

Monetary policy from a historical perspective

Speech by Governor Svein Gjedrem at the conference to mark the 100th anniversary of the Association of Norwegian Economists, 16 September 2008

Introduction

Let me begin by offering my congratulations to the Association of Norwegian Economists on its 100th anniversary. One hundred is a respectable age. In Norway, the introduction of a university degree in economics was certainly an important stimulus in the first part of the last century. In the period since the Second World War, major changes in society have increased the demand for expertise in the field of economics.

And economists are constantly gaining new insights. This also applies to the field of central banking, even though one of the fundamental central bank responsibilities – to safeguard the value of money – was as important 100 years ago as it is today. Monetary policy in Norway has changed considerably over the past 100 years. The government, with the support of the Storting, has now defined an objective for monetary policy of low and stable inflation. Norges Bank sets its interest rate with a view to achieving price stability. This has not always been the case.

Monetary policy in Norway

Chart: Monetary policy in Norway 1816-1971

Norges Bank was established in 1816 and was placed directly under the Storting (Norwegian parliament). The government had no control or influence. The Bank was authorised to issue banknotes that were to serve as legal tender. To ensure stability in the value of money, the banknotes were to be redeemable in silver, although this was not achieved until 1842. Later – in 1874 – the basis for the monetary system was changed from silver to gold. One year later, in 1875, Norway entered the Scandinavian Currency Union with Sweden and Denmark. Norway was a member of the currency union until around the mid-1920s, but after 1914 the union lost its practical significance. [\(1\)](#)

The latter half of the 1800s was generally marked by stable prices. Hence, when the first students completed their degree in economics in 1908, price stability was perhaps not the main concern of economists.

Chart: Consumer prices from 1830

When the First World War broke out in 1914, confidence in the monetary system faltered. The obligation to convert banknotes into gold was suspended. The money supply was out of control and inflation rose sharply. It reached 40 per cent in 1918. When Nicolai Rygg took office as chairman of the board of Norges Bank in 1920, he regarded it as an obligation to restore the gold value of the krone to previous values, i.e. parity policy [\(2\)](#). This was

considered a pre-condition for restoring confidence in the monetary system and in money as a means of payment and saving vehicle [\(3\)](#).

Chart: Monetary policy in Norway 1816-1971

The crisis in the 1930s, which severely affected the Norwegian economy, led to changes in views regarding economic policy. The parity policy experience was probably an important reason for this change. As a result, there were few objections when after liberation in 1945, the government with the Storting's support made decisions that under the law were the responsibilities of the central bank. This was the start of a new era of reduced independence for the central bank. The discount rate, for example, was reduced to 2.5 per cent on the recommendation of the government in January 1946. The Bank's task was to implement the government's decisions. Norges Bank nonetheless played an important role in shaping monetary policy, for example serving as an interface with international financial community and acting as adviser and facilitator [\(4\)](#).

In the first decades after the Second World War, it was firmly believed that the economy could be fine-tuned in the desired direction by coordinating instruments established by the central authorities. In Norway, this resulted in a period of low nominal interest rates set by the government authorities, direct regulation of credit through quotas set out in a separate credit budget, channelling of loans for special purposes via state banks, regulation of cross-border capital movements, a fixed but adjustable krone and occasionally the use of price and wage regulation. For a period, regulation and fine-tuning seemed to be having the intended effect.

Chart: Consumer prices from 1830

But in the 1970s, inflation got out of control in Norway and in a number of other countries. The Norwegian economy experienced a price/wage spiral. Although the krone was devalued several times in the 10-year period from 1976 to 1986 in pace with high price and wage inflation, this was nonetheless not sufficient to prevent a decline in the manufacturing sector.

In 1980, Odd Aukrust, Head of Research in Statistics Norway, stated the following with regard to developments in the Norwegian economy: "*Unfortunately there is even less reason for optimism this time. It seems that competitiveness in Norwegian manufacturing will deteriorate in the year ahead. The main problem is that no one can control price developments. With annual inflation at approximately 10 per cent, no one dares to invest in measures that could stop this price carousel.*" [\(5\)](#)

High inflation showed that the economic policy framework was not functioning as intended, and the importance of providing the economy with a nominal anchor became evident. In the light of experience, it became clear that unemployment could not be permanently reduced by merely accepting higher inflation [\(6\)](#).

One of the first to formulate this clearly in the debate in Norway was then Director General at the Ministry of Finance Per Schreiner, who wrote in 1982 that [\(7\)](#):

"It has long been a commonly held view in the Nordic countries that a policy choice can be made between price stability and full employment. There are strong indications that this choice does not exist [...] Personally, I am no longer in doubt that controlling inflation is essential to achieving other social objectives."

Chart: Monetary policy in Norway: 1971-2008

In line with developments in other countries, a shift in monetary policy also took place in Norway. In 1985, legislation was adopted which gave Norges Bank greater independence. After the last devaluation in 1986, monetary policy was oriented towards a fixed exchange rate. The fixed exchange rate was to be our nominal anchor.

The fixed exchange rate regime was abandoned in December 1992 in the wake of the crisis in the European Monetary System (EMS). The UK withdrew from the EMS and our neighbours Sweden and Finland also had to accept a floating exchange rate. The crisis revealed the built-in weaknesses of a fixed exchange rate regime in a world of free capital flows and deep financial markets. And it did indeed finally spread to the Norwegian krone. When the fixed exchange rate policy was abandoned, there was a risk that the Norwegian economy might again lose its nominal anchor. But the krone exchange rate showed little change, and rapidly found a new range.

From 1996 the conditions necessary for exchange-rate stability deteriorated. With a strengthening of central government finances, the minority government was not able to contribute sufficiently to restraining growth in government spending. Wage growth was substantially higher than in other countries. Moreover, petroleum revenues fluctuated widely from year to year and turbulence in international financial markets spilled over to our currency. The krone exchange rate fluctuated in spite of the active use of Norges Bank's instruments. Volatility increased further in 1998. The Norwegian krone fell in value. In response to this the interest rate was raised on several occasions through 1998.

The years between 1996 and 1998 showed that it was difficult to use the interest rate to fine-tune the exchange rate. Norges Bank Governor Kjell Storvik discussed the situation in a speech he gave in August 1998: *"Let us be mindful of the well known fact that a lower exchange-rate can amplify inflation expectations and that these expectations can in turn contribute to expectations of a weaker exchange rate, and in themselves amplify the depreciation tendency. Price expectations would then be self-fulfilling. The interest-rate level that has now been established should, in addition to directly contributing to stabilising the krone exchange rate, also curb price expectations."* [\(8\)](#)

In recognition of this fact, Norges Bank gradually gave greater weight to influencing inflation developments as a prerequisite for a more stable krone exchange rate over time. As stated in an article in the Norwegian daily newspaper Aftenposten in May 1999 [\(9\)](#): *"In the discretionary assessments on which monetary policy is based, Norges Bank gives weight to fundamental preconditions for exchange-rate stability over time. Price and cost inflation must be brought down towards the level aimed for by the euro area countries. At the same time the situation must be avoided whereby monetary policy in itself contributes to a downturn with deflation."*

The division of responsibility in economic policy was even more clearly defined when the government presented new economic policy guidelines in March 2001. An inflation target for monetary policy was introduced, with an operational target for annual consumer price inflation of close to 2.5 per cent over time. The fiscal policy rule was also introduced. According to this rule, the cyclically adjusted non-oil government budget deficit shall correspond to the long-term real return on the Government Pension Fund – Global. The division of responsibility in economic policy has since been the following:

- Monetary policy steers inflation in the medium and long term and can also contribute to smoothing swings in output and employment.
- The central government budget – growth in public spending – affects the real krone exchange rate and the size of the internationally exposed business sector in the long term. At the same time, developments in government expenditure and revenues must ensure a reasonable distribution across generations.
- Wage formation, the structure of the economy and incentives determine how well and how efficiently we utilise labour and other real economic resources.

It is the government that defines the inflation target. Norges Bank sets the interest rate with the aim of reaching the inflation target. The Bank must account for its decisions. It does so through an annual report on the conduct of monetary policy. The report is submitted to the Ministry of Finance to be presented to the King and communicated to the Storting. The government's assessment is presented in the annual credit reports. The governor of Norges Bank is also required once a year – first in 2003 – to appear at an open hearing on monetary policy of the Standing Committee on Finance and Economic Affairs.

What can we learn from history?

Chart: Consumer prices since 1830

We can learn from history. The experience of the 1970s and 1980s was a costly one. After the last devaluation in 1986, a fixed exchange rate policy was introduced and the economy went through a period of extensive restructuring. Confidence in the krone had to be restored to prevent persistently high inflation. This required very high interest rates. The Norwegian economy entered into the deepest recession since the interwar period. Unemployment rose from around 2 per cent in 1987 to 6 per cent in the winter of 1992/1993. Many companies went bankrupt and households faced debt problems. There was a crisis in the banking sector. Inflation only decreased to 2-3 per cent in the early 1990s. The years between 1986 and the beginning of the 1990s provide a realistic picture of the cost of bringing down inflation from a high level.

Inflation has been low and stable since the mid-1990s because the objective of monetary policy has been to provide the economy with a nominal anchor. Economic agents should be able to rely on the value of money remaining stable over time. High inflation and inflation that varies considerably over time result in random changes in the real value of assets and debt. This leads to unintended transfers between creditors and debtors. When inflation is high and variable over time, the function of prices as an information vehicle is also impaired. When inflation is low and stable, changes in relative prices are more easily discernible, and it

is easier for households and businesses to make decisions about consumption and investment. Low and stable inflation is the best contribution monetary policy can make over time to employment, economic growth and welfare.

The central banks in the first industrialised countries have attained a more independent status over the past 20 years. This is partly because Germany and its firm Bundesbank fared better during the period of high inflation in the 1970s and 1980s than many other countries. Arguments in favour of an independent central bank are also found in economic theory. Studies by Finn Kydland of Norway and Edward Prescott of the US at the end of the 1970s on economic policy rules were groundbreaking (10). The insights gained from these studies provide arguments for ensuring central bank independence and deriving monetary policy objectives.

History and theoretical studies have taught us that adverse effects may occur if the authorities do not take into account that households and enterprises are forward-looking when making decisions about consumption, investment, wages and prices. They base these decisions their expectations of economic policy in the future, not only on today's policy. It is therefore important that the authorities do not sow doubt, but on the contrary pursue a long-term and predictable policy. The authorities must be credible and inspire confidence. There must be consistency between the stated objectives of economic policy and what is actually done to achieve these objectives. This is the most important reason why the conduct of monetary policy has been delegated to the central bank in Norway, as is the case in other comparable countries.

The question of central bank independence is not new. When Norges Bank was established almost 200 years ago, there was much discussion about where to locate the head office. Trondheim was chosen and one of the arguments in the debate was that locating the central bank far from the seat of government would prevent the central bank from coming under political pressure. It was not until 1896 that the Storting decided that the central bank should be moved to Kristiania (now Oslo). The strongest objection to relocating the central bank from Trondheim to Kristiania was expressed by Director Karl Gether Bomhoff, who was in fact also a friend of Henrik Ibsen from his Dresden period (11). Bomhoff was a member of the Bank's board for 35 years, from 1885 to 1920. In 1893, he became the first permanently employed chairman of the board and the first director for the entire central bank. He emphasised that Norges Bank had to be independent and free of pressure from the political authorities and civil servants He stated at the time (12):

"As I have said before, I believe that the Bank can be managed just as well from Trondheim as from Kristiania, and I believe, better, because in the capital city it will be subject to pressure that it is impossible to know how long the board will be able to resist, since there are those in Kristiania, and perhaps also in the government, that may seek to change the Bank's objectives. Norges Bank should be maintained as an independent institution under the control of the Storting."

Geographical distance to markets and government has no significance today, but it may well be said that Bomhoff expressed thoughts that were articulated in more modern terms by Kydland and Prescott 70-80 years later.

History has also taught us that fiscal policy has considerable bearing on the role monetary policy can play. If the government's debt is too high, the political authorities have an incentive to increase inflation in order to reduce the real value of the debt. It is then difficult to anchor inflation expectations. No monetary policy can secure the nominal anchor if government spending spins out of control. Monetary policy and fiscal policy must therefore have a common platform.

The interaction between the political authorities and the central bank can be effective if the authorities take the role of "leader", and the central bank the role of "follower". Inflation targeting provides a clear indication as to how the central bank should respond in different situations. The political authorities are the "leader" in this interaction. They can internalise the central bank's – the "follower's" – pattern of response in their actions [\(13\)](#). Government spending growth can then be decided knowing the effect it will have on interest rates.

We have also learned from history that financial bubbles and crises occur from time to time. Even though financial crises may seem to be very different, they usually have a common feature. The US economist Hyman P. Minsky was of the view that this could be summed up in five stages: First a shock, often triggered by a technological breakthrough or changes in legislation and regulation of the business sector, followed by a period of growth - a boom - where new technology and opportunities are applied. This turns into euphoria - people get carried away. At some point some people wake up and take out their profits by selling. This triggers a fall in asset prices and equity prices and ultimately leads to panic and a crash [\(14\)](#). This is referred to as the Minsky moment.

We are now in the midst of a global financial crisis, which originated in the US housing market. Combined with new financial instruments that were intended to spread risk – but that did not prove to be viable – the US housing crisis has spread to many parts of the world and whose outcome is still unknown. Seven or eight years ago, we experienced a similar situation, although not as severe, when the dotcom bubble burst. Many also recall the crises in the emerging market economies in Asia, Central Europe and South America ten years ago and the downturn in the Japanese economy in the 1990s. Nor will we forget the banking crises in the Scandinavian countries in the early 1990s. However, financial crises are nothing new. We also find parallels to today's crisis if we go back to the Great Depression in the 1930s. If we go much further back in history, to the 1600s, the same phenomenon occurred with speculation in the tulip trade. In Holland, they discovered at an early stage that a virus could give tulips stripes and beautiful colour. A forward market for bulbs developed in the 1630s. In 1636 market prices rose sharply and in a short time that winter bulb prices increased 25-fold. This did not last. The market collapsed in February 1637 and prices fell to 5 per cent of earlier levels in the course of few days. Auction lists a hundred years after the crisis show prices from one per cent to 0.005 per cent of the level before the collapse [\(15\)](#).

Moving depictions of financial crises and their effect on people can also be found in imaginative literature. The Norwegian author Alexander Kielland depicts the local financial bubble in Stavanger in the 1880s in his book *Fortuna*. There was a surge in credit growth and speculation in commercial bills that did not represent actual values. Speculation formed the basis for quick gains and it all ended in bankruptcies and banks that failed. One of the

climaxes in the book is a scene where Taraldsen – the old messenger from Norges Bank – realises that the financial bubble is about to burst:

... in breathless surprise Taraldsen asked again: "Aren't your bills of exchange to be redeemed today?"

"No."

"Mr. Marcussen! People say that you are a jocular man; but this -" "I'm not joking - damn it!" Old Taraldsen straightened up; everyone was hunched over their work; only young Rasmus' eyes met his. The boy was white as a sheet; he began to understand. It also started to become clear for old Taraldsen; but immediately afterwards, he became very confused again; because he understood the entire scope of this; he had the entire town's bills of exchange in his head; and of course he had seen a lot of this kind of thing during his long life but all of those were trifles compared to what would happen now.

His voice shook as he almost ceremoniously asked:

"Will Carsten Løvdahl's papers be protested?"

"Yes," replied Marcussen without looking up.

Old Taraldsen trotted out of the offices; but on the steps he met the messenger from Aktiebanken: "Is it true? - Taraldsen!"

"Now the entire town is going to collapse," answered the old man, throwing up his arms in despair.

Kielland's description of a financial crisis and its consequences was realistic. There was speculation then and there is speculation today, but in other kinds of financial instruments than at that time. We might find employees at Lehman Brothers today who have expressed themselves in the same way as old Taraldsen.

It seems to be an inherent property in financial markets that financial bubbles and crises occur from time to time. A monetary policy that is oriented towards stabilising inflation and inflation expectations will reduce the impact. We have seen that when the interest rate is raised to restrain the rise in prices for goods and services, it also has the effect of stabilising house and property prices. In some areas, however, regulations and frameworks – cf. the substantial tax subsidy benefiting homeowners – amplify fluctuations in asset prices and lending.

Conclusion

The monetary system has changed through history. If we go far enough back in time, money consisted of coins with a certain quantity of silver or gold. The quantity of silver and gold therefore limited the volume of money that could be produced. This ensured that coins were attractive as a means of exchange and as a means of storing value. On the other hand, paper money cost almost nothing to produce and can be therefore be printed in unlimited quantities. Over the past 100 years, there have been several periods when paper money could be redeemed for silver or gold. For example, this was for a long period the case in the Scandinavian Currency Union. In the period after the Second World War and up to the beginning of the 1970s, the US dollar had a fixed price against gold while other currencies had a fixed exchange rate against the US dollar. This was the basis for what was known as

the Bretton Woods monetary system. Paper money had a value because the central bank was obligated to redeem it for gold.

A system whereby paper money can be redeemed for gold is nevertheless more fragile than a system whereby coins must contain a certain quantity of the precious metal. A central bank can quickly cease to redeem paper money for gold, or redeem notes at a lower gold price than prevailing earlier. This is what happened when the Bretton Woods system collapsed after the Federal Reserve was no longer obligated to redeem dollars for gold.

Today's monetary system may even be more fragile. Gold and silver belong to the past. Today it is deposit money and paper money that prevail. People must be confident that deposit money can be converted into paper money. The central bank must promise that the value of paper money is maintained. If people do not believe that the central bank will keep its promise, they will want neither deposit money nor paper money. Money will then lose its value. Other currencies or goods with direct utility value will take over as a means of exchange and a means for storing value. This reduces the effectiveness of the economic system.

We are of the view that it is an important but demanding task to safeguard the value of money. It is our own economic policy that determines the value of our money in the long term. It is therefore important to remember that price stability does not come about on its own.

Thank you for your attention.

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Footnotes

1. See Jonung (2005) for a more detailed description of the Scandinavian currency union. See also Qvigstad and Skjæveland (1994)
2. As used in the Norwegian debate, "parity policy" refers to the monetary policy of the 1920s, when the Norwegian krone was forced back to its former gold parity by means of highly deflationary policies. (Footnote not included in Norwegian text.)
3. See Ecklund (2008), p.43-44
4. See Ecklund (2008), p.120
5. Translation of an interview published in the Norwegian newspaper Adresseavisen 27 December 1980.
6. A key element in the Keynesian way of thinking in the 1960s and 1970s was that employment could be reduced in the long term merely by accepting higher inflation. This was demonstrated by the Phillips curve (named after the economist A.W. Phillips), which showed that low unemployment has historically accompanied high wage growth. In the 1960s, Milton Friedman and Edmund Phelps rejected the idea that this empirical relationship could be used to reduce unemployment in the long term. Any attempt to reduce unemployment would over time only result in higher inflation, without affecting employment and output. A more detailed discussion of these developments in macroeconomic history can be found in Snowdon and Vane (2005).
7. See Schreiner (1982).
8. See Storvik (1998)
9. See Gjedrem "Challenges in monetary policy", *Aftenposten*, 4 May 1999
10. See Kydland and Prescott (1977)
11. See Figueiredo (2007)
12. See Borlaug (1999), pp 34-35
13. See Borlaug (1999), pp 34-35
14. For more details on the Minsky moment, see www.newyorker.com/talk/comment/2008/02/04/080204taco_talk_cassidy
15. For a further account of the tulip bubble in Holland, see NOU 1999:29 "Commodity derivatives", p 53