips the growth in deposits. This entails an increase in the proportion of market funding. Shin and Shin (2011)⁴⁴ claim that a high degree of non-core liabilities (i.e. market funding) indicates a late stage of the financial cycle and that the risk of a subsequent period of financial vulnerability is therefore high. An indicator based on the degree of market funding can thus be used to identify when the risk in the financial system is beginning to build up.

Information from Finanstilsynet

Finanstilsynet has a substantial base of information about the state of the financial institutions, which it obtains from a variety of sources: data reported by the financial institutions themselves, on-site inspections and reviews of the banks' capital adequacy and risk assessment processes. Information on capital structure, the funding situation, margins and earnings can be central to assessments of developments in systemic risk. It is therefore essential that this information is given due weight in the setting of the countercyclical capital buffer.

⁴⁴ Shin, Hyun S. And Kwanho Shin (2011): "Procyclicality and monetary aggregate". NBER Working Paper no. 16836.

4.2.5 Use of models

Use of macroeconomic projections will provide a more accurate basis for determining the level of the countercyclical capital buffer. In this way, account is also taken of the interactions between debt, asset prices and economic activity that play a large part in the build-up of risk in the financial system. Using models also helps ensure consistency in assessments and analyses over time.

Once a set of indicators has been prepared, this will provide a foundation for assessing the magnitude of financial imbalances. However, this alone will not provide a definitive indication of the required level of the countercyclical capital buffer. This is partly because the relevant macroprudential measures will have a somewhat delayed effect.

The further development of the financial imbalances will to a large extent depend on the economic policy in general and various macroeconomic factors. By producing projections of key indicators such as debt burden and house prices using a macroeconomic model, a picture can be drawn of how the imbalances will evolve if the countercyclical capital buffer is not changed. Model projections are always uncertain, and the importance attached to the projections must be evaluated in the light of the historical accuracy of the model. The final assessment of the future developments must be based on other relevant information, including matters not covered by the model.

The set of current and projected indicator values can provide an outline of the magnitude of the relevant financial imbalances. As shown in sections 4.2.3 and □, there are significant challenges associated with using mechanical trend analysis to calculate long-term, sustainable levels of, for example, debt burden and asset prices. In this context, a macroeconomic model can be a useful tool to assess whether the developments in key indicators are consistent with sustainable development. This kind of model should include relationships that explain variables such as debt and house prices. Although there will always be uncertainty about how well the model captures actual behaviour, models are useful in assessing whether developments in relevant variables are deviating significantly from their long-term trends. Such deviations are often a sign of build-up of imbalances.

Models can be used to assess the severity of actual and projected imbalances. Model projections can help us calibrate stress scenarios, in order to illustrate a rapid reversal of the imbalances. In this context, two different stress scenarios can be created: one where the shock comes immediately, and one where the imbalances continue to build up for, say, three years before the shock occurs (the size of the shock after three years should be adjusted to the development in the imbalances in the baseline scenario). These scenarios can then be used in a stress testing framework to project losses and capital adequacy for banks.

The results of these model calculations and stress tests can be part of the background analysis for assessing the need for action. The same modelling tools can be used to assess the impact of proposed levels of the countercyclical capital buffer. In periods where it is appropriate to reduce the capital buffer, the modelling tool can also help indicate the length of the period when it is unlikely that the countercyclical capital buffer rate will need to be increased again.

4.2.6 Criteria for releasing the buffer

The use of indicators and models as outlined above will be suitable in situations where it is appropriate to increase the countercyclical capital buffer rate. This framework might also work well in cases where it is appropriate to gradually lower the level of countercyclical capital buffer because the risk in the financial system has abated.

However, there may be instances where the risk manifests itself as financial turbulence. In these cases, it might be most pertinent to release the buffer promptly. As shown in the figures in the appendices to this report, the standard indicators will not provide signals to release the buffer promptly enough. In these cases, indicators based on more high-frequency data will be better suited for monitoring the situation and decide on the quick release or reduction in the capital buffer. In its latest Global Financial Stability Report, the IMF assesses several possible such indicators using U.S. data. In particular, they highlight an indicator based on risk premiums in money markets and the slope of the yield curve as among the most suitable.

Market indicators can also provide useful information about the need to release the buffer capital; for example, risk premiums in the money and bond market and CDS prices, the findings of consumer confidence barometers for households and businesses, surveys among banks, such as Norges Bank's survey of bank lending and its monitoring of bank liquidity, and financial institutions' reporting to Finanstilsynet on liquidity.

Considerable work is being done both internationally and in Norway to develop such indicators. This work will provide a basis for deciding which indicators are best suited for this purpose in Norway.

4.2.7 Summary

The following model is proposed for use in determining the countercyclical capital buffer rate:

1. A set of indicators is used to assess the current imbalances. To this end, a wide set of indicators covering developments in debt and the debt burden is proposed, as well as indicators of developments in asset prices and possibly also an indicator of the banks' market funding ratio (non-core liabilities). This assessment must also include relevant information from Finanstilsynet on the state of the financial institutions.

There is a considerable amount of work being done internationally, in academia, central banks and the ESRB, to develop good indicators of systemic risk build-up for use in macroprudential supervision and for use in assessments linked to the countercyclical buffer. There are therefore grounds to expect that in the future there will be more possible indicators that ought also to be considered for use when setting the countercyclical capital buffer rate in Norway.

2. A macroeconomic model is used to provide projections of the relevant variables, say, three years ahead in order to assess the developments of the imbalances without changes in the countercyclical capital buffer rate.

3. 1 and 2 are used to create stress scenarios: one in which the imbalances are reversed immediately and one in which the reversal occurs after three years. A stress testing model can be used to calculate the impacts of these stress scenarios.
4. Based on the indicator values, projections and the results of the stress tests, the need to adjust the level of the countercyclical capital buffer is assessed. In this context, it may also be useful to use modelling tools to assess the impact of the proposed change in the buffer rate.

This model will provide a good basis for thorough professional assessments in operating the countercyclical capital buffer. The systematic use of models will also promote consistency over time in the exercise of professional discretion.

The European Commission's proposed new Capital Requirements Directive sets some requirements for information to be given in connection with the quarterly setting of the buffer, including information about the factors on which the designated authority has based its decision. Beyond this, it may be natural to produce a regular report providing a more thorough explanation. It will not be necessary to prepare this kind of report in connection with every review of the countercyclical capital buffer rate, but rather perhaps once or twice a year, for example. Such transparency concerning the indicators, models and how the models are used will ensure predictability for the institutions that are subject to the requirements.

The members of the working group Lind Iversen and Johansen made the following special comment about the background material for decisions and time-variable macroprudential supervision and regulation:

"In broad terms, the basis for decision making can be divided up into data, indicators and models. Financial institutions regularly report large amounts of data to Finanstilsynet, where they are analysed on an ongoing basis. This means that Finanstilsynet has good insight into and proximity to developments in the institutions, which in turn enables both rapid identification and follow-up of sources of systemic risk build-up and assessment of the impacts of various different measures. The financial crisis led to increased focus on realism when modelling economic relations, especially the interplay between the real economy, the financial sector and the agents' behaviour. It has been argued that both macroeconomic models in general and macro stress-testing models specifically fail to provide a satisfactory picture of future macroeconomic developments and the uncertainty in the economy. When crises occur, it becomes evident that the financial institutions are all exposed to the same (few) underlying risk factors, further exacerbating a self-reinforcing downward spiral in the economy. There are currently no models that satisfactorily capture this kind of dynamics and mutual interaction. It is especially difficult to model the relationship between the financial sector and real economy, and the turning points in particular. Considerably more research and model development are required before the models are of any great practical value in connection with work on financial stability. Assessments of developments in the credit-to-GDP ratio relative to its long-term trend do not require a comprehensive modelling system and can be based on a standard set of indicators.

The level of the countercyclical buffer is supposed to vary with developments in the credit-to-GDP ratio relative to its long-term trend and shall be evaluated on a quarterly basis. It is questionable whether this type of policy instrument is suitable for high frequency recalibration. Systemic risk normally accumulates over longer periods. It seems more pertinent to establish supervisory systems that ensure high capital adequacy and strong liquidity irrespective of the economic cycle. The international rules for determining the countercyclical buffer are still pending. Developments so far appear to suggest that the ambitions for calibration frequency will be lowered and greater importance will be attached to discretion in the final rules."

5 Relationship between the countercyclical capital buffer and other policy areas

5.1 Relationship to the conduct of monetary policy

5.1.1 Monetary policy

The operational target of monetary policy in Norway is annual consumer price inflation of approximately 2.5 per cent over time. The key policy rate is the main tool of monetary policy. The key policy rate is the interest rate on banks' deposits (up to a certain quota) in Norges Bank. It affects short-term money market rates and, together with expectations concerning future developments in the key policy rate, banks' deposit and lending rates and for bond yields

Monetary policy affects inflation through several channels. A lower key policy rate will serve to increase demand by making loans cheaper and by making investments more profitable. It increases consumption and investment, leading to higher growth in wages and margins, accelerating inflation. A lower interest rate normally also contributes to depreciation of the exchange rate because fewer investors will want to invest in NOK. This leads to increased exports and improved profitability in Norwegian industry, which in turn can increase wage growth and contribute to higher inflation. A weaker krone will also make imports more expensive, which will also lead to higher inflation. As long as it is credible and predictable, monetary policy also exerts an influence through the expectations channel whereby lower interest rates give rise to expectations of higher inflation ahead. Higher inflation expectations may weaken the exchange rate and may contribute to higher wage growth and margins. Both of these will increase inflation.

In other words, the interest rate exerts an influence on the demand for credit, household income growth and profitability of companies – all of which affect the stability of banks. In addition, a lower interest rate can increase the public's access to credit by increasing the growth in collateral assets (such as house prices). It can also affect banks' supply of credit through the bank lending channel or bank balance-sheet channel. If a lower interest rate leads to borrowers being considered less risky (for example, as a result of better earnings opportunities, lower risk of bankruptcy, more investment projects being profitable), the bank's assets are perceived as less risky than without a change in interest rates. This will lead to a lowering of the risk premium required by banks' investors, and banks may wish to increase their lending.⁴⁵ Further, the interest rate can affect banks' risk-taking, for example as a result

⁴⁵ Analyses of Norwegian data appear to support the existence of a bank lending channel, see Jacobsen, D.H. et al. (2011): "Macroeconomic effects of higher capital requirements for banks", Staff memo 14/2011, Norges Bank and Vale (2011).

of nominal required rates of return that allow lower interest rates to cause a search for yield, and partly as a result of changes in risk assessments.⁴⁶

5.1.2 Relationship to the use of a countercyclical capital buffer

Chapter 4 discussed how the countercyclical buffer works. The impact of the key policy rate has been outlined in section 5.1.1. These reviews pointed out that the conduct of monetary policy and the countercyclical capital buffer requirement respectively may have implications both for the ability of the other policy area to achieve its objectives and for the "calibration" of the policy instruments.

In some circumstances, monetary policy and the countercyclical capital buffer will work towards the same end; for example, in periods of rapid growth in the real economy that can lead to strong credit growth, increased risk-taking, asset price growth and inflation above the target. In addition, in its attempt to balance the interests of stable inflation against the interests of a stable development in the real economy, monetary policy has to take financial imbalances into account insofar as they affect inflation and the output gap in the long term. However, sound monetary policy is not necessarily enough to prevent financial instability. In a speech given on 12 April 2011 at the Finance Norway conference, the Governor of Norges Bank Øystein Olsen stated:

"The question can be raised as to whether the interest rate should be used to a further extent in preventing the build-up of systemic risk. Higher interest rates can curb the rise in both debt and house prices during an economic upturn. But systemic risk will depend on both the vulnerabilities that accumulate internally in the banking system and the sources of risk outside the banking system. The interest rate may only have a dampening effect on the build-up along some of these dimensions. In the March issue of the Monetary Policy Report, we wrote that the consideration of guarding against the risk of future financial imbalances that may disturb activity and inflation somewhat further ahead suggest that key policy rate should be increased in the near future. The consideration with regard to financial imbalances is thus part of the basis for setting the interest rate."

If monetary policy is designed to place great emphasis on curbing financial imbalances, it can also limit the opportunities for achieving the primary goal of monetary policy (continuing the quotation):

"At the same time, there are limits as to how many considerations the interest rate can bear. The interest rate also has effects on other assets prices, such as the krone exchange rate. A monetary policy that aims at bringing down the value of domestic assets can easily push the value of the krone in the opposite direction. In interest rate setting we can never lose sight of the primary objective of monetary policy, which is low and stable inflation. In assessing the different considerations, monetary policy must adhere to the operational mandate – low and

⁴⁶ Karapetyan (2011), by contrast, does not find evidence for the existence of a bank risk-taking channel in Norway.

stable inflation. Without results that show that the inflation target is actually attained over time, there is a risk that monetary policy will lose credibility."

Furthermore, for monetary policy alone to be able to slow down a sharp rise in asset prices, the changes in the interest rate would have to be extremely large. In a speech at the Jackson Hole conference in 2010, deputy governor of the Bank of England Charles Bean said:

"Generally speaking, monetary policy seems too weak an instrument to moderate a credit/asset price boom without inflicting unacceptable collateral damage on activity."

The experiences of the last few years have proven that a new instrument is needed that targets imbalances in the economy that neither monetary policy nor microprudential regulation are able to deal with in an appropriate manner.

The introduction of a countercyclical capital buffer will mean that the central bank will have to base its interest rate setting on projections of the buffer rate. The countercyclical capital buffer will normally be adjusted less frequently than the key policy rate, and increases in the countercyclical buffer requirement shall be announced at least 12 months in advance according to the CRD IV proposal. Normally, therefore, the central bank will be able to take the stance of the national macroprudential policy for granted when setting the key interest rate. Monetary policy projections will be an integral part of the basis for determining the level of the countercyclical capital buffer. The objective of introducing a countercyclical capital buffer is to influence the credit cycle, and it requires a relatively long policy horizon. Within this horizon, both the key interest rate and the central bank's interest rate path may change a number of times. Good and effective policy practice for one policy instrument requires a good understanding of the policy practice and the effects of the other policy instrument. Ensuring that both policy areas are governed by predefined objectives, a defined set of policy instruments and transparency in the decision-making process will promote target achievement in both areas.

The impact of stabilisation policy instruments depends on how the various agents in the economy adapt. In some cases, the policy authorities may seemingly be able to achieve a greater impact with a tool by adapting the way in which it is used after the other agents have formed expectations and made their decisions. Not only may an authority wish to adjust its policy after the private sector has responded, it may also want to further adjust its policy after other government authorities have made their policy decisions. However, if other agents – private as well as other policy authorities – see that this might happen, the credibility of the original policy will be undermined and it will not achieve the results it might otherwise have done. The risk of this kind of situation arising can be reduced by the various policy authorities adhering to a predetermined pattern of behaviour. Procedures for public verification of the way in which policy is executed would further enhance the credibility of the policy.

The way in which the two policy areas are organised will affect the extent to which it is possible to coordinate decisions with a view to achieving the best possible overall result. An arrangement with two separate policy authorities will have the advantage that the two institutions can be given clear mandates and responsibilities. This would promote independence and credibility in policy practice. The two institutions having completely

separate mandates – for example, targets related to inflation and activity levels for monetary policy and a goal of smoothing the credit cycle for macroprudential regulation – would reduce the likelihood of the two institutions playing against one another. Detailed knowledge of the factors that determine the other institution's decisions will increase the likelihood of a good overall outcome. If, in addition, the respective policies in the two fields can be coordinated to form a credible plan, this increases the likelihood of other institutions acting on the assumption that the plan is going to be followed. In the wake of the introduction of the inflation target in Norway, one of the objectives has been to make monetary policy predictable and credible.

Regardless of the degree of predictability and credibility, problems may arise when not all the stabilisation targets can be optimally achieved (which they rarely can). Since the policy instruments of both macroeconomic regulation and monetary policy have an impact on the effects achieved by the other, this situation may arise. Ideally, a deviation from the inflation target ought then to be weighed up against the build-up of financial imbalances. If the individual institution's responsibility is restricted to separate target variables, this may make it difficult to decide how much the achievement of one goal should be renounced in pursuit of the other. Both monetary policy and the application of a countercyclical capital buffer require a good understanding of macroeconomic interactions – especially the interplay between real and financial variables. Theoretical and empirical models will be extremely useful in this respect. Centralisation of the conduct of policy would allow relevant macroeconomic expertise to be pooled in one place.

5.2 Relationship to the supervisory authorities' Pillar II review

5.2.1 Description of the supervisory authorities' Pillar II review

The main principles in Pillar II in the current capital adequacy regulations, and which are upheld in CRD IV, are the following:

- Institutions should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital level.
- The supervisory authority should review and evaluate institution's internal capital adequacy assessments and strategies. The supervisory authority should take supervisory action if it is not satisfied with the result of this process.
- The supervisory authority should expect institutions to operate above the minimum regulatory capital ratios.
- The supervisory authority should intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular institution. The supervisory authority shall take remedial action if an institution's capital is not maintained or restored.

Requirements for banks' internal risk and capital adequacy assessment process – ICAAP⁴⁷

The banks' internal assessments of their capital needs shall cover:

- risks not taken into account in the calculation of the minimum requirement under Pillar 1.
- risks related to uncertainty in their models (because quantification of risk and capital needs is based on uncertain methods and data)
- the fact that assessment of the capital need has to be forward-looking and reflect business plans, growth and access to capital markets.
- the fact that the capital base must be sufficient to weather an economic downturn with negative results in which it is difficult to raise fresh capital in the market.

The bank is expected to have a capitalisation plan with a board-approved targets for minimum capital level.

The supervisory authorities' follow-up – SREP⁴⁸

The supervisory authorities are required to evaluate the ICAAP process and the result of the process at the individual institution. The assessments shall include the companies' exposure to the major risks, management and control of risks, and capital needs. Finanstilsynet has the legal authority to set individual capital requirements, demand that the risk level be decreased, or require improved governance and control.

Norway was one of the first countries in Europe to implement Pillar II in practice in the current capital adequacy regulations. Circular 21/2006 – Pillar 2 of the revised capital adequacy framework – guidelines for assessing risk profile and calculating capital needs at institutions, was sent to all the banks in Norway in December 2006. Norwegian banks were required to submit documentation of their internal assessment of their risk profile and calculation of their capital needs in 2007.

Finanstilsynet's practice

The overarching objective of Finanstilsynet's work is that Norwegian financial institutions are robust and have a financial strength that is consistent with their risk profile and a long-term, forward-looking assessment of risk, which includes the possibility of a severe recession with major losses and deficits. It is essential that the banks are sufficiently capitalised so that they have access to competitive, stable funding even under such conditions.

Finanstilsynet uses a "Pillar I +" approach, i.e. its evaluation of the institutions' capital needs are based on the assumption that the Pillar I minimum requirement is an absolute minimum for each of the risk categories included, i.e. credit risk, market risk and operational risk. In addition to the types of risks covered by Pillar I, it is expected that the institutions set aside

⁴⁷ Internal capital adequacy assessment process.

⁴⁸ Supervisory review and evaluation process.

capital for other risk factors such as concentration risk (individual customer, industry and geography), interest rate risk in the banking portfolio, business risk and strategic risk. For liquidity risk, Finanstilsynet attaches importance to the quality of governance and control in the bank and the bank's actual capital level and targets, as key factors in maintenance of satisfactory funding. In addition to the ICAAP documentation, Finanstilsynet also uses information from the on-site inspections of business and management models, funding strategy and liquidity position, level and quality of the credit and securities portfolios, as well as the quality of the governance and control systems and compliance with them.

In its SREP assessments, Finanstilsynet uses special sensitivity tests and future scenarios related to a severe economic downturn.

In addition to developing their own regular stress tests, as mentioned above, Finanstilsynet has collaborated with Norges Bank on stress tests for Norwegian banks. It was also involved in the EBA's stress tests of European banks, as DNB was among the 91 banks that were tested in 2011.

This work also provides useful information that can be used in assessments of institutions' risk and capital requirements.

In its feedback to the banks, Finanstilsynet emphasises that the Tier 1 capital must be capable of loss absorption on a going concern basis. The boards of the banks are asked to take this into account in their assessment of the required levels of capitalisation.

In December 2011, Finanstilsynet followed up the new recommendations from the EBA in a letter sent to all the Norwegian banks. One Norwegian bank is explicitly mentioned in the EBA list of banks covered by the recommendation of 8 December 2011. Most Norwegian banks are well capitalised and have Tier 1 capital well above the current minimum requirements and a future requirement for a CET1 ratio of 9 per cent. At this juncture, Finanstilsynet assumes that all Norwegian banks and financial institutions will meet the target of 9 per cent CET1 by 30 June 2012. In addition, Finanstilsynet has requested that all Norwegian banks prepare a plan detailing the capitalisation level they are going to achieve under the new regime, as part of their ICAAP work.

5.2.2 Relationship to a countercyclical capital buffer

In connection with their Pillar II assessments, the boards of banks shall set capital targets and capital planning on the basis of a sound capital adequacy assessment process in light of the requirement that must bank be able to withstand a situation with large, unexpected fluctuations in income and unexpected high losses. Income fluctuations and losses can occur either as a result of a bank-specific event or as a result of general developments in the economy. Banks shall include increased future losses due to the economic situation in their calculations when setting their capital targets. There will therefore be a certain degree of overlap between the considerations to be addressed through the banks' Pillar II assessments and the considerations that form the basis for the countercyclical capital requirements. An important difference is that the countercyclical buffer will be the same for and apply to all banks, including branches of foreign-owned banks, in contrast to the Pillar II requirement.

There are also more stringent requirements concerning predictability and transparency in the basis for decisions on the countercyclical buffer.

In its Pillar II reviews, Finanstilsynet also attaches great importance to a forward-looking perspective, with requirements concerning the ability to survive an economic downturn, and that institutions must be able to obtain liquidity / funding even in difficult market conditions. Consideration of macroeconomic factors and potential systemic risk are part of this perspective as it has been practised. Finanstilsynet has long attached great importance to identifying potential systemic risk through its macroprudential supervision.

Both the banks' own assessments of the risk level and its capital needs and the supervisory authorities' assessments will vary with the economic situation and outlook. The requirements in CRD IV for more system assessments in the Pillar II regulations mean that both the time dimension and the cross-sectional dimension of the macroprudential perspective will be included as integral parts of the authorities' assessments under Pillar II.

The overall Pillar II requirement is determined through a dialogue between Finanstilsynet and the board of the individual bank. The bank's assessment of its capital requirements should also include a variety of risk factors. Neither the total capital requirement nor its structure is published. The required countercyclical buffer rate shall be set on the basis of an assessment of the situation in the financial system as a whole and shall be the same for all banks. Special procedures shall be developed for setting the buffer rate. A distinction must therefore be made between decisions concerning the required countercyclical buffer rate and the Pillar II review.

The members of the working group Lind Iversen and Johansen made the following special comment on the banks' capital adjustment and the Pillar II regulations:

"Adjustments in the Norwegian banking sector indicate that most banks are going to operate with Common Equity Tier 1 capital in excess of 10 per cent of risk-weighted assets. According to the Pillar II framework, in the future too, it will be assumed that in connection with setting capital targets and capital planning on the basis of a sound capital adequacy assessment process, the boards of banks shall take as their starting point that the bank must be able to tolerate a situation with great, unexpected income reduction and unexpected high losses. This can occur as a result of a bank-specific event or as a result of general developments in the economy. According to the capital adequacy regulations, the supervisory authorities shall, in addition to analysing the risk of the individual institution in isolation, also analyse the potential risk that the institution poses to the entire financial system. This also applies to groups of institutions.

Finanstilsynet's implementation of the Pillar II regulations and its targets for the financial soundness of banks assume that the banks shall at any given time have a high capital adequacy ratio, strong liquidity and good risk management. The norm will be that the Pillar II requirement for Tier 1 capital exceeds the sum of the minimum requirement and the required buffer rate. In this situation, a countercyclical buffer requirement constitutes a non-binding regulation, and thus has limited relevance and effect."

6 The institutional framework for and organisation of macroprudential supervision

6.1 Introduction

In the wake of the international financial crisis in 2008–2009 there has been a marked focus on monitoring systemic risk and the need for special measures in this area. While some countries are building on existing structures for their work on macroprudential supervision, others are establishing a new institutional framework. An important factor in this choice has been how well the former framework handled the financial crisis.

The IMF has summarised the development as follows:

"In a number of advanced economies, in particular in Europe, countries are integrating prudential functions into the central bank. Typically, these countries have adopted some form of "twin peaks" model, as in the Netherlands, leaving conduct-of-business and securities market supervision as a responsibility of a separate agency (Belgium, France, the United Kingdom, and the United States). Ireland has opted for a stronger form of integration where all supervision of markets and institutions is conducted by the central bank. Moreover, a number of countries, including the United Kingdom and the United States are creating dedicated policy-making committees, such as the Financial Policy Committee (FPC), chaired by the Governor of the Bank of England, and the Financial Stability Oversight Council (FSOC), chaired by the United States Treasury."⁴⁹

6.2 Models for the institutional organisation of macroprudential supervision

6.2.1 Overview from the IMF

The IMF⁵⁰ has prepared a list of different stylised models of organisation of macroprudential supervision based on the degree of institutional integration between the central bank, the financial supervisory authority and the ministry of finance. The models, which are presented in table 6.1 below, are considered in the light of five different dimensions:

- A** Degree of institutional integration of central bank and supervisory agencies
- B** Ownership of macroprudential policy mandate
- C** Role of the ministry of finance / treasury / government
- D** Separation of policy decisions and control over instruments
- E** Existence of separate body coordinating across policies

⁴⁹ IMF staff discussion note, 1 November 2011: "Institutional Models for Macroprudential Policy".

⁵⁰ International Monetary Fund (IMF) 30 August 2011: "Towards Effective Macroprudential Policy Frameworks: An Assessment of Stylized Institutional Models".

Table 6.1 Stylised models of organisation of macroprudential supervision

Model \ Features	1	2	3	4	5	6	7	R1
A	Full (central bank)	Partial	Partial	Partial	No	No (partial*)	No	No
B	Central bank	Committee “related” to central bank	Independent committee	Central bank	Multiple agencies	Multiple agencies	Multiple agencies	Committee (multi-national; regional)
C	No (active*)	Passive	Active	No	Passive	Active	No	Passive (EC)
D	No	In some areas	Yes	In some areas	No	No	No	Yes
E	No	No	No (Yes*)	No	Yes	Yes (de facto**)	No	No

Examples:

1 Czech Republic, Ireland (new), Singapore*

2 Malaysia, Romania, Thailand, UK

3 Brazil*, France, USA

4 Australia

5 Belgium (new), The Netherlands, Serbia

6 Canada, Chile, Hong Kong SAR*, Korea**, Lebanon, Mexico

7 Iceland, Japan, Peru, Switzerland

R1 EU (ESRB)

Source: IMF. 30. August 2011: "Towards Effective Macroprudential Policy Frameworks: An Assessment of Stylized Institutional Models".

The IMF's criteria for the choice of model

The IMF recommends that the assessment of the institutional organisation of macroprudential supervision attaches importance to the following criteria:

1. The organisation should provide for effective identification, analysis, and monitoring of systemic risk. It is important to have access to *relevant information*, and use should be made of *existing resources and expertise*.
2. The institution that is going to make decisions on measures must have a *clear and unambiguous mandate and powers*. This will both contribute to the *accountability* of the executive institution and enable verification of the use of the instruments.

3. The institutional framework should facilitate effective coordination across government agencies in a way that reduces the risk of gaps and overlaps in follow-up, while preserving the autonomy of separate policy functions.

The IMF and others also highlight the following factors, to which importance ought to be attached:

Predictability of decisions and *transparency* about the underlying analyses. Responsibility for macroprudential supervision should be delegated to a body that is independent of political cycles. This will reduce the risk of more short-term political considerations prevailing and preventing measures to mitigate systemic risk build-up being initiated in time.

6.2.2 European Systemic Risk Board (ESRB)

The ESRB recommends that member states designate in the national legislation an authority entrusted with the conduct of macroprudential policy, and on Monday 16 January published a document containing recommendations concerning a) objective, b) institutional arrangements, c) tasks, powers, instruments, d) transparency and accountability, and e) independence of such a body.⁵¹

According to the ESRB, responsibility for the macroprudential policy should be entrusted either to an existing institution or a board composed of the authorities whose actions have a material impact on financial stability. The objective of the body that will be responsible for macroprudential supervision should be to safeguard the stability of the financial system as a whole.

The body should have the authority both to pursue macroprudential policies upon its own initiative and as a follow-up to recommendations or warnings from the ESRB. The national body should have full access to all the necessary statistics and policy instruments. The ESRB also requests that the national body be given the necessary independence to perform its duties, that responsibilities are clearly defined and distributed, and that body's activities are transparent. It is pointed out in particular that all macroprudential policy decisions and their motivations are made public.

The recommendations are addressed to the member states. The ESRB asks the member states to submit a report by 30 June 2012 on how they plan to organise the macroprudential supervision on the national level, and set a deadline of 1 July 2013 for having macroprudential supervision systems in place nationally and a deadline 30 June 2013 to submit a final report to the ESRB on the national arrangements. It is envisaged that the ESRB can comment on the plans from the individual member states.

⁵¹ Recommendation of the European Systemic Risk Board of 22. December on the macro-prudential mandate of national authorities (ESRB/2011/3).

6.3 Advice on the institutional arrangement in Norway

In Norway, the authorities' work on financial stability is divided among Norges Bank, Finanstilsynet and the Ministry of Finance. See the more detailed presentation in section 2.2.

6.3.1 The Financial Crisis Commission's recommendation

In chapter 19 of Official Norwegian Report NOU 2011: 1 (p. 208), the Financial Crisis Commission proposes that the macroprudential policy work (macroprudential regulation and supervision) be built on the existing distribution of roles among the Ministry of Finance, Norges Bank and Finanstilsynet. The Commission also refers to the fact that Norges Bank has a special responsibility for monitoring the financial system on the system level, and finds that this practice should be continued. The Commission submitted a proposal for a formalised system for decisions on the use of instruments in macroprudential regulation:

"The Commission proposes that Norges Bank is provided a clearer formal responsibility to periodically provide accurately expressed advice on the use of discretionary measures in macro regulation of the financial system. Norges Bank should provide the advice in the form of publicly available submissions to the Ministry of Finance and Finanstilsynet. Finanstilsynet should explain in publicly available submissions to the Ministry of Finance what it does to follow up the recommendations from Norges Bank, or why it has decided to not follow up the recommendations. All communication should be open to the public."

6.3.2 Norges Bank's response to the consultation

Norges Bank has stated that twice a year it will *"send a letter comprising recommendations for relevant measures to the Ministry of Finance and Finanstilsynet."*⁵²

In its consultative comments of 3 May 2011 to the Financial Crisis Commission's report, Norges Bank endorses the Commission's proposals for an institutional system for setting the countercyclical buffer. In its comments, Norges Bank also mentions the relationship between the regulation of systemic risk and monetary policy. The Bank points out that there are limits as to how many tasks the interest rate can fulfil, and that there is therefore a need for more targeted instruments that can curb systemic risk.

6.3.3 Finanstilsynet's response to the consultation

In its consultative comments of 3 May 2011 to the Financial Crisis Commission's report, Finanstilsynet points out that Finanstilsynet has been using macroprudential supervision as an important supplement in its supervision activities since 1994. Finanstilsynet also points out that the countercyclical buffer is a new macroprudential regulatory tool that is going to be incorporated into the revised capital adequacy framework, and that the vast majority of other relevant macroprudential regulatory tools are tools that can be used in the regulation and supervision of individual institutions and are available to Finanstilsynet. Finanstilsynet also

⁵² Norges Bank (2010): "Financial stability 2/10", frame 3.

refers to the fact that the countercyclical capital requirement shall supplement, and partially overlap, Finanstilsynet's Pillar II reviews, and states that it is important that Finanstilsynet continues to be responsible for overall assessments by practising all the individual components of the capital adequacy regulations. In line with this, Finanstilsynet believes that the introduction of countercyclical capital requirements ought to be considered in conjunction with the implementation of the other Basel III capital requirements.

"Finanstilsynet supports the introduction of such a buffer, but nevertheless finds grounds to reiterate that it is important not to attach too much importance to this one new tool. Variable macroprudential tools for use in the financial sector, intended to influence the credit supply, will alone hardly be capable of curbing the development if the demand for credit is being affected by expansionary fiscal and monetary policies. Finanstilsynet is therefore of the opinion that if Norges Bank is to be responsible for warning when credit growth is excessive, as part of its macroprudential regulation of banks, the monetary policy mandate cannot disregard the consideration of a potentially reckless growth in the credit market."

In terms of which institution shall be tasked with making decisions on the buffer rate, Finanstilsynet proposes that the formal decision-making authority rest with the Ministry of Finance, with the possibility of delegation to Finanstilsynet. Finanstilsynet proposes the following possible arrangement:

"One possible arrangement is that Norges Bank and Finanstilsynet take turns on a quarterly basis (i.e. twice a year each) to submit an overview of financial stability and that both have a duty to provide opinions on and/or recommendations concerning the need for countercyclical buffer capital. This kind of arrangement will ensure predictability and transparency for the market and the public at large. It is assumed, in accordance with constitutional practice in Norway, that the formal decision-making authority to issue requirements regarding buffer capital rests with the Ministry of Finance, with the possibility of delegation to Finanstilsynet."

6.3.4 Finance Norway's response to the consultation

In its consultative comments of 3 May 2011 to the Financial Crisis Commission's report, Finance Norway (FNO) makes the following point concerning the distribution of roles and responsibilities:

"In the opinion of Finance Norway, it is essential for the proper execution of macroprudential regulation that the formal responsibilities have been clearly and unambiguously defined and allocated. Finance Norway supports a system in which Finanstilsynet is authorised to assess and impose additional capital requirements on the basis of macroeconomic analyses, based on consistent methods and frameworks as prescribed by the European Commission in a directive, regulation or set of guidelines. In Norway, the responsibility for monitoring the capital adequacy of financial institutions, including the responsibility for implementing measures that the authorities decide to implement, has been ascribed to Finanstilsynet. Finance Norway holds that it is important that Finanstilsynet continues to be responsible for the regulation of capital adequacy and liquidity in Norway, to ensure consistent and comprehensive supervision of the system. Nevertheless, it will probably be useful to conduct

macroeconomic analyses in consultation with Norges Bank. Finance Norway is concerned that any expansion of Norges Bank's area of responsibility in the regulation of the financial soundness of the financial institutions may be in conflict with the central bank's responsibility for monetary policy and the Government Pension Fund Global."

6.3.5 Recommendation from the IMF

The IMF gave the following advice concerning the framework for macroprudential policy during its review of the Norwegian economy in November 2010:

"Looking beyond near-term measures, there may be a case for adopting a more formal framework for countercyclical macroprudential policy. The key objective is to mitigate the amplitude of the credit cycle by using targeted instruments, such as time-varying capital risk weights, loan-to-income caps, or collateral requirements. In designing a macroprudential framework, it would be important to set out clear institutional responsibilities based on relevant expertise and in a way that ensures accountability and appropriate operational independence. Furthermore, cooperation with and support from foreign regulators, notably in the Nordic region, would be critical to ensure the effectiveness of some measures."⁵³

The IMF gave the following advice concerning the framework for macroprudential policy during its review of the Norwegian economy in November 2011:

"Financial stability may also benefit from establishing a more formal framework for countercyclical macroprudential policy. The key objective of such policy is to mitigate the build-up of systemic risk via the use of targeted instruments, such as time-varying adjustments in capital ratios, LTV limits, LTI limits, and risk weights on assets. In the wake of the global financial crisis, many countries – including Norway – are considering strengthening their institutional set-up for macroprudential policymaking. Good guiding principles for such reforms include to promote operational independence in order to shield macroprudential policy from political cycles, as with monetary policy; to establish clear lines of accountability; to facilitate information-sharing across policymaking institutions; and to bolster the role of the central bank in order to harness its macroeconomic expertise and promote coordination with liquidity management, payment systems oversight, and monetary policy. A number of institutional arrangements could achieve these objectives, including the one recently proposed by Norway's Financial Crisis Commission, especially if mechanisms are included to ensure robust collaboration between the FSA and the central bank in regard to risk identification and information sharing."⁵⁴

6.4 Models for a decision-making structure for macroprudential supervision in Norway

The working group has chosen to outline four possible models for how Norway's work on macroprudential supervision can be organised. The models are primarily focused on decisions

⁵³IMF. Norway 2010 Staff Visit. Concluding Statement of the IMF Mission 16 November 16 2010.

⁵⁴ IMF. Norway 2011 article IV consultation: Concluding statement of the IMF mission.

on the countercyclical capital buffer requirements and any other discretionary variable measures. In all the models, Norges Bank is responsible for the preparation of the background material for decision-making or "buffer guide". One main difference between the models vary is regarding who makes the decisions about the use of the instrument. Below is a presentation of the four models, highlighting their strengths and weaknesses in the light of criteria defined by, among other things, the IMF and the ESRB.

Model 1 (Current distribution of responsibilities)

This model constitutes continuance of the current distribution of responsibilities between the three government agencies. The model entails that Finanstilsynet and Norges Bank supervise and regulate the financial institutions and markets using the policy instruments available to them. In this model, some of the decisions will be made by Finanstilsynet, some will be made by the central bank and some will be made by the Ministry, in line with the existing distribution of expertise and resources. The Ministry of Finance makes decisions based on advice and input from Norges Bank and Finanstilsynet. The level of the capital requirements is laid down in Acts of law and in regulations set by the Ministry of Finance. In the light of Norges Bank's duty to 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, in this kind of model it is natural that Norges Bank shall advise the Ministry of Finance on setting the countercyclical buffer. The Ministry makes the decision on the countercyclical buffer requirement. On the basis of Finanstilsynet's responsibility to prepare all cases falling under its supervision in which the final decision rests with the Ministry, it will also be natural that Finanstilsynet prepares a resolution on countercyclical buffer requirements for the Ministry. In addition, Finanstilsynet shall continue to monitor the financial institutions' compliance with the buffer requirements.

One advantage of this model is that it builds on an existing system that has proven to work well. A disadvantage is that sharing the responsibility among several agencies may mean that the responsibilities of each agency do not appear as clearly defined. This can hamper verifiability and accountability. It would also be unfortunate if two entities (Finanstilsynet and Norges Bank in this model) base their advice on divergent assessments of economic developments. Nor does this model meet the criterion that ongoing decisions about the countercyclical buffer and other cyclical measures should be independent from political cycles.

Model 2 (Advice from the central bank and decision made by Finanstilsynet (comply or explain))

The Financial Crisis Commission has proposed a model in which Norges Bank has a clearer formal responsibility to advise Finanstilsynet on the use of discretionary macroprudential measures. In this model, Finanstilsynet shall either follow the advice or explain why it has chosen not to follow it. Both the advice and the explanations shall be public. The mandate and

the basis for decision-making shall be defined by law or by the Ministry of Finance. In this model, the Ministry of Finance does not make decisions on the use of discretionary macroprudential measures, but the Ministry of Finance must give an account of the recommendations, assessments and actions to the Storting.

One strength of this model is that the background material that has been prepared by one body for decisions in another might be more comprehensive than material intended for internal use. Another advantage of model 2 is that it will ensure that Finanstilsynet's detailed knowledge about the individual institutions is given adequate weight. On the other hand, all the relevant microprudential information should be made available to Norges Bank in advance, and can thus be incorporated into the Bank's background material. As with model 1, a division of the responsibility for making recommendations and the responsibility for making decisions might undermine predictability, create confusion about responsibilities, and complicate verification of decisions. In this model, Finanstilsynet can reject Norges Bank's recommendations. This will necessitate development of parallel expertise in Finanstilsynet and may create uncertainty *ex ante* about the analytical basis for the final decision. Another objection might be that, since Finanstilsynet is a subordinate agency under the Ministry of Finance, the model does not comply with the recommendations concerning delegation to an independent institution.

Model 3 (Preparation of the decision-making basis and decision-making both performed by the central bank)

This model entails that Norges Bank both prepares the background material and makes decisions on the use of instruments. Within this model it is particularly appropriate to ascribe the responsibility for making decisions on discretionary cyclical measures to the central bank.

The model entails that responsibility for the preparation of the analytical basis on which decisions are made is not separated from the responsibility for making the decisions, thus ensuring a clear allocation of the responsibility for the use of macroprudential tools. The model also allows for a single body to consider use of instruments to achieve financial stability and monetary policy. The model reduces the need to build up expertise and capacity outside Norges Bank. The right of political authorities to issue instructions to the central bank is strictly regulated, entailing a high degree of independence in monetary policy. This increases the credibility of the use of the instrument. On the downside, any criticism of Norges Bank's execution of a mandate for macroprudential monitoring might also negatively affect Norges Bank's credibility in monetary policy. This kind of model might also make it more difficult to take full advantage of Finanstilsynet's expertise and knowledge of the individual financial institutions.

Model 4 (Tripartite committee)

Some countries have established a special committee to make decisions on one or more macroprudential measures. The committee consists of representatives from a number of different institutions and is usually chaired by the governor of the central bank. In Norway,

this kind of committee could include representatives from Norges Bank, Finanstilsynet and the Ministry of Finance, and, as appropriate, other independent members.

A decision made by a committee with members from several different institutions would allow a broader discussion ahead of the decision. Like model 2, this model would also help ensure that Finanstilsynet's in-depth knowledge of individual institutions is given adequate weight. However, decisions about the countercyclical buffer shall be based on a limited set of indicators, and information from Finanstilsynet ought already to be included in the original background material. Decisions made by a separate committee might create uncertainty about responsibilities and about the relationship between the committee and the institutions that are represented. It is also not a given that the model will ensure a good balance between the objectives of monetary policy and the objectives of the countercyclical buffer.

The members of the working group Lind Iversen and Johansen made the following special comment on the capital requirements framework and the various government authorities and institutional models:

"It can seem rather disorganised that different parts of the capital adequacy requirements are administered by different government agencies. It also seems unnecessary, since the primary purpose of the countercyclical buffer is to enhance the financial soundness and resilience of banks. In light of this, there is little need for coordination with monetary policy, but a significant need for coordination of the various different capital requirements. Banks that fail to meet the countercyclical buffer requirement will be subject to restrictions on payments of dividends and bonuses and share buybacks. The bank will also be asked prepare a capital conservation plan. Both of these matters will be handled by Finanstilsynet. There is a need for coordination of both the capital requirements per se and the authorities' administration of the requirements vis-à-vis the banks.

Among other things to ensure that monetary policy is based on long-term considerations, the political authorities have delegated interest-rate setting to the central bank. Decisions on the introduction of a countercyclical buffer are primarily a measure to promote soundness and resilience in the financial system, and the framework for decisions ought therefore to be the same as for other capital adequacy rules.

Given the proposal to base the countercyclical buffer requirement on developments in such an established indicator as the credit-to-GDP ratio, the issue of verifiability does not appear to be particularly problematic. Other relevant indicators are also well established and simple to calculate. The minority of the working group believes there is very little likelihood of the various authorities playing against one another. Historical evidence and the institutional set-up in Norway indicate that the relevant government agencies have a tradition of coordination and consistency in their conduct."

6.5 The working group's assessment of the framework and organisation

6.5.1 Introduction

As already mentioned, the working group finds that a countercyclical capital buffer system ought to be established in Norway at the latest at the same time as in other European countries. The working group did not reach consensus on the optimal institutional set-up for a buffer system. In this context, reference is also made to the special comments cited above.

Chapter 7 below discusses a number of other possible countercyclical instruments to supplement the buffer requirement. The working group does not propose changes in the institutional framework for other policy instruments than the countercyclical capital buffer. The working group finds that, when the use of other macroprudential instruments is being considered, it should then be considered where the competence to make decisions on these measures should lie.

Continuance of the current institutional framework means that Finanstilsynet, by virtue of its high level of expertise in supervision of individual institutions, will continue to play a central role in the work on discretionary macroprudential measures along the cross-sectional dimension, and that Norges Bank, in line with its current tasks, ought also to make recommendations on the use of other discretionary time-varying macroprudential policy instruments than the countercyclical buffer.

6.5.2 Organisation of the setting the countercyclical buffer requirement

The current distribution of roles (model 1) has thus far proven to be a stable model for the existing policy instruments that have hitherto been used to ensure financial stability. The working group believes that in principle the institutional framework for macroprudential supervision ought to build on the existing expertise and resources in Norges Bank and Finanstilsynet in these areas. Norges Bank and Finanstilsynet should continue to apply their macroeconomic expertise in their monitoring of the financial institutions, financial markets and systemic risk. Finanstilsynet has in-depth insight and understanding of systemic risk through direct contact with the institutions and the market players and its separate macroprudential supervision. Understanding of the relationships between systemic risk and institution-specific risk is important in Finanstilsynet's supervisory work. Its work on administering the regulations and preparing new regulations also yields specialist expertise. Similarly, through its work on monetary policy and financial stability, Norges Bank has extensive expertise in macroeconomics and supervision of the financial market as a whole. Norges Bank bases its assessments of financial stability and the risk factors for the banks on the same assessments of developments in the Norwegian and international economies as it uses in its monetary policy reports. Norges Bank receives a great deal of information about the situation in banks and markets through its own market operations and by virtue of its role as lender of last resort.

The working group finds that the *decision-making basis* for the cyclical aspect of the macroprudential supervision (the "reference guide") must be based on thorough analyses of

systemic risk, including the interaction between the real economy and financial system. Theoretical and empirical models will be extremely useful in this respect. It will be necessary both to draw on Finanstilsynet's knowledge about individual institutions, markets and systemic risk, and to be able to coordinate the assessments and analyses that underlie decisions concerning discretionary cyclical macroprudential measures with Norges Bank's assessments of financial stability in general and with the decision-making basis for monetary policy.

The majority of the working group (the members Vikøren, Svendsen, Rikheim, Wassiluk and Tveit) refer to the fact that Norges Bank is a large organisation with extensive and broad understanding of macroeconomic relationships and the interplay between the real economy and financial sector, and that the central bank, through its mandate to monitor the build-up of systemic risk and assess the outlook for the financial system as a whole, has built up good expertise that is relevant for the analysis of systemic risk and assessment of the need to use policy instruments. The task of preparing the background material for decision-making will be labour-intensive and costly and ought therefore to be assigned to a body that has sufficient resources to perform this task. In the opinion of the majority of the working group, this indicates that Norges Bank ought to be given a separate formal responsibility for the preparation of the basis for decisions on the countercyclical buffer.

The purpose of a countercyclical buffer is, as mentioned above, to protect the banking sector and real economy against systemic risk arising from major fluctuations in debt and asset prices and more generally from other risk factors that can threaten financial stability.⁵⁵ The majority of the working group points out that many of the criteria that ought to apply to the institutional framework for decisions on the countercyclical buffer will be satisfied in a model where the responsibility for making the decision is also assigned to the central bank (see model 3 described above). This is a model that appears to be in line with the recommendations of both the IMF and the ESRB. The majority of the working group also notes that the wording of the European Commission's Capital Requirements Directive proposal can be interpreted as suggesting that the same authority that is commissioned with preparing the basis for decisions each quarter – the "buffer guide", which shall be the designated authority's reference to guide its exercise of judgement in setting the countercyclical buffer rate – shall also set the countercyclical buffer rate (see Article 126 paragraph 2 of the draft directive).

In the opinion of the majority of the working group, this indicates that Norges Bank, in addition to being responsible for the preparation of the buffer guide and other background material, ought also to be responsible for making the quarterly decisions on the level of countercyclical capital buffer. One of Norges Bank's long-standing responsibilities is monitoring the financial system as a whole. The Bank regularly provides recommendations concerning measures to counteract the build-up of systemic risk. In this assessment, the majority of the working group has also attached importance to the advantages entailed by

⁵⁵ See, for example, the European Commission's description of the purpose of the countercyclical buffer: European Commission, 20 July 2011: "CRD IV – Frequently Asked Questions, MEMO/11/527)."

decisions on the countercyclical buffer being made by the same body that makes decisions on monetary policy.

The Ministry of Finance has the overall responsibility for financial stability. The Storting and the Ministry of Finance determine the allocation of roles and responsibilities between Finanstilsynet and Norges Bank. The constitutional responsibility for the financial market lies with the Minister of Finance. The Ministry of Finance is also responsible for formulating capital requirements for financial institutions. This means that the Ministry must delegate the authority to make decisions on the countercyclical buffer. The working group assumes that the final EEA rules on the countercyclical buffer will contain relatively precise requirements concerning national criteria for decisions on the countercyclical capital buffer, and that it will be relevant to implement these rules as a regulation. The Banking Law Commission's draft new Act on Financial Undertakings and Financial Groups provides a legal basis for the Ministry to issue regulations on a countercyclical buffer.⁵⁶ Assuming it is enacted, the Ministry would be able to issue regulations defining criteria for the use of this policy instrument and delegate the authority to make decisions to another body.

The majority of the working group holds that the Ministry, based on the legal authority provided in the draft new Act on Financial Undertakings and Financial Groups, ought to define an objective for the use of this instrument and delegate the task to Norges Bank, with a clear mandate. The mandate ought to be based on Norges Bank exercising professional judgement in a delimited area. Norges Bank ought to establish a bespoke decision-making process for the countercyclical capital buffer requirement. A system ought to be established whereby the Ministry receives information in advance about the background material for decision-making and the quarterly decisions on the countercyclical capital buffer. There should be a retrospective evaluation of how the task of making decisions on the countercyclical buffer has been performed, based on a review of the basis for the decisions and the exercise of judgement. There should be transparency concerning the basis on which decisions have been made and the decision-making process. The working group considers that countercyclical capital buffer decisions cannot be regarded as individual decisions and therefore would not be subject to the standard rules of appeal.

It is important that there is good exchange of relevant information between Finanstilsynet and Norges Bank in connection with the preparation of the basis for decisions on the countercyclical buffer, such that optimal use is made of Finanstilsynet's continuous access to updated information about the situation in the banks. It is also important that Norges Bank and Finanstilsynet exchange information about the liquidity situation for Norwegian banks. Finanstilsynet and Norges Bank should collaborate to develop procedures for the exchange of information.

Norwegian banks are going to have to submit more comprehensive reports to Finanstilsynet as a result of the new European reporting requirements. The working group recommends a study to clarify how financial market reporting is going to be organised in the future.

⁵⁶ NOU 2011:8 "New financial legislation", draft Act section 14-8, third paragraph, subsection b).

As specified in section 5.2.1, Finanstilsynet shall periodically evaluate the banks' own assessment of its capital needs through the Pillar II process. In this work, Finanstilsynet also takes into account factors included in the basis for decisions on macroprudential measures. Therefore, the preparation of the basis for decisions on the countercyclical buffer and other cyclical measures ought to be coordinated with Finanstilsynet's Pillar II reviews. In the opinion of the majority of the working group, Finanstilsynet must take the decisions on the countercyclical buffer requirement as given in its Pillar II reviews.

While the deadline in the European Commission's CRD IV proposal is 1 January 2013, the ESRB, as mentioned above, has proposed national implementation of a system for national macroprudential supervision from 1 July 2013. As already mentioned, the Banking Law Commission's draft new Act on Financial Undertakings and Financial Groups contains a proposal to provide a statutory basis for the introduction of countercyclical capital requirements. Provided that such a legal basis is proposed and adopted by the Storting, the working group assumes that it will be possible to establish a system for the countercyclical capital buffer based on this in the first half of 2013.

As already mentioned, a minority of the working group (Lind Iversen and Johansen) finds that, if the purpose of the countercyclical buffer is to enhance the financial soundness and resilience of banks, there is little reason to make an institutional distinction between the management of ordinary and countercyclical capital requirements. Likewise, nor does the fact that the international regulatory framework assumes a close correlation between the buffer rate and the credit-to-GDP ratio relative to its long-term trend provide grounds for establishment of such a distinction, in the opinion of the minority. The proposed rules ensure a high degree of verifiability. Other relevant indicators are also well established, and it will be easy to communicate the analytical basis for the decisions and the assessments that underlie the decisions to the relevant stakeholders.

In the opinion of the minority, it may be appropriate that both Finanstilsynet and Norges Bank prepare assessments of the need to impose and remove countercyclical buffer requirements. The Ministry of Finance is responsible for the overall assessment of the various considerations related to the general capital and buffer requirements. If the Ministry wants to delegate the authority to set the required buffer rate, it is, in the opinion of the minority of working group, more natural that this authority be delegated to Finanstilsynet than to Norges Bank. This is because the minority finds that there is a greater need to coordinate the countercyclical buffer requirement with the capital adequacy rules in general, including the Pillar II rules, than with monetary policy. It will be inefficient and seems unnecessary that different parts of the capital adequacy requirements are administered by different government agencies. Finanstilsynet has earned great credibility over many years for its work to ensure the soundness and resilience of the banks in Norway and stability in the financial system.

7 Other measures

7.1 Measures aimed at banks' lending practices

7.1.1 Caps on loan-to-value ratio

Caps on loan-to-value ratio⁵⁷ (LTV) are generally regarded as one of the few macroprudential tools that have been in use in many countries for any length of time. A loan-to-value ratio cap for housing is a requirement that a home loan should not exceed a defined percentage of the market value of the property. The main purpose of this requirement is to curb the growth in debt and house prices. Analyses from the IMF suggest that the limits on loans relative to the value of the collateral help reduce the build-up of systemic risk.⁵⁸

In Norway, LTV caps are included in Finanstilsynet's guidelines on prudent mortgage lending practices. Finanstilsynet has also proposed the establishment of a statutory basis so that these kinds of restrictions may be imposed by regulations in situations of high risk of financial instability and where the guidelines do not have a sufficiently strong influence on the banks' behaviour.

Finanstilsynet's 2011 Home loan survey revealed that roughly one quarter of all new home loans had an LTV of above 90 per cent in 2011.⁵⁹ Loans to purchase a residential property accounted for nearly 40 per cent of the reported lending portfolio.

When the loan-to-value ratio is high (i.e. equity requirements are low), even minor adjustments to the loan-to-value ratio will have major consequences for the individual household's borrowing options and thus the purchasing power in the housing market, if the cap is binding and households cannot produce more equity. This point is best illustrated with a simple example:

Assuming a household has equity of NOK 200,000 and the maximum permitted loan-to-value ratio is 90 per cent of value of the property, the household (given that it has sufficient income to service such a loan) would be able to buy a home with a value of NOK 2 million [= NOK 0.2 million / (1-0.90)] by taking out a loan of NOK 1.8 million. If the maximum loan-to-value ratio is lowered to 85 per cent and the LTV ratio is binding, a household with the same amount of equity would now only be able to afford a home with a value of NOK 1.3 million (and borrow NOK 1.1 million). This example illustrates how tightening the LTV requirements can have a significant impact on credit growth and the housing market, assuming these requirements are binding.

In reality, probably both the banks and the households would attempt to mitigate the effects of such a requirement by using additional collateral and other types of credit than home-secured loans. There is also a risk that strict LTV requirements can stimulate the emergence of a new

⁵⁷ The amount that can be borrowed relative to the value of the collateral.

⁵⁸ IMF (2011): "Global Financial Stability Report September". September 2011. Chapter 3.

⁵⁹ Finanstilsynet (2011): "Financial trends 2011".

grey market for loans outside the regulated financial sector. At the same time, the benefits of saving up equity would also be large, providing households strong incentives to save more.

There is reason to believe that caps on the size of loans relative to the value of the collateral work best as part of more permanent regulations. If the authorities were to frequently adjust the requirements in line with assessments of the risk in the financial system, this could be interpreted as intervening in the banks' credit assessments. This could have unfortunate repercussions for both the credit markets' function and the banks' responsibility for performing proper credit assessments. In situations of high risk of financial instability stemming from rapid growth in lending to certain groups of borrowers, however, changes in the LTV caps may nevertheless be a suitable instrument.

7.1.2 Caps on loan-to-income ratio

Restrictions on maximum loan-to-income ratio (LTI) have also been used in several countries for some time now. This is also considered a potentially useful macroprudential policy instrument that can help reduce imbalances in the financial position of households and can be a useful supplement to loan-to-value ratio caps. A loan-to-income ratio cap imposes a limit on the amount of money a household can borrow, defined as a percentage of its gross income. Analyses from the IMF suggest that LTI caps have a similar effect on the build-up of systemic risk as LTV caps.⁶⁰

The requirements concerning the borrower's liquidity position in Finanstilsynet's guidelines on prudent mortgage lending practices set an upper limit for loan size relative to income.

It will always be possible to circumvent absolute requirements for maximum permissible debt ratio to some extent through grey markets or inter-household loans (for example, parents with a low debt ratio may increase their loans to help their children who are limited by the LTI cap). Furthermore, the absence of a public debt registry impairs credit institutions' ability to verify the debt information supplied by potential borrowers. Nevertheless, the scope of this kind of circumvention is unlikely to be as large as the drop in credit, meaning that total credit will be reduced by the introduction of (or reduction in) LTI caps.

A loan-to-income ratio cap will reduce household borrowing and increase their financial robustness, and thereby the robustness of the banking system, by reducing the probability of loan default. A LTI cap will dampen the financial accelerator in the household sector, because the ceiling on debt will be independent of developments in collateral values and interest rates. This can serve to slow down growth in debt and house prices and reduce the risk of self-reinforcing interaction between them. It will also mitigate the impact that interest rates have on household borrowing: lower interest rates will not lead to increased credit growth for borrowers who have already reached the maximum LTI (beyond the impact that lower interest rates have on income).

⁶⁰ IMF (2011): "Global Financial Stability Report", September 2011. Chapter 3.

For the same reasons as for LTV caps, there is reason to believe that LTI caps work best as a permanent regulation. However, there may be situations where changes in these restrictions can be a useful means to limit the build-up of systemic risk.

7.1.3 Authority to issue detailed requirements for financial institutions with a view to promoting financial stability

In a letter to the Ministry of Finance dated 28 September 2011, Finanstilsynet raises the question of the legal authority to issue regulations on prudent lending practices. The Ministry of Finance has asked the working group to consider this issue. In the letter, Finanstilsynet states:

"since the regulation of home loans is not only conducted based on financial soundness considerations or institution-specific factors, a legal basis should be established to remove any doubts about the right to impose measures that are justified by the interests of financial stability and well functioning markets. Furthermore, depending on the situation in the economy and credit markets, there may be a need to issue detailed guidelines for loans for purposes other than buying a home, such as consumer loans. The proposed statutory basis ought therefore not to be limited to housing loans, but should have a more general scope."

Finanstilsynet proposes initially provision of the necessary statutory authority to adopt regulations *"in the event that the guidelines do not have sufficient impact on lending practices"*. Against this backdrop, Finanstilsynet has proposed that the following statutory provision be included in the Financial Supervision Act:

"The Ministry of Finance may by regulation impose requirements on institutions under its supervision to adjust their lending practice to ensure financial stability and well functioning markets."

According to Finanstilsynet's proposal, the authority to issue regulations shall rest with the Ministry.

According to the applicable legislation, there are several legal bases for both Finanstilsynet and the Ministry of Finance to set stricter requirements for capital adequacy and liquidity for financial institutions. Reference is made to, among others, the Financial Institutions Act and the Financial Supervision Act and appurtenant regulations

The working group points out that in a cyclical upswing in particular there may be pressure on credit assessments and questions about whether banks and other financial institutions are observing generally accepted standards of prudent lending practice. If the financial institutions do not follow Finanstilsynet's quantitative guidelines for prudent lending practice, questions may thus also be asked about the extent to which these guidelines are binding on the individual financial institution. This may warrant the introduction of a statutory basis, so that credit assessment guidelines can be prescribed more directly in regulations. The working group also believes that there may be a need for a more general legal basis to issue requirements for financial institutions in the interests of financial stability. In this case, it ought to be possible to use this legal basis for measures to address both risk associated with

cyclical fluctuations in the financial institutions and financial markets (procyclicality) and risk associated with interlinkages among financial institutions and among markets (the cross-sectional dimension).

The working group refers to the fact that the Banking Law Commission has recently drafted a new Act on Financial Undertakings and Financial Groups.⁶¹ A fundamental objective of legal rules for financial institutions is to promote financial stability. As already mentioned, the working group believes that it ought to be possible to include a statutory basis in the new Act on Financial Undertakings and Financial Groups, along with a provision stating clearly that one of the key objectives of the Act is to ensure financial stability. The working group supports Finanstilsynet's proposal that the authority to impose measures ought to be delegated to the Ministry of Finance, but holds that the Storting ought to be invited in the standard way to delegate the authority to "the ministry".

Establishment of a statutory basis will provide an opportunity to develop legally binding macroprudential measures with a view to promoting financial stability. The working group proposes the following wording of the legislation, which could, for example, be included as a new first paragraph of section 1-1 on the object and scope of draft new Act on Financial Undertakings and Financial Groups, (see the draft Act in NOU 2011:8 Volume B, p 946 f:

"The purpose of the Act is to promote financial stability and contribute to ensuring that financial institutions operate in an appropriate and adequate manner. Financial stability implies that the financial system is robust enough to mediate credit, execute payments and redistribute risk in a satisfactory manner.

The Ministry may by regulations issue detailed requirements for financial institutions with a view to promoting financial stability."

7.2 Capital requirements for banks' home loans

Capital requirements relating to the banks' lending shall reflect risk. Home-secured mortgages have traditionally been regarded as safe loans by lenders. However, house prices and household debt have risen considerably in recent years. There are now more households with high debt levels, and the composition of the debt is different from in the previous Norwegian banking crisis. Furthermore, Norwegian debt settlement rules can make it difficult for creditors to recover their claims. High house prices and high debt can pose a challenge for the financial system in Norway.

As a rule, it is the large, systemically important institutions that use internal ratings based approaches in their calculations. The calculation basis for capital requirements can be reduced considerably using an internal ratings based approach. In the various models, time series of 5–6 years are used to estimate the probability of default. The minimum capital requirement for home-secured mortgage loans is much lower than it used to be, especially for banks that use internal calculation methods. There is also a direct correlation between high debt ratio in

⁶¹ NOU 2011:8 "New financial legislation".

banks and high market funding of these banks' lending, meaning the banks are very vulnerable to disruptions in the capital markets. The working group has been informed that there are major variations among the individual EU countries in banks' risk weights for home loans.

In the interests of financial stability, it is extremely useful to be able to impose higher capital requirements on home-secured mortgage loans when this is deemed necessary for macroprudential supervision purposes. This can be done by, for example, setting minimum requirements for the parameters used in the IRB models, or by applying a multiplier for scaling up the risk-weighting that the bank has calculated for its home loan portfolio. [National discretion](#) to introduce such a measure will depend on the final scope and details of the CRD IV framework.

Given that there appear to be large differences, the working group proposes a test in which all the banks that use IRB models are given a standard portfolio and asked to calculate their capital requirements. The banks' capital requirements for this portfolio, calculated using the bank's own internal models, are then compared.

7.2.1 Risk weighting

It is also possible to use time-varying risk weighting as a tool in macroprudential regulation. The banks must hold capital relative to the estimated risk in the different parts of the business. How much capital the bank must hold for each krone it provides in loans for various purposes depends on the risk weighting. High risk weighting means that the bank must hold a relatively large amount of capital relative to its lending, while low risk weighting means that they can hold relatively less capital.

Systemic risk that builds up in parts of the banks' balance sheet can be tempered by increasing the risk weighting of these parts. Banks must then hold more capital for these parts of the lending portfolio. This will both make the banks more robust through higher capital buffers and reduce the scope of the high-risk activities by making them relatively more expensive.

In 2010, the largest Norwegian banks that use their own risk models (the "IRB banks") had average risk weights on home loans of between 10 and 16 per cent.⁶² Smaller banks that use the standard method operate with a risk weight of 35 per cent. Simple calculations show that a near doubling of risk weighting from 20 to 35 per cent could increase interest rates on home loans by up to 10 basis points.

Since at times there is fierce competition in the home loans market (at the same time as home loans provide access to sales of services or products that are less exposed to competition), it may in principle be the case that banks choose to pass the higher costs on to other customers than their home loan customers, or add them on to other (additional) products as opposed to the home loan itself. The products in the corporate credit market are more heterogeneous than

⁶² Currently, the banks' ability to make use of this are limited through the so-called Basel I transitional floor. This rule entails that the banks' minimum capital adequacy shall not fall below 80 per cent of the capital requirements calculated according to Basel I.

home loans. This creates more imperfect competition in the market for corporate loans. Higher risk weighting may therefore have a greater impact on the lending margins in the corporate sector.

Overall, there is reason to believe that changes in risk weighting will have a relatively limited impact on lending rates. They will, however, be able to have a significant impact on how much capital the banks must hold, and thus the banks' loss-bearing capacity in a downturn. Nevertheless, for a variety of reasons, it appears that risk weighting requirements ought primarily to be a part of the permanent regulation. Frequent changes in risk weights, in line with changes in the outlook for financial stability, may be perceived as reducing the banks' responsibility for through-the-cycle estimates of risk. Consequently, changes in risk weights ought probably first and foremost to be implemented when assessing whether the risk weights will contribute in the long run to an equity situation in banks that is not compatible with financial stability.

7.3 Capital requirements for systemically important banks

The Financial Crisis Commission stated that systemically important financial institutions should be subject to higher capital requirements than other financial institutions – both to minimise the likelihood of these institutions ending up in financial difficulties and to offset the fact that in reality systemically important institutions often operate with an implicit government guarantee.

On the basis of the high market share held by the largest banks in the Norwegian market and the major role played by the largest Norwegian bank by virtue of both its size and its role in the infrastructure, the Committee stated that Norway should set additional requirements for large banks, based on their degree of systemic importance, for example, through differentiation of the capital requirements. Because several large banks in the Norwegian market are headquartered in Sweden or Denmark, the Commission recommended "that the Norwegian authorities take the initiative for Nordic cooperation in the regulation of systemically important financial institutions, based on any mutually agreed upon recommendations or principles for such regulation internationally. Should the international processes fail to lead to adequate measures, special measures should be considered on the Nordic level." The Commission recommended that if this Nordic cooperation is not successful, the Norwegian government make "an independent assessment of whether it is appropriate to impose stricter requirements on some Norwegian institutions."

As mentioned in section 2.3.3, a final set of recommendations from the FSB, which included the regulation of global systemically important institutions, was presented at the G20 summit in November 2011. The recommendations from the FSB included an additional requirement that institutions that are regarded as globally systemically important be required to hold additional common equity Tier 1 capital. This surcharge is proposed to range from 1 to 2.5 per cent of risk-weighted assets depending on the institution's degree of systemic importance.

The Swedish government has announced new capital requirements for the four largest banks in Sweden, which will entail the full implementation of, and slightly stricter capital

requirements than, Basel III. This means that the Swedish requirement for Tier 1 capital ratio is 10 per cent for the four banks from 1 January 2013 and 12 per cent from 1 January 2015, i.e. 3 and 5 percentage points above the Basel III requirements.

The Swiss parliament has adopted a proposal for higher capital requirements for systemically important institutions than those required under the Basel III standards. These institutions shall have a Tier 1 capital ratio of 10 per cent and a total capital ratio of 19 per cent. This is 3 and 8.5 percentage points higher than required by the Basel III standards respectively. The part of the capital requirement that is not covered by Tier 1 capital can be covered by the convertible bond issues that will automatically be converted to share capital when the Tier 1 capital ratio falls below a given level. These requirements are going to be phased in gradually using the same implementation timetable as for Basel III.

The working group finds that the Norwegian authorities ought to coordinate with any future EU and EEA legislation in this area.

7.4 Measures aimed at banks' funding

Changes in banks' funding structures can lead to the build-up of systemic risk. In boom times, banks often use a higher proportion of short-term market funding to enable rapid expansion. We saw this prior to the international financial crisis. The consequence of this kind of development is that the financial system becomes increasingly vulnerable to disruptions in the financial markets. There are numerous measures that could conceivably be used to curb the accumulation of this risk. In this section, we discuss quantitative liquidity rules, a tax on banks' market funding (stability fee) and banks' access to liquid assets from the central bank.

7.4.1 Quantitative liquidity requirements

The Basel Committee has proposed new rules to improve banks' liquidity management. In addition to more stringent capital requirements, the new Basel III standards also contain two quantitative liquidity requirements: a liquidity buffer requirement (Liquidity Coverage Ratio, "LCR") and a stable funding requirement (Net Stable Funding Ratio, "NSFR"). The first concerns the required level of liquid assets a bank must have in order to be able to withstand periods of downturn in the markets for funding. The second concerns the composition of sources of funding or the stability of the funding. The new rules will make it harder for banks to expand rapidly using short-term market funding.

In accordance with the Basel III recommendations, the new requirements shall be phased in over an extended period and will not come into full effect until 1 January 2019. No concrete proposals have been submitted for legislation in this area in the EU Commission's proposal for more stringent capital adequacy and liquidity requirements (CRD IV); however, the Commission has announced that it will return to this matter. The working group would like to point out that it will be important to follow up the new EEA rules on liquidity when they come into force. The working group finds that a good liquidity framework is primarily a microprudential tool and is very important for financial stability.

Depending on the final framework, it may also be pertinent to link time-varying macroprudential measures to the regulations governing financial institutions' liquidity and liquidity management. For example, this might take the form of higher LCR and NSFR requirements during periods of economic growth. This would make rapid expansion even more costly in economic upturns, and the banks will have an even more robust financial structure in the event of turbulence in the financial markets. Whether this will be an appropriate way to regulate the liquidity risk in the system will depend on how effective the permanent regulations are in practice, the impact on the banks' conduct of these requirements being made time-varying, and whether other macroprudential instruments are introduced that affect the banks' liquidity risk. In the opinion of the working group, it is too early to conclude whether it will be desirable to introduce time-varying liquidity requirements as part of the new framework for financial market regulation.

7.4.2 Stability fee (levy on market funding)

The Financial Crisis Commission proposed a levy on Norwegian financial institutions' market funding. The purpose of this tax was to offset an implicit government guarantee that enables these institutions to pay less for their market funding than their risk would indicate. The implicit government guarantee arises because market lenders are confident that these banks will be bailed out by the government in the event of a crisis, meaning that these banks can grow faster and operate with a lower equity ratio than they would be able to without this kind of implicit guarantee.

A stability fee will also make rapid expansion more expensive and thus act as a general macroprudential measure during upswings.

Stability fees of this nature have already been introduced in the UK and Germany. According to the 2012 National Budget, the Ministry of Finance is considering whether it might be appropriate to introduce a stability fee in Norway, and whether this kind of levy is likely to fulfil the purpose the Commission describes. It is natural to postpone this assessment until it has been decided whether a stability fee is going to be incorporated as a macroprudential policy instrument in the regulation of the financial sector.

7.4.3 Banks' access to liquid assets in the central bank

Access to liquidity can have a major impact on banks' procyclical behaviour. When liquidity is cheap and readily available, it may be tempting for banks to expand their business based on short-term funding. Then, when access to funding becomes harder, this may trigger deleveraging by banks. The banks will then tighten their lending practices, with potentially significant consequences for the real economy.

The requirements regarding holdings of liquid assets and stable funding in the Basel III regulations will make it more expensive for banks to grow rapidly, making rapid growth based on short-term market funding less attractive for banks. However, if the situation in the financial markets becomes strained, it may be pertinent to ensure the banks easier access to

liquidity to prevent a sudden deleveraging. In this way the central bank can mitigate the impact on the real economy of turmoil in the financial markets.

The central bank is the ultimate provider of liquidity in an economy. The central bank creates liquidity by providing loans to banks, both to individual banks that have liquidity problems and to the market as a whole through open market operations. By virtue of this role, central banks have several variables that they can adjust in their day-to-day liquidity management that will affect banks' access to and the cost of liquidity. For example, Norges Bank injected large amounts of liquidity into the banking system during the financial crisis, in both NOK and USD, and with longer maturities than normal. Changes were also made in which securities could be pledged to the central bank as collateral, increasing the banks' lending opportunities.

Proper pricing of these kinds of liquidity measures is essential. If lending schemes are made too cheap, there is a risk that in the long term banks take too much liquidity risk because they assume that the central bank will provide plenty of reasonably priced liquidity when the conditions in financial markets deteriorate. Conversely, they must not be priced too high or the banks will prefer to improve their capital ratios by deleveraging rather than making use of the loan schemes.

Overview of appendices

Appendix 1 Excerpt from the European Commission's proposals 20 July 2011:

“Proposal for a directive of the European parliament and of the council on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and amending Directive 2002/87/EC of the European Parliament and of the Council on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate”.

Appendix 2 Letter from the Ministry of Finance dated 30 September 2011 and letter from Finanstilsynet dated 28 September 2011 about the statutory basis for prudent lending practices.

Appendix 3 Figures to section 4.2.1.

Appendix 4 Summary of Finanstilsynet's work on ICAAP in banks and financial institutions since 2007.

Appendix 5 Developments in tier 1 capital targets in selected banks 2007–2010.

Appendix 6 ESRB's recommendation on the macro-prudential mandate of national authorities

Appendix 1 Excerpt from the European Commission's proposals 20 July 2011:

“Proposal for a directive of the European parliament and of the council on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and amending Directive 2002/87/EC of the European Parliament and of the Council on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate”.

From the Commission's reasons for and objectives of the proposal:

“5.5. Capital buffers

On the basis of Basel III, this proposal introduces two capital buffers on top of the requirements: a Capital Conservation Buffer and a countercyclical capital buffer. The Capital Conservation Buffer amounts to 2,5% of risk weighted assets, applies at all times and has to be met with capital of highest quality.

It is aimed at ensuring institutions' capacity to absorb losses in stressed periods that may span a number of years. Institutions would be expected to build up such capital in good economic times. Those credit institutions that fall below the buffer target will face constraints on discretionary distributions of earnings until the target is reached.

The Countercyclical Capital buffer is intended to achieve the broader macro-prudential goal of protecting the banking sector and the real economy from the system-wide risks stemming from the boom-bust evolution in aggregate credit growth and more generally from any other structural variables and from the exposure of the banking sector to any other risk factors related to risks to financial stability. It will be applied by adjusting the size of the buffer range established by the conservation buffer by up to additional 2.5%. The Countercyclical Capital Buffer is set by national authorities for loans provided to natural and legal persons within their Member State. It can be set between 0% and 2.5% of risk weighted assets and has to be met by capital of highest quality likewise. If justified, authorities can even set a buffer beyond 2.5%. The Countercyclical Capital Buffer will be required during periods of excessive credit growth and released in a downturn. The ESRB could issue recommendations for the buffer settings by national authorities and its monitoring, including instances where the buffer exceeds 2.5%. So long as the Countercyclical Capital Buffer is set below 2.5%, Member States have to mutually recognise and apply the capital charge to banks in their Member State. For parts of the buffer exceeding 2.5%, authorities can choose if they accept the judgement of their peers and apply the higher rate or leave it at 2.5% for institutions authorised in their Member State.

Credit institutions and investment firms whose capital falls below the buffers will be subject to restrictions on the distribution of profits, payments on Additional Tier 1 instruments and the award of variable remuneration and discretionary pension benefits. In addition, these institutions will have to submit capital conservation plans to the supervisory authorities to ensure a swift replenishment of the buffers.”

From the preamble to the draft Directive:

“(55) In the light of the financial crisis and the pro-cyclical mechanisms that contributed to its origin and aggravated its effect, the FSB, the BCBS, and the G20 made recommendations to mitigate the pro-cyclical effects of financial regulation. In December 2010, BCBS issued new global regulatory standards on bank capital adequacy, including rules requiring the maintenance of capital conservation and countercyclical capital buffers.

(56) It is therefore appropriate to require credit institutions and investment firms to hold, in addition to other own fund requirements, a Capital Conservation Buffer and a Countercyclical Capital Buffer to ensure that credit institutions and investment firms accumulate during periods of economic growth a sufficient capital base to absorb losses in stressed periods. The Countercyclical Capital Buffer would be built up when aggregate credit growth is judged to be associated with a build-up of system-wide risk, and drawn down during stressed periods.

(57) In order to ensure that countercyclical buffers properly reflect the risk to the banking sector of excessive credit growth, credit institutions and investment firms should calculate their institution specific buffers as a weighted average of the counter-cyclical buffer rates that apply for the countries where their credit exposures are located. Every Member State should therefore designate an authority responsible for quarterly setting the level of the Countercyclical Capital Buffer rate for exposures located in that Member State. That buffer rate should take into account the growth of credit levels and changes to the ratio of credit to GDP in that Member State, and any other variables relevant to the risks to financial stability.

(58) In order to promote international consistency in setting Countercyclical Capital Buffer rates, BCBS has developed a methodology on the basis of the ratio between credits and GDP. This should serve as a common starting point for decisions on buffer rates by the relevant national authorities, but should not give rise to an automatic buffer setting or bind the designated authority. In particular, designated authorities could also take into account structural variables and the exposure of the banking sector to any other risk factors related to risks to financial stability.

(59) In order to achieve coherent application and to assure macro-prudential oversight across the Union, it is appropriate that the European Systemic Risk Board (ESRB) develops principles tailored for the Union economy and is responsible for monitoring their application. This Directive should not prevent the ESRB from taking any actions it deems necessary under Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board.

(60) It is appropriate that decisions of Member States on countercyclical buffer rates are coordinated as far as possible. In this regard, the ESRB, if requested by national authorities, could facilitate discussions among them about their proposed buffer settings. In order to promote a consistent approach to the factors on which designated authorities base those decisions, and to ensure that the setting of countercyclical buffer rates is consistent with the fundamental principles of the internal market, designated authorities should also be required

to notify the ESRB and the EBA whenever they take into account variables other than the deviation of the ratio of credit-to-GDP from its long term trend and related guidance from the ESRB, and as a result set a buffer rate that is higher than it would have been if those variables had not been taken into account. The purpose of such notification should be for the ESRB and the EBA to assess the nature of those variables and the consistency of the setting of the buffer rate with the internal market principles.

(61) Where a credit institution or investment firm fails to meet in full the requirements for a Capital Conservation Buffer and any additional countercyclical buffer, it should be subject to measures designed to ensure that it restores its levels of own funds in a timely manner. In order to conserve capital, it is appropriate to impose proportionate restrictions on discretionary distributions of profits, including dividend payments and payments of variable remuneration. So as to ensure that such institutions or firms have a credible strategy to restore levels of own funds, they should be required to draw up and agree with the competent authorities a capital conservation plan that sets out how the restrictions on distributions will be applied and other measures that the institution or firm intends to take to ensure compliance with the full buffer requirements.”

The Commission's proposal for Article 126:

“Article 126

Setting countercyclical buffer rates

- 1. Each Member State shall designate an authority (hereafter, a 'designated authority') that is responsible for setting the countercyclical buffer rate for that Member State.*
- 2. Each designated authority shall calculate for every quarter a buffer guide as a reference to guide its exercise of judgement in setting the countercyclical buffer rate in accordance with paragraph 3. The buffer guide shall be based on the deviation of the ratio of credit-to-GDP from its long-term trend, taking into account:
 - (a) the growth of levels of credit within that jurisdiction and, in particular, changes in the ratio of credit granted in that Member State to GDP;*
 - (b) any current guidance maintained by the ESRB in accordance with Article 125(1)(b).**
- 3. Each designated authority shall assess and set the appropriate countercyclical buffer rate for its Member State on a quarterly basis, and in so doing shall take into account:
 - (a) the buffer guide calculated in accordance with paragraph 2;*
 - (b) any current guidance maintained by the ESRB in accordance with Article 125(1)(a), (c) and (d) and any recommendations issued by the ESRB under paragraph 9; and*
 - (c) any other variables that the designated authority considers relevant.**
- 4. The variables referred to in point (c) of paragraph 3 may include structural variables and the exposure of the banking sector to particular risk factors, or to any other factors related to risks to financial stability.
 - (a) Where, in setting the countercyclical buffer rate, a designated authority takes into account variables mentioned in point (c), and the setting of that buffer rate would**

have been lower if variables mentioned in point (c) had not been taken into account, the designated authority shall notify EBA and the ESRB. EBA and the ESRB shall assess whether the variables on which the buffer rate is based relate to risks to financial stability and whether the setting of a buffer rate taking into account those variables is consistent with the fundamental principles of the internal market for financial services as reflected in Union legislation in the field of financial services.

- (b) By way of derogation from paragraph 3, the designated authority shall review the part of the countercyclical buffer rate based on the other variables referred to in point (c) of paragraph 3 on an annual basis only. That part shall not be taken into account by institutions established in another Member State for the purposes of calculating their institution specific countercyclical capital buffer.*
- 5. The countercyclical buffer rate, expressed as a percentage of the total risk exposure amount referred to in Article 87(3) of Regulation [inserted by OP] of institutions that have credit exposures in that Member State, must be between 0% and 2.5%, calibrated in steps of 0.25 percentage points or multiples of 0.25 percentage points. Where justified in view of the considerations set out in paragraph 3, a designated authority may set a countercyclical buffer rate in excess of 2.5% of the total risk exposure amount referred to in Article 87(3) of Regulation [inserted by OP] for the purpose set out in Article 130(3).*
 - 6. When a designated authority sets the countercyclical buffer rate above zero for the first time, or when thereafter a designated authority increases the prevailing countercyclical buffer rate setting, it shall also decide the date from which the institutions must apply that increased buffer for the purposes of calculating their institution specific countercyclical capital buffer. That date may be no later than 12 months after the date when the increased buffer setting is announced in accordance with paragraph 8. If the date is less than 12 months after the increased buffer setting is announced, that shorter deadline for application shall be justified by exceptional circumstances.*
 - 7. If a designated authority reduces the existing countercyclical buffer rate, whether or not it is reduced to zero, it shall also decide an indicative period during which no increase in the buffer is expected. However, that indicative period shall not bind the designated authority.*
 - 8. Each designated authority shall announce the quarterly setting of the countercyclical buffer rate by publication on its website. The announcement shall include at least the following information:*
 - (a) the applicable countercyclical buffer rate;*
 - (b) the relevant credit-to-GDP-ratio and its deviation from the long-term trend;*
 - (c) the buffer guide calculated in accordance with paragraph 2;*
 - (d) a justification for that buffer rate, including by reference to any variables other than those covered by the buffer guide that the designated authority took into account in accordance with point (c) of paragraph 3 when setting the countercyclical buffer rate;*
 - (e) where the buffer rate is increased, the date from which the institutions must apply that increased buffer rate for the purposes of calculating their institution specific countercyclical capital buffer;*

- (f) where the date mentioned in point (e) is less than 12 months after the date of the announcement under this paragraph, a reference to the exceptional circumstances that justify that shorter deadline for application;*
 - (g) where the buffer rate is decreased, the indicative period during which no increase in the buffer rate is expected, together with a justification for that period;*
 - (h) where the designated authority has taken into account variables mentioned in point (c) of paragraph 3, an indication of the amount of the buffer rate that relates to those variables.*
 - (i) Designated authorities shall take all reasonable steps to coordinate the timing of that announcement.*
 - (j) Designated authorities shall notify each quarterly setting of the countercyclical buffer rate and the information specified in points (a) to (g) to the ESRB. The ESRB shall publish on its website all such notified buffer rates and related information.*
9. *The ESRB may issue recommendations in accordance with Article 16 of Regulation (EU) No. 1092/2010 concerning the quarterly setting of the countercyclical buffer rate in a specific Member State or, where appropriate, in more than one Member State.”*



DET KONGELIGE
FINANSDEPARTEMENT

Arbeidsgruppe om makroovervåking og virkemidler

Deres ref

Vår ref
11/4187 MAO
11/1229-4

Dato
30.09.2011


Lovhjemmel for å fastsette forskrift om forsvarlig utlånspraksis

Finanstilsynet har i brev 28. september 2011 til Finansdepartementet foreslått en lovhomeel for å fastsette forskrift om forsvarlig utlånspraksis. Kopi av brevet er vedlagt.

Etter departementets vurdering er Finanstilsynets forslag dekket av mandatet til arbeidsgruppen om makroovervåking og virkemidler, gitt 15. september 2011, jf. at arbeidsgruppen bl.a. er bedt om å «vurdere og eventuelt foreslå andre diskresjonære virkemidler [i tillegg til et motsyklisk kapitalbufferkrav] som kan være aktuelle i forbindelse med organiseringen av et system for makroovervåking i Norge». I denne forbindelse vil det også være aktuelt å foreslå endringer i lov eller forskrift.

Vi ber arbeidsgruppen vurdere Finanstilsynets forslag om en lovhomeel for å fastsette forskrift om forsvarlig utlånspraksis, som en integrert del av arbeidsgruppens utredning.

Med hilsen



Jan Bjørland e.f.
ekspedisjonssjef



Per Øystein Eikrem
avdelingsdirektør

Vedlegg: Kopi av brev 28. september 2011 fra Finanstilsynet til Finansdepartementet
Kopi: Finanstilsynet

Postadresse
Postboks 8008 Dep
0030 Oslo

Kontoradresse
Akersg. 40
Org. nr. 972 417 807

Finansmarkedsavdelingen
Telefon 22 24 45 21/22 24 90 90*
Telefaks 22 24 27 16

Saksbehandler
Marius B. Østli
Telefon 22 24 45 49



FINANSTILSYNET
THE FINANCIAL SUPERVISORY
AUTHORITY OF NORWAY

Finansdepartementet
Att.: Finansmarkedsavdelingen
Postboks 8008 Dep

0030 OSLO

28.09.2011

SAKSBEHANDLER:

Anders Hole

VÅR REFERANSE:

11/9606

DERES REFERANSE:

DIR.TLF:

22 93 97 72

ARKIVKODE:

501

Lovhjemmel til å fastsette forskrift om forsvarlig utlånspraksis

1 Innledning

De siste årene har husholdningenes økonomi vært preget av økende gjeldsbelastning, høy belåningsgrad på boliglån og mer bruk av avdragsfrie lån. Husholdningenes gjeld og boligprisene har i stor grad vist en sammenfallende utvikling. Både gjeld og boligpriser er allerede kommet opp på et meget høyt nivå. Det er bekymringsfullt at gjelden har økt mest blant de gruppene som har høyest gjeld i forhold til inntekt. Det høye gjeldsnivået har økt husholdningssektorens sårbarhet ved renteoppgang, arbeidsledighet og redusert inntekt. Rentenivået i Norge har i lengre tid vært meget lavt, og i rentemarkedene forventes det at renten skal holde seg lav lenge. Et vedvarende lavt rentenivå øker faren for større ubalanser i husholdningenes finanser og i boligmarkedet. Erfaring har vist at dersom en boble utvikles, får det alvorlige konsekvenser når den sprekker. Brå og kraftig gjeldskonsolidering i husholdningene fører til lavere forbruk og boliginvesteringer, som gir negative ringvirkninger i resten av økonomien og vil bidra til redusert finansiell stabilitet.

Utvikling i boligpriser og husholdningenes gjeld er av sentral betydning for den finansielle stabiliteten. En nøktern utlånspraksis for boliglån kan bidra til å dempe oppbyggingen av risiko i husholdningssektoren. Finanstilsynet ga derfor retningslinjer for forsvarlig utlånspraksis for lån til boligformål i mars 2010. Retningslinjene skal bidra til soliditet i institusjonene, finansiell stabilitet og ivareta forbrukerhensyn.

Med utgangspunkt i situasjonen i bolig- og lånemarkedene, tematilsynet av bankenes etterlevelse av retningslinjer for forsvarlig utlånspraksis for lån til boligformål (boligretningslinjene) som Finanstilsynet gjennomførte våren 2011, og boliglånsundersøkelsen fra august 2011, vurderer Finanstilsynet innskjerpingen i retningslinjene for forsvarlig utlånspraksis for lån til boligformål.

Finanstilsynet vil innhente synspunkter fra Norges Bank, FNO, Forbrukerombudet og Forbrukerrådet på noen mulige endringer av retningslinjene. På grunnlag av innkomne synspunkter vil Finanstilsynet eventuelt utarbeide nye retningslinjer.

2 Lovhjemmel til å fastsette forskrift

Ved utarbeidelse av de gjeldende retningslinjene for boliglån, var det Finanstilsynets vurdering at eksisterende lovgivning ikke gir tilstrekkelig hjemmelsgrunnlag til å fastsette regler om forsvarlig utlånspraksis i forskrift. Særlig tilsynsloven § 4 ble vurdert som mulig grunnlag. Retningslinjene er i utgangspunktet ikke rettslig bindende, men utlånspraksis som ikke er i tråd med retningslinjene vil inngå i Finanstilsynets vurdering av institusjonens samlede risiko og eventuelle pålegg om økt kapital.

Ettersom reguleringen av utlån til boligformål ikke bare foretas ut fra soliditetshensyn og institusjonsspesifikke forhold, bør det etableres et hjemmelsgrunnlag som ikke reiser tvil om adgangen til fastsette tiltak som er begrunnet i hensynet til finansiell stabilitet og velfungerende markeder. Videre kan det, avhengig av situasjonen i økonomien og lånemarkedene, være behov for fastsette nærmere retningslinjer for lån til andre formål enn boligformål, som for eksempel forbrukslån. Den foreslåtte hjemmelen bør derfor ikke være begrenset til utlån til boligformål, men ha et mer generelt virkeområde.

Dagens retningslinjer gir både institusjonene og Finanstilsynet rom for skjønn ved vurderingen av hva som kan anses som forsvarlig utlånspraksis. Hvis regler om forsvarlig utlånspraksis skulle fastsettes i forskrift, vil dette skjønnnet måtte snevres inn. En lovhjemmel til forskrifter bør derfor i første rekke være en beredskapshjemmel for det tilfelle at retningslinjene ikke får tilstrekkelig effekt på utlånspraksisen.

Reguleringen av bankenes utlånspraksis i forskrift kan i stor grad gripe inn i kredittinstitusjonenes vurdering av kredittrisiko og andre forretningsmessige forhold. Vurderingen av kredittrisiko er en kjerneoppgave for kredittinstitusjonene. Prinsipielt kan regulering av kredittvurderinger ha uheldige virkninger på kredittmarkedenes funksjon. En slik regulering må derfor forbeholdes situasjoner med stor risiko for finansiell ustabilitet.


Finanstilsynet foreslår følgende lovbestemmelse:

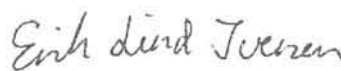
"Finansdepartementet kan i forskrift stille krav til hvordan institusjoner under tilsyn skal innrette sin utlånspraksis for å ivareta hensynet til finansiell stabilitet og velfungerende markeder."

Bestemmelsen kan tas inn i tilsynsloven. Da bruk av forskriftshjemmelen kan virke sterkt inngripende i institusjonenes forretningsmessige vurderinger, bør forskriftskompetansen legges til Finansdepartementet.

Det vises for øvrig til Finanskriseutvalgets anbefaling om å gi Finanstilsynet tilstrekkelige hjemler for å kunne iverksette makrotiltak for å bremse oppbyggingen av finansiell ustabilitet.

For Finanstilsynet

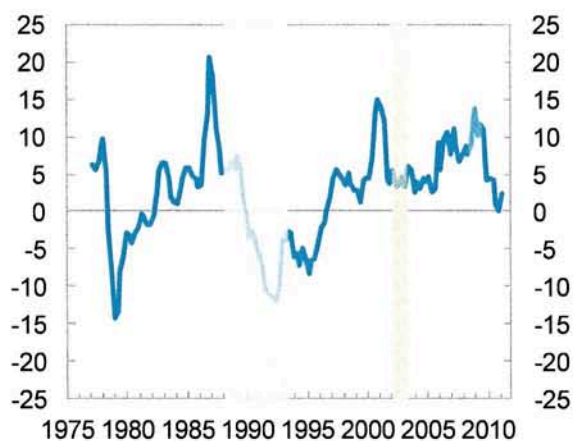

Morten Baltzersen
Finanstilsynsdirektør


Erik Lind Iversen
fung. Direktør for finans- og forsikringstilsyn

Appendix 3 Figures to section 4.2.1

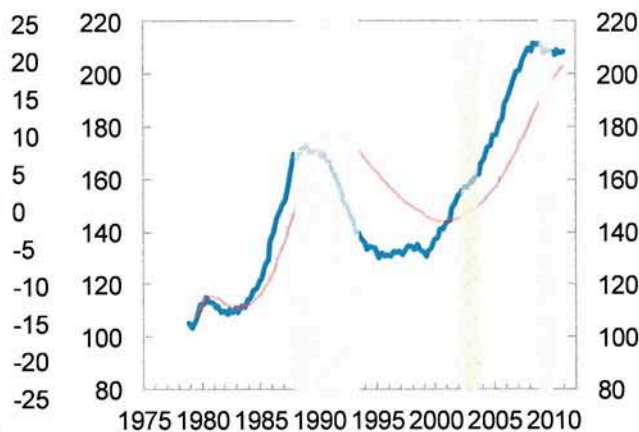
In general, the figures show the actual series in blue. Red indicates mechanical trend analysis. Shaded areas indicate periods of financial vulnerability.

Figure V2.1 Credit/GDP ratio. Mainland Norway. Change in percentage points from the previous year.



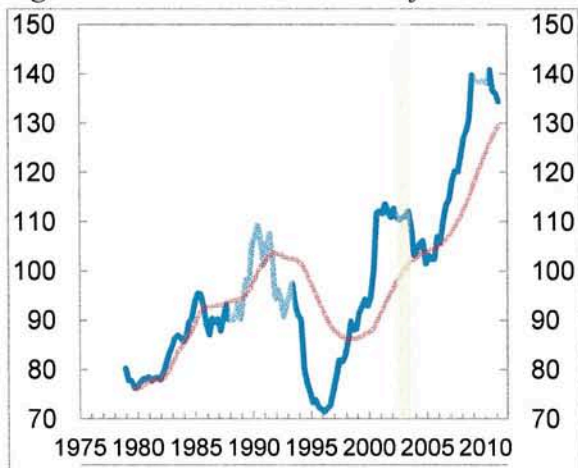
Source: IMF, Statistics Norway and Norges Bank

Figure V2.2 Debt burden of households. Percentage of disposable income.



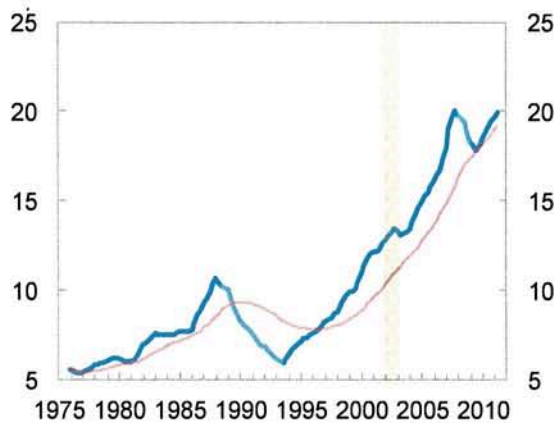
Source: Statistics Norway and Norges Bank

Figure V2.3 Credit/GDP ratio for mainland enterprises.



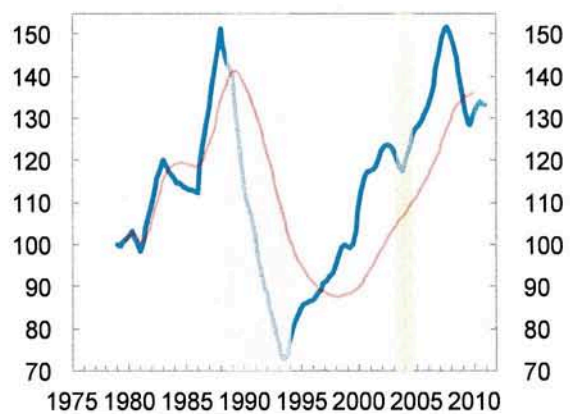
Source: Statistics Norway and Norges Bank.

Figure V2.4 House prices deflated by CPI. NOK 1,000 (at 1998 rate) per square metre.



Source: NEF, Econ Pöyry, Statistics Norway and Norges Bank.

Figure V2.5 House prices deflated by disposable income. Index. Q4 1978 = 100.



Source: NEF, Econ Pöyry, Statistics Norway and Norges Bank.

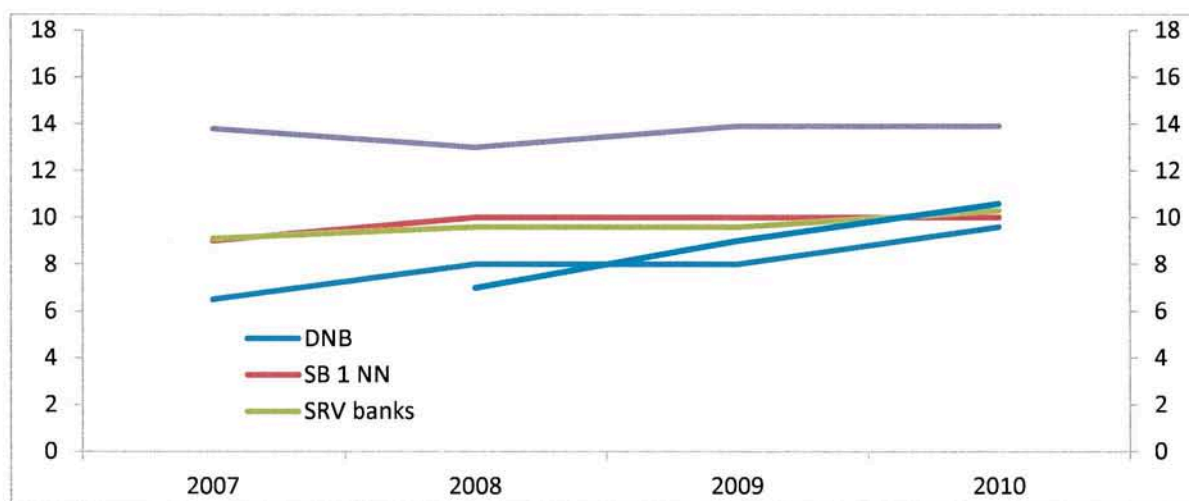
Appendix 4 Summary of Finanstilsynet's work on ICAAP in banks and financial institutions since 2007

Below is a brief summary of Finanstilsynet's work on ICAAP in banks and financial institutions and Finanstilsynet's dialogue with the banks' management and governing bodies since the implementation of Pillar 2 in the current capital adequacy rules:

- In 2007, Finanstilsynet evaluated the ICAAP of six IRB banks and seven other banks that had elected to use the standard method for reporting credit risk. Finanstilsynet focused in particular on management board responsibility for the process and the importance of maintaining good margins in addition to the minimum capital requirement in Pillar 1. Several banks were asked to set new targets for their financial soundness.
- In 2008, Finanstilsynet gave feedback on ICAAP documentation from 137 banks and 17 finance companies / credit institutions. The main focus was on management board responsibility for the process, actual Tier 1 capital ratio and targets for Tier 1 capital ratio. Observations were made concerning aspects of the banks' own assessments of their capital needs. Some 70 per cent of the institutions were asked to consider measures to increase the actual Tier 1 capital ratio and/or raise their targets for core capital ratio.
- In 2009, a total of 104 institutions were ordered to submit their ICAAP documentation for 2009. In addition to the 17 banks / groups that were subject to the overall risk assessment, banks whose actual capital adequacy was found to be too low and banks that had not established sufficiently high internal capital targets also had to submit their ICAAP. In 2009, priority was given to close dialogue with those institutions that in the previous year's ICAAP feedback had been told to consider raising their actual Tier 1 capital ratio. In March 2009, 15 banks received a letter from Finanstilsynet where it was stated that their Tier 1 capital ratio was low and reminding them of the previous year's ICAAP feedback, and referring to the legal authorities defined in section 2-9b of the Financial Institutions Act. This resulted in the banks acknowledging the need to strengthen their capital base and implementing measures through ordinary share issues in the market or through injections from the Norwegian State Finance Fund.
- In 2010, around 50 institutions were asked to submit their ICAAP for evaluation. Attention was focused on ensuring that the institutions do not reduce their board-approved minima for Tier 1 capital ratio and that the actual core capital ratio does not fall below the internally set minimum levels.
- Finanstilsynet has asked the boards of five banks to consider measures to increase the banks' Tier 1 capital ratio. In another 15 institutions, the board was asked to raise the board-approved minimum level for Tier 1 capital adequacy.
- In 2011, some 50 institutions will be assessed. Several banks have been told to continue their efforts to strengthen their Tier 1 capital, both with effect for 2011 and for capital development in the longer term. Finanstilsynet continuously monitors developments in the core capital of all banks in relation to the institutions' reported minimum targets based on their ICAAP.

Appendix 5 Developments in tier 1 capital targets in selected banks 2007–2010

Figure V5.1 Developments in tier 1 capital targets in selected banks 2007–2010. Per cent.



Source: Finanstilsynet

I

(Resolutions, recommendations and opinions)

OPINIONS

EUROPEAN SYSTEMIC RISK BOARD

RECOMMENDATION OF THE EUROPEAN SYSTEMIC RISK BOARD

of 22 December 2011

on the macro-prudential mandate of national authorities

(ESRB/2011/3)

(2012/C 41/01)

THE GENERAL BOARD OF THE EUROPEAN SYSTEMIC RISK BOARD,

Having regard to the Treaty on the Functioning of the European Union, and in particular Articles 2(2) and 4(2)(a) and Protocol (No 25) on the exercise of shared competence thereof,

Having regard to Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board ⁽¹⁾, and in particular Article 3(2)(b), (d) and (f) and Articles 16 to 18 thereof,

Having regard to Decision ESRB/2011/1 of the European Systemic Risk Board of 20 January 2011 adopting the Rules of Procedure of the European Systemic Risk Board ⁽²⁾, and in particular Article 15(3)(e) and Articles 18 to 20 thereof,

Whereas:

- (1) A well-defined policy framework is a necessary condition for effective macro-prudential policy. With the establishment of the European Systemic Risk Board (ESRB) within the European System of Financial Supervision, a policy framework was put in place for macro-prudential policy at the European Union level, to be exercised through warnings and recommendations, which need to be implemented.
- (2) The effectiveness of macro-prudential policy in the Union also depends on the national macro-prudential policy

frameworks of the Member States, since the responsibility for the adoption of the measures necessary to maintain financial stability lies first within national frameworks.

- (3) Legislative initiatives are currently being discussed in some Member States regarding macro-prudential frameworks.
- (4) It is necessary to provide guiding principles on core elements of national macro-prudential mandates, balancing the need for consistency among national approaches with the flexibility to accommodate national specificities.
- (5) Setting out explicitly a clear objective would help the national macro-prudential authorities to overcome the bias towards inaction. Macro-prudential policies can be pursued at national level upon the initiative of the national macro-prudential authorities, or as a follow-up to recommendations or warnings from the ESRB.
- (6) Generally, macro-prudential policy can be pursued by either a single institution or a board composed of several institutions, depending on the national institutional frameworks. In any case, the entrusted authority should be identified in a clear and transparent way.
- (7) Recital 24 of Regulation (EU) No 1092/2010 provides that: 'the national central banks should have a leading role in macro-prudential oversight because of their expertise and their existing responsibilities in the area of financial stability.' This conclusion is further strengthened when central banks are also in charge of micro-prudential supervision.

⁽¹⁾ OJ L 331, 15.12.2010, p. 1.

⁽²⁾ OJ C 58, 24.2.2011, p. 4.

- (8) Depending on the national institutional framework, co-operation among authorities with competences influencing financial stability may take different forms, ranging from coordination to exchange of data and information.
- (9) The ESRB will discuss potential cross-border policy spill-overs of macro-prudential measures planned by the competent national authorities so as to ensure a minimum degree of coordination and limit possible negative spill-over effects. To this end, the ESRB Secretariat should be informed in advance of significant macro-prudential actions proposed by national authorities, for discussion by the Steering Committee of the ESRB. If deemed appropriate by the Steering Committee, the proposed macro-prudential actions may be drawn to the attention of the General Board.
- (10) The tasks and powers of the macro-prudential authority should be clearly defined. Taking into account the impact that the ongoing EU reform of the capital requirements framework for credit institutions⁽¹⁾ might have, the procedures to assign instruments to the macro-prudential authority should allow — within the principles of the relevant legislative framework — for timely adjustments of the policy toolkit in response to innovation and change within the financial system and to the changing nature of risks to financial stability. The macro-prudential authority should justify ex-ante why it needs certain instruments, and have the right of initiative to request the assignment of those instruments. Instruments should include both those that can affect cyclical risks, such as unsustainable levels of leverage, maturity mismatch and credit growth, and those that can affect market structures. An institutional separation between non-binding and binding instruments could be provided for.
- (11) Transparency improves the understanding of macro-prudential policies by the financial sector and the public at large, and is a necessary requirement for accountability vis-à-vis the legislature, as the representative of the wider population. Given that the ultimate objective of macro-prudential policy is difficult to quantify, accountability may be phrased in terms of achieving intermediate objectives, or explaining publicly the rationale of the use of macro-prudential instruments.
- (12) Pressures can be put on macro-prudential policy makers not to tighten policies in a boom or to loosen them in a bust. In order to safeguard policy credibility, macro-prudential authorities should be shielded against outside pressures through independence. Central banks entrusted with macro-prudential mandates should be independent in the sense of Article 130 of the Treaty.
- (13) This Recommendation is without prejudice to the monetary policy mandates of the central banks in the Union, and to the tasks entrusted to the ESRB.
- (14) ESRB recommendations are published after informing the Council of the European Union of the General Board's intention to do so and providing the Council with an opportunity to react,

HAS ADOPTED THIS RECOMMENDATION:

SECTION 1

RECOMMENDATIONS

Recommendation A — Objective

Member States are recommended to:

1. specify that the ultimate objective of macro-prudential policy is to contribute to the safeguard of the stability of the financial system as a whole, including by strengthening the resilience of the financial system and decreasing the build up of systemic risks, thereby ensuring a sustainable contribution of the financial sector to economic growth;
2. ensure that macro-prudential policies can be pursued at national level upon the initiative of the national macro-prudential authority, or as a follow-up to recommendations or warnings from the ESRB.

Recommendation B — Institutional arrangements

Member States are recommended to:

1. designate in the national legislation an authority entrusted with the conduct of macro-prudential policy, generally either as a single institution or as a board composed of the authorities whose actions have a material impact on financial stability. The national legislation should specify the decision-making process of the governing body of the macro-prudential authority;
2. where a single institution is designated as the macro-prudential authority, establish mechanisms for cooperation among all authorities whose actions have a material impact on financial stability, without prejudice to their respective mandates;

⁽¹⁾ Commission proposals for a directive of the European Parliament and of the Council on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms and amending Directive 2002/87/EC of the European Parliament and of the Council on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate (COM(2011) 453 final) and for a regulation of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (COM(2011) 452 final).

3. ensure that the central bank plays a leading role in the macro-prudential policy and that macro-prudential policy does not undermine its independence in accordance with Article 130 of the Treaty;
4. mandate the macro-prudential authority to cooperate and to exchange information also cross-border, in particular by informing the ESRB of the actions taken to address systemic risks at national level.

Recommendation C — Tasks, powers, instruments

Member States are recommended to:

1. entrust the macro-prudential authority as a minimum with the tasks of identifying, monitoring and assessing risks to financial stability and of implementing policies to achieve its objective by preventing and mitigating those risks;
2. ensure that the macro-prudential authority has the power to require and obtain in a timely fashion all national data and information relevant for the exercise of its tasks, including information from micro-prudential and securities market supervisors and information from outside the regulatory perimeter, as well as institution-specific information upon reasoned request and with adequate arrangements to ensure confidentiality. Under the same principles the macro-prudential authority should share with micro-prudential supervisory authorities the data and information relevant for the exercise of the tasks of those authorities;
3. entrust the macro-prudential authority with the power to designate and/or develop the surveillance approaches for identifying, in coordination or together with the micro-prudential and securities market supervisors, the financial institutions and structures that are systemically relevant for the respective Member State, and to determine or recommend on the perimeter of national regulation;
4. ensure that the macro-prudential authority has control over appropriate instruments for achieving its objectives. Where necessary, clear and expeditious procedures should be established for assigning instruments to the macro-prudential authority.

Recommendation D — Transparency and accountability

Member States are recommended to:

1. ensure that macro-prudential policy decisions and their motivations are made public in a timely manner, unless there are risks to financial stability in doing so, and that the macro-prudential policy strategies are set out and published by the macro-prudential authority;

2. entrust the macro-prudential authority with the power to make public and private statements on systemic risk;
3. make the macro-prudential authority ultimately accountable to the national parliament;
4. ensure legal protection for the macro-prudential authority and its staff when they act in good faith.

Recommendation E — Independence

Member States are recommended to ensure that:

1. in the pursuit of its objective, the macro-prudential authority is as a minimum operationally independent, in particular from political bodies and from the financial industry;
2. organisational and financial arrangements do not jeopardise the conduct of macro-prudential policy.

SECTION 2

IMPLEMENTATION

1. Interpretation

Terms used in this Recommendation have the following meanings:

'financial institutions' means financial institutions as defined in Regulation (EU) No 1092/2010;

'financial system' means financial system as defined in Regulation (EU) No 1092/2010.

2. Criteria for implementation

1. The following criteria apply to the implementation of this Recommendation:
 - (a) the recommended measures should be enacted in the national legislation;
 - (b) regulatory arbitrage should be avoided;
 - (c) due regard should be paid to the principle of proportionality in the implementation, with reference to the different systemic significance of the financial institutions, to the different institutional systems, and taking into account the objective and the content of each recommendation;
 - (d) For the purpose of recommendation A:
 - (i) intermediate policy objectives may be identified as operational specifications of the ultimate objective;

- (ii) macro-prudential policy should allow action also on measures that have macro-prudential relevance.
2. Addressees are requested to communicate to the ESRB and to the Council the actions taken in response to this Recommendation, or adequately justify inaction. The reports should as a minimum contain:
 - (a) information on the substance and timeline of the actions taken;
 - (b) an assessment of the functioning of the actions taken, from the perspective of the objectives of this Recommendation;
 - (c) detailed justification of any inaction or departure from this Recommendation, including any delays.
 3. **Timeline for the follow-up**
 1. Addressees are requested to communicate to the ESRB and the Council the actions taken in response to this Recommendation, or adequately justify inaction, as specified in the following paragraphs.
 2. By 30 June 2012, addressees communicate to the ESRB an interim report covering at the minimum the following aspects: (a) a statement concerning whether a macro-prudential mandate has been implemented or is planned to be implemented; (b) an examination of the legal basis for the implementation of this Recommendation; (c) the foreseen institutional shaping of the macro-prudential authority and the devised institutional changes; (d) an assessment for each recommendation hereby provided of whether it is or will be covered by the national measures on the macro-prudential mandate and, if not, adequate explanations. The ESRB may inform the addressees of its views on the interim report.
 3. By 30 June 2013, addressees communicate the final report to the ESRB and the Council. Recommended measures should be in force not later than the 1 July 2013.
 4. The General Board may extend the deadlines in paragraphs 2 and 3 where legislative initiatives are necessary to comply with one or more recommendations.
 4. **Monitoring and assessment**
 1. The ESRB Secretariat:
 - (a) assists the addressees, including by facilitating coordinated reporting, providing relevant templates and detailing where necessary the modalities and the timeline for the follow-up;
 - (b) verifies the follow-up by the addressees, including by assisting them upon their request, and reports on the follow-up to the General Board via the Steering Committee within two months from the expiry of the deadlines for the follow-up.
 2. The General Board assesses the actions and the justifications reported by the addressees and, where appropriate, decides whether this Recommendation has not been followed and the addressees have failed to adequately justify their inaction.
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Done at Frankfurt am Main, 22 December 2011.

The Chair of the ESRB

Mario DRAGHI