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Working Paper

Norges Bank's bicentenary project

Norges Bank 1999-2010 Governance and structural reforms

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NORGES BANK 1999 – 2010

GOVERNANCE AND STRUCTURAL REFORMS

Abstract

In 1999 Norges Bank employed 1150 persons and had 12 regional branches located in various cities across the country. In 2010, the regional branches had all been closed and the traditional central bank staff had been reduced to a good 300 persons.

In the same period, an investment management unit was developed into what is now called Norges Bank Investment Management (NBIM) with about 280 persons from 25 countries. The head of NBIM reports directly to Norges Bank's Executive Board and is subject to oversight by the Governor of Norges Bank on behalf of the Board.

Considerable changes were also made with respect to the Bank's organisational and governance structure. This paper has been drawn up to document the Bank's work on governance and the structural reform process in the period under review, with a view to providing a background document for the authors of the book on the history of Norges Bank to be published in connection with the Bank's bicentenary in 2016.

Keywords: Central bank organisation, central bank governance

JEL Classification: E58, H44, N20

Preface

During the period when Svein Gjedrem was Governor of Norges Bank, extensive changes to the structure of the Bank were implemented.

When the new Governor took office in 1999 Norges Bank employed 1150 persons and had 12 regional branches located in various cities across the country. In 2010, the regional branches had all been closed, and the traditional central bank staff had been reduced to a good 300 persons. In a speech delivered in November 2010, Governor Svein Gjedrem stated the following¹: *“This is an adequate staff level. We no longer produce statistics, and we are no longer a manufacturing enterprise. We issue the currency, but we do not print banknotes or mint coins. The distribution of money has been taken over by private business.”*

In the same period, an investment management unit was developed into what is now called Norges Bank Investment Management (NBIM) with about 280 persons from 25 countries. The head of NBIM reports directly to Norges Bank’s Executive Board and is subject to oversight by the Governor of Norges Bank on behalf of the Board.

Considerable changes were also made with respect to the Bank’s organisational and governance structure. Various editions of the Bank’s *Annual Report* provide an account of these changes, and the *Annual Report* for 2008 includes the most extensive account. A comprehensive presentation of this structural change process is not available, however.

This paper has been drawn up to document the Bank’s work on governance and the structural reform process in the period under review, with a view to providing a background document for the authors of the book on the history of Norges Bank to be published in connection with the Bank’s bicentenary in 2016. The paper draws on Norges Bank’s *Annual Report*, a conversation with Svein Gjedrem on 7 August 2012, internal documents and my own notes and recollections. A number of colleagues at Norges Bank have provided comments on the account of the reform processes where they were involved. Any errors or omissions found in this paper remain the sole responsibility of the author.

Harald Bøhn

¹ Svein Gjedrem: Making use of the central bank. Speech delivered on 17 November 2010 at Norges Bank’s Symposium “What is a useful central bank?”

1. Outline of developments

1.1. Tasks

The definition of Norges Bank's core tasks had been the subject of internal discussion through the 1990s. The Bank's traditional operations had been built up around the conduct of monetary policy, analyses of and measures to secure financial stability, and the production and distribution of banknotes and coins. Investment management was in the early stages of development. Many of the services provided to the rest of the organisation were delivered by the Bank's internal administration. Eight regional offices had been closed in 1988-1989, and a number of tasks, particularly at the regional offices, were discontinued in the 1990s. Support functions were downsized.

The discussion about what Norges Bank's core tasks should be continued after Svein Gjedrem took office as Governor of Norges Bank. Before his appointment, he had followed developments in Norges Bank from his post at the Ministry of Finance. He had noted that the Bank's activities were wide-ranging and saw a need for greater focus on core tasks. In Gjedrem's view, Norges Bank should primarily be a public institution with core functions linked to the field of economics. This was not compatible with a situation in which most of Norges Bank's employees were engaged in pure bank tasks or manufacturing.

After he took office as Governor of Norges Bank, Gjedrem was nonetheless surprised at the wide spectrum of activities. He also observed that a large number of matters, ranging from the material to the trivial, were submitted for consideration by the Executive Board and the Supervisory Council, a practice which could only be deemed as lacking in efficiency. To him, the Bank's activities seemed to be without a clear sense of direction and purpose, and without sufficient focus on core tasks.²

The basis for the discussion about Norges Bank's core tasks was the Norges Bank Act of 1985. The Act states that Norges Bank shall be an executive and advisory body for monetary, credit and foreign exchange policy. The Bank shall issue banknotes and coin, promote an efficient payment system domestically as well as vis-à-vis other countries, and monitor developments in money, credit and foreign exchange markets. The Act enables the Bank to implement any measures customarily or ordinarily taken by a central bank. The Bank's task of managing the Government Pension Fund Global is stipulated by regulation and is set out in a separate management agreement with the Ministry of Finance.

² This and the preceding paragraph are based on a conversation with Svein Gjedrem, 7 August 2012

Based on the above, the conclusion was drawn that Norges Bank's primary objective would be to promote economic stability in Norway. This would naturally include:

- promoting price stability through monetary policy,
- promoting financial stability and contributing to robust and efficient financial infrastructures and payment systems, and
- performing efficient and sound portfolio management of the Government Pension Fund Global, Norges Bank's foreign exchange reserves and the Government Petroleum Insurance Fund.

Thus, the Bank's core tasks were defined as monetary policy, financial stability and investment management.

Through the period 1999-2010, the resources allocated to the performance of core tasks were increased, particularly with respect to investment management. In pace with the growth of the Government Pension Fund Global from NOK 170 billion at the end of 1998 to more than NOK 3 trillion in 2010, the staff of Norges Bank Investment Management (NBIM) was expanded from 40 in 1998 to 280 in 2010. In the first decade, NBIM was organised as the investment management area of the Bank, reporting to the Governor of Norges Bank in line with the other operational areas. In order to more clearly reflect NBIM's particular function in the execution of a mandate issued by the Ministry of Finance, the head of NBIM has reported directly to the Executive Board since 2008. The Governor of Norges Bank is responsible for oversight on behalf of the Executive Board. The organisation of investment management at Norges Bank is described in more detail in Section 2.

Resources were also augmented for work related to the conduct of monetary policy and analyses of financial stability.

In the same period, non-core activities were considerably reduced, resulting in a leaner organisation with a sharp reduction in overall costs. If some tasks had been maintained it might have put the Bank at risk of contravening the Norges Bank Act. In other cases, other institutions were considered to be better suited to the task.

The main changes were the following:

- The Royal Mint was established as a separate company in 2001 and sold in 2003.
- Banknote production was discontinued in 2007. The first purchase of banknotes from abroad took place in 2008.
- Cash handling was spun off to form a new company (NOKAS) owned by Norges Bank and a number of private banks in 2001. As a result, the Bank's tasks such as the operation of central bank depots and banknote destruction were largely outsourced. Norges Bank sold its 33.5 percent interest in NOKAS in January 2006.
- The Bank concentrated on its role as wholesaler and reduced the number of central bank depots.
- Norges Bank's statistical activities were transferred to Statistics Norway in two stages, in 2005 and 2007.
- Operation of Norges Bank's settlement function was outsourced in 2003.
- Production of a number of banking services for public entities and bank employees was discontinued in 2004.
- Central IT activities were outsourced in two stages, in 2008 and 2010.
- Internal Audit and an audit committee were established in 2006. As from 2010, the Bank is audited by an external auditor.

These changes are described in more detail in Sections 3 and 4.

1.2. Governance and organisation³

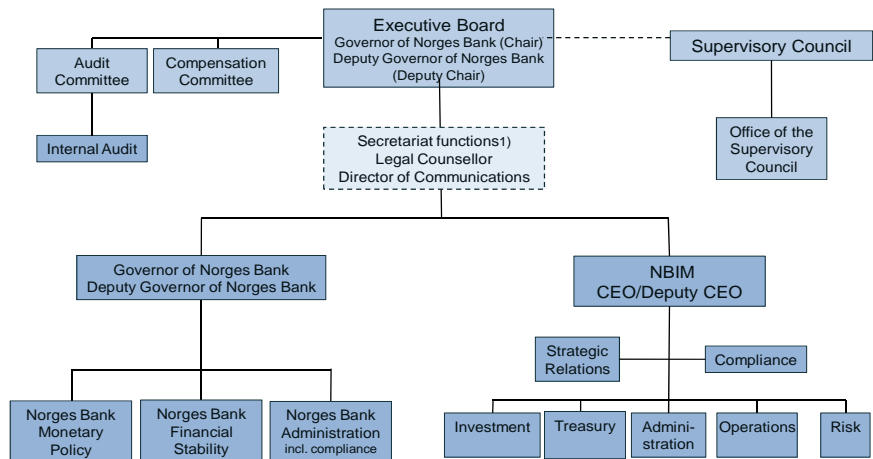
An important goal for Gjedrem was to establish clear lines of responsibility in the organisation at an early stage. In his opinion, this implied following the principle of line management. He was generally sceptical to holding executive team meetings several days a week, which could easily lead to an unclear distribution of responsibility, to a 'pecking order' or to meetings dominated by the Governor. The frequency of executive team meetings was therefore reduced, and meetings were focused on overarching matters.

The Bank was already largely organised around the core tasks, with one operational area dedicated to each, and this aspect was developed further. Most of the activities of an earlier department for the production and distribution of notes and coins were not defined as core tasks and were subsequently outsourced. Another department provided staff and support services.

³ Section 1.2 is largely based on a conversation with Svein Gjedrem, 7 August 2012

With the division into few, but relatively large units, the span of control for the executive management was considered to be adequate. The number of staff in the various areas of activity in Norges Bank ranged from around 80 to around 280, with clearly defined interfaces between units. The organisational chart as of December 2010 is shown in Chart 1.

Chart 1 Organisation of Norges Bank

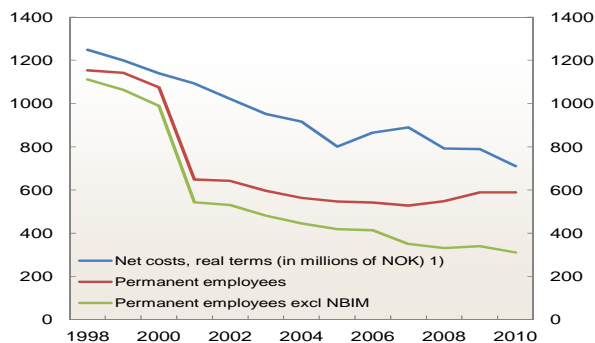


1) Performs secretariat functions for the Executive Board, the Compensation Committee, Audit Committee, safeguards the legal framework for central bank activities and the Executive Board's external communication.

Chart 1. Organisation of Norges Bank

A focus on the three core tasks shaped the development of the Bank in the period 1999-2010. In addition, it was important that the Bank operate as a lean and efficient specialist enterprise, sober in its use of resources and with a willingness and ability to change. The Bank sought as far as possible to purchase non-core services from external providers. By establishing limited companies, outsourcing, discontinuing tasks and implementing general efficiency measures, the number of employees was reduced from approximately 1 150 in 1998 to around 590 at end-2010, even after building up an investment management unit which by 2010 had a staff of 280. Net operating expenses in the period 1998-2010 were reduced by 43 percent at constant prices (see Chart 2).

Chart 2. Developments in net expenses and permanent employees



1) Deflated by price index for public expenditure
 Source: Norges Bank

Chart 2. Developments in net expenses and permanent employees

The Supervisory Council adopts the budget, approves the Bank’s accounts and supervises the Bank to ensure that the rules governing the Bank’s activities are observed. In matters directly affecting the Bank’s structure, the Supervisory Council often had decision-making authority. The Bank’s executive management and the Executive Board were responsible for diligently preparing matters for consideration. A good working relationship with the Supervisory Council was important to Gjedrem.

The then Chair of the Supervisory Council, Mary Kvidal, had previously held the position of State Secretary in the Ministry of Finance. Gjedrem has informed that he had become acquainted with Kvidal there and they had developed a professional relationship of trust and mutual respect. They shared an understanding of the need for efficiency measures in the public sector. In Gjedrem’s opinion, the Supervisory Council had through its history been overly focused on individual functions and he wanted to work with Kvidal to establish procedures to allow the Council to perform its tasks, not least its responsibility for supervision of the Bank’s operations. This required the Council to be given a broader introduction to the Bank’s operations, which would enhance their ability to understand and identify the most important tasks. This would also facilitate the reform process.

It was important to Gjedrem to avoid a competence conflict between the Executive Board and the Supervisory Council. This required confidence between the two bodies. To achieve this, the Executive Board’s presentation of a matter had to be convincing, requiring time to be given to preparing the background material necessary to meet the Council’s need for information. In some cases, matters were sent back to the Executive Board for more extensive analysis. Gjedrem had

observed that Kvidal was focused on implementing the processes that were necessary to establish confidence between the Council and the Executive Board/Norges Bank's administration.

The Executive Board is Norges Bank's executive and advisory authority and has delegated responsibility for the Bank's day-to-day operations to the Governor. It was important to establish confidence between the Executive Board and the Bank's administration. Some Executive Board members had, according to Gjedrem, experienced that the "bureaucrats" in the organisation did not respect their views, and the Board members were therefore reluctant to voice their opinions at the meetings. This, in his opinion, could not continue. As in the case of the Supervisory Council, emphasis was given to taking the time to perform the supplementary analyses necessary to ensure confidence in the decision-making process.

Furthermore, it was important to Gjedrem that the matters submitted to the Executive Board were of primary importance and not minor administrative matters. Less emphasis on daily exchange rate variations made it easier to have well prepared discussions on monetary policy at Board meetings and thereby shift attention onto the most important matters in the Bank. As a result, a number of other types of matters would have to be delegated and an understanding of the need for reorganisation developed. In Gjedrem's opinion, the change in procedure for the appointment of Executive Board members implemented in 2003/2004 had been correct in principle, but had no particular bearing in this context.

From Gjedrem's point of view, the relationship between Norges Bank and the Ministry of Finance in matters concerning the reorganisation was unproblematic. The purpose of the Bank's submissions to the Ministry were to seek the Ministry's views in order to assess those views before making a decision, but did not relieve the Executive Board of the responsibility for making decisions on the basis of its own assessment. This was a long way from being instructed by the Ministry. In principle, the Ministry was not likely to oppose a matter that had been thoroughly discussed at Norges Bank. The Ministry of Finance, least of all, could not oppose measures to improve the efficiency of the central bank and to shed some activities in order to enhance the Bank's capacity to perform its most important tasks.

Gjedrem felt that Norges Bank had maintained good relations with the Bank's in-house trade union 'Norges Banks Funksjonærforbund' through the reforms. The union had been consistent in its response to the measures implemented. There was probably some surprise that the reorganisation was conducted so resolutely. There had been some occasions where trade union members had approached the Ministry of Finance and the Storting's Standing Committee on Finance and Economic Affairs directly, indicating the need for a realistic picture among employees' organisations of the alternative to the proposed reorganisation. It was important to convey to employees that maintaining the status quo would not in many cases be a realistic alternative.

In preparing for the reorganisation, Gjedrem emphasised the importance of ensuring a sound process in the Executive Board and the Supervisory Council and maintaining good relations with the Ministry of Finance and the employee organisations. The responsibility for implementation had been delegated. The decisions taken were always, in his view, loyally followed up. One of the main reasons why the reorganisation was so successful was that the Bank had capable staff who took on the task with great enthusiasm⁴.

Through the period, day-to-day operational responsibility was delegated from the Governor to the main operational areas to a greater extent than previously. The operational areas were large enough to allow the redistribution of resources among the units within each area.

The operational areas were afforded considerable freedom with regard to personnel administration and budgets, within annual caps. Guidelines were set for limits on the number of person-years over a three-year period for most of the Bank's operations. These limits were based on strategy documents/mission statements that were drawn up and approved for each area. Best international practice was used as a benchmark, both as regards quality and resource use.

The operational areas drew up annual action plans for their activities with performance objectives approved by the Governor. The Governor followed up the performance of each area through the year by means of staff performance/pay appraisal interviews in spring and follow-up interviews in autumn. In addition, follow-up meetings between the Governor/Deputy Governor and the Executive Director of each area were held approximately every three weeks.

The responsibility of all directors was clearly defined in accordance with the Bank's organisation and line management principles. A system was established for the annual appraisal of directors by their superiors and subordinates based on the assessment criteria of direction, effectiveness, approach and professional standards.

In order to strengthen line management, a number of administrative functions were transferred to the operational areas early in the period. As staff numbers in the areas were reduced, some of this transfer was reversed. The process had shown that a decentralised model was often too resource-intensive.

Support functions had to be rationalised and downsized in line with an increasingly leaner central bank. This was a continuous process involving staff cuts and outsourcing of some operational functions.

Norges Bank implemented redundancy programmes to ease the reorganisation process. The Bank sought to re-employ staff elsewhere through business transfers, support for training schemes and redundancy payments, but also had to resort to early retirement pensions and severance pay. Gjedrem has emphasised that even though the cost of these packages was high, it was still lower

⁴ This and the previous part of 1.2 are based on a conversation with Svein Gjedrem, 7 August 2012

than the cost of not reorganising. In some cases, the packages may have been too advantageous, which may have been a disadvantage to recipients by not providing the right incentive to find new employment⁵.

The staff reductions resulted in office vacancies at the Bank's head office in Oslo. NOKAS rented offices in the building when it was established in 2001. In addition to previous employees of Norges Bank, employees in private banks who were transferred to NOKAS were also located in the building. NOKAS moved out towards the end of 2011. When Norges Bank's printing works was closed down, the site was converted into office space and is now occupied by Finanstilsynet (Financial Supervisory Authority of Norway), which has rented this area and other office space in the building since December 2009.

2. Building up the sovereign wealth fund

2.1. Scope

Norges Bank has managed the Government Pension Fund Global (formerly the Government Petroleum Fund) since the first allocation was made to the Fund in 1996. The rapid expansion of the Fund has placed growing demands as to its organisation.

The Fund has always aimed to achieve high returns using controlled risk strategies. The Fund started up by investing in government and government-guaranteed bonds. In 1998, the Fund also started investing in equities in 21 countries with fairly developed financial markets and built up an equity allocation of 40 percent. The investment universe has steadily been expanded in response to the growing size of the Fund. As a result, new financial instruments have been included, such as corporate bonds in 2002 and real estate in 2010. The equity allocation was increased to 60 percent in 2007 and the benchmark portfolio for equities was concurrently expanded from about 2500 to about 7700 companies. The number of countries in the Fund's investment universe was also increased. As early as 1997 it was clear that a professional investment organisation with broader competencies than Norges Bank had at the time would be needed.

During the period, ethical investment rules were introduced, in addition to rules relating to the exercise of ownership rights established by the Bank.

NBIM also managed the Government Petroleum Insurance Fund, which was discontinued at the end of 2010.

The size of the reserves was deemed to be greater than that required for monetary policy purposes. With an organisation with broader competencies, it was natural to consider the investment strategy for the Bank's foreign exchange reserves.

⁵ Conversation with Svein Gjedrem, 7 August 2012

The reserves were divided into three portfolios; a short-term money market portfolio, a long-term investment portfolio and a petroleum buffer portfolio comprised of funds for transfers to the Government Pension Fund Global.

At the end of 2010, the Bank's foreign exchange reserves amounted to NOK 259 billion. At the end of 2010, the market value of the long-term investment portfolio was NOK 225 billion. The portfolio is only to be used for monetary policy purposes when necessary. Subject to the limitations implied by this principle, the aim is to achieve a high long-term return. The investment strategy thus shares many features with the management of the Government Pension Fund Global. From 2001, 20 percent of the portfolio was invested in equities. The allocation to equities was later increased and has been 40 percent since 2006.

The money market portfolio has been invested so that it can readily be used in the conduct of monetary policy. It is exclusively invested in money market instruments with a residual maturity of up to one year. The size of the portfolio has varied over time with the Bank's assessment of the size of reserves needed for monetary policy purposes. At the end of 2010, the portfolio stood at NOK 24 billion.

2.2. Management model

NBIM manages the Government Pension Fund Global subject to a management agreement with the Ministry of Finance. The agreement can be terminated. The purpose of the Fund is to safeguard the long-term financial interests of Norway's future generations through professional investment management and strong integrity.

A clear division of responsibilities between owner, which is the Ministry of Finance, and manager, which is Norges Bank, is an important component of the model. Moreover, management transparency and accountability are key aspects, supported by extensive reporting to the owner in order to explain the performance and activity of the Fund. At year-end, all the Fund's investments are published.

The objectives of investment management have been clearly defined. As manager, Norges Bank's primary goal is to generate high value added through active management of the government's and Norges Bank's foreign financial assets, safeguard the owner's long-term financial interests through active ownership and implement the owner's management strategy in a costs-effective, sound and trustworthy manner.

Since NBIM's establishment in 1998 to the end of 2010, the annual nominal return on the Fund was 5.0 percent, as measured by the currency basket that corresponds to the composition of the Ministry of Finance's benchmark portfolio. Excluding management costs and adjusted for inflation, the real net average annual return was 3.1 percent. These figures reflect the impact of the financial crisis and are lower than indicated in the analyses conducted in 1998. The Fund's short history include a lost decade in the equity market with two periods of sharp declines.

NBIM's active choices in the form of deviations from the benchmark portfolio have contributed to increasing the annual return by 0.31 percentage point.

In order to achieve a high return, a strong focus must be placed on commercially viable results. Employees are to a large extent held accountable for their performance. Combined with extensive use of performance-based pay, this nurtured a culture that was basically different from the traditional central bank management structure. Combined with a consistent line management approach, the meeting of the two different cultures has also influenced the rest of the Bank and contributed to clearer demands on the individual employee and the development of a more performance-oriented workplace than earlier.

2.3. Organisation of work

When Norges Bank Investment Management (now NBIM) was established in 1998, it was only responsible for the equity portfolio of the Government Petroleum Fund. Later that same year it was also charged with managing the Fund's bond portfolio and the long-term investment portfolio of the foreign exchange reserves. The money market portfolio of the reserves continued to be managed by what was called the Market Operations Department at Norges Bank at that time.

NBIM was from the start given an autonomous position within Norges Bank. One reason for this was to ensure that the head of NBIM had full focus on its core tasks. This was in line with Gjedrem's aim of establishing large units with strong leaders. The work relating to NBIM raised his awareness of the need for delegating functions⁶. It was also important that the information transmitted to Norges Bank in its capacity of central bank did not reach the persons who were engaged in investment management. Watertight compartments, so-called Chinese walls, were thus set up between NBIM and the rest of the Bank. NBIM was given greater autonomy in the administrative area than other areas of the central bank.

From 1999, accounting, settlement and IT services and some control functions were transferred to NBIM with a view to strengthening governance and coordination of its operations, in accord with the line management principle. In order to avoid building up several competence centres for these functions, NBIM provided corresponding services to the Market Operations Department. As NBIM increased in size, it was important for it to focus on supporting its own operations. Corresponding competencies had to be built up in other areas of the central bank.

The work relating to advising the Ministry of Finance on the Fund's strategy and choice of benchmark portfolio remained in a separate unit up to 2006. The main argument for this was that the Bank wanted to ensure that the advice be based on a broader assessment than a purely portfolio management perspective. The model did not, however, dovetail with Gjedrem's organisational model based on line management. He argued that this division of functions gave

⁶ Conversation with Svein Gjedrem, 7 August 2012

rise to a number of unnecessary competence conflicts⁷. With the development of competence within the Ministry of Finance, it also became more natural for Norges Bank to give weight to portfolio management considerations when advising the Ministry. In order to facilitate NBIM's work to attain its overriding objective, the activities that cannot be qualified as core functions have been outsourced. NBIM has also assigned management of a large share of its portfolio to external managers. External mandates are awarded to managers with specialised competence within clearly defined investment mandates.

There has nonetheless been a need for additional staff. At the end of 1998, NBIM's staff numbered around 40 persons. The number had increased to around 280 persons from 25 different countries by the end of 2010. NBIM has been reorganised on several occasions in line with the development of their operations.

From the beginning, the Fund's capital was managed from Oslo, as well as New York where Norges Bank has had an office since 1942. Rising volumes and the expansion of the investment universe to more markets led to the establishment of offices in London in 2000, Shanghai in 2007 and Singapore in 2010.

The particular position of NBIM within Norges Bank was specified in 2008 when a new post description was drawn up for the head of NBIM. The head is designated as the Chief Executive Officer of NBIM and reports directly to the Executive Board of Norges Bank and is subject to oversight by the Governor of Norges Bank on behalf of the Board.

3. Outsourcing the production and distribution of cash

3.1. The Royal Norwegian Mint

3.1.1. Establishment of a limited company

From 1962 until 2000, the Royal Norwegian Mint (in Norwegian: Den Kongelige Mynt) in Kongsberg was a part of Norges Bank. Over time, this entity had developed not insignificant business activities, especially with regard to the production of medals. Approximately half of the Mint's operating revenue came from external customers.

After changes to the budget and oversight routines in autumn 1997, the Mint was basically run as a separate profit centre. To reduce costs, the Mint had also made substantial changes to its organisation and operations. However, the market for products aimed at external customers was uncertain, and there was still a considerable gap between the cost of minting coins in Kongsberg and an assumed market price for circulation coins.

In 2000, an evaluation was done of whether the Mint's performance was acceptable in relation to the market situation and the Mint's financial objectives. The outcome of the evaluation was

⁷ Conversation with Svein Gjedrem, 7 August 2012

positive. However, it did not make sense for Norges Bank to engage in commercial activities in competition with other market participants. An amendment to the Norges Bank Act from December 1999 allowed the Bank to have wholly or partly owned subsidiaries. At that time, work was started to spin off the Mint into a separate company. The primary motive was to create as efficient an enterprise as possible, so that coins could continue to be minted in Norway. At the same time, this would help to bring forward a leaner, more focused organisation at Norges Bank.

It was thus decided to establish the limited company Den Kongelige Mynt AS in 2000, which started operating from the turn of the year 2000/2001. In the Bank's view, the restructuring would result in a more solid platform for continuing medal production. An extended product range would improve the Mint's use of investments, expertise and capacity. Concurrently with spin-off, Norges Bank signed a contract with the company for delivery of Norwegian coins.

From the start, the company's board of directors was chaired by the director of the Bank's Notes and Coins area. In addition to representatives of Norges Bank, the board also had external members.

3.1.2. Sale of shares

Even though the spin-off made the Mint somewhat freer vis-à-vis Norges Bank than previously, the Norges Bank Act placed restrictions on how far the enterprise could go in establishing new lines of business. A broad product range was necessary to cover the fixed costs of many products and hence keep the price of coins low. The Bank saw a reputational risk in being associated with commercial activity. At the same time, it was desirable for the Mint to have an owner that was focused on the business and was willing to invest in it.

On the basis of these assessments, an effort was started in autumn 2002 to sell the shares. To reduce costs, staff reductions were carried out. It was clear early on that in conjunction with a sale, an agreement would be signed to purchase coins from the company until the end of 2009. This would give the company time to make further cost adjustments to make it competitive when the contract expired. Following a round of tendering, a framework agreement was signed in autumn 2008 for the delivery of coins for four additional years as from 2010.

The sale was opened to a wide range of operators to allow all interested parties to participate. However, only one bid was received, a joint bid from Samlerhuset Norge AS and Mint of Finland, which sought to purchase a 50 percent stake each. Together they presented a vision of maintaining and further developing the production facilities in Kongsberg.

The shares were transferred on 1 July 2003. The Ministry of Finance had set as a condition for the sale that the word "Royal" (in Norwegian: Kongelig) could not be used in the company name following the sale. For that reason, the company changed its name to Det Norske Myntverket AS. Norges Bank continues to make decisions about coin series and the appearance and quality of individual coins. The Bank's collection of coins, medals, coin dies and presses and models of

coins and medals, which were kept on the enterprises' premises, is still owned by Norges Bank. In 2009, a contract was signed with the Norwegian Mining Museum to administer the collections.

3.2. Norges Bank's Printing Works

In the 1990s, Norges Bank's Printing Works attempted to utilise its spare capacity by making a foray into the international market for banknotes. While it won and performed some contracts, the competitive situation as it was made it difficult to obtain contracts at prices that covered the printing works' costs. From 2002, stamp production was discontinued, and the following year, production of passports ceased, leaving banknotes as the printing works' sole product.

Clear economies of scale exist in banknote production. Norges Bank's own needs for banknotes would not be sufficient to yield the profitability deemed necessary to justify continued operations. In addition, new technology and demands for enhanced security features might eventually require extensive capital investment. The age breakdown among employees also indicated there would soon be a need to invest in new personnel.

Outsourcing banknote production has become increasingly common among central banks. There was reason to believe that there would be competition for the contract, since there were several large banknote printers in Europe with substantial overcapacity as a whole.

In view of this, Norges Bank decided in 2003 to close the printing works as from 2007. The matter was submitted to the Ministry of Finance. The Ministry took note of the matter, stating that it required that Norges Bank ensure that banknote production is effectively supervised. The matter was also discussed in a report to the Storting.

Following a competitive tender, contracts were signed in December 2006 with two banknote printers in the UK and France to produce Norwegian banknotes for the period 2007-2012. Both printers are large and reputable and print banknotes for a large number of other countries. The first notes produced abroad were delivered in 2008. Norges Bank continues to make all decisions about the banknote series and the appearance and quality of individual banknotes.

3.3. Cash distribution

3.3.1. Profit centre

By the end of the 1990s, operations at Norges Bank's regional branches had increasingly begun to resemble a commercial business. Previously, branches had been charged with tasks linked to the implementation of banking, credit and regional development policy and performed duties for local government administration and banks. These tasks had been discontinued, and activities focused on supplying and distributing notes and coins. Besides performing central banking functions, the branches also performed services that could have been performed by banks and value transportation companies.

A necessary prerequisite for the further development of this portion of operations was that costs be covered by revenue from customers other than Norges Bank and for operations to be developed under the prevailing competition and state aid rules.

The Executive Board thus decided to reorganise the regional branches as a separate profit centre. This unit was supposed to perform tasks relating to Norges Bank's role as issuer of notes and coins, while also aiming to develop cash distribution services for banks and other external customers within cash handling services. This allowed Norges Bank to capitalise on its expertise and opportunities for economies of scale and scope to achieve optimal efficiency in the overall system of cash distribution. Profitable operations would require cost reductions and increased activity. The unit was to operate under existing competition and state aid rules.

The alternative to this model in the Executive Board's view was to reduce the operations of the regional branches to those activities directly relating to Norges Bank's role. In this case, the Bank's expertise would not be fully utilised, and private banks would need to find other ways to meet their cash distribution needs. Moreover, the branches would be substantially overstaffed.

For this reason, a commission was appointed to determine what measures would be necessary for the profit centre to at least break even following a transition period. In view of the commission's report, a decision was made to close the regional branches in Bodø, Fredrikstad, Hammerfest, Vardø and Ålesund, and the cashier's office in Haugesund. The Bank did not find these branches commercially viable. In the northern counties, Norges Bank would rely on local banks to administer its depots. A similar model had been used in other countries, such as Denmark and the UK, with favourable results. Switchboard and some archival functions were transferred from the head office to the Vardø branch for a period to boost local employment. These activities were later outsourced and the Vardø branch was closed in 2007.

3.3.2. Establishment of NOKAS

In the aftermath of the robbery of Den norske Bank, Norges Bank and Den norske Bank initiated discussions in autumn 2000 aimed at a single, secure organisational solution for cash distribution services. On the initiative of Norges Bank, the discussions also included the establishment of a jointly owned company that would provide cash distribution services to several banks in Norway. The aim of such a company was to help to meet the need for a range of secure and efficient cash distribution services by realising economies of scale and scope. For its part, Norges Bank required that the company be sufficiently capitalised and operate on commercial terms, with the goal of turning a profit after an initial breaking-in period.

These discussions led to Norges Bank's participation in the establishment of a limited company jointly owned by Norges Bank, Den norske Bank, Gjensidige NOR, Fokus Bank, Nordlandsbanken, Sparebank1 Group and Terra-Group. The company, named Norsk Kontantservice AS (NOKAS), started operations on 1 July 2001 with NOK 50 million in share

capital. Norges Bank's holding was 33.5 percent. The Bank had one representative on the company board. Before NOKAS was established, the workforce at Norges Bank had been downsized to reduce costs.

From the beginning, NOKAS accounted for a substantial portion of cash distribution in Norway, performing under contract to Norges Bank a number of the Bank's statutory cash distribution tasks. The Supervisory Council has continued to monitor and oversee NOKAS' performance of these services.

With the establishment of NOKAS, Norges Bank's remaining regional branches were closed as branch offices of Norges Bank. The premises on which the regional branches operated were leased to NOKAS and subsequently sold.

The establishment of NOKAS entailed the transfer of approximately 300 persons who had been employees of Norges Bank to positions with NOKAS.

3.3.3. Sale of the shares of NOKAS

As part of the establishment of NOKAS, participants signed an agreement to retain their shareholdings for at least three years from the incorporation date, after which the shares could be freely sold.

The establishment of NOKAS had resulted in a substantial reduction in Norges Bank's costs, while ending the undesirable mix of administrative tasks and commercial activity in what were branches of the Bank. Even so, certain challenges remained with the Bank as a major shareholder. Norges Bank was both an owner and customer of NOKAS. Moreover, the Bank exercised authority and defined the terms for banks' deposits with and cash withdrawals from the central bank. Even though the Bank made an effort to keep its roles separate, it was still accused of favouritism towards NOKAS. This represented a reputational risk for Norges Bank.

The markets NOKAS participated in were quickly changing. This would eventually require restructuring and expansion of operations. Such modifications might come into conflict with the limits the Norges Bank Act placed on Norges Bank's activities. This situation warranted a sale of the Bank's shareholding.

In December 2005, a decision was made to sell Norges Bank's shares in NOKAS to Hafslund Sikkerhet AS. In Norges Bank's view, the sale would give NOKAS an owner that brought industry expertise to the company. In addition, Hafslund had experience as a value transportation subcontractor. As the other shareholders did not exercise their pre-emption rights, Norges Bank's shares were transferred to Hafslund in January 2006.

3.3.4. Wholesaler role in cash supply services

In the period 2001-2005, Norges Bank made several changes to its role in the area of cash distribution. These changes were motivated by a need for a clearer limitation of responsibilities vis-à-vis private market participants. Moreover, it was the Bank's intention to limit Norges Bank's responsibilities beyond its statutory duties related to issuing notes and coins to functions where market solutions proved inadequate or where it was probable that Norges Bank could put in place more efficient solutions.

The changes were made in three stages. The establishment of NOKAS ended all commercial services that Norges Bank had provided for banks. This made it necessary to distinguish between central banking services and services performed for others, while also allowing the Bank to charge cost-based prices for these services.

The next stage was a change in the rules for banks' deposits with and cash withdrawals from Norges Bank that was aimed at giving Norges Bank a clearer role as cash distribution wholesaler. Norges Bank had been responsible for much of the cash distribution among banks and their branches without charging them cost-based prices. Thus, instead of having the wholesaler function it desired, Norges Bank was functioning more like a retailer, which involved considerable cash distribution activity. Banks appeared to be frequent users of Norges Bank's depots for storing cash that would normally constitute banks' stocks for short-term transactions.

To change this, banks had to be given greater incentives to assume responsibility themselves for short-term cash storage and the desired distribution of liquidity at the retailer level. This took place through changes in the terms for deposits in and withdrawals of cash from the central bank. The changes became effective from 1 January 2005.

The final stage of the process involved a change in depot structure. The number of central bank depots was reduced, with the first stage of the downsizing completed in January 2005, when the depots in Hammerfest and Vardø were closed. This was followed by the closure of four more central bank depots, leaving Norges Bank with five depots at the end of 2010. These were located in Bergen, Oslo, Stavanger, Tromsø and Trondheim.

At the same time, Norges Bank introduced an arrangement whereby on certain conditions it pays compensatory interest for stocks kept in private cash depots, established to meet banks' actual needs. At the end of 2010, there were 14 private cash depots throughout Norway. These were operated by NOKAS and Loomis Norge AS.

These changes resulted in a reduction in banks' deposits with and cash withdrawals from Norges Bank. The average amount per transaction increased.

4. Other changes

4.1. Statistics

4.1.1. Statistics concerning international payments

Up until 2005, Norges Bank compiled statistics for payments between Norway and other countries. These statistics were based partly on reporting from banks and partly on reporting from enterprises with accounts in foreign banks. However, the system then used for data collection had obvious weaknesses. These stemmed from a number of factors, such as the liberalisation of transactions in foreign exchange and capital markets, the globalisation of financial markets and the economy as a whole, the increased use of modern technology as alternative settlement channels, greater transaction volumes and more sophisticated settlement methods. At the same time, Norges Bank's role as controller of transactions in the foreign exchange transactions lapsed when the regulation relating to foreign exchange transactions was repealed. In 2000, an internal report at Norges Bank concluded by recommending an increase in reporting from enterprises, reflecting a general trend in the rest of Europe.

As a result, in 2000/2001, discussions took place between Norges Bank and Statistics Norway on the division of responsibilities between the institutions. It was agreed that Statistics Norway would be responsible for collecting data from all sectors with the exception of the financial sector. A result of this would be a reduction in Norges Bank's resource needs. Even though resource use at Statistics Norway would increase, the change was expected overall to lead to lower total resource use. From Norges Bank's perspective, this could also be seen as a move towards narrowing the scope of the Bank's activities, with greater focus on core responsibilities.

Against this background, work began to develop a new statistic reporting system at Statistics Norway. The data were important inputs in compiling the national accounts, and a change in reporting might also make quality improvements possible.

Norges Bank's cooperation with the Norwegian Tax Administration, Norwegian Customs and ØKOKRIM (Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime) posed a particular challenge. They had previously been able to obtain data from Norges Bank on international payments. Since this data source would no longer exist, Norges Bank participated in an effort to find alternatives that could meet control authorities' needs.

The new division of responsibility went into effect from the beginning of 2005. Some employees of the Bank's Statistics Department took positions at Statistics Norway.

4.1.2. Financial market statistics

Norges Bank had a long-standing close relationship of cooperation with Statistics Norway and Kredittilsynet, now called Finanstilsynet (Financial Supervisory Authority of Norway), on collecting data reported by financial undertakings and securities markets. Until the beginning of 2007, Norges Bank was responsible for compiling statistics based on oversight and accounting data for banks and financial undertakings. Norges Bank also collected data for financial undertakings for balance of payments statistics published by Statistics Norway and was also responsible for statistics for the securities market, quarterly financial sector accounts and most of the other financial market statistics. Beginning in 2003, there were discussions between the three partners on the division of responsibilities and costs, related, for example, to new solutions for collecting and compiling financial market statistics. However, these discussions were not conclusive.

In May 2006, the Executive Board appointed a working group tasked with studying aspects of a change in the division of responsibilities between Norges Bank and SSB. The aim was to study whether Norges Bank's statistics compilation activities should be transferred to SSB. The working group had members from Statistics Norway, Finanstilsynet and Norges Bank. Norges Bank is, in principle, primarily a user of statistics, while Statistics Norway is a producer of statistics. This gives the institutions different comparative advantages, which warranted a change in the division of tasks in the light of developments in the institutions in the preceding ten years.

The working group found that transferring compilation activities from Norges Bank to Statistics Norway would not compromise the quality of statistics. It also recommended transferring certain tasks to Finanstilsynet.

The transfer of the responsibility for these tasks took place on 1 January 2007. The tasks transferred primarily involved official statistics whose compilation would be funded over the central government budget. However, Norges Bank helped to fund this activity during a transition period. Some tasks were defined as "operations statistics", statistics work performed by Statistics Norway on contract to Norges Bank. Most of the employees in Norges Bank's statistics operations were transferred to Statistics Norway under the provisions of the Working Environment Act concerning the transfer of undertakings.

4.2. Banking services

4.2.1. Settlement system

From 2003, operation of Norges Bank's settlement system was outsourced to Ergo Integration AS. The background for the outsourcing was Norges Bank's desire to focus on its core activities in its settlement operations and to outsource system operation and development. Norges Bank would thus continue to have primary responsibility for the delivery of settlement and central banking services to banks, the government and other recipients of services from the system.

Operation of the central government's consolidated account had been outsourced previously, with an external operating agreement concluded with AS EDB.

Prior to the decisions, employees who had worked in settlement system operations had been transferred from the Technology Department in Central Bank Administration to a new department in the Financial Stability area. The Bank faced a need to modernise its settlement systems, and in keeping with the principle of line management, it was deemed important that the area responsible for modernising the settlement system also managed IT resources.

It became clear that the IT system would eventually have to be replaced, and new hardware and new software installed. Given the system's limited transaction volume, the Bank could not justify the cost of maintaining an internal mainframe environment. The existing system was interwoven to a high degree, making system modifications and changes for business reasons needlessly complex. Greater demands for operating stability and backup solutions also posed considerable challenges.

To maintain control over its settlement-specific expertise, Norges Bank considered whether to outsource actual operation, but retain administration and further development in-house. However, the Bank chose to outsource all functions, but to postpone modernisation until after the outsourcing process was completed.

The outsourcing involved risk factors, particular with regard to the ability to ensure stable operation of the settlement system through the entire process until all functions had been taken over by the external service provider. Migration of operations to the external operator was accomplished without appreciable disruptions.

A personnel restructuring process was carried out in order to retain the necessary core expertise, while ensuring a process that was as fair as possible. Most of the employees with core expertise in developing and operating the settlement system were transferred to Ergo Group AS as part of a transfer of undertaking. Under the agreement, core expertise was to be kept together in a separate group with special responsibility for following up the service delivery to Norges Bank. Some employees were transferred to the Banking Department to support the follow-up of the service delivery and to work in the area of system development.

After the outsourcing of IT operations had been completed and the settlement system was in stable operation on the outside provider's site, the Bank began a process to replace system hardware and software, as well as the systems for exchanging information and transactions between participant banks and the system. Even though the primary functions in the area of settlement services are relatively standardised internationally, a number of circumstances particular to Norway required special modification of the off-the-shelf software the suppliers had delivered to other central banks.

After a long breaking-in phase, with extensive testing of the new solutions, the new settlement system went live in 2009. The new system had met expectations, and operating stability of the new systems has been very high.

4.2.2. Other banking services

Until 2000, the Banking Department was responsible for a broad range of tasks. These included typical core activities, such as operation of the interbank settlement system, but also a number of other activities, such as banking services for the government and for the Bank's employees and retirees.

Work began to gradually phase out banking services not normally provided by a central bank and other functions that could not be regarded as core activities. Some of the tasks the Bank performed for the public sector might be such that the government could direct the Bank to perform them under the Norges Bank Act. Other services were of a type that allowed Norges Bank to terminate the agreements to provide them. In both cases, it was necessary to initiate a dialogue with customers to help them choose alternative service providers. The result was that most of these activities were phased out or taken over by others. However, Norges Bank continues to manage the central government's consolidated account, and all government liquidity is transferred to Norges Bank on a daily basis. Likewise, the Bank performs tasks related to the issuance of new government bonds and management of sovereign debt.

Banking services for Bank employees and retirees were phased out. For personnel policy reasons, the Bank continued the existing home mortgage and consumer loan schemes. However, responsibility for administering these benefits was outsourced.

All changes were carried out in the course of 2004.

4.3. Other IT functions

In November 2005, the Executive Board adopted an IT strategy under which administration of major IT agreements, excluding those concerning NBIM, was to be coordinated by a single unit. This unit was to be the Bank's tool for ensuring delivery of IT services that meet the needs of the various areas of the Bank. The strategy also included centralising IT operations for all units, except NBIM, and work to continue towards outsourcing the Bank's central IT functions. The bulk of the work related to centralisation had been carried out by the end of 2007.

In 2006, a contract was also signed for external development, administration and operation of Norges Bank's website (*www.norges-bank.no*). Publishing solutions previously developed in-house had been phased out by the end of 2009.

The outsourcing of central IT functions took place in two phases. In 2008, operation of servers and networks as well as of shared services such as e-mail, Internet services, helpdesk and

hardware and software purchasing was outsourced to Ergo Group AS. This took the form of a transfer of undertakings. Administration of the Bank's technical systems was outsourced in 2010 to Capgemini. In 2008, the Bank began to set up a single IT unit responsible for administering all major IT agreements.

An important objective of outsourcing was to reduce the Bank's vulnerability by migrating functions to a larger IT environment, which reduced risks and extended the opening hours of service functions. At the same time, IT costs became more transparent to users. In connection with the outsourcing, a better contingency solution was put in place for the Bank's IT systems.

4.4. Auditing

4.4.1. Internal Audit Unit and Audit Committee

In 1998, the Executive Board had decided to develop the Bank's internal control in accordance with Finanstilsynet's regulation on internal control in financial institutions. Internal control was defined as all actions, procedures and systems that help the Bank to accomplish its objectives. There were requirements for performing and documenting risk analyses and control measures. The Executive Board had received an annual report on the risk management and internal control in each area of the Bank.

Developments, especially in the area of investment management, but also in the Bank's other core activities, led to greater operational risk and reputational risk. For that reason, in 2006, the Executive Board approved the establishment of an Audit Committee and an Internal Audit Unit answerable to the Executive Board. At that time, Norges Bank had its own audit unit, the Central Bank Audit Unit, which was organised under the Supervisory Council and thus organisationally and administratively independent of the Executive Board and the Bank's senior management. The extensive scope of its auditing also covered most of the auditing tasks that an internal audit unit would normally perform.

The decision was especially tied to the need to bolster the Executive Board's control environment and thus the basis for discharging its primary oversight responsibility for the Bank. It would also improve the Supervisory Council's central supervisory and control tasks, especially relating to the central bank auditor's ongoing audit of the Bank's operations. An important factor was that a separate Internal Audit Unit under the Executive Board would help to strengthen the central bank auditor's independence and integrity by following up and auditing the Bank's governance and control systems. At the same time, it would bolster confidence in the Bank's overall internal control and auditing arrangements. The new units would not have particular duties relating to the Bank's financial reporting and financial auditing.

The Audit Committee was to comprise three of the Executive Board's external members. One essential task was to have contact with and follow up the Internal Audit Unit on behalf of the Executive Board. Establishment of the Audit Committee did not change the responsibility of

individual Executive Board members or of the Executive Board as a whole. The Internal Audit Unit was to be the secretariat for the Audit Committee. The changes were implemented in consultation with the Supervisory Board.

Organising the Internal Audit Unit under the Executive Board did not deprive the Supervisory Council's of its authority and duty to supervise the operations of the Bank and for organising the Central Bank Audit. In 2006, the Supervisory Council decided that the Central Bank Audit would function exclusively as the Bank's "external" auditor.

4.4.2. Employing an external auditor

In June 2009, the Storting passed amendments to the Norges Bank Act that spelled out in detail the Supervisory Council's and Executive Board's areas of responsibility and authority. The amendments entailed some important changes in the Supervisory Council's remit. A further amendment to the Act passed in 2010 stipulated that as from 1 January 2011, the Supervisory Council would submit an expanded report directly to the Storting, and not via the Ministry of Finance as before. The amendments were largely in accord with the views expressed by the Supervisory Council and Executive Board in their consultation statements.

The amendments obliged the Bank to prepare its financial reporting in accordance with the Accounting Act, and a new auditing arrangement was introduced that replaced the Central Bank Audit with an external auditor elected by the Supervisory Council. At the same time, a secretariat to the Supervisory Council was established. The secretariat was to continue to perform and develop supervisory activities previously carried out by the Central Bank Audit, organise the Supervisory Board's activities and administer the agreement with the external auditor.

One important reason for the amendments was that Norges Bank's task in managing the Government Pension Fund Global had become considerably more complex. These management activities underscored the need to modernise the central bank's rules on internal control, financial reporting, auditing and supervision. In particular, it was argued that the auditor should no longer be employed at the Bank, but function completely independently of it.

The Supervisory Council elected Deloitte AS as external auditor following an open invitation to tender. The firm assumed its responsibilities on 6 May 2010 and has audited the Bank's annual financial statements as from the 2010 accounting year.