STAFF MEMO

Norges Bank's financial sector role in the period 1945-2013

WITH A PARTICULAR FOCUS ON FINANCIAL STABILITY

NO. 9 | 2016

HARALD HAARE,
ARILD LUND AND JON
A. SOLHEIM

BICENTENARY PROJECT

NORGES BANK

Staff Memos present reports and documentation written by staff members and affiliates of Norges Bank, the central bank of Norway. Views and conclusions expressed in Staff Memos should not be taken to represent the views of Norges Bank.

© 2016 Norges Bank
The text may be quoted or referred to, provided that due acknowledgement is given to source.

Staff Memo inneholder utredninger og dokumentasjon skrevet av Norges Banks ansatte og andre forfattere tilknyttet Norges Bank. Synspunkter og konklusjoner i arbeidene er ikke nødvendigvis representative for Norges Bank.

© 2016 Norges Bank
Det kan siteres fra eller henvises til dette arbeid, gitt at forfatter og Norges Bank oppgis som kilde.

ISSN 1504-2596 (online)
ISBN 978-82-7553-919-7 (online)

Norges Bank's financial sector role in the period 1945-2013, with a particular focus on financial stability

Harald Haare[1], Arild Lund[2] and Jon A. Solheim[3]

This article is a slightly revised version of Chapter II (the summary) of Norges Bank's Occasional Paper No. 48, published in Norwegian, which surveys financial sector developments and Norges Bank's financial sector role in the period 1945-2013. In particular, it documents the main developments and the central bank's handling of the Norwegian banking crisis in 1987-1993 and the global financial crisis in 2007-2009. The Occasional Paper forms part of Norges Bank's Bicentenary Project marking the Bank's 200th anniversary in 2016. The authors would like to thank Helle Snellingen for the translation into English.

1. Introduction

There have been major changes in Norges Bank's duties and responsibilities in the financial sector area since the Second World War. The reconstruction era through to the early 1960s was a period of public regulation and intervention in the Norwegian economy, and much of the Bank's work was related to the regulation of the financial sector. Monetary and credit policy was based on agreements between representatives of the authorities and the banks. Norges Bank was central in designing and overseeing these agreements. The Bank played a key role not only in monetary and credit policy issues, but also in other matters concerning the financial sector. When the Monetary and Credit Policy Act entered into force in July 1965 (cf. section 3.2 below), the decision-making authority in the financial sector area was to a greater extent given to the Ministry of Finance, while Norges Bank was mainly assigned an advisory and control function. This gave the Bank a less prominent position in the formulation of policy.

Most of the changes to Norges Bank's duties and responsibilities, however, have come since the mid-1980s. A more market-orientated approach to monetary, credit and foreign exchange policy and an increased emphasis on

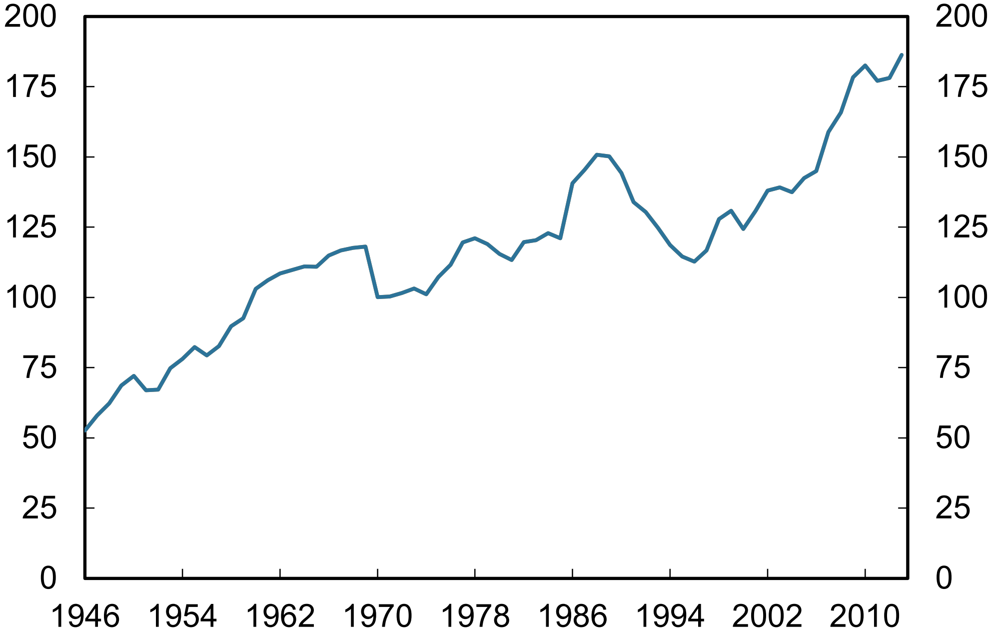
---

[1] Harald Haare is a retiree of Norges Bank whose positions at the Bank included special adviser at Norges Bank Financial Stability from 2004 to 2015.
[2] Arild J. Lund is a special adviser at Norges Bank Financial Stability.
[3] Jon A. Solheim is a retiree of Norges Bank whose positions at the Bank included Executive Director of Norges Bank Financial Stability from 1994 to 2003 before sitting on the Executive Board of the International Monetary Fund from December 2003 to January 2006.

efficiency and competition in the financial sector strengthened the Bank's policy role. The new Norges Bank Act of 1985 and a major reorganisation of the Bank's policy departments starting in 1986 paved the way for a sharper focus on the financial sector area. From 1987, much of this focus was on mounting problems in the banking sector. These problems, which culminated in the systemic crisis in 1991-1992, led Norges Bank to attach great importance to surveillance, crisis management and the central bank's exposure to troubled banks. This period also saw the end of the Bank's regulatory and more general banking duties, and changes were made to its organisation, with increased concentration on what were considered to be its core activities.

Financial instability is often closely linked to the level and growth of debt. Private-sector debt in Norway has increased much more quickly than GDP during the post-war period (Chart 1). Only during and after the banking crisis of the early 1990s was there a significant drop in debt relative to output. As there are no fixed limits for either the level or growth of debt, there is a need for continuous surveillance and analysis of developments in the financial sector.

Chart 1: Total gross debt (C3) as a percentage of GDP, 1946-2013. Percent



Source: Norges Bank

Norges Bank's focus on financial stability issues was heightened by the Asian crisis of the late 1990s. Increased importance was attached to broader macrofinancial analysis of financial sector developments and stability. The Bank reinforced its work on crisis management during the 2000s, and analyses of risks and banks' vulnerabilities were stepped up. Due to the close integration with the global financial markets, Norwegian financial institutions were also affected by the global financial crisis of 2007-2009. During this period, the Bank played a key role in both planning and implementing

Norway's crisis response. Since 2009, Norges Bank has strengthened its monitoring of banks and made preparations for possible new duties in the prevention and management of financial crises in the light of new international rules for the financial sector.

2. The Norges Bank Act and Norges Bank's loan arrangements

2.1 The Norges Bank Act

From 1945 to 1984, Norges Bank was governed by the Norges Bank Act of 1892. The Act said nothing specific about the Bank's role and duties in relation to financial institutions and contained no objects clause. Norges Bank's activities were regulated in more detail by a set of Rules and Regulations, which stated that the Bank should, in the first instance, issue credit to firms, but it also contained provisions concerning lending to banks. Although it had long been clear that the Act of 1892 was ill-suited to the role that a central bank was now expected to play, its successor did not arrive until 1985.

Other than defining the Bank's responsibilities in the payment systems area, the new Norges Bank Act still did not contain any particularly clear formulation of the Bank's role in terms of either monetary policy or the financial sector area. Norges Bank submitted comprehensive comments on the draft legislation, proposing a number of amendments and recommending that the objects clause include the central bank's responsibility to promote long-term stability in the country's economy, which could be taken to cover financial stability as well. However, the Storting (the Norwegian parliament) incorporated only a few of the Bank's proposals into the new Act. In 2003, the Storting made a number of changes to the Norges Bank Act which helped strengthen the Bank's independence and put in place much of what the Bank had recommended back in 1985. But even now there was no provision specifying the Bank's duties in the financial sector area. The Act is formulated in such open terms, however, that Norges Bank has largely been able to perform the tasks that it has considered natural for a central bank.

2.2 Norges Bank's loan arrangements

2.2.1 Norges Bank's general loans to banks

For the first 10-15 years after the Second World War, liquidity conditions in Norway were ample, so banks had little need to borrow from Norges Bank. In fact, loans from the central bank were also seen as a sign of weakness, which was a hangover from the banking crises of the 1920s and 1930s. The Bank's

direct lending to firms, on the other hand, increased somewhat through to the mid-1950s, but in 1956 it was decided to scale down these loans. As northern Norway had a less developed banking industry with many small banks that were often not in a position to issue large business and investment loans, Norges Bank had a more liberal lending policy in that part of the country. Norges Bank's lending to firms in northern Norway was not phased out completely until 1998, and the Bank managed Government-guaranteed fisheries loans and various extraordinary loan and support arrangements from 1921 right up until 2001.

The new legislation for commercial and savings banks in 1961 imposed more stringent liquidity requirements that some banks had trouble meeting. To help banks adapt to the new requirements, a general loan facility was introduced in May 1965 that allowed banks to have short-term loans (up to 21 days) from Norges Bank without having to deposit collateral. One condition was that banks having such loans held securities approved by Norges Bank as a basis for their borrowing. If the loans exceeded a set limit, progressive increases in the interest rate would prevent them from becoming more permanent and being used for unwanted credit expansion. The banks' borrowing from Norges Bank nevertheless remained at low levels through to 1970.

Norges Bank's general loan arrangement for banks has undergone many changes since 1965, partly reflecting developments in the economy and partly making things simpler. Following the transition to market-orientated monetary and credit policy in the 1980s, the two main aims of the general loan arrangement have been to help implement Norges Bank's monetary policy decisions (interest rate decisions) and to fulfil the role of settlement bank to ensure that the payment system functions without significant interruptions. The Executive Board has given the Governor relatively wide-ranging powers to decide on the actual use of the loan arrangement for banks provided that it is kept informed.

The foreign exchange problems in 1985-86 (cf. Section 6.1 below) led to an extraordinary need for liquidity following the outflow of foreign currency. As a result, in 1986 the requirement that banks should have securities as collateral for their loans from Norges Bank became unrealistic. Until the end of 1993, virtually all central bank loans to banks were made without such collateral being required. While Norges Bank's lending to banks was negligible in autumn 1985, it had risen to NOK 80 billion by spring 1986. Owing to the banking crises of 1987-93, the level of central bank loans remained high until the banks' general borrowing requirements fell back sharply from 1992. The requirement for collateral in the form of securities was gradually increased from 1994 until full collateral was required from September 1995. Since June 2001, banks' access to loans has been limited to the collateral provided unless

Norges Bank makes a special decision. During the global financial crisis of 2007-2009 (cf. Section 7 below), situations arose where private sources of funding dried up. The Bank therefore relaxed its collateral requirements in order to increase banks' access to loans.

2.2.2 Norges Bank's loans on special terms (S-loans)

In 1921, Norges Bank's Supervisory Council resolved that the central bank would support banks running into temporary difficulties where this was in the public interest. Such loans are often referred to as the central bank's role as lender of last resort (LLR). During the 1920s and the early 1930s, Norges Bank issued guarantees and LLR-loans at reduced rates to a number of banks. In the strict regulatory regime that prevailed in the first decades after the Second World War, there were no acute liquidity problems, and the S-loans were not used for this purpose. Until the Executive Board started setting more restrictive grant criteria in August 1987, S-loans could also be used for structural policy purposes. After that, it was limited to banks with acute liquidity problems. In special circumstances, S-loans could be granted to entities other than banks.

In his annual address in February 1988, Governor Hermod Skånland discussed the weaker trends in financial markets and Norges Bank's role in this context. Reference was often later made to the following words:

"The Banking, Insurance and Securities Commission [now the Financial Supervisory Authority of Norway] ensures that financial institutions meet the statutory capital requirements, and guarantee funds provide depositors with added safety. However, should individual financial institutions find themselves in a position which could affect general confidence in the credit market, Norges Bank – cognisant of its responsibility as the central bank – is prepared to take such measures as are necessary to bolster confidence in our financial system."

This statement did not contain any legally binding guarantee to the banks, but it took time for the international financial community to realise that Governor Knut Getz Wold's 1975 declaration "Under no circumstances will Norges Bank allow a Norwegian commercial bank to suspend its payments" was no longer to be taken as a blanket guarantee. International banks' extensive funding of Norwegian banks during the 1980s to some extent reflected a belief that these were still risk-free loans.

The granting of S-loans was discussed with the Financial Supervisory Authority (FSA) and the Ministry of Finance before and during the banking crisis of 1987-1993. It was presupposed that any solvency support in the form of guarantees or capital would come primarily from the guarantee funds. In February 1990, the Storting confirmed that income support from Norges Bank

in the form of subsidised S-loans or write-downs of central bank loans should first be considered by the Storting. [4],[5]. Consequently, cases of this type could no longer be decided by Norges Bank in consultation with the Ministry of Finance.

Following extensive work on clarifying the Bank's role in crisis management, and in particular its role as LLR, the Executive Board issued new guidelines in 2004 that were more detailed and to some extent more restrictive than the previous principles and guidelines for the issue of S-loans. It was decided that S-loans could be granted only to financial institutions and should be reserved for situations where financial stability would otherwise be jeopardised. The interest rate on S-loans was also to be higher than the market rate applying generally. To clarify expectations for the future use of S-loans, the principles were made public in Financial Stability 2/2004.

3. Financial legislation, with the emphasis on Norges Bank's functions

3.1 General

When it comes to legislation, Norges Bank has primarily had an advisory role to the FSA and the Ministry of Finance throughout the post-war period. Initially, the Bank's legal advice focused on a broad range of financial sector issues, with particular emphasis on matters of importance for financial stability, such as rules on capital adequacy, loan-loss provisions, deposit guarantees, public administration and accounting. During the 1990s, the scope of Norges Bank's statements was gradually scaled back, and it was decided that the Executive Board should only consider significant matters of principle. Few regulatory matters were put before the Executive Board during the 2000s. This change can to some extent be seen in the light of the European Economic Area (EEA) agreement, which allows less scope for national variations. [6] Norges Bank also wished to focus more on what were considered to be the central bank's core activities regarding financial stability.

3.2 The Monetary and Credit Policy Act

In December 1963, the Money and Credit Policy Committee, chaired by Deputy Governor Getz Wold, delivered a report proposing a new Monetary and Credit Policy Act, which provided for the regulation of credit volumes at

[4] When considering Report No. 24 (1989-90).
[5] Subsidised S-loans means S-loans with a lower interest rate than ordinary central bank loans to banks, such as the overnight (D-loan) rate or money market rate.
[6] The EEA agreement unites EU Member States and the EEA EFTA States in the EU Internal Market.

various financial institutions.[7]. The committee made a number of clear majority and minority recommendations. Representatives of the credit institutions argued that the Act went too far in regulating their activities, and that agreements between the authorities and the trade associations representing financial institutions should continue to play a key role. A majority of Norges Bank's Executive Board backed a compromise whereby the Storting would set overall limits, and the allocation within these limits would, as previously, be agreed between the authorities and the finance associations. The proposals from the credit institutions and Norges Bank in these areas were not, however, incorporated into the Storting's final text of the Act.

As a result of the Act's provisions on liquidity reserves, investment obligations and the regulation of lending and interest rates, the Ministry of Finance played a key role in managing the Norwegian financial sector through to the second half of the 1980s. Norges Bank was to be consulted before the ministry reached decisions under the Act. Oversight and control were largely delegated to Norges Bank, which meant that the central bank's operational role in the financial sector area was extended. From the late 1970s until the credit regulations were largely phased out in 1987, the Bank regularly expressed a sceptical view of the regulation of both volumes and interest rates.

3.3 Financial sector legislation

The Joint Stock Bank Act and the Savings Bank Act were passed in 1924. Although it had long been clear that there was a need for changes to these acts governing banks' activities, it was not until 1961 that a new Commercial Bank Act and Savings Bank Act were introduced. The capital requirement for commercial banks was reduced from 10 to 8 percent, and in 1972 it was lowered further to 6.5 percent. There was no statutory capital requirement for savings banks until the Savings Bank Act was revised in 1988. However, like the commercial banks they were covered by provisions intended to limit the various types of risk that a financial institution could take. Until the mid-1970s, the commercial banks' equity consisted solely of share capital and reserves. In 1976 the commercial bank Rogalandsbanken was given the green light to classify a loan of NOK 15 million as subordinated capital, and an equivalent arrangement for savings banks was approved in 1977. Subordinated loan capital, which in the event of bankruptcy ranked behind all other types of debt but ahead of share capital at the commercial banks and primary capital at the savings banks, would eventually make up a substantial share of banks' capital.

In 1983, the Ministry of Finance decided that subordinated loan capital up to a limit of 50 percent of equity could be considered equivalent to equity for

[7] Under the Act, reserve requirements could be imposed on financial institutions. The Act also contained rules for obligatory investments in bonds, direct regulation of lending, maximum interest rates on loans and control of bond issues.

capital adequacy purposes, and thus amount to as much as a third of total regulatory capital. Norges Bank supported this, and Swedish and Danish rules also accepted subordinated loan capital as part of total regulatory capital. In 1987, the Bank backed the FSA's proposal that commercial banks and finance companies be permitted to have equal amounts of subordinated loan capital and equity in their regulatory capital. Any subordinated loan capital beyond 50 percent of equity would have to be perpetual. The Bank pointed out that this might not be ideal in terms of solvency, but noted that the Bank of England and the FSA shared the same positive view of this new type of capital. The FSA's proposal was adopted.

In 1987, Norges Bank recommended that savings banks be subject to the same capital requirement as commercial banks, and a requirement of 6.5 percent was duly introduced in 1988, based on primary capital rather than share capital. The new minimum would not apply until 30 June 1992 and could be met with a higher share of subordinated loan capital until 30 June 1994. A number of savings banks made use of this option. The possibility of raising subordinated loan capital led to a sharp reduction in savings banks' need for core capital. As the problems at banks worsened from 1988 onwards, it emerged that in practice only core capital could be used to cover losses. A higher core capital requirement might also have helped slow the strong credit expansion of the mid-1980s.

On 1 June 1988, a heavily revised version of the Financial Services Act of 11 June 1976 entered into force. The act provided a common regulatory framework for various groups of financial institutions. For instance, the act set out provisions governing the ownership structure of all private financial institutions. Norges Bank has over the years submitted many consultation responses on proposals from the Ministry of Finance to amend the Financial Services Act and the Insurance Act.

In July 1988, the Basel Committee on Banking Supervision published recommendations for new capital requirements for internationally active banks (Basel I).[8] The most important change was to weight assets according to credit risk in the calculation of capital requirements. Corporate debt was to have a 100 percent weight, whereas residential mortgages were assigned a 50 percent weight. All financial institutions were to meet a minimum capital requirement of 8 percent of risk-weighted assets. Part of this requirement could, as before, be met with subordinated loan capital. For commercial banks, with much of their lending to the business sector and significant off-balance-sheet items, this represented a tightening of the rules. For savings banks, which generally had a

[8] The Basel Committee on Banking Supervision is the primary global standard-setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability.

higher share of residential mortgages, the changes entailed more relaxed rules. The FSA and Norges Bank worked closely together on the introduction of the new capital requirements, which were adopted in 1990.

There were soon calls for the capital adequacy rules to take even greater account of banks' actual risks, but work on a major overhaul of Basel I did not begin until 1999. Norges Bank and the FSA submitted a number of joint consultation responses to the Basel Committee on Banking Supervision. In general, they supported the proposals, but they also warned that the use of models could lead to an effective reduction in the capital requirements contrary to intentions. Basel II was incorporated into Norwegian law from 2007.

In the mid-1990s, securitisation and derivatives were subject to extensive analytical work at Norges Bank. Also on several occasions in the 2000s, the Bank argued that financial stability in Norway would probably be enhanced if a larger share of financing for firms and households went through the securities market. This was expressed, for example, in consultation responses, financial stability reports and the Governors' speeches. Securitisation entailed transferring loans to a special-purpose vehicle (SPV) that was not subject to licensing, supervision or capital requirements. [9] The Ministry of Finance formulated the rules on securitisation so rigidly, however, that this did not appear as an attractive option for the banks. From 2007, the rules were amended so that securitisation could take the form of issuing covered bonds through wholly-owned mortgage companies that were subject to supervision and capital requirements. Norges Bank supported these amendments.

After the global financial crisis in 2008, an extensive process began internationally to make the financial sector more robust. The Basel Committee on Banking Supervision drew up proposals for more loss-absorbing capital at banks and quantitative liquidity requirements, known as Basel III. In a joint consultation response, the FSA and Norges Bank supported this tightening of the rules. The most important new capital requirements were incorporated into Norwegian law in 2013. They entailed a substantial increase in the core capital requirement.

3.4. Norges Bank's control function

The follow up and control of financial institutions' compliance with applicable credit and foreign exchange policy rules at all times was delegated principally to Norges Bank. Foreign borrowing by both banks and others was also regulated by the Bank. The scope of these duties increased substantially after the Monetary and Credit Policy Act entered into force in 1965 (cf. Section 3.2

[9] A "bankruptcy-remote" entity with operations limited to acquiring and financing specific assets.

above). Until most credit regulation was phased out in the second half of the 1980s, and foreign exchange regulation in 1990, credit and foreign-exchange policy controls made up a substantial part of Norges Bank's work. The Bank carried out continuous controls of interest rate setting right through to 1993. The abolition of these control duties paved the way for a sharper focus on core activities such as monitoring and stability in the financial sector area.

3.5 The banks' guarantee funds

A statutory guarantee fund for savings banks was established in 1924. A statutory scheme for commercial banks was not put in place until 1961, but was preceded by a voluntary scheme that covered most deposits. From 1961, both funds were governed by the new Commercial Bank Act and Savings Bank Act. The main aim of the guarantee funds was to protect households and other small investors in need of risk-free and liquid deposits, and to prevent financial panic from breaking out as a result of runs on banks. The Norwegian Bankers' Association and the Norwegian Savings Banks Association acted as secretariats for the two funds. The FSA and Norges Bank had a representative on the board of each fund. During the banking crisis and until the creation of the Government Bank Insurance Fund in March 1991, the guarantee funds played a key role in producing analyses and proposals for solutions for troubled banks.

As problems mounted at the banks, Norges Bank presented an in-depth review of the two guarantee schemes to the FSA, the Ministry of Finance and the two bank associations in February 1990. Among other things, the review discussed harmonisation of rules, restrictions on the deposit guarantee and the issue of whether there should be one or two funds. The deterioration in banks' position from late 1990 meant that the Ministry of Finance did not follow up these proposals until 1994. It was then decided that the Banking Law Commission should look in more detail at the regulatory and legislative framework.[10]

Norges Bank largely supported the majority proposals in the commission's report on guarantee arrangements and public administration of financial institutions.[11] The majority wanted to retain the system of a relatively general and broad framework for when support action could be taken. A minority argued that a fund's support measures should not exceed what would be covered by the fund in case of public administration (least-cost principle). The commission unanimously supported a guarantee for deposits of up to NOK 2 million, and this was included in the new Guarantee Schemes Act. Originally, Norges Bank had proposed a limit of NOK 1 million. The Bank recommended a single bank guarantee fund on a number of occasions. As a result of the

[10] The Ministry of Finance set up the Banking Law Commission in 1990 to review financial sector legislation and examine the need for statutory regulation of the payment system area.
[11] NOU 1995:25, Sikringsordninger og offentlig administrasjon m.v. av finansinstitusjoner.

merger of Den norske Bank (DnB, now DNB) and Sparebanken Gjensidige NOR, it was decided in 2004 that the two guarantee funds should be merged to create the new Norwegian Banks' Guarantee Fund. From 2005, branches of foreign banks were also permitted to join the scheme so that they could offer the same guarantee as Norwegian banks (topping up).

4. Structural policy and developments in the financial sector area

4.1 Structural policy – Norges Bank's role

For the first 15 years after the Second World War, the authorities showed no great interest in the banking structure. Attention focused mainly on supporting businesses in weak areas of the country with guarantees and investment credits through state banks. From around 1960 through to the early 2000s, however, assessments of structural policy in the financial sector area and consultation responses on mergers, new branches and other structural changes at financial institutions were a major task for Norges Bank. When commenting on mergers and branch openings, the Bank's regional branches also played a key role for banks in their respective geographical areas.

Between 1938 and 1961, the three largest Norwegian commercial banks – Bergens Privatbank, Den norske Creditbank (DnC) and Christiania Bank – swallowed up a total of 30 small and medium-sized banks. The authorities wanted to see strong regional and district banks as a counterbalance to the big three commercial banks. To develop a decentralised banking industry with competition between players, there was a particular need to create stronger savings bank units. Norges Bank supported the proposals in report NOU 1982:39 "On the banking structure" to avoid further concentration at the big three commercial banks through mergers and to adopt a more liberal practice when it came to allowing the big banks to open branches. The Bank was also positive with regard to mergers of commercial and savings banks where this contributed to stronger regional banking units.

The system of correspondent banks met Norwegian banks' needs for international banking services for many years, but the emergence of the Norwegian oil industry meant that wholly-owned subsidiaries or branches abroad gradually became more common from the late 1970s. Less onerous bank regulation than in Norway meant that many banks set up operations in Luxembourg, but Norwegian banks were also represented in London, Zürich and elsewhere. Even back in the early 1970s, Norges Bank had been supportive of letting foreign banks operate in Norway, but subject to certain conditions. Reciprocity was considered important in this respect. It was only from 1

January 1985 that seven foreign commercial banks were granted licences to operate in Norway through Norwegian subsidiaries rather than branches. The entry into force of the EEA agreement in 1994 gave foreign credit institutions in the EEA the right to open branches in Norway.

The international liberalisation process during the 1980s made it easier to conduct banking business across national borders. The aim was to encourage competition, and Norges Bank supported this. Towards the end of the 1980s, expectations of increased international competition and major earnings problems at many financial institutions led to changes to structural policy. The risk of diminished competition in the Norwegian market seemed less of an issue when foreign financial institutions were a genuine alternative. The award of a licence for the merger of two of the largest commercial banks – DnC and Bergen Bank – to form Den norske Bank (DnB) in 1989 has to be seen in this light. Norges Bank was basically positive to the merger and argued that a liberal approach should be taken to mergers and acquisitions; only a merger between DnB and Christiania Bank should be ruled out. Norges Bank also argued that the Government-owned post office bank Postbanken should be given greater freedom, that the rules on opening new branches should be relaxed, that it should be easier for foreign banks to set up operations in Norway, that the special treatment of savings banks should be toned down, and that banks and insurers should be allowed to form part of the same group of companies.

Between 1994 and 2003, Norges Bank produced a number of detailed consultation responses and other submissions to the FSA and the Ministry of Finance on structural and competition-related issues in the financial sector area. While Norges Bank advised in 1997 that DnB should be permitted to take over BN Bank, with headquarter in Trondheim, the Ministry of Finance rejected the application due to the structural and regional policy objective of having at least one major financial center outside Oslo.[12] In the 1990s, Fokus Bank, also with headquarter in Trondheim, was subject to a number of failed takeover bids. Norges Bank backed the solution devised in 1999 whereby a Danish bank, Den Danske Bank, was permitted to form a Norwegian financial services group in which Fokus Bank was a subsidiary bank. Norges Bank had no objections to the Nordic Baltic Holding group's acquisition of Christiania Bank as a subsidiary bank in 2000, which led to the formation of Nordea.[13] The merger gave rise to extensive discussions between the Nordic central banks on crisis management for cross-border banking activities.

---

[12] BN Bank was acquired in 2004 by Icelandic bank Íslandsbanki, which changed name to Glitnir in 2008.
[13] Christiania Bank, Nordbanken (Sweden), Merita Bank (Finland) and Unibank (Denmark) formed the new bank group Nordea in 2001.

One important case in terms of financial stability was the application in 2003 to merge the two largest banking groups in Norway: DnB and the savings bank Gjensidige NOR. For Norges Bank, the main issue was the implications for financial stability. It was argued that a crisis at the merged bank would have greater negative consequences than a crisis at either of the existing banks. On the other hand, increased size would provide scope for cost savings, diversification and better risk management, which could provide a better basis for sound financial strength. The banking crisis had also shown that the authorities were capable of handling a crisis that extended to a larger part of the Norwegian banking industry than the merged DnB NOR would account for. Norges Bank also contemplated the possible adverse effects of the merger in the form of increased moral hazard. In its consultation response, the Bank concluded that financial stability considerations were not an insurmountable obstacle to the merger of the two banks.

4.2 Structural trends

As can be seen from Table 1, the most striking change in the financial sector from 1950 to 1980 was the state banks' increased share of total lending, which

Table 1: Financial institutions' share of lending to the public, 1950-2010.

	1950	1960	1970	1980	1990	2000	2010
State banks[14]	23	31	32	40	21	12	6
Commercial banks	41	25	23	21	30	38	37
Savings banks	27	21	19	16	21	32	23
Mortgage companies	9	7	8	11	17	11	29
Finance companies	-	-	3	3	3	5	3
Insurance companies	-	16	15	9	8	2	2
Total	100	100	100	100	100	100	100

Source: Norges Bank

has since fallen back sharply. The commercial and savings banks' share of lending fell from 1950 to 1980 but recovered to 70 percent in 2000 following the rapid credit expansion of the 1980s and strong growth in the second half of the 1990s.

Mortgage and finance companies' share of lending increased through to 1990, and the decline in the following decade was due partly to a number of mortgage companies converting to banks. Since 2007, several banks have set up mortgage companies to which they have transferred their residential mortgages, which explains the shift between banks and mortgage companies

[14] Including Postbanken and Postgiro.

between 2000 and 2010. Insurance companies increased their share of lending through to 1965, but it has since dropped back considerably.

At the same time that these changes in market shares were taking place, there were also significant changes within each group, especially in terms of the concentration of companies. The number of commercial and savings banks fell sharply from 1950 to 2010 (Table 2). The drop in the number of commercial banks was mainly a result of small local commercial banks being taken over by one of the big three. Until about 1970, the decline in the number of savings banks was due mainly to small banks merging with one another or with larger players. Later, a number of regional full-service solutions emerged. The sharp rise in the number of private finance companies from the late 1960s was because they met different needs than the banks and were, at times, subject to fewer restrictions.

Table 2: Number of financial institutions, 1950-2010.

	1950	1960	1970	1980	1990	2000	2010
State banks	12	10	8	9	10	3	4
Commercial banks	89	68	40	24	23	22	31
Savings banks	606	597	493	322	142	130	113
Mortgage companies	11	12	16	15	15	12	30
Finance companies	26	48	146	68	71	53	52
Life insurance companies	14	14	11	12	12	19	22
Non-life insurance companies	128	156	125	116	56	102	113

Source: Statistics Norway.

5. Norges Bank's monitoring and analysis of the financial sector area

5.1 Development of monitoring and analysis work

Economic policy in the first decades after the Second World War featured a fixed exchange rate, strict currency regulation and direct management of money and credit. Throughout his time as Governor (1954-1970), Erik Brofoss was closely involved in formulating a long-term structural policy for the business sector in general and the financial sector in particular. Once the instruments in the Money and Credit Policy Act were taken into use at the start of 1965 to manage the credit supply, Norges Bank's control and advisory roles in the financial sector area meant that it needed a continuous overview of credit developments. This led to the Bank having to strengthen its insight into the financial sector during the 1970s, with a particular emphasis on the banks.

Until the beginning of the 1980s, however, the Bank produced few studies of banks' solvency, competition in the financial sector or financial stability.

The market-orientated policy approach from the mid-1980s meant that Norges Bank's duties and activities in the financial sector area shifted gradually away from operational supervisory and control functions to monitoring and analysing financial and macroeconomic trends. This was accentuated by mounting problems in the financial sector from 1987 and by the Bank's increasing exposure to individual banks. Partly to limit weak banks' scope to fund credit expansion with central bank loans and partly with its own risk exposure in mind, Norges Bank introduced general restrictions on F-loans in 1988 based on banks' solvency.[15] Internally, there was some scepticism about introducing general quantitative restrictions in a newly liberalised market. There was also some opposition because restrictions of this kind could be interpreted as the Bank lacking confidence in the banking system.

Good insight into the financial strength of individual institutions was necessary for the central bank to be able to decide when to provide liquidity support. From 1988, reports were prepared on internal risk at financial institutions, and crisis management strategies were developed in collaboration with the Ministry of Finance and the FSA. More resources were put into monitoring international trends in the financial sector area and how other central banks were responding to them. From 1988 to 1993, a substantial part of Norges Bank's work in the financial sector area focused on matters relating to the banking crisis. From 1991 to 1993, much of this was related to the Bank's secretariat role for the Government Bank Insurance Fund (see section 6.3 below). From 1994 onwards, the situation in the financial sector normalised, and the Bank's secretariat duties for the Government Bank Insurance Fund were scaled back sharply. Drawing on the experience of the banking crisis, the Bank stepped up its work on monitoring the financial sector and the payment system, and financial stability was defined as a core activity. At the same time, the Bank's use of resources on consultation responses and regulation and control duties was reduced further.

In 1994, the FSA developed a macroeconomic monitoring programme with the intention of identifying problems that could spark financial crises or in some other way threaten financial stability. This programme was based on extensive collaboration with Norges Bank. On the basis of this work, and the Bank's own assessment of the importance of analysing the relationship between macroeconomic trends and developments in the sector, Norges Bank decided at the beginning of 1995 to produce quarterly reports summing up the situation in the financial sector. In 1996, it decided to publish these reports semi-annually

[15] F-loans carry a fixed interest rate and are normally allotted at auction.

from 1997 onwards. As well as being considered by the Executive Board, these reports would be discussed at senior management meetings between the FSA and Norges Bank and sent to the Ministry of Finance. To begin with, the reports were not made public.

In the years that followed, considerable importance was attached to strengthening the surveillance of the economy and the financial sector in order to detect vulnerabilities. An external version of the report was published twice a year in Norges Bank's quarterly *Economic Bulletin* from 1997, and as a separate publication from 2000 presented at a press conference. The main aim of the reports has always been to paint a general picture of the financial sector's current status and outlook. In terms of both analysis and presentation, the report underwent substantial changes from 2000 to 2013, inspired partly by the three expert panels that assessed the report in the light of other central banks' reports in 2002, 2005 and 2007. Collaboration with academic institutions, other central banks (including Sveriges Riksbank, the Bank of Finland and the Bank of England) and international organisations such as the EMI/ECB, BIS and IMF has also contributed to its evolution.

During the 1990s, financial stability crystallised internationally as one of the three main tasks of a central bank.[16] Considerable effort was put into adapting Norges Bank's organisation and expenditure to changes in the range of duties that were customary among its peers. Drawing up reports on financial stability involved comprehensive processes that were be given very high priority and involved several departments of the Bank. It was stressed that securities markets would play a growing role in both monetary policy effectiveness and financial stability, and an increased volume of cross-border payments would make new demands of national payment systems. New financial instruments and markets were also evolving rapidly. Not least as a result of the EEA agreement coming into effect on 1 January 1994, these factors would have a growing impact on the Norwegian financial system. In 1998, during the Asian crisis, it was decided that there should also be more focus on international developments.

The business sector had traditionally brought banks the heaviest losses. To strengthen its insight into this sector, Norges Bank had developed a system for IT-based analysis of corporate accounts using data for all firms in Norway. A model (SEBRA) was gradually developed to predict banks' expected loan losses from business lending.[17] SEBRA was also used for projections and stress-testing of banks' loan losses in various macro scenarios, for analysing banks' pricing of business loans, and for assessing the potential effects of

[16] The two others being a stable value of money and efficient payment systems.
[17] SEBRA is an acronym for Norges Bank's model for credit risk in the enterprise sector, «System for EDB-based Accounts Analysis».

changes in capital requirements. Norges Bank's macroeconomic model RIMINI was used increasingly to analyse credit risk during the 1990s and early 2000s.[18] In 2004, RIMINI was replaced with Norges Bank's Small Macro Model (SMM). Growing use was also made of other models to shed light on credit risk. In addition, there were extensive analyses of developments in household debt based on data for tax receipts from all households from Statistics Norway. The years before the global financial crisis of 2007-2009 saw continuous further development of financial stability analyses, and work on contingency planning and crisis management was also stepped up.

5.2 Monetary policy and financial stability

With a fixed exchange rate, monetary policy has to be geared to that objective and there will hardly be any leeway to address other considerations. The fixed-rate policy in Norway was gradually relaxed until the introduction of an inflation target as the monetary policy objective in 2001. In principle, monetary policy could then also take account of the outlook for financial stability.

The work on financial stability attached importance to the relationship between price stability and financial stability from an early stage. Besides participating in the regular internal coordination of monetary and foreign-exchange policy issues and issues relating to financial markets and payment systems, the financial stability department was also part of a separate monetary policy group at Norges Bank that discussed matters material to interest-rate decisions. In summer 1999, the internal processes for setting interest rates were overhauled. Based on the pattern at the Bank of England, a fact-finding session was introduced ahead of each rate-setting meeting, where staff from different departments presented the latest data in their areas. The financial stability department's contributions to the rate-setting process consisted of structural and cyclical information on the financial system and households' and firms' balance sheets. Besides ensuring awareness of vulnerabilities in the financial system, this information was useful for assessing the outlook for output and inflation.

In 2005, an external expert panel's review of the financial stability reports noted that Norges Bank was early to recognise the interlinkages between financial stability and monetary policy. There had long been a debate at the Bank about whether, and if so how, financial stability considerations should affect rate setting. However, for a long time the attitude was that the Bank should not attach too much weight to financial imbalances in the implementation of monetary policy. After the Bank began publishing projections for the key policy rate in 2005, factors important for financial

---

[18] RIMINI is an acronym for Norges Bank's quarterly macroeconomic model, "Real economy and Income accounts – a MINI-version".

stability were included in the criteria for an appropriate interest rate path. External communication on financial stability, on the other hand, was long subordinate to external communication on monetary policy. One dilemma was that if Norges Bank expressed any great concern about financial imbalances, this could trigger expectations of an increase in interest rates, resulting in an immediate appreciation of the krone. This meant that, to some extent, concerns about financial stability were toned down in the financial stability report compared with how they were presented internally.

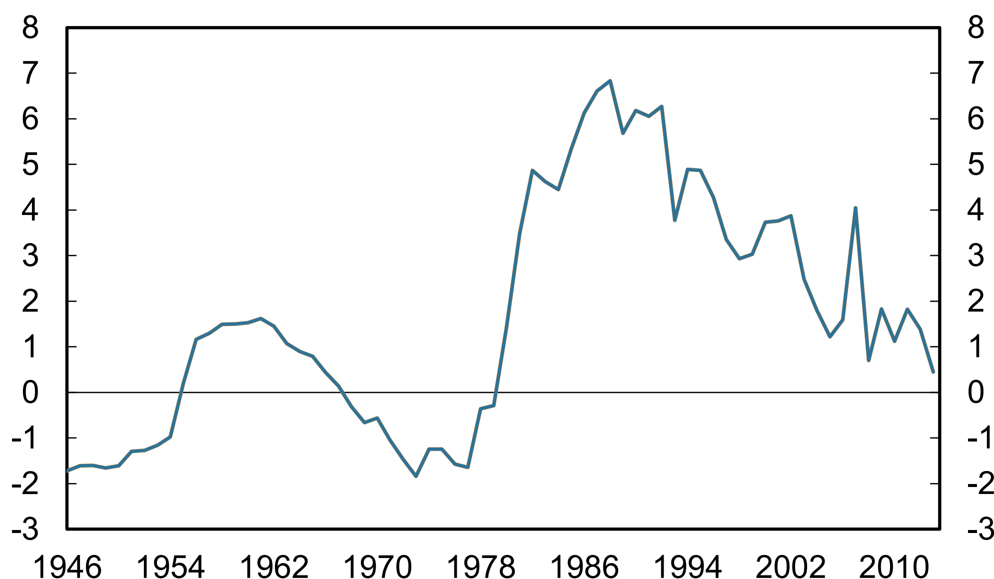
After the international financial crisis in 2007-09, there was growing recognition both in Norway and abroad that financial stability and monetary and real economic stability cannot be viewed in isolation. Among other things, it was recommended that macroprudential instruments be used to dampen fluctuations in debt and asset prices and otherwise reduce the danger of financial instability. One such instrument, which forms part of the Basel III capital requirements, is the countercyclical buffer. In Norway, it was decided that Norges Bank should prepare the decision basis for the buffer and advise the Ministry of Finance on where it should be set. This new role also led to changes in Norges Bank's reporting. From 2013, the *Monetary Policy Report* was expanded to include an assessment of financial stability and present the decision basis for the countercyclical buffer. The *Monetary Policy Report* is published four times a year, while the frequency of the separate *Financial Stability Report* has been reduced from twice a year to once a year.

6. The banking crisis of 1987-1993, with the emphasis on Norges Bank's role

6.1 Background

From the mid-1960s onwards, the credit budget was the major intermediate objective of the Norwegian authorities in the formulation and current assessment of monetary and credit policy. The credit budget was a relatively detailed presentation of target figures for the credit supply to the private and municipal sector from foreign and domestic lending sources. One of the main reasons for the gradual liberalisation of monetary and credit policy from the late 1970s and into the 1980s was growing problems achieving the desired level of aggregate credit supply without using the interest rate as an instrument of monetary and credit policy. Credit demand was high, because real interest rates were generally negative in the 1970s and early 1980s (Chart 2). After tax, the real interest rate was even more negative. The target figures for credit supply in the original national budgets were exceeded in all but one year from 1967 to 1987. Moreover, a share of the credit found new paths, such as through "shadow banks". During this period of deregulation, it could be difficult to determine just how strong credit growth actually was.

Chart 2: The real interest rate, 1946-2010



Source: Norges Bank

Direct regulation of banks' foreign borrowing was abolished in 1978 and replaced with a requirement that banks' net currency position should be zero. By hedging currency loans, banks could achieve this zero position and still fund increased lending in Norwegian kroner. Banks' rapid lending growth was increasingly funded with foreign loans into the 1980s. When turmoil in the foreign exchange market caused funding options abroad to dry up towards the end of 1985, the Government's maintenance of a politically determined money market rate meant that a substantial part of banks' credit expansion was funded instead with large unsecured liquidity loans from Norges Bank. At the end of 1986, banks' general loans from Norges Bank accounted for 16 percent of their assets, against just 1 percent at the end of 1984. There was, however, a final break with the previous interest rate management regime when, at a meeting on 30 October 1986, the Ministry of Finance backed Norges Bank's proposal to raise the upper limit for the overnight lending rate to 20 percent when the exchange rate approached the index's outer bounds.

In the period 1984-1986, real growth in domestic demand for goods and services was 9 percent stronger in Norway than in the OECD as a whole. The trade deficit grew rapidly, and prices and wages increased much more quickly than among Norway's trading partners. This necessitated significant fiscal tightening from 1986 to 1988, which was supported by Norges Bank. The outcome of these imbalances and the tightening of economic policy was that output growth slowed, and substantial overinvestment – especially in commercial buildings – became apparent. The number of bankruptcies also soared, and aggregate credit growth slowed from almost NOK 140 billion in 1987 to less than NOK 10 billion in 1991. Banks' loan losses increased considerably. Between 1984 and 1987, banks' losses on loans and guarantees fluctuated between 0.5 and 1 percent of their assets; between 1988 and 1992,

they were mainly between 1.5 and 2 percent, peaking at 2.1 percent in 1989 at savings banks and 4.5 percent in 1991 at the commercial banks. This meant that banks as a whole operated at a loss, which eroded their reserves and made it hard to attract new equity. The mounting problems at banks in 1987-1990 culminated in the systemic crisis of 1991-1992.

6.2 Crisis management in 1987-1990

The problems first emerged at finance companies, which had greatly expanded their lending in the 1980s. Loan losses increased substantially in 1987, and several finance companies had significant liquidity problems. In the first half of 1988, the situation at Norway's largest finance company, Nevi, the biggest company in a large financial group that also included the insurance companies of the Vesta group, became very serious. Because a loss of confidence in one of Norway's largest insurance groups could have severe financial repercussions, the eventual solution was for one of Norway's largest commercial banks (Bergen Bank) to take over Nevi. In connection with the takeover, Norges Bank granted Bergen Bank a short-term loan on special terms (S-loan) of NOK 1 billion at the overnight (D-loan) rate.

From 1988 to 1990, the situation deteriorated at many banks, and 14 had to apply for capital or guarantees from the banks' guarantee funds and S-loans from Norges Bank. Most of the S-loans were issued with a guarantee or assurance from the guarantee funds of a satisfactory equity position at the problem bank or the acquiring bank. Because the support measures during this period covered only small and medium-sized banks, the average amount drawn on S-loans was just NOK 3.8 billion in 1989, as against NOK 13.8 billion in 1992 during the systemic crisis. Due to uncertainty about banks' financial position and solvency, the rules for the general loan arrangements – F-loans and D-loans – were also adjusted between 1985 and 1993 to reduce the risk of bank problems and subsequent losses at Norges Bank. Stricter limits were set for banks' aggregate exposure to Norges Bank, and the banks were monitored more closely.

In 1988, it could be seen that three big regional banks (Sunnmørsbanken and the Tromsø-based banks Sparebanken Nord and Tromsø Sparebank) had incurred heavy loan losses and had a weak capital position. Norges Bank had extended substantial unsecured loans to all three. One condition for the Bank covering the three banks' acute liquidity needs with S-loans was that a solution was found for their solvency problems. In the case of the two Tromsø-based banks, the FSA, the Ministry of Finance, Norges Bank and the Savings Banks' Guarantee Fund reached agreement in November 1988 on measures to ensure their continued operation by merging the two to create Sparebanken Nord-Norge. These measures included total income support of NOK 800 million, comprising NOK 600 million from the guarantee fund and

NOK 200 million from Norges Bank in the form of a "subsidised" five-year S-loan (i.e. below the D-loan rate). In addition, a S-loan on standard D-loan terms was issued to cover Sparebanken Nord-Norge's liquidity needs. Norges Bank's income support was discussed beforehand with the Ministry of Finance, and the Executive Board stressed in its decision that the support should be seen in the light of the two savings banks' dominant position in the north of the country. Importance was also attached to the two banks' substantial foreign funding.

In September 1988, the Commercial Banks' Guarantee Fund decided to guarantee all of Sunnmørsbanken's liabilities, and Norges Bank issued substantial S-loans to the regional commercial bank until it was decided in March 1990 that Christiania Bank would take it over. Sunnmørsbanken's application for income support from Norges Bank in the form of a subsidised S-loan rate was, however, rejected. At a meeting in January 1989, the Ministry of Finance and Norges Bank agreed that, in their handling of Sunnmørsbanken, the authorities should be flexible about the institutional solution but not so flexible about public sector support.

The situation at the merged bank Sparebanken Nord-Norge deteriorated in 1989. After lengthy discussions at the Savings Banks' Guarantee Fund and between the FSA, Norges Bank and the Ministry of Finance, it was agreed in autumn 1990 that, to safeguard the continued operation of the bank, the guarantee fund would provide total support of NOK 1,500 million and that Norges Bank would contribute income support of NOK 500 million in the form of write-downs of loans. The proposals for refinancing Sparebanken Nord-Norge were considered by the Storting in February 1990 (Report No. 24 (1989-90)). The Storting stressed that the income support from Norges Bank entailed active use of Government money that ought to be approved by the Storting in advance. While Norges Bank had assumed that interaction with the Government and the Storting had been taken into account through its discussions with the Ministry of Finance, the Storting's consideration implied that the framework for the Ministry of Finance's role in the resolution of future banking crises was more strictly defined. In any future crises at Norwegian banks, the law's ordinary systems were to be observed, and reference was made to the schemes established through the guarantee funds. Norges Bank agreed that this represented a sensible approach. Income support from Norges Bank in consultation with the Ministry of Finance has not since been a relevant issue unless approved by the Storting in advance.

Only one bank, the relatively small commercial bank Norion Bank, was placed under public administration in the period 1988-1992. Unlike with the Savings Banks' Guarantee Fund, ordinary depositors and other creditors of the commercial banks did not, in principle, have any legal entitlement to support

from the Commercial Banks' Guarantee Fund. At the board meeting of the fund on 30 October 1989, three members (the representatives of the FSA and Norges Bank and one representative of the commercial banks) proposed that the guarantee should be limited to NOK 5 million per depositor, while four board members from the commercial banks argued that the fund should follow the same practice as the Savings Banks' Guarantee Fund. By a vote of four to three, the board decided to guarantee all deposits, but not the bank's other liabilities. To facilitate the release of depositors' funds, Norges Bank issued an S-loan which was guaranteed by the guarantee fund. Ignoring the special measures to support Sparebanken Nord-Norge, Norges Bank's only loss during the banking crisis was as a result of the failure of Norion Bank. The total loss from this bankruptcy was NOK 47 million.

In 1989 and early 1990, there were signs of economic recovery, and the banks' position was expected to strengthen relative to 1988. During the second half of 1990, however, a weaker outlook both domestically and globally suggested that the improvement in banks' earnings would be weaker than anticipated. It became ever clearer that even the biggest Norwegian banks could run into problems, and the FSA warned of the risk of a liquidity and solvency crisis at these banks at a meeting with the Ministry of Finance and Norges Bank in October 1990. It was also realised that the Commercial Banks' Guarantee Fund could end up in the same position as the Savings Banks' Guarantee Fund, which no longer had the capital to provide solvency support. In November and December 1990 there was close contact between the Ministry of Finance, the FSA and Norges Bank, and alternative crisis management models with greater involvement of the authorities and with Government solvency support were discussed. These discussions were mainly based on the existing division of responsibilities between the guarantee fund, the FSA and Norges Bank, and it was assumed that decisions on special equity measures would be made by the political authorities.

As a result of the problems at one large commercial bank, Fokus Bank, and in consultation with the Ministry of Finance, the FSA and Norges Bank, the Commercial Banks' Guarantee Fund decided in December 1990 to grant the bank an equity guarantee of NOK 1.5 billion. The guarantee was approved by the FSA as equity. To maintain stability and confidence in the Norwegian commercial banking system, it was also decided that the bulk of the fund's remaining assets should be used to shore up the commercial banks' core capital by purchasing preference capital at member banks.

Compared to most other countries, the two Norwegian guarantee funds had a stronger preventive and operational role in crisis management of troubled banks. Until their capital was exhausted, both guarantee funds contributed support measures that could ensure continued operation of crisis-stricken banks

or facilitate mergers with other banks. Except for the problems at Sparebanken Nord-Norge, and to some extent also Sunnmørsbanken and Norion Bank, the Ministry of Finance's role in crisis management was relatively hands-off until autumn 1990. The Ministry was nevertheless kept continuously informed of all the various crisis resolutions by the FSA and Norges Bank.

6.3 The systemic crisis of 1991-1993

At a meeting on 4 January 1991 between the Ministry of Finance and Norges Bank about the problems in the financial sector, the Bank was informed of plans to create a new Government Bank Insurance Fund (GBIF). The plan for the fund was officially unveiled in the ministry's press release of 10 January 1991. Other than the formation of the GBIF as a new crisis management body with its own board, the main principles of the previous crisis management model were retained. Both the FSA and Norges Bank supported the key features of the proposals to establish the GBIF and submitted detailed comments on the draft legislation. Many of these comments were taken into account, but at a meeting with the Ministry of Finance on 24 January 1991, Governor Skånland criticised the ministry for not putting the proposals before Norges Bank as an institution. He also stressed that the draft was overly concerned with ensuring that the Government would get its money back. This could come into conflict with one important aim of the change, namely to restore foreign confidence in the Norwegian banking system. Governor Skånland also argued that it was inappropriate for the legislature to impose such detailed restrictions on the fund's management of individual cases. According to the draft act, the Ministry of Finance would not be able to intervene in the terms set by the GBIF. Governor Skånland pointed out that this would result in a new administrative body that could take binding decisions material to the structure of financial markets, and that the ministry was therefore ceding far more authority than it had previously been willing to cede to Norges Bank.

The GBIF was formally established in March 1991. Both the FSA and Norges Bank were to appoint advisers to its board, and the Bank was given the main responsibility for secretariat duties. The creation of the fund meant that the authorities' involvement in solvency problems in the Norwegian banking system was clarified and formalised. The fund was to be allocated capital of NOK 5 billion and have as its objective the granting of loans on special terms (support loans) to the Commercial Banks' Guarantee Fund and the Savings Banks' Guarantee Fund.

The situation at banks and mortgage companies continued to deteriorate during the course of 1991. Given the systemic risks that would be associated with a failure of the largest mortgage company, Realkreditt, it was granted an S-loan of NOK 450 million on 1 May 1991, extended later in the year to a total of

NOK 2.8 billion. The loan was granted at the market rate and without collateral, but on the condition of a substantial injection of capital from shareholders. In June 1991, the Commercial Banks' Guarantee Fund had to pay out on the NOK 1.5 billion equity guarantee to Fokus Bank (cf. section 6.2 above). Together with the fund's NOK 1 billion injection of preference capital into commercial banks other than Fokus Bank, Christiania Bank and DnB, this meant that the Commercial Banks' Guarantee Fund had disposable funds of less than NOK 300 million at the end of June 1991.

Christiania Bank and Fokus Bank recorded heavy losses in the first half of 1991. As the Commercial Banks' Guarantee Fund did not have enough capital to meet the two banks' applications for an injection of preference capital, the fund applied for a support loan from the GBIF in August 1991 to fund the supply of preference capital to the two banks. In his statement to the fund, Governor Skånland argued that part of this capital should come from private sources, but this proved impossible to achieve. At the end of September 1991, Christiania Bank received NOK 2.1 billion in preference capital from the Commercial Banks' Guarantee Fund, of which NOK 1.8 billion was funded through a loan from the GBIF. At the beginning of October, Fokus Bank received NOK 650 million in preference capital from the Commercial Banks' Guarantee Fund, funded entirely by a loan from the GBIF. After both guarantee funds had essentially exhausted all of their capital, their independence and roles were substantially diminished. Both had to borrow from the GBIF in order to supply capital to member banks, and both had a majority on their boards appointed by the Government.

Although the FSA still had responsibility for setting capital requirements for continued operation, and Norges Bank contributed S-loans and other liquidity support assuming satisfactory solvency, this meant that the GBIF – and the Ministry of Finance – were the main players in the resolution of systemic problems in the financial sector. As Norges Bank and the FSA had advisers on the GBIF's board, and the board's decisions on support measures under the Guarantee Schemes Act had to be submitted to the Governor and the Director General of the FSA for comments, Norges Bank and the FSA were assured of influence over the work of the GBIF. Norges Bank's Executive Board was kept constantly updated on the GBIF's crisis management activities and considered related applications for S-loans, capital expansions, mergers and so on. From the second half of 1991 until 1993, work on issues relating to the banking crisis and secretariat duties for the GBIF laid claim to a substantial part of Norges Bank's resources in the financial sector area.

Heavy losses at the big three commercial banks made it clear that the GBIF's starting capital of NOK 5 billion was not sufficient, and that it was no longer realistic to refinance the big three banks with capital support from the Commercial Banks' Guarantee Fund funded with support loans from the GBIF. At a meeting on 9 October 1991, the Norges Bank's Executive Board was

informed about discussions between the Ministry of Finance, the FSA and Norges Bank on measures to strengthen banks' finances. Over the weekend of 12-13 October 1991, the authorities were told by Christiania Bank that its losses were substantially larger than previously assumed and that its equity was lost. The crisis was discussed at a meeting at the Ministry of Finance on the Sunday, and a statement was drafted that the Government would take action to ensure confidence in the Norwegian banking system. At the same time, Norges Bank issued a press release confirming the division of responsibilities for crisis management and stressing that the central bank would continue to ensure an adequate supply of liquidity to Christiania Bank and the rest of the banking system.

On 17 October 1991, finance minister Sigbjørn Johnsen presented a three-part package of measures to the Storting. The first part aimed to boost banks' earnings. This income support consisted of low-interest deposits in the banks from Norges Bank, a reduced membership fee for the banks' own guarantee fund, and a reduction in the liquidity requirement. The combined annual income effect for the banks was estimated at NOK 1.9 billion, of which NOK 1 billion was due to the interest subsidy on Norges Bank's deposits. The second part of the package was to strengthen the guarantee system for the banks, partly through a direct Government injection of NOK 1 billion into the Savings Banks' Guarantee Fund, an increase of NOK 6 billion in the GBIF's capital, the creation of a Government Bank Investment Fund with capital of NOK 4.5 billion, and an extension of the GBIF's mandate to allow it to hold shares in commercial banks and primary capital certificates in savings banks. [19] To permit the issue of shares to the GBIF, the third part of the package made changes to section 32 of the Commercial Banks Act. This would give the King in Council the authority to write down the share capital of banks in which more than 75 percent of the share capital was considered to have been lost.

On the same day, the Norges Bank's Executive Board held an extraordinary meeting where the measures were presented. The Board expressed its support for the creation of a new loan tranche of up to NOK 25 billion at an interest rate that entailed a total subsidy of around NOK 1 billion, provided that the subsidy element was scaled back once conditions allowed. Other than the support loans to Sparebanken Nord-Norge, all of the S-loans since 1987 had been issued at the overnight (D-loan) or market rate. [20] In line with the guidelines adopted for income support from Norges Bank to the banks, the proposal for subsidised deposits had to be put before the Storting along with the Government's appropriation proposals. The Storting supported the proposals, and the subsidised deposit scheme lasted for two years. The Storting

[19] The primary aim of the Government Bank Investment Fund was, along with private investors, to provide capital to Norwegian banks not subject to crisis management. Norges Bank was not the secretariat for the SBIF.
[20] Market rates were used for the S-loans (without collateral) to Realkreditt in May 1991 and Fokus Bank in June 1991.

passed the necessary decisions on the Government's support package at the end of November 1991. These decisions also meant that provisions were added to the Guarantee Schemes Act on the authority to instruct the GBIF and on the GBIF's duty to consult the Ministry of Finance. These were matters that Norges Bank had raised in its comments on the draft act back in January 1991.

Towards the end of 1991, conditions in the bond market and access to funding from foreign banks became more and more difficult. If these credit lines were to dry out, both banks and mortgage companies could find themselves mired in an even deeper crisis. Because the problems of the mortgage companies were primarily related to the problems of the Norwegian financial institutions in general, a press release was issued on 26 November 1991 stating that Norges Bank could issue liquidity loans to mortgage companies where a shortfall in funding could not be linked to the solvency situation at the individual company. This statement helped calm the liquidity situation, and ultimately it was not necessary to grant S-loans to mortgage companies other than Realkreditt. After Christiania Bank had problems with raising short-term foreign-currency loans from foreign banks in November 1991, the Executive Board granted S-loans of NOK 8 billion to both Christiania Bank and DnB in late November and early December 1991. These loans could be used to enter into currency swap contracts with Norges Bank, and the currency loans attracted interest marginally above the market rate (LIBOR). Because foreign-currency financing eroded the central bank's foreign-currency liquidity, Norges Bank advised the Ministry of Finance to step up the Government's foreign-currency borrowing.

Fokus Bank, Christiania Bank and DnB reported further deterioration in their results for the third quarter of 1991, and the GBIF made further large injections of capital into the three banks in December 1991. At the same time, Fokus Bank and Christiania Bank had their share capital written down to zero by royal decree on 20 December 1991, with the result that the two banks became 100 percent state-owned. The Government's contributions to the Savings Banks' Guarantee Fund and the SBIF's injections of capital meant that it was only necessary to make direct transfers of capital from the GBIF to the big three commercial banks and Oslobanken. In 1992, however, the GBIF issued a support loan to the Savings Banks' Guarantee Fund that was used to subscribe for primary capital certificates at three regional savings banks (Sparebanken Rogaland, Sparebanken Midt-Norge and Sparebanken Hedmark). Norway's third-largest bank, Sparebanken NOR, did not need any support from the GBIF but received capital from the Government Bank Investment Fund and other investors. Norges Bank often granted S-loans in connection with these rescue operations. The loans were issued without any direct collateral, but on the basis of a commitment to provide capital from the GBIF itself or via the two bank guarantee funds.

Turmoil flared up once more in financial markets in late August and early September 1992. On 4 September, Norges Bank published a press release stating that its commitment of 26 November 1991 to supply liquidity to mortgage companies still applied and had been extended to include finance companies. S-loans were extended to four finance companies and one mortgage company. The interest on the loans was based on the interbank rate with a premium. At a time of currency turmoil, this entailed very high rates of interest. The big three commercial banks looked likely to report significant losses again in 1992, leading to a need for further injections of capital so that they would meet the 8 percent capital requirement at the end of the year. In November 1992, the GBIF decided to supply new equity to Christiania Bank, Fokus Bank and DnB. In DNB's case, this was on the condition that its general meeting wrote down its ordinary share capital to zero, which happened on 30 March 1993. As a result of these capital injections, an additional NOK 2.5 billion was transferred to the GBIF in December 1992. Governor Skånland largely supported the GBIF's proposed measures, but argued that Christiania Bank and DnB should have a higher capital ratio than the minimum given their high levels of foreign funding.

Table 3 shows that the highest quota of S-loans was reached in 1992. However, the banks' need for S-loans decreased considerably in late 1992, and the total S-loan quota fell to NOK 6.8 billion at the end of the year, compared with

Table 3: S-loans by type of institution, 1988-1992. Highest quota during the year in billions of NOK

	1988	1989	1990	1991	1992
Commercial banks	2.3	3.1	2.7	23.8	33.0
Of which the big three[1]	1.0	0.5	-	23.0	32.3
Savings banks	2.6	4.7	3.0	3.8	1.1
Mortgage companies[2]	-	-	-	2.8	0.6
Finance companies	-	-	-	-	0.7
Total	4.8	7.8	5.7	30.3	35.3

[1] DnB incl. Bergen Bank, Christiania Bank and Fokus Bank. [2] The mortgage company Realkreditt was taken over by DnB in December 1991. Realkreditt's S-loan quota was then transferred to DnB.

Source: Norges Bank

NOK 25.9 billion at the end of 1991.[21] In April 1993, Oslobanken applied for capital from the GBIF, expecting that its capital ratio at the end of the first quarter would be below the statutory minimum. A merger with DnB would not

[21] The figures in the table differ because they show the highest quota during the year.

be possible without a substantial injection of capital from the GBIF, and public administration was considered. For reasons of financial stability, both the Governor and the Director General of the FSA recommended that public administration should be avoided, and the GBIF decided to inject capital with a view to an orderly liquidation. To facilitate the disbursement of depositors' funds, Norges Bank granted an S-loan guaranteed by the Commercial Banks' Guarantee Fund.

1993 brought a significant improvement in the Norwegian economy and at the Norwegian banks. By the beginning of 1994, there was a broad consensus that the banking crisis was over. The need for S-loans fell sharply, and only the S-loan to Oslobanken was outstanding at the end of the year. The Savings Banks' Guarantee Fund repaid its support loans from the GBIF in spring 1994, and the Commercial Banks' Guarantee Fund repaid its remaining support loans in December 1995. After that, the standard rules for the guarantee funds came back into play. Until the Commercial Banks' Guarantee Fund reached its statutory minimum size, or the GBIF believed that the fund had sufficient capital for its operations, DnB, Christiania Bank/Nordea and Fokus Bank were to report to the GBIF on a quarterly basis. In April 2002, the Storting decided to repeal the Guarantee Schemes Act and wind up the GBIF.[22] The three commercial banks were released from their reporting obligation with effect from the third quarter of 2002.

6.4 Evaluation of the banking crisis of 1988-1993

The causes and evolution of the Norwegian banking crisis of 1988-1993 have been examined in numerous articles, lectures and discussions both in Norway and abroad.[23] All in all, the banks' guarantee funds, the FSA, the Ministry of Finance, Norges Bank and, from spring 1991, the GBIF worked very well together during the period. The ministry, the FSA and Norges Bank were united behind a Norwegian solution that avoided the use of blanket guarantees.

As early as October 1991, the ministry appointed a committee – the Munthe Commission – to assess the extent and causes of the crisis in the banking industry. This was not a full committee of inquiry, so it did not map out the sequence of events and actions of public authorities, banks and other financial institutions. The Storting appointed its own committee of enquiry in 1997, the Smith Commission. This commission's report contained a detailed analysis of the background to the banking crisis, the authorities' management of the crisis, and various recommendations based on experience from the crisis.

The Smith Commission concluded that the banks' own conduct was a far more important cause of the crisis than the shortcomings found in the exercise of

[22] Proposition to the Odelsting No. 33 (2001-2002).
[23] Norges Bank Occasional Paper No. 33 (2004), The Norwegian Banking Crisis.

public supervisory and systemic responsibilities. The FSA came in for criticism for aspects of its supervisory activities, but it was also noted that not only the FSA but also the Ministry of Finance, Norges Bank and, not least, the banks themselves greatly underestimated the depth of the banks' problems. In particular, the Smith Commission stressed that the documentation of dealings between Norges Bank and the Ministry of Finance did not give the impression that "the central bank, either in letters or at meetings, actively advocated limiting the supply of liquidity in the winter and spring of 1986 to bring about a rise in interest rates". Governor Skånland had addressed similar criticism already in 1996 claiming that both Norges Bank and the Finance Ministry were aware of the political situation. There was no point in spending time repeatedly arguing for measures (higher interes rates) clearly lacking support in the Storting.[24]

The commission's main impression was that the banking crisis was handled responsibly by the key players: "In the light of the serious situation that arose and the time that was available, it seems reasonable to conclude that the crisis in the credit system in autumn 1991 was managed impressively." The Smith Commission also recommended a number of measures to help prevent similar crises in the future. The single most important observation was that capital adequacy was crucial for stability in the banking sector, and the importance of loss provisions during good times was underlined. The importance of active ownership and good bank supervision was also noted. The commission stressed that the Government and Norges Bank had overall responsibility for interpreting the macroeconomic outlook and so argued that "the principal responsibility for preventing future banking crises rests with the Government (in particular the Ministry of Finance) and Norges Bank."

7. The international financial crisis of 2007-2009

7.1 Background

In many countries, much of the 1990s and early 2000s brought a strong and persistent increase in debt and property prices with record-low risk premiums in financial markets. This was driven by large current-account surpluses in China, oil-exporting countries and Germany, and low interest rates. In 2006, house prices in the US began to fall, due partly to higher interest rates. Fears of losses on residential mortgages, especially those issued to subprime borrowers, quickly flared up. Banks and investors across much of the world were exposed to these loans because they had been converted into transferable securities,

[24] A note from Governor Skånland 11 October 1996 to an article in Økonomisk Revy (October 1996) by Trond Reinertsen, Executive Director of the Norwegian Bankers' Association.

often restructured in various ways (such as CDOs), but the extent of this exposure was uncertain.

The first wave of turmoil in global markets came in August 2007 when redemptions at three subprime-related funds were suspended as it was not possible to value the structured products the funds had invested in. The impact on interest rates of higher risk premiums in money markets was considerable in both Europe and the US. Turbulence in one country's markets soon spread to other markets and other countries due to the close integration of global financial markets, and Norway was not immune. The turmoil continued in waves and worsened during the course of 2008, becoming acute with the bankruptcy of Lehman Brothers on 15 September 2008. The situation in the global dollar market deteriorated dramatically, and financial institutions in many countries began to run into problems. In Iceland, the entire banking system collapsed, with significant spillover effects on other countries, including Norway.

In October 2008, many countries launched extensive rescue packages, including not only loans and guarantees but also injections of capital into the banking system. The situation was considered to bode ill for the general economic outlook, and many parallels were drawn with the Great Depression between the two World Wars. Fiscal policy was therefore rapidly made more expansionary, including in Norway. The massive response from the authorities soon stemmed the growing panic, and financial markets gradually improved during the course of 2009. It did not, however, prevent a steep drop in demand and production, with the result that the global economy experienced its biggest downturn since the Great Depression.[25]

7.2 Crisis management at Norges Bank

Thanks to its experience from the Norwegian banking crisis almost 20 years before, Norges Bank was better prepared for the global financial crisis. There was also a greater awareness of the Bank's own responsibility for preventing and managing crises, accentuated by its revised role after several years of independence in the exercise of monetary policy. Ahead of the banking crisis of the early 1990s, Norges Bank did not have a similarly independent policy role.

Although there were a few cases of additional liquidity being supplied in late 2007 and into 2008, Norges Bank's management of the crisis did not start up for real until after the Lehman Brothers bankruptcy. A shortage of US dollars among players in the Norwegian NOK/USD swap market (from which the krone interest rate is derived) led the Bank to lend dollars directly to

[25] The Great Depression started in 1929 and lasted until the late 1930s.

participanta in this market in May 2008. This was considered necessary for the quotation of krone interest rates. Late 2008 and early 2009 brought extensive extraordinary injections of both kroner and foreign currency (dollars and euros) in a bid to bring down very high money market rates. Like several other central banks, Norges Bank entered into a swap agreement with the Federal Reserve so that it could supply USD without depleting its foreign exchange reserves. Also like many other central banks, Norges Bank's balance sheet grew substantially as a result of these extraordinary measures. The banks' balance sheets also expanded. To allow an increase in lending to banks, the collateral requirements for loans from Norges Bank were relaxed in several stages.

7.2.1 The swap arrangement

The peculiarly Norwegian dependence on the US dollar for quoting krone interest rates was considered to be a major problem during the global financial crisis. Shortly after the Lehman Brothers bankruptcy, Norges Bank therefore began to explore the possibility of bringing about a krone money market independent of the swap market. In many countries, the use of government securities as collateral forms the basis for a well-functioning money market in local currency. A shortage of government securities was therefore considered to be an important reason for the absence of an active money market in Norwegian kroner. A natural way of supplying government securities to the banks was to set up a swap arrangement enabling banks to exchange Norwegian covered bonds – a secure and relatively liquid security – for government securities. The covered bond market in Norway was expanding rapidly after banks were given the green light in 2008 to sell their illiquid mortgages by issuing covered bonds at the value represented by these mortgages. Covered bonds were also approved and well-suited as collateral for banks' loans from Norges Bank. In the event of a major need to borrow from Norges Bank, there was no real alternative to making mortgages "collateralisable" if the requirements for adequate collateral were to be met.

While this work was going on in late September 2008, the global liquidity turmoil worsened. Risk premiums shot up, and many countries had to launch extensive support packages for their banks. In Norway, work on establishing the swap arrangement had to be rushed through, and its main purpose was changed to being an acute measure to remedy the ever more difficult funding situation for Norwegian banks. The banks' situation would be eased greatly if they could have access to government securities and borrow against these securities. The proposed swap arrangement was communicated orally to the Ministry of Finance at a meeting on 3 October 2008. The banks would swap Norwegian covered bonds directly for Treasury bills. Norges Bank would administer the scheme, which meant that prices for the Treasury bills would be set at auctions. The ministry backed the proposals, which were published on 12

October. At the same time, EU member states were recommending government guarantees to ensure that banks had access to funding.

There were very high levels of activity at Norges Bank, the FSA and the Ministry of Finance in the following weeks as they put in place the practical and legal aspects of the arrangement. The package was approved by the Storting on 24 October, and the first auction was held on 24 November. By this time, market conditions were beginning to improve. The actual announcement of the arrangement on 12 October, combined with the unveiling of measures in other countries, had already helped calm the markets. The swap arrangement had an upper limit of NOK 350 billion and reached a take-up of around NOK 230 billion at its peak. The last auction was held on 19 October 2009. A number of banks set up mortgage companies so that they could issue covered bonds, and the formation and formal approval of these new companies were expedited.

7.2.2 Icelandic-owned banks

During the course of 2007, Norges Bank and the FSA stepped up their surveillance of the liquidity situation at Norwegian banks in general. There was a particular focus on the Icelandic-owned banks and their funding problems. This surveillance was stepped up further in 2008 as the banks' funding woes grew. The Icelandic banks collapsed when the global turmoil peaked in the first half of October 2008.

The management of Glitnir Norge, the Norwegian subsidiary of Glitnir, was handled jointly by the Norwegian Banks' Guarantee Fund, the FSA and Norges Bank. The statutory division of responsibilities in the event of such crises required the guarantee fund to act as a second line of defence after the bank's own capital. The fund, which had representatives of both Norges Bank and the FSA on its board, duly took on this role. Due to the unpredictable market conditions, the fund wanted to obtain funding from Norges Bank rather than realising its own assets in its rescue operation for Glitnir Norge. Norges Bank granted the fund an S-loan facility with a limit of NOK 5 billion. The loan was renewed on several occasions until the fund found a permanent solution for the bank, which entailed its sale to a group of Norwegian savings banks without losses for either depositors or other lenders to Glitnir Norge.

The Norwegian branch of Kaupthing Bank ran into problems at the same time as Glitnir. It was much smaller than Glitnir Norge, and Norges Bank announced early on that S-loans would not be issued for a branch of a foreign bank. The loan would in this case have to be issued to the Icelandic parent bank, which was not an option. When the Norwegian branch of Kaupthing Bank's funding ran dry, it was therefore shut out of the settlement system and eventually placed under the administration of the Norwegian authorities.

Although the bank was small, market conditions were very troubled at this time. Just two hours after the FSA was informed that Kaupthing's payments would be suspended and orally recommended a guarantee, finance minister Kristin Halvorsen announced publicly that the Norwegian authorities would pay out on deposits covered by the Icelandic guarantee scheme. Neither the Norwegian Banks' Guarantee Fund nor the Government sustained any losses in connection with this operation.

7.2.3 Solvency measures – the Government Finance Fund and the Government Bond Fund

As the market turmoil rumbled on in October 2008, Governor Svein Gjedrem launched an internal process to assess the need and possible models for measures to improve Norwegian banks' financial strength. This work resulted in a letter from the Executive Board to the Ministry of Finance on 18 December proposing the creation of a Government Finance Fund. The fund would be around NOK 20-30 billion in size and contribute to capital expansions at solvent Norwegian banks. Norges Bank argued that banks in other countries had significantly increased their equity, partly through Government capital injections. As a result, Norwegian banks' competitiveness had been eroded. It was noted that the scheme must give banks an incentive to continue supplying credit.

The primary instrument was to be preference capital on terms that assured the fund of a return on a par with what the market would normally require. To give the banks an incentive to redeem this preference capital, the dividend on ordinary shares could be set to zero for as long as a bank had government preference capital, or the dividend on the preference shares could be higher than the bank's normal capital costs, at least after a year or two. Norges Bank recommended that the Ministry of Finance prepare for the introduction of such a scheme but also stressed that this new measure should not be publicly unveiled until the effects of previously announced measures became evident, or until it became clear that the situation had become significantly more serious. The scheme had clear similarities to the Government Bank Investment Fund set up in autumn 1991 during the national banking crisis (cf. Section 6.3 above).

The Ministry of Finance largely supported the proposals from Norges Bank, and the Government Finance Fund was announced on 9 February 2009 and formally established on 6 March 2009 with capital of NOK 50 billion. The proposals were also submitted to the FSA, which supported them. Besides preference capital, the fund offered subordinated loans (hybrid bonds). At the same time, the Government proposed setting up a Government Bond Fund, also with capital of NOK 50 billion. This fund would invest in fixed-income securities issued by Norwegian companies, including banks. The Storting backed the proposals. In a consultation response, Norges Bank argued that such

a fund would not be needed. Capital markets improved substantially in 2009, and ultimately little use was made of either fund.

7.2.4 Evaluation of the management of the crisis

The Government Finance Fund injected a total of NOK 4 billion into 28 banks accounting for 14 percent of total bank assets and 21 percent of the total number of banks in Norway. Although use of the scheme was limited, it was important to demonstrate the authorities' ability and willingness to protect Norwegian banks and so reassure the markets. Not least, it gave the big Norwegian banks time to prepare ordinary market measures to strengthen their equity. Evaluations of the financial crisis have found that Norway was hit less hard than other countries, but that the policy response was appropriate. As early as summer 2009, the Government appointed a public committee to look at the Norwegian financial markets, including Norwegian financial market regulation, in the light of the global financial crisis and experience from the crisis.[26] The committee concluded:

"Norway is among the countries that, at least so far, have been the least affected by the global financial crisis. This is probably due to a combination of luck, skill and caution. The failure of international financial markets nevertheless led to acute funding challenges for Norwegian banks, and comprehensive regulatory measures were taken. A number of aspects of the Norwegian economy, the financial markets and the financial market regulation helped mitigate the effects of the crisis. In addition, strong monetary and fiscal stimulation and special support measures for financial markets were effective in stabilising the situation.

Moreover, when compared with the Norwegian banking crisis of the 1990s, the effects in Norway of the international financial crisis have been mild. While the causes of the Norwegian banking crisis in the 1990s where domestic in origin, resulting from excessive debt accumulation by households and firms, and subsequent solvency problems in banks, the financial crisis originated abroad."

[26] NOU 2011: 1 Bedre rustet mot finanskriser— Finanskriseutvalgets utredning. ("Better equipped to tackle financial crises". In Norwegian only, but includes an English summary).