

# ECONOMIC PERSPECTIVES

Address by Governor Øystein Olsen  
to the Supervisory Council of  
Norges Bank and invited guests on  
Thursday 18 February 2016

THURSDAY  
18 FEBRUARY  
2016

## INTRODUCTION

In late autumn 1857, a steamship left Christiania bound for Hamburg carrying a cargo of silver from Norges Bank to be deposited in one of Hamburg's finance houses. In only a few months, 20 tonnes of silver worth 800 000 speciedaler were shipped south as collateral for the redemption into silver of bills and notes issued by Norges Bank. There was to be no doubt that the speciedaler was worth its face value in silver.

Europe had just been hit by a financial crisis. Norges Bank intervened to maintain confidence in the country's currency. The Bank remained faithful to the social mission it had been assigned 40 years earlier.

This year is Norges Bank's 200th anniversary. Under the Constitution, control of the monetary system was given to the Storting (Norwegian parliament). The establishment of Norges Bank in 1816 gave the authorities a tool to restore confidence in the country's means of payment. Norges Bank had a monopoly on the issuance of currency, but the amount of currency in circulation was limited by the stock of silver.

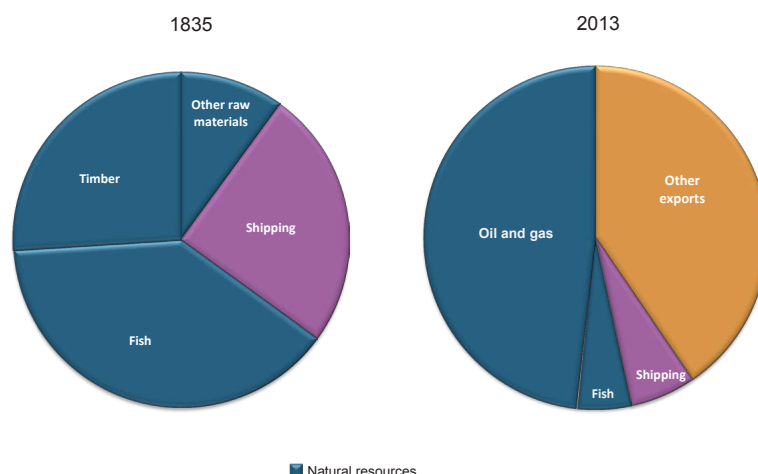
The organisation of Norway's monetary system was inspired by the note-issuing banks that had emerged in Europe since the end of the 1600s. One hard-won lesson was particularly important: the central bank must keep the crown and government at arm's length and must not extend credit to government. Control of the printing press would promote economic stability and prevent unchecked money printing to finance spending by the crown.

Two hundred years later, safeguarding the value of money remains monetary policy's main task. Responsibility for monetary policy rests with Norges Bank, but today policy is geared towards maintaining stable inflation rather than a stable currency backed by a precious metal. The Bank's role has also changed in other areas. From being the country's only bank, Norges Bank took on the role of the bankers' bank, with the new responsibilities that entailed. The central bank also has a responsibility to promote robust financial markets. The core of Norway's payment system is housed in this building.

## TWO HUNDRED YEARS AS A CENTRAL BANK IN A SMALL OPEN ECONOMY

The Norwegian economy has changed over the past 200 years. In the early 1800s, eight in ten Norwegians worked in agriculture, forestry and fisheries compared with one in forty today. But some important features have not changed. Norway is a small open economy and developments abroad have an impact at home. Our foreign trade is largely based on natural resources (Chart 1). In the early 1800s, fish, timber and shipping were the mainstays of our economy. In recent times, oil and gas sales have accounted for a large share of Norway's export revenues.

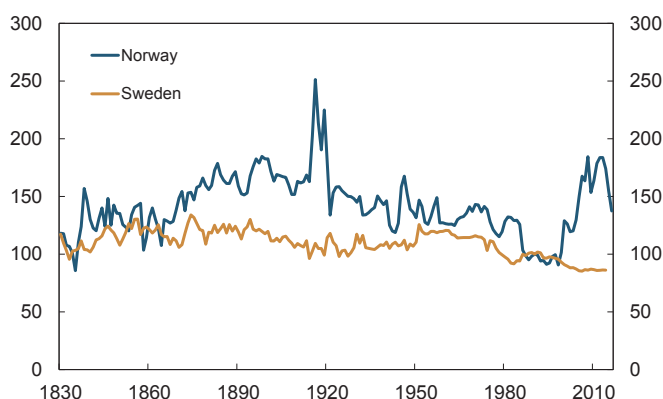
Chart 1 Export shares.  
Share of total exports. 1835 and 2013



Sources: Statistics Norway and Schweigaard (1840)

With only a few large export industries, changes in Norway’s terms of trade have a greater impact on our economy than on other economies in our region (Chart2). In the early 2000s, international prices moved in our favour. The fall in oil prices over the past couple of years has changed the picture. We are now faced with the negative implications of a largely oil-dependent Norwegian economy.

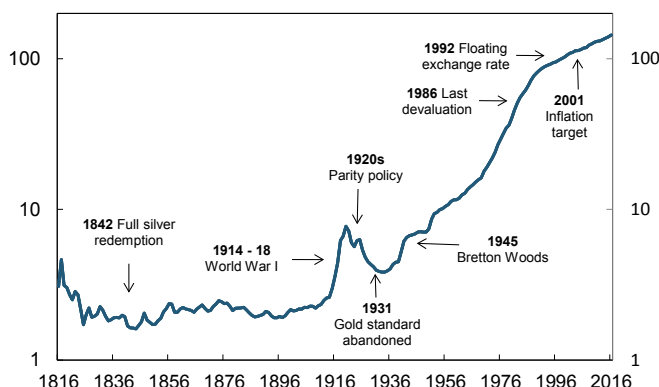
Chart 2 Terms of trade.  
Index. 1990=100



Sources: Statistics Norway, Statistics Sweden, Sveriges Riksbank and Norges Bank

It is not the first time Norway’s terms of trade have taken a turn for the worse. The same thing happened after the First World War and in the 1980s, with severe repercussions for the Norwegian economy both times. The experience gained from these periods has contributed to shaping today’s monetary policy framework. The road from the silver standard to today’s inflation targeting regime has not been without bumps.

Chart 3 Consumer price index.  
Index. 1998=100



Sources: Statistics Norway and Norges Bank

It is fair to say that monetary policy in the Bank's first 100 years was fairly successful. The prevailing environment of hyperinflation and a loss of confidence in the value of the currency posed a challenge, but after full silver redemption had been established in 1842, the Bank was able to stand by its promise to honour its own banknotes, first in silver, then in gold. This policy had a stabilising effect on prices (Chart 3). This period is referred to as the heyday of stable money.

This period of stability came to an abrupt halt when the First World War broke out. The war generated substantial profits for the shipping industry and fuelled speculative behaviour resulting in a credit and asset price boom. Monetary policy did not contribute to dampening these developments. There was a sharp increase in the money supply and inflation soared. Between 1914 and 1918, the price level more than doubled.

After the war, exports fell and the krone depreciated to about half of the statutory exchange rate. At the same time, the economy was faced with a banking crisis and recession. This created a dilemma for monetary policy. The prevailing view was nonetheless that the krone had to be brought back to parity.

The task fell to Nicolai Rygg. The active deflationary policy pursued proved to be costly. However, Rygg stood firm in his belief that breaking the promise made in 1816 to preserve a stable value of money would entail more serious consequences:

*"The hardships we are facing in the transition to normal, ordered conditions are transient. No one can close their eyes to the fact that they are very serious, but the life of the people is eternal and the consequences of this decision will remain with us for generations."*

Those were Rygg's words in his annual address in 1927.

A year later, in 1928, the policy of gold parity had achieved its objective. Consumer prices had fallen by more than 40 percent since 1920. But the gold standard would only survive three years. In the wake of the Great Depression, the UK abandoned the gold standard and Norway followed suit.

After the Second World War, there was a substantial shift in economic policy. Direct regulation and an active fiscal policy were regarded as more effective instruments than the interest rate, also in terms of promoting price stability. This was an international trend, but few countries supported the new thinking more than Norway, spurred to a large extent by the negative legacy of the policy of parity.

In practice, the interest rate was thereafter to be set by the government, and as a main principle the interest rate was to be kept low. Norges Bank's discount rate was set at 2.5 percent in 1946 and was changed only once over the next 23 years.<sup>1</sup> Credit would be channelled to promote policy priorities and kept in check by means of regulation and foreign exchange controls.

The policy regime eventually started to falter. In the 1970s, domestic inflation spiralled out of control, as it did in many other countries. In Norway, the government responded with stimulus measures, wage and price freezes and devaluations, but the measures had limited effect. High inflation had become entrenched.

A policy change was needed to bring down inflation. The low interest rate policy was discontinued in the wake of the oil price collapse in 1986. Norges Bank was given broader responsibility for the conduct of monetary policy. With freer international capital movements, the interest rate level had to be raised substantially to defend the krone exchange rate.

In the period that followed, the Norwegian economy took a tough cure. Unemployment reached its highest levels since the interwar years and the banking industry was mired in problems. The challenges of operating a fixed exchange rate regime in an oil economy became increasingly evident. In 1992, the policy of setting a specific target for the krone exchange rate was abandoned. Monetary policy would still aim to maintain exchange rate stability, but the absence of a clear and verifiable objective was a weakness.

Internationally, a new approach to monetary policy was gaining ground. Through the 1990s, a growing number of central banks were tasked with pursuing the goal of low and stable inflation.

The introduction of the inflation target in 2001 was an important milestone for Norges Bank. The inflation target gave monetary policy an effective nominal anchor in a world of free capital movements. Inflation had been under control since the early 1990s and confidence in the value of money strengthened further in the years thereafter.

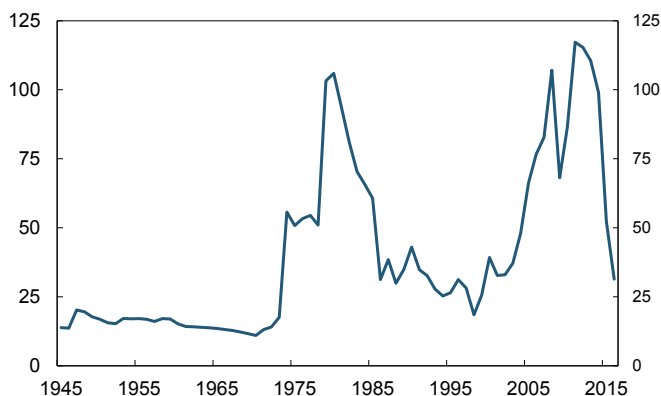
## ECONOMIC RESTRUCTURING IN NORWAY

During the first 15 years of inflation targeting, the Norwegian economy was in a unique position. But the upswing could not last forever. The sharp fall in oil prices since summer 2014 will put the economy to the test in the period ahead (Chart 4). The Norwegian economy has enjoyed an exceptionally long summer. Winter is coming.

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<sup>1</sup> Norges Bank: Historical monetary statistics for Norway. <http://www.norges-bank.no/en/Statistics/Historical-monetary-statistics/>

Chart 4 Oil price.  
USD per barrel at constant 2016 USD



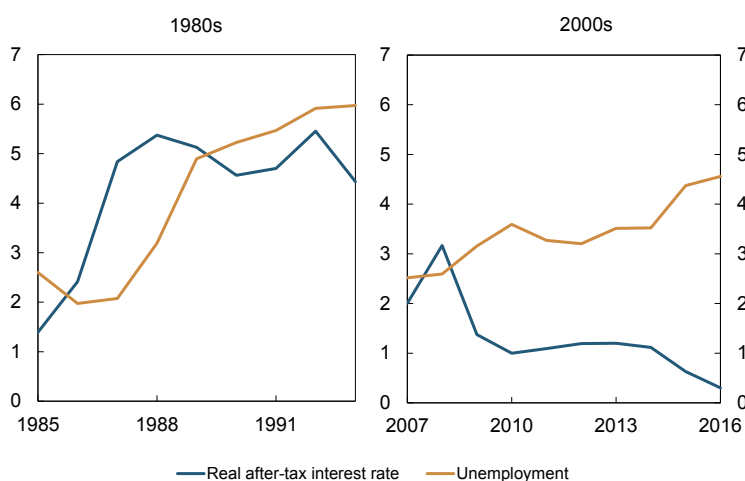
Sources: BP and Thomson Reuters

The Norwegian economy is well equipped to tackle the challenges. The defence mechanisms of economic policy are better suited today than when oil prices fell in the mid-1980s.

At that time, current oil revenues were largely spent over the government budget. When oil prices plummeted, the budget was severely tightened. Today, we have accumulated savings of more than five times the government budget.

In the 1980s, the banks had little equity capital. Many of them failed when faced with loan losses, which in turn amplified the economic downturn. In recent years, banking regulation has been enhanced. Banks have built up their capital levels, which puts them in a better position to fulfil their role as providers of credit during a downturn.

Chart 5 Lending rates and unemployment<sup>1)</sup>.  
Percent

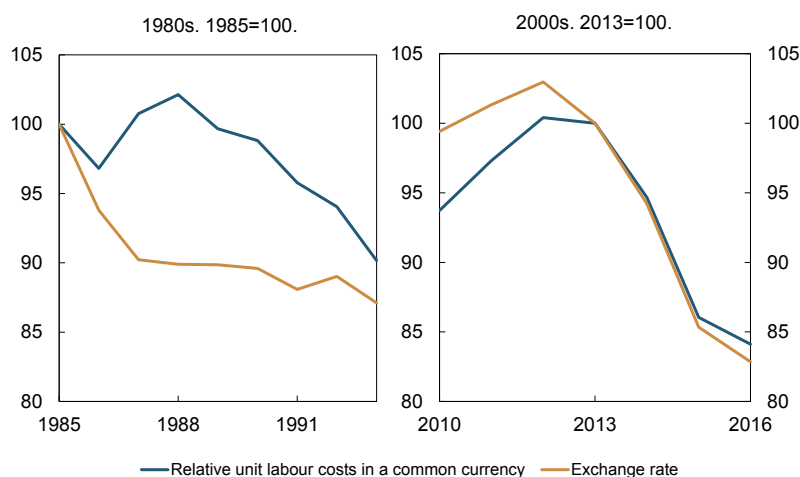


<sup>1)</sup> LFS unemployment.  
Sources: Statistics Norway and Norges Bank

Towards the end of the 1980s, both interest rates and unemployment reached a high level at the same time (Chart 5). There is little likelihood that this will happen again. Since the inflation target was introduced, it has been easier for monetary policy to have a countercyclical effect. When inflation expectations are firmly anchored,

monetary policy should also be geared towards stabilising output and employment. Inflation has been low and stable for a quarter century. This is now of benefit to us all.

Chart 6 NOK exchange rate and unit labour costs.  
Index



Sources: The Norwegian Technical Calculation Committee for Wage Settlements (TBU) and Norges Bank

The oil price collapse in the 1980s led to a substantial current account deficit. Competitiveness had to be strengthened. In May 1986, the krone exchange rate was devalued by around 10 percent (Chart 6). The repeated devaluations in the preceding years had undermined credibility. The gains were short-lived. Price and wage inflation soared. It was only after several years of high unemployment that the relative wage level came down.

The current account deficit rapidly turned into a surplus. The Norwegian economy grew out of recession, supported by external growth impulses and the development of the Norwegian oil sector.

This time, we cannot rely on those sources of impetus. The Norwegian economy will need more legs to stand on in the future. The time to restructure has come.

A necessary adjustment of the cost level can occur via two channels, either through lower wage growth relative to other countries or a weaker krone exchange rate.

In the past few years, the krone exchange rate has depreciated more than in the 1980s. And this time, the krone depreciation has fed through to relative labour costs in a common currency. In a short time, the relatively high level of cost inflation over the past decade in Norway has been wiped out.

The main responsibility for developments in relative wages lies with the social partners. A durable improvement in competitiveness is dependent on Norwegian wage earners' willingness to accept future wage settlements without a substantial increase in purchasing power. This will make it easier for non-oil exposed industries to grow, which will create new and viable jobs.

The krone depreciation has helped start the restructuring process. After a decade of higher growth in imports than mainland exports, export growth is now outpacing import growth. The tourism industry is one of many industries experiencing an upswing.

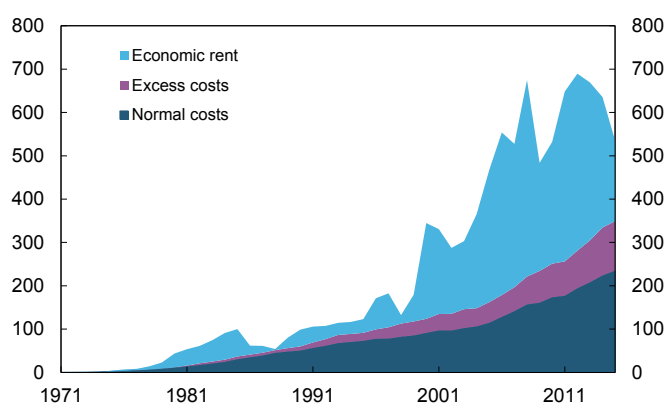
Many export firms have announced plans to increase investments in 2016, which will likely entail an increase in production and market shares.

Oil service companies are also benefitting from the krone depreciation. So far, around 75 percent of the field development contracts for Johan Sverdrup have been won by Norwegian companies, a clearly higher share than in recent years.<sup>2</sup>

The effect of the sharp fall in demand from oil companies is nevertheless predominant in the oil service industry.

Both the oil production industry and the oil service industry must now go through a process of restructuring. Costs at many stages appear to have followed oil prices upwards. High prices may have created a sense of complacency. The profits from petroleum activities have nevertheless been substantial.

Chart 7 Income from the petroleum sector<sup>1)</sup>.  
In billions of NOK



1) Economic rent is gross production value deducted for all costs, including normal return on capital. Excess costs are defined as input price inflation in the petroleum sector in excess of input price inflation in the mainland economy.  
Sources: Statistics Norway and Norges Bank

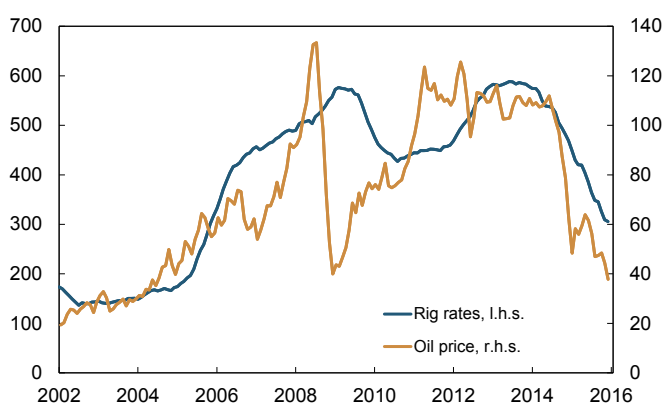
Most of the economic rent has flowed into government coffers via the special taxation of oil production (Chart 7). But wages in oil production and oil services have also been relatively high. The rise in input prices and investment in the petroleum industry have been significantly higher than for other industries. The excess costs have reduced the economic rent.

At today's oil price, it seems that virtually none of the new field developments planned on the Norwegian shelf can be realised at a profit. But cost calculations may change. Oil prices are not the only prices trending downwards. The cost level on the Norwegian shelf is also drifting down.

<sup>2</sup> Statoil (2015): Press release of 9 December



Chart 8 Rig rates and oil price.  
Daily rig rates in thousands of USD. Oil price in USD per barrel



Sources: Arctic Securities and Thomson Reuters

This is perhaps best illustrated by developments in rig rates (Chart 8). The rates followed oil prices upwards, but have fallen in recent months. At the same time, oil companies are slashing costs. The development of the Johan Sverdrup field is now profitable even at oil prices around USD 30 per barrel. For the Castberg field development in the Barents Sea, the break-even price has been reduced from more than USD 80 to below USD 45 per barrel.<sup>3</sup>

Norway's oil age is not over. Proven crude oil reserves are larger today than 10 years ago despite substantial sales over the period.<sup>4</sup> Our gas resources are even larger. So far, only a third of the estimated exploitable Norwegian gas resources have been produced.<sup>5</sup> Oil and gas prices will to a large extent determine the quantity that will be extracted. That is something we can do little about.

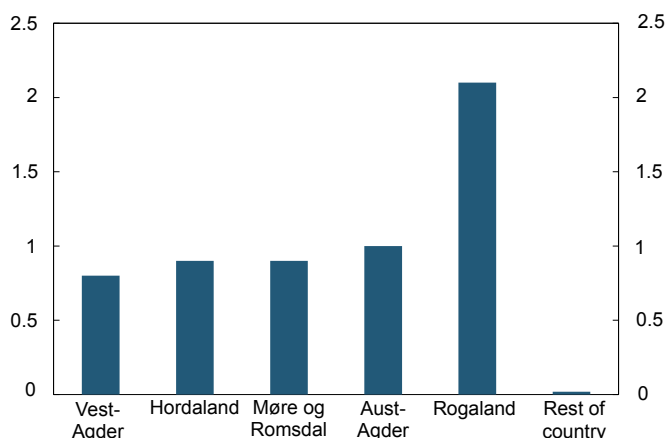
What we can do is to optimise production efficiency on the Norwegian shelf as far as possible. There is still potential in this respect. Increased productivity and lower costs in the oil industry will contribute to sustaining activity on the Norwegian shelf, which will also benefit the oil service industry. The economic rent should benefit society as far as possible.

<sup>3</sup> Statoil (2016): Results for fourth quarter 2015 and capital market update 2016.

<sup>4</sup> Norwegian Petroleum Directorate (2015): Evaluation of reserve growth for oil - 2005-2014.

<sup>5</sup> Norwegian Petroleum Directorate and Ministry of Petroleum and Energy: [www.norskpetroleum.no](http://www.norskpetroleum.no)

Chart 9 Changes in unemployment.  
Change from January 2015 to January 2016.  
Percentage points



Source: NAV

Employment has been high in Norway for many years. Compared with other countries, unemployment has been low. In the competition for labour resources, oil production and oil service companies drew the longest straw. The situation has now changed. Unemployment is on the rise. Norway's oil regions, which have long reaped the benefits of the upswing, are now struggling (Chart 9). The downswing is proving painful for many.

The situation is far different from the adverse conditions that prevailed in the 1980s, which resulted in a deep economic crisis in Norway. But unemployment must be expected to be higher than we have been accustomed to in recent years. Closing a business takes less time than developing a new one. Restructuring takes time.

Restructuring must start in the business sector. Economic policy can only help set the stage.

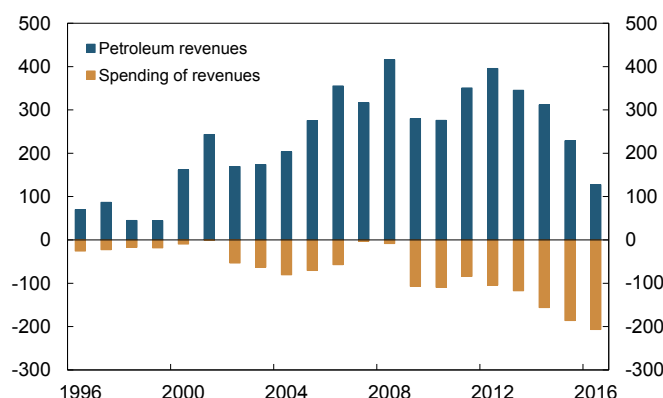
Monetary policy can facilitate the restructuring process by supporting a weaker krone exchange rate and thereby expedite adaptation to a lower cost level. In addition, reduced interest expenses will contribute to income growth for many households. There is still monetary policy room for manoeuvre.

When unemployment rises, as is the case today, it may be appropriate to use the fiscal space available. We must avoid a self-reinforcing decline in output and employment and hence a decline that is more pronounced than necessary. But an increase in the spending of petroleum revenues should primarily be used to finance temporary measures that are easy to reverse. Fiscal policy must also take into consideration that lower oil prices will reduce the government's spending capacity in the longer term.

In recent years, we have sold large volumes of oil and gas at good prices. The transfers to the government's savings account have been substantial. The picture is now quite different. If oil prices remain at today's level, government revenues will fall sharply. The present value of future income can in that case be estimated at a fourth of today's oil fund, the Government Pension Fund Global (GPF).<sup>6</sup> That means that most of the government's petroleum wealth may already have been deposited in the GPF.

<sup>6</sup> The estimate is based on impact calculations in the National Budget for 2016 (page 31) based on a long-term oil price of NOK 400 per barrel at constant 2016 NOK.

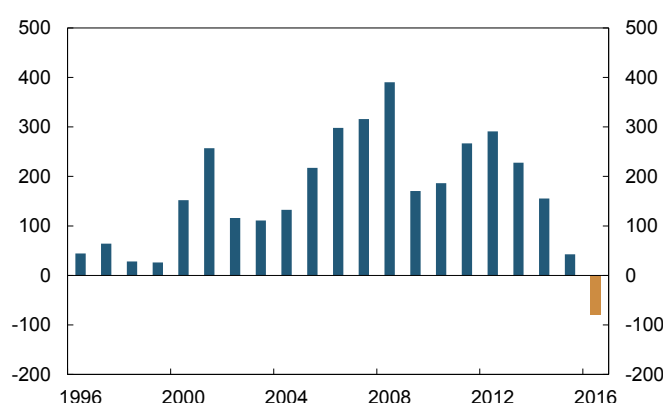
Chart 10 Government petroleum revenues and spending of petroleum revenues. In billions of NOK



Sources: Ministry of Finance and Norges Bank

The year 2015 may stand as the last year of net transfers to the GPFG. Already when the budget for 2016 was presented, there were prospects that the spending of oil revenues would exceed actual income from petroleum activities (Chart 10).

Chart 11 Transfers to the Government Pension Fund Global (GPFG). In billions of NOK



Sources: Ministry of Finance and Norges Bank

At today's oil price, it may be necessary to use about NOK 80 billion of the GPFG's return to finance the structural non-oil budget deficit (Chart 11).<sup>7</sup>

In the course of three years, spending of oil revenues has increased by as much as in the 10 previous years. In the budget for 2016, spending of oil revenues is estimated at more than 7 percent of mainland GDP. Spending is well below 4 percent of the GPFG's value, which is the assumed – but highly uncertain – real return. The 4-percent fiscal rule no longer functions as an effective long-term guideline for fiscal policy.

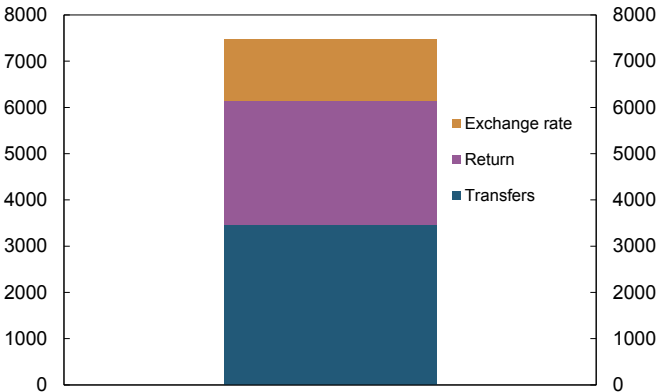
<sup>7</sup> The estimate is based on impact calculations in Table 2.4 in the National Budget for 2016 based on an oil price of NOK 270 per barrel in 2016.

The fall in oil prices will reduce Norway’s national wealth. The GPFG may be close to its peak. Future returns are also uncertain. Against this background, increased spending is not a viable path to follow.

## MANAGEMENT OF THE GOVERNMENT PENSION FUND GLOBAL (GPFG)

It is now 20 years since Minister of Finance Sigbjørn Johnsen made the first capital transfer to the Government Petroleum Fund, as the Government Pension Fund Global was aptly named at the time.

Chart 12 Government Pension Fund Global (GPFG).  
In billions of NOK. At 31 December 2015

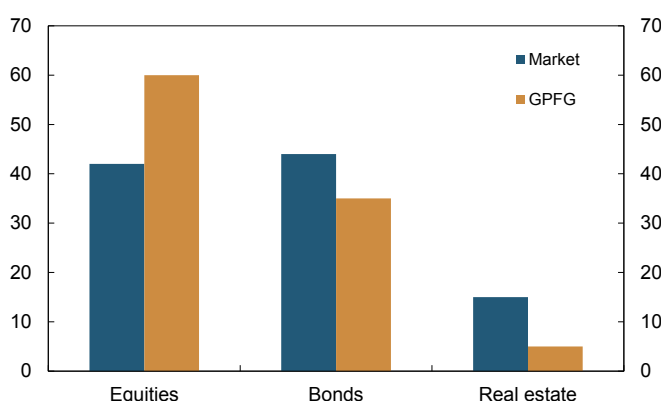


Source: Norges Bank

Since its establishment, NOK 3.5 trillion has been transferred to the GPFG (Chart12). GPFG capital has almost doubled, and is now the equivalent of around NOK 1.3 million per inhabitant. The return on investments accounts for a substantial portion, close to a third, of GPFG capital. Nearly every year, Norges Bank’s management of the GPFG has outperformed the market average. It would appear that the pattern is too consistent to be due to chance.

All the key variables that are essential for the GPFG’s long-term performance have been specified by the Ministry of Finance and approved by the Storting, and this is how it should be. This financial wealth belongs to the Norwegian people. Norges Bank’s role is to manage it and to advise the Ministry of Finance on investment strategy.

Chart 13 Asset classes broken down by share of market value. Percent



Sources: FTSE, Barclays, DTZ and Norges Bank

There is no return without risk. As a long-term investor, the GPFG is especially well-positioned to weather short-term volatility in securities markets. This is the reason for the GPFG's relatively high allocation to equities of 60 percent (Chart 13). Rebalancing the GPFG towards a fixed equity allocation has also enabled the GPFG to benefit from buying low and selling high. Sitting tight has been a profitable strategy.

The GPFG's investment universe has been expanded to include unlisted real estate. Its size and long time horizon are an advantage in real estate investing. The real estate portfolio has grown to more than NOK 200 billion. The GPFG is becoming a big real estate investor in a number of major cities.

Norges Bank recently recommended increasing the GPFG's real estate allocation to between 5 and 15 percent. We are also prepared to invest in foreign infrastructure. The return on real estate and infrastructure tends to follow a slightly different pattern than the return on equities and bonds. Investing in these asset classes is therefore expected to improve the GPFG's risk-return trade-off.

Looking ahead, the GPFG will likely reduce its allocation to bonds from today's weight of 35 percent. For a long-term investor, this is a sensible adjustment. At the same time, it will signal that the authorities are willing to accept considerable fluctuations in the return and size of the GPFG, at least on a par with the volatility seen during the financial crisis.

Even though a number of countries hold substantial foreign exchange reserves, Norway stands out. In almost no other country does the central bank manage such a large and diversified investment fund. The GPFG has delivered solid results, and its management model has been shown to be robust despite periods of rough weather. Transparency, accountability and the safety of capital invested are paramount. The organisation has been enlarged to manage a steadily growing and more diversified portfolio.

Changes in the organisation of the GPFG may come. But whatever the future solution may be, the primary objective of investment management must remain firm: the highest possible return for the benefit of current and future generations. The GPFG should remain a financial investor. If the government were to use the GPFG for other

purposes, it would limit the scope for achieving good returns and thereby Norway's fiscal space.

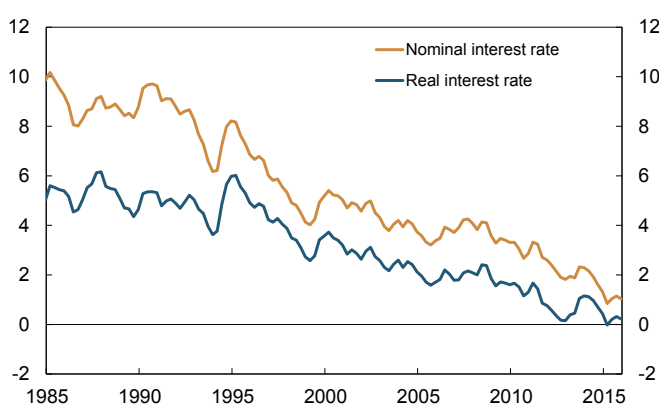
## CENTRAL BANKS IN NEW AND UNCHARTED TERRITORY

Major shifts in export prices have not been alone in posing challenges to the Norwegian economy through history. Financial turbulence and banking crises created their own set of challenges.

Central banks play a particular role in the event of financial turbulence. As the bankers' bank, the central bank acts as lender of last resort. The first time Norges Bank assumed this role was during the Christiania Crash in 1899 – Norway's first debt-driven real estate bubble. When the most recent financial crisis hit Norway in 2008, our role as lender of last resort was again put to the test. Access to short-term funding dried up. This also affected Norwegian banks. Norges Bank had to provide liquidity support, and the government implemented extraordinary measures to safeguard the financial system.

For Norway, the real economy effects of the financial crisis were short-lived. Other countries have had a more difficult time. Since the financial crisis, monetary policy in many countries has been stretched close to the limit with the aim of putting economies back on their feet and keeping inflation above zero. Many countries are still experiencing weak growth. This illustrates familiar features of financial crises. A post-crisis economic downturn may prove to be deep, and it may take a long time to reverse the negative trend. In a number of countries, little support from other policy areas has made the job particularly demanding.

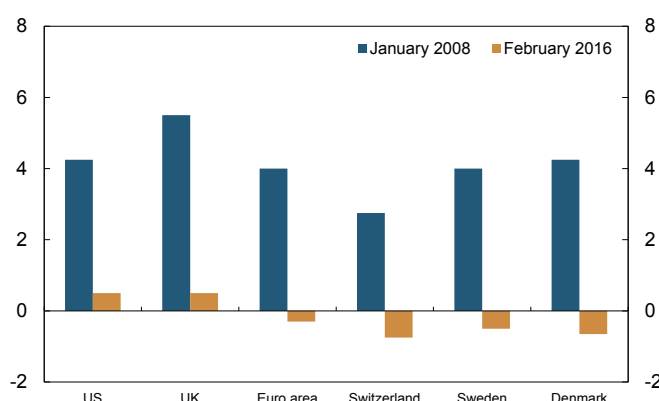
Chart 14 International interest rates.  
Long-term interest rates. 14 OECD countries<sup>1)</sup>.  
Percent



1) Unweighted average.  
Source: OECD

Never before in recent history have global interest rates been as low for as long as they are today (Chart 14). The interest rate level was moving down long before the 2008 financial crisis. What lies behind this is an enduring decline in long-term real interest rates. The decline is attributable to structural changes that have weakened the growth capacity of many economies, low productivity growth and weaker growth in the labour force.

Chart 15 Policy rates.  
Effective policy rates. Percent



Sources: Thomson Reuters and Bloomberg

In the wake of the financial crisis, interest rates fell from an already low level to even lower levels (Chart 15). Central banks slashed policy rates to counter the downturn.

The room for further rate cuts was gradually exhausted. In this situation, central banks have shown a capacity for new thinking. They have purchased securities on a large scale. The purchases have continued to push down long-term rates. In addition, a barrier has been broken. In a number of countries, the policy rate is now negative.

Negative policy rates can affect the economy via lower bank lending rates and a weaker exchange rate. These are well-known channels. But the effect of further policy rate cuts may weaken when rates fall below zero.

An important reason is that banks are reluctant to set negative deposit rates, especially for households. For many retail customers, substituting cash for bank deposits is fairly inexpensive. If banks hold back on deposit rates, lending rates can only fall to a limited extent before banks' earnings are reduced. A lower policy rate may thus have less effect on lending rates than normal, weakening the impact of monetary policy.

Over the past year, inflation among many of Norway's trading partners has approached zero. For many years monetary policy was aimed at preventing high inflation, while it must now seek to avoid inflation that is too low. Central banks are in new territory.

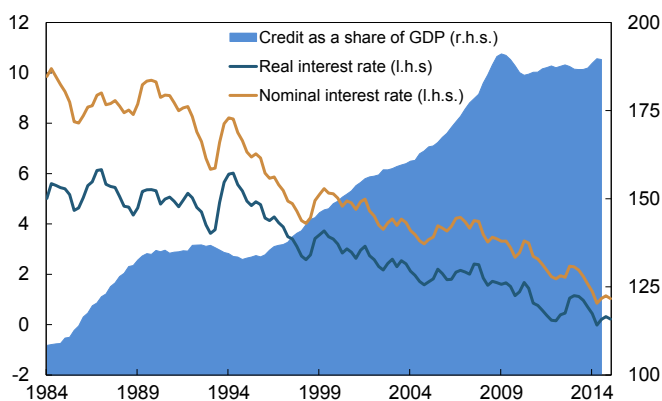
A period of low inflation is not necessarily a problem as long as confidence in the inflation target remains firm. But when the room for further policy rate cuts is close to being exhausted, steadily falling inflation could lead to a dangerous downward spiral. For every notch that expected future inflation falls, real interest rates rise. This has a contractionary effect on the economy.

In recent years, concerns about falling inflation expectations have prompted central banks to cut policy rates further and to deploy unconventional measures. It has been argued that these monetary policy measures are necessary to avoid a further fall in inflation as a result of a stronger exchange rate.

Interest rate cuts that lead to a currency depreciation push up inflation. But countries cannot all weaken their currencies at the same time. If many countries cut interest rates

to boost inflation via a weaker currency, the benefit may not materialise, while interest rates remain too low with respect to other considerations.

Chart 16 Interest rates and credit.  
14 OECD countries<sup>1)</sup>. Percent



<sup>1)</sup> Unweighted average. Long-term interest rates and credit to private non-financial sector.  
Sources: OECD and Bank for International Settlements (BIS)

The financial crisis created unusually strong headwinds in the global economy. The persistent decline in long-term rates has been accompanied by a sharp increase in debt levels in many countries (Chart 16). Heavily indebted firms, households and government had to embark on an extensive deleveraging process. Weak growth prospects have restrained the willingness to invest. Heightened uncertainty following the crisis may have reduced risk appetite. The result is that the effect of policy rate cuts has diminished.

For the countries that took the lead, a loose monetary policy appears to have worked. In the US, the recovery has been on track for a while and unemployment has declined. Before Christmas, the Federal Reserve raised its policy rate for the first time in nine years. In Europe, the recovery remains hesitant. In emerging economies growth is slowing. Since the beginning of the year, global financial markets have been marked by considerable turbulence, likely owing to increased uncertainty about global economic prospects.

The period of low interest rates is likely far from over. The headwinds from the financial crisis are still being felt by many large economies. With both interest rates and inflation close to zero, monetary policy's room for manoeuvre is limited. Central banks will have little left in their arsenal in the face of a new downturn. Other policy areas will then have to take on a greater role.

## A SOLID FINANCIAL SYSTEM OVER TIME

An environment of persistently low interest rates may pose challenges to financial stability. Low interest rates are still driving up debt levels, making economies vulnerable to shocks.

Just as monetary policy represents the first line of defence in managing the business cycle, regulation and supervision of financial institutions must be the first line of defence in maintaining financial stability.



It is not sufficient for individual banks to be solid. Banks are closely interlinked. They obtain funding from common sources and from one another, and large portions of loan exposures are in the same markets. High credit growth can result in financial imbalances that have system-wide effects. System-wide risk is therefore far greater than the risk of individual banks.

The financial crisis showed the severe damage that can be caused when insufficient attention is paid to system-wide financial risk. Banking regulation has therefore been strengthened by including a macroprudential component. The instruments employed are not new, but an important difference is that banks are required to hold more equity capital than previously. The required level is based on the overall risks to the financial system. Some requirements may vary over time, such as the countercyclical capital buffer.

The regulation of the Norwegian financial sector is in line with international standards. In recent years, a number of instruments have been implemented in Norway to mitigate risk in the banking system. In response to the sharp rise in real estate prices and household debt, the countercyclical capital buffer has been increased and bank lending standards tightened. Moreover, capital surcharges have been introduced for systemically important banks.

Norwegian banks have made good use of the solid earnings and low loan losses of recent years. Banks have built up their capital and adapted to new buffer requirements. The buffers can be used in the event of a pronounced economic downturn. Banks will then be able to absorb loan losses without a significant reduction in new lending.

The build-up of financial imbalances can be difficult to identify. Financial crises can occur suddenly and unexpectedly. When they do occur, the banking system must be solid. Most regulatory components should be as stable as possible. The aim of macroprudential supervision cannot be to fine-tune the economy over the business cycle. But when financial turbulence occurs, the authorities must be prepared to act quickly and in concert.

In Norway, the Ministry of Finance has the overriding responsibility for macroprudential supervision. It is natural that the political authorities make decisions regarding the framework and permanent regulations. It would be an advantage to delegate the responsibility for time-varying instruments to an independent authority with a view to ensuring effective implementation and predictability over time.

## CONCLUSION

After two decades that can be described as a golden age, the Norwegian economy is heading for a demanding period. We have always known that the long oil-driven expansion would come to an end, either because the activity level would pass the peak, or because oil prices would fall. We have now reached that juncture.

The challenges are twofold. One challenge consists of further developing the technology and expertise gained in oil production and oil services. Costs have been brought down at many stages to strengthen competitiveness in response to lower oil prices. If we succeed in this endeavour, the oil industry will continue to be a pillar of the Norwegian economy for many decades ahead. The other challenge lies in paving the way for growth in other industries and replacing the revenue shortfall and jobs shed in the oil industry owing to lower activity levels.

The groundwork is in place. In recent years, the Norwegian financial system has been strengthened. During a period of restructuring, it is crucial that banks are in a position to channel credit to projects and businesses that will generate new growth. We have more fiscal policy muscle than most countries, but it must be used sensibly. The social partners seem to understand the gravity of the situation and are prepared to do their share. Monetary policy can be geared to facilitate the necessary structural changes.

Norges Bank is in its 200th year. As a central bank, we have a responsibility to promote economic stability. In addition, the Bank is responsible for managing Norway's collective financial wealth. The responsibility we have been given cannot be taken for granted. It is a mission that must be merited. Under the parity policy of the 1920s, the economic downturn was amplified by the desire to return to parity. In hindsight, that policy was described as one-eyed. If today's inflation targeting regime is to avoid the same label, it must be practiced flexibly so that it fosters economic stability over time.

Confidence in low and stable inflation remains firm. That must always be the main task of monetary policy. Yet our own history and the recent experience of other central banks have shown that the system can come under pressure. When circumstances change, central banks must also be capable of adapting and new thinking. We must learn from the past, be prepared for sudden shifts and seek out new solutions.

Come what may.