Norges Bank Watch 2015

An Independent Evaluation of Monetary Policy in Norway

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Contents

Foreword

Executive Summary

- 1. Introduction
- 2. Economic situation
- 3. Monetary policy in 2014
- 4. Various Issues to Be Addressed

FOREWORD

Each year the Centre for Monetary Economics (CME) at The Department of Economics, BI

Norwegian School of Management appoints an independent group of experts to evaluate

monetary policy in Norway.

This year the committee consists of Kyrre Aamdal, Senior Economist in DNB Markets, and

Kjell Erik Lommerud, Professor in Economics at the University of Bergen.

The committee is solely responsible for the report and the views therein. The report does not

necessarily represent the views of the CME or of its members.

The Ministry of Finance partly funds the Norges Bank Watch reports, which contain useful

information and analyses for the Ministry's evaluation of monetary policy that is presented

each year in a White Paper to Parliament.

Oslo, 2 March 2015

Centre for Monetary Economics

Arne Jon Isachsen

3

Executive Summary

In 2014, Norges Bank's Executive Board held six monetary policy meetings. After four of these, Monetary Policy Reports (MPRs) were issued. Before assessing Norway's 2014 monetary policy, we would like to stress that the monetary policy framework and over-all execution are sound. Our objections concern details of the system and nuances as regards how discretion has been exercised. We fully support the broad features of the monetary policy system as it has evolved in Norway and other Western economies over the last twenty years, and in our opinion, in these years Norges Bank has largely pursued its monetary policy goals in an excellent manner.

Norges Bank kept policy rates unchanged at every meeting last year, except for the December meeting. At that meeting the key policy rate was lowered 25 basis points to 1.25 percent. The rate cut was unannounced, in the sense that the preceding interest rate forecast from the MPR in September did not consider this possibility. It was not entirely unexpected, though, since oil prices had gone down markedly and more than expected. An important backdrop for the rate cut is the expansionary monetary policies from ECB and the Riksbank and others, and an exceptional and continuous fall in long-term interest rates internationally.

Macroeconomic analysts, who follow Norges Bank's decisions, seem to have divergent views of the December interest rate cut. It is hard to argue that the Bank's decision was a mistake. Our discretionary judgement, though, differs from that of the Bank. Through 2014 Norges Bank had used "financial stability" as a reason for not lowering the policy rate. In December concerns about the possible problems for the Norwegian economy following a sharp decline in oil prices and petroleum sector investments dominated the fear of too high housing prices and other forms of asset inflation. The December MPR stresses that the Bank wants to act proactively as regards the falling oil price. We think that financial stability is still an issue, and that the Bank could have waited till early 2015 to see how acute the downswing would turn out to be.

We stress that we do not subscribe to views that there is a housing market bubble in Norway. Nevertheless, low interest rates will stimulate housing prices – and contribute to increasing households' debt burden from already high levels. If interest rates should return to a higher level this might constitute a serious problem for the economy.

Central banking is much about shaping the general public's expectations of future interest rates and other macroeconomic variables. Norges Bank does a good job in communicating

what lies behind their decisions. The Bank conducts monetary policy by forward guidance through its interest rate forecasts (interest rate paths). Such paths are presented in the Monetary Policy Reports. They also provide background information and general assessments. The interest rate account decomposes how various factors play roles in shaping changed interest rate paths.

We think the situation with falling oil prices and the December rate cut, revealed some weaknesses concerning the Bank's communications. The falling oil price was obviously an important factor behind the December rate cut. But neither the interest rate account nor other information informs us how the Bank will react to subsequent dramatic changes in the oil price. Around the December meeting, the oil price was around 70 dollars per barrel. Later it fell to below 50 dollars per barrel. Market participants came to believe that the interest rate in the near future would be cut more than forecasted in the published interest rate path. This may have contributed to a belief among the public that interest rates will be ultralow for the foreseeable future, with implications for the pricing of real estate and other assets.

The interest rate account mentions many factors that help determining the key policy rate. These factors vary from MPR to MPR. We learn little of functional form and what will happen if these variables develop in another way than forecasted. Here we would welcome more information. Alternative scenarios may increase the understanding of Norges Bank's reaction functions, but also verbal discussions would be valuable.

One instrument could be minutes from the Bank's board meetings, as suggested by many earlier vintages of the Norges Bank Watch reports. Arguments have been put forward that more detailed record of the discussions in the board would stifle free discussion. Anonymous minutes would dampen such problems. What is important is to get a broader perspective on what the board has emphasized and how it evaluated the future, contingent on the development in important variables, and not to attach arguments to persons.

At its five other meetings, the board chose not to change the key policy rate. The interest rate forecast, though, was changed several times. Often changes where quite small and related to time periods somewhat into the future. One could argue that the Bank was trying to conduct monetary policy through the interest rate path rather than through the interest rate itself. We would like to remind that flexible inflation targeting builds on variables where there are large measurement problems, and we think that very small changes in the interest rate path could be seen as suggesting a level of precision that is not warranted.

We would also like to draw attention to the September interest rate forecast. The forecast from the June meeting had included some probability of a lowered policy rate. In September this downside bias was removed. The market reaction was quite large despite the relatively small adjustments to the rate path. We find it somewhat hard to justify the removal of the dovish bias. Indeed some key figures looked better in September, but the investment survey for August supported the view of a marked decline in petroleum investments in 2015, which was the main reason to the negative bias in June. The flexible inflation targeting rate path also stated that new information supported a lower rather than a higher rate path in the short term. And we now know that the policy rate was actually cut in December.

1. Introduction¹

In 2014, like the year before, Norges Bank's Executive Board held six monetary policy meetings where it decided key policy interest rates. The policy rate was changed in December only, but interest rate forecasts were changed considerably over the meetings. Our report is organized as follows.

In chapter 3 we give a brief description of some key economic variables that are important for the monetary policy decisions.

In **chapter 4** we describe each meeting in more detail and evaluate the Board's assessments. The decision to cut rates in December stands out as the most obvious decision to assess. Norges Bank lowered rates to be proactive after the drop in oil prices, and placed less emphasis on the risk of increasing financial imbalances. We are not totally convinced that proactivity was required here and believe that the financial stability concerns are real.

In **Chapter 5** we address various issues. We discuss monetary policy and financial stability, and Norges Banks communication in relation to the interest rate account and robustness criterion for monetary policy. We agree with previous Norges Bank Watch committees and recommend publishing minutes shortly after the meeting. We also discuss briefly Norges Bank's purchases of NOK and recommend that Norges Bank provide more information.

The committee met with Norges Bank 7 January 2015 and Ministry of Finance 5 February 2015. We wish to thank Steinar Juel, Nordea, and Kari Due-Andresen, Handelsbanken for beneficial discussions.

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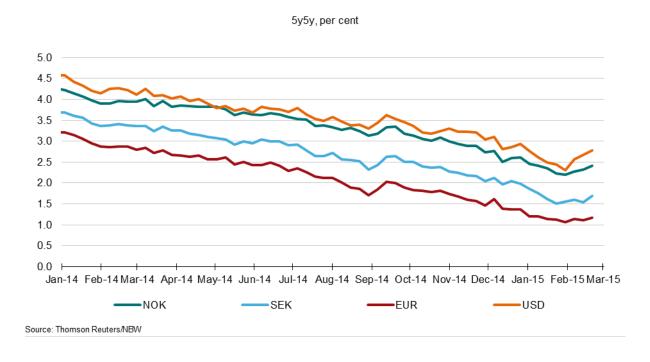
¹ The authors want to thank the BI Centre for Monetary Economics for inviting them to undertake this study. The views expressed are those of the authors and do not necessarily coincide with those of the CME or their respective employers.

2. Economic situation

2014 was yet another year of very expansive monetary policies. Negative interest rates on central bank deposits were introduced in a number of countries. The rate cuts carried out by the Swedish Central Bank and the ECB were probably the most important for Norway. The US Fed ended its quantitative easing program in October, but the ECB introduced a program for purchasing certain types of private bonds last autumn and warned that it may increase its government bond purchases. In January this year the ECB decided on public QE.

Economic trends abroad have been multifaceted. While economic growth in the USA and UK has reached a decent cruising speed, most of the countries in the euro zone have basically stood still. Headline inflation has been negative in a number of countries. The lowering of policy rates, the central bank's forward guidance and quantitative easing have contributed to lower forward rates. Falling inflation from low levels and disappointing growth also contributed to the decline in forward interest rates. The decline in forward rates can be illustrated in several ways, as shown in chart 3.1.

Chart 3.1 5-year swap rates with 5-year forward starts



2014 was also the year of the biggest fall in oil prices since the financial crisis. Since last summer, the price of oil has been halved, the Norwegian krone has plummeted against other currencies and the outlook for the oil-dependent Norwegian economy has darkened considerably.

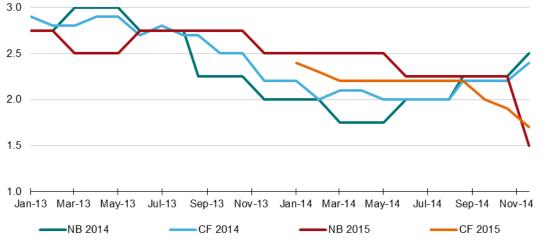
Still, the key figures for the Norwegian economy in 2014 were fairly good. The overall consumer price index rose by 2.0 percent from 2013 to 2014 and the core inflation ended up at 2.4 percent last year. Mainland GDP increased by 2.3 percent from 2013 to 2014 according to preliminary national account figures. The LFS unemployment ratio was 3.5 percent in 2014. The rate fell in the first half of the year, but rose in the second half to 3.7 percent in the fourth quarter.

In 2013, Norges Bank revised its forecast for Mainland GDP growth in 2014 downwards and ended up with a forecast of 2 percent in December 2013. In March 2014, the forecast was lowered further to 1¾ percent, but gradually raised to 2.5 percent by December 2014. The adjustments in the forecasts were largely reflected by other forecasters as reported in the surveys from Consensus Economics. In the beginning of 2014, Norges Bank predicted Mainland GDP growth of 2.5 percent in 2015. The forecast was lowered by ¼ percentage points in the June meeting and cut to 1½ percent in December 2014. Norges Bank's forecasts for CPI inflation in 2014 were stable at 2 percent in all the Monetary Policy Reports (MPR) last year, while the inflation forecasts for 2015 were revised up from 2 percent in the beginning of 2014 to 2.5 percent in December 2014.

Chart 3.2 Growth in Mainland GDP 2014 and 2015

Forecast given in 2013 and 2014 from Norges Bank and Consensus Forecast for 2014 and 2015.

Growht in per cent



Source: Norges Bank/Consensus Economics/NBW

3. Monetary policy in 2014

3.1 Introduction

Norges Bank had six policy meetings in 2014. Monetary Policy Reports (MPRs) were issued after four of these meetings, in March, June, September, and December. After each of the two in-between meetings, in May and October, the Bank published a one- or two-page memo entitled, "The Executive Board's policy decision—background and general assessment." In addition, press statements were released and webcast press conferences were held after all six meetings. Also, charts that were presented to the Board and forecasts from the system of averaging models (SAM) were published after the meetings.

Declining forward rates abroad were important reasons for the flattening of Norges Bank's rate paths presented in the different monetary policy meetings. After leaving the key policy rate unchanged for 1,002 days, Norges Bank decided to cut the rate by 25 bps to 1.25 percent, effective as of 12 December last year. The main reason was the decline in oil prices and the effect it will have on the Norwegian economy.

Chart 4.1 summarizes the factors affecting the rate paths in 2014. The lower value of the Norwegian Krone was the major factor contributing to increasing rate paths, but lower lending margins in the banking sector also contributed positively. On the downside, the main contribution stems from changes in the prospects for domestic capacity utilisation, followed by the decline in foreign forward interest rates. The drop in oil prices has two major effects on the economy. A fall in oil prices affects investment plans, increases the downward pressure on costs and lowers business and consumer sentiment. Hence, domestic demand will be reduced. On the other hand, lower oil prices are often followed by a fall of the Norwegian Krone. This will contribute to higher profits and activity in the export sector and a rise in imported prices. These factors are evident in the interest rate accounts presented in December.

Chart 4.2 shows there were two marked changes in the policy rate paths. The first one took place in the June meeting. New information about the petroleum investment plans for 2015 was a major reason for changing forecasts, in addition to the marked decline in foreign interest rates. The second major change took place in December and was caused by the drop in oil prices.

In the meeting in December 2013, Norges Bank lowered the interest rate path by extending the period of unchanged policy rates. In the interest rate path, the key policy rate was

Chart 3.1 Factors behind changes in the interest rate forecast



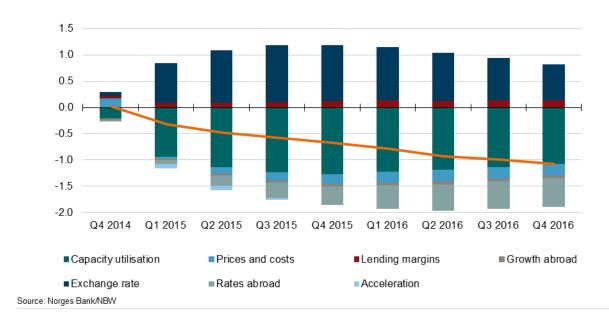
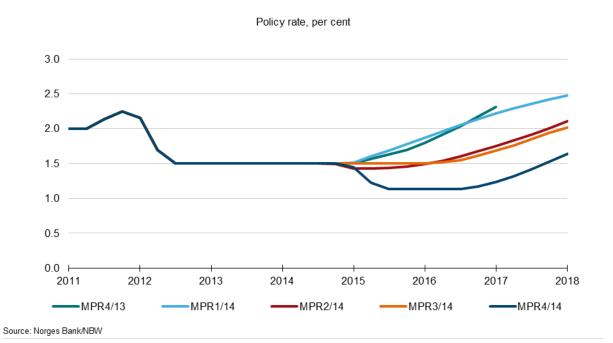


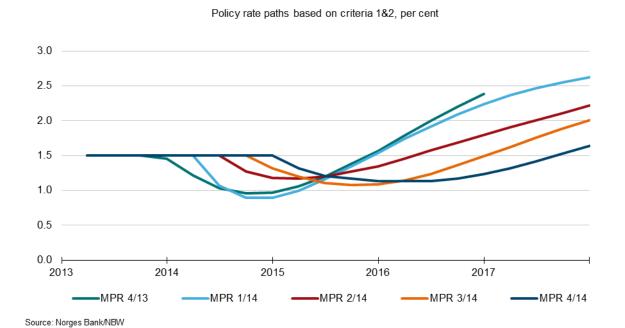
Chart 3.2 Norges Bank's Interest Rate Paths



unchanged at 1.50 percent until the first quarter of 2015, rose to 1.63 percent in the second quarter and was not raised above 1.75 percent until the fourth quarter of the same year. Below target inflation is an argument for a low rate path. In the previous MPRs this has been weighted against a positive output gap, although this gap was almost closed in the previous report. In the December 2014 MPR however, both factors imply a low rate path.

Norges Bank follows an inflation target given by the government. In its conduct of monetary policy, Norges Bank operates a flexible inflation targeting regime so that weight is given to both variability in inflation and variability in output and employment when setting the key policy rate. In addition, Norges Bank wants the monetary policy to be robust. Norges Bank summarizes this in the criteria: 1) Inflation, 2) Inflation and GDP gap (flexible inflation targeting) and 3) Robustness. This robustness criterion is a residual item, which captures the difference between standard flexible targeting (1 and 2) and the final rate path. One important factor covered by criterion 3 in recent years has been the risk of a build-up of economic imbalances. But the robustness criterion also has implications for other judgments and assessments. Norges Bank publishes interest rate paths calculated on the basis of criterion 1, and criteria 1 and 2 in addition to the final path. The calculations of the robustness also include any difference between the estimated loss function in the model and the implicit loss function for the Board. Chart 4.3 shows the policy rate path based on criteria 1 and 2 from the various Monetary Policy Reports.

Chart 3.3 Norges Bank's Interest Rate Paths based on criteria 1 and 2

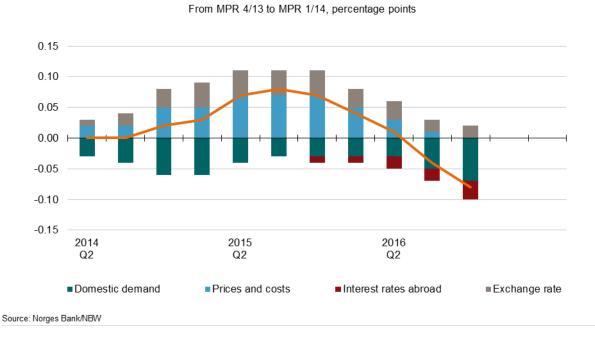


The differences between the rate paths based on criterion 1 (inflation gap) and criteria 1 and 2 (inflation and output gap) were very small in December 2013, and model calculations based solely on these two criteria indicated that the policy rate would be cut by 50 bps over the next quarters. The main reasons for keeping rates unchanged were related to robustness and financial risks, as had been the case for a while.

3.2 Monetary policy meeting 26 March, with MPR

In the March monetary policy meeting Norges Bank only made small adjustments to the forecasts for the Norwegian economy and the policy rate path was roughly unchanged. Norges Bank stated that "The analyses imply an unchanged key policy rate in the period to summer 2015, followed by a gradual increase". Norges Bank itself described the new interestrate path as entailing "hardly any changes" in relation to the previous one that was presented in December 2013. In the latter, the key policy rate was expected to remain unchanged at 1.5 percent until the summer of 2015 and thereafter be raised gradually. The interest-rate path was not changed much because the trend since December has mostly been in line with Norges Bank's estimates and projections. The assessments of the various driving forces that affect the key policy rate were largely unchanged. Some new factors were included, however.

Chart 3.4 Factors behind changes in the interest rate forecast



Even though growth in the Norwegian economy was more or less in line with estimates, Norges Bank deemed the outlook for demand in Norway to be a bit poorer. This was said to be mostly because of the outlook for oil industry and housing investments. The markets' forecasts for key policy rates abroad had also been trimmed. In isolation, these two factors pulled the interest rate path down a little. On the other hand the rise in consumer prices had been marginally higher than predicted and price inflation projections were adjusted upwards. Furthermore, the NOK had been a bit weaker than forecasted. In isolation, both the inflation outlook and the currency exchange rate pushed the interest-rate path up a bit. The total effect on the interest-rate path was thus small, but it did lead to the path being nudged up in 2015 and the first half of 2016 and trimmed in the second half of 2016.

One small, but odd, detail was that the new interest-rate path specified an average interest rate of 1.51 in the fourth quarter. Norges Bank thereby indicated that a rate hike in December 2014 was more likely than a rate cut. Such likelihood could not be inferred on the basis of the previous path. The effect of the minor upward adjustment of the interest-rate path in 2015 was to slightly increase the likelihood of a rate hike happening before rather than after the summer. The interest-rate path showed an average interest rate of 1.69 percent for the second quarter of 2015. One way to achieve that would be to raise the rate from 1.50 percent to 1.75 percent effective as of 23 April 2015. A reasonable interpretation of the interest-rate path could thus be that the intention was to carry out a rate hike in connection with the meeting that would normally have been held in early May. Norges Bank had pointed out, however, that the interest-rate path is not set on the basis of the dates of monetary policy meetings.

Norges Bank Watch also noted that the interest rate path based on criteria 1 and 2 had declined more steeply and had a lower trough than the corresponding rate path from the previous meeting.

Market reactions after the decisions were made public were limited. This was well in line with the markets' as well as analysts' expectations. 6 out of eleven analysts, according to a Reuters survey, expected the key interest rate to be unchanged until June 2015, 3 expected a rise to 1.75 percent, 1 expected the rate to be cut once within 6 months and one expected rates to be cut to 1.00 percent.

3.3 Monetary policy meeting 7 May, without MPR

The next monetary policy meeting was held on 7 May, with announcement the day after. This was an intermediary meeting that did not entail the preparation of a report. The central bank governor said that «The economic trends both abroad and at home have been more or less in line with projections. We will thus leave the key policy rate unchanged». Norges Bank pointed out that the markets now expect interest rates to start rising later than hitherto

predicted, and that Norwegian deposit and lending interest rates for the general public had been cut. In addition, the increase in housing prices was higher than projected. According to a Reuters survey none of the participants expected rate changes, but those who had included rate cut in their expected paths in the previous survey, had removed one cut. Market reactions were limited, with EURNOK down roughly 3 øre.

3.4 Monetary policy meeting 18 June, with MPR

In the meeting of 18 June, the interest rate path was lowered again, by up to 47 basis points.

«The analyses imply that the key policy rate be held lower longer than previously projected. There are prospects that the key policy rate will remain at about today's level to the end of 2015, followed by a gradual rise. A further weakening of the outlook for the Norwegian economy may warrant a reduction in the key policy rate»

– said the central bank governor when the report was presented. The interest-rate path shows a key policy rate of 1.43 percent in the fourth quarter of this year and first quarter of next year. In June, Norges Bank believed that a rate cut in course of the next year was more likely than a rate hike.

There were two factors in particular that affected the interest-rate path this time. The first was a further drop in interest rates abroad. This contributed to reducing the interest-rate path in Norges Bank's interest rate accounts by about ½ percentage point a bit farther out in time.

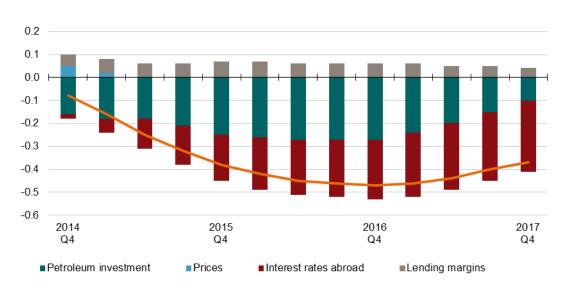
The second factor was a clear reduction of projected petroleum investments. This weakened the growth picture so much that Norges Bank decided to trim the interest-rate path by up to ½ percentage point. The fact that the inflation rate was a bit higher than predicted and that banks' loan spreads had shrunk were deemed to be of less importance. The two latter factors contributed to pulling the interest-rate path up by 5 to 10 basis points respectively.

The markedly downward revision of the policy rate path was a surprise. According to a Reuters survey none of the participants had expected a rate cut. None of the participants had changed their forecasts for the next year since the previous survey in May. 3-month forward interest rates in the markets had dropped, but not as much as in other countries on the short end of the curve. The market reactions were, however, significant, and EURNOK rose more than 10 øre right after the decision was announced.

In the Monetary Policy Report Norges Bank says:

Chart 3.5 Factors behind changes in the interest rate forecast

From MPR 1/14 to MPR 2/14, percentage points



Source: Norges Bank/NBW

Chart 3.6 Market reactions after the June meeting



Source: Bloomberg/NBW

«Capacity utilisation in the mainland economy is assessed to have declined slightly over the past year, but is likely still close to a normal level. ... Overall capacity utilisation seems to have declined in line with the projections in the March Report and the projections for the coming quarters remain broadly unchanged.»

Mainland GDP growth was revised up ¼ percentage point in 2014, and down ¼ percentage point both in 2015 and 2016. Potential GDP-growth had been adjusted correspondingly. Employment growth in 2014-2016 was unchanged, and unemployment in 2014 had been trimmed compared to the previous report. The policy rate path based on criteria 1 and 2 was flatter than the path presented in March, with a markedly higher bottom. Still, Norges Bank wanted to signal an increased probability of a rate cut together with a delay of the first rate hike.

The main reason for the surprise was the weight Norges Bank assigned to the expected decline in petroleum investments. Statistics Norway released the petroleum investment plans survey on 12 June. The figures summarize the petroleum companies investment plans on annual basis, and the first figures for investments in 2015 were released in June. The figures showed a marked decline in investments, also after adjusting for systematic underreporting at this stage in the survey. Norges Bank had a relatively short time to interpret this new and still quite uncertain information and incorporate it in the interest rate path. Obviously this new information posed a downward risk for the outlook and the interest rate path. The interest rate account thus included petroleum investments as a new factor, contributing to the lower rate path.

When presenting the analyses attached to the monetary policy reports in March and June, Norges Bank also gave the Ministry of Finance advice on the countercyclical capital buffer. The advice itself was not disclosed to the public, but the analyses were presented in the aforementioned reports. On 12 December 2013, the Ministry of Finance resolved that as of 30 June 2015, banks, finance companies and parent companies in financial services groups that are not insurance groups, must have a one percent counter-cyclical capital buffer consisting of pure core capital. Norges Bank originally wanted the requirement to take effect a little earlier. The Ministry of Finance resolved in both March and June to uphold the requirement and also pointed out that it was in line with what Norges Bank had advised.

3.5 Monetary policy meeting 17 September, with MPR

In the meeting 17 September (report published 18 September), Norges Bank decided not to change the interest rate. This was just as expected. The interest rate path was raised on the short term, and lowered a bit on the long term. Even though the changes were small, the adjustments meant that the interest rate path did not allow for rate cuts on the short term like the rate path from June did. The market had already priced in the likelihood of a lower interest rate path for the next year. This is probably why the NOK appreciated about 8 øre against the Euro and why FRA interest rates increased by about 8 basis points after the new rate path was published.

According to the new path, the interest rate would remain unchanged until the end of 2015 and then rise slightly in 2016 and 2017. The adjustment of the interest rate path was mostly due to a weaker NOK and falling interest rates abroad. These factors pulled in opposite directions in the assessment of the interest rate path. Norges Bank also took into account that demand in other countries was now deemed to be lower, while capacity utilisation in the Norwegian economy was a bit higher than what had been assumed. These two factors had fairly little impact on the interest rate path. There were also positive contributions from inflation, which had been a little higher than expected.

The dominant factors on the short term were inflation and weakening of the NOK, and the short-term downward bias was thus removed. The likelihood of a drop in interest rates abroad was the dominant factor farther out on the curve and contributed to lowering the interest rate path. The rate path was nonetheless rising. In its monetary policy report, Norges Bank nudged up its estimate for mainland GDP growth by ¼ percentage point to 2¼ percent in 2014, left the estimates for 2015-2016 unchanged and trimmed the growth rate in 2017 by ¼ percentage point. The projected inflation rate was nudged up by ¼ percentage point for 2015 and trimmed by the same amount for 2016. The projected exchange rate was higher in 2014 and 2015, but lower in 2016 and 2017 compared with the June report.

According to a Reuters survey none of those surveyed expected rate changes in September and of 9 participants 8 expected unchanged rates for the next year, while one forecasted two rate cuts. Compared to June, the average forecast for the policy rate by end of September 2015 had dropped 14 bps.

Chart 3.7 Market reactions after the September meeting

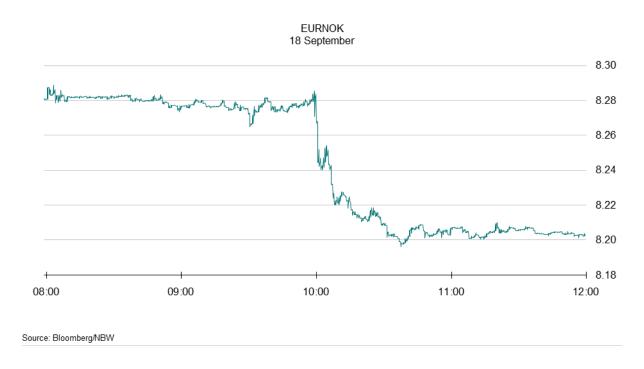
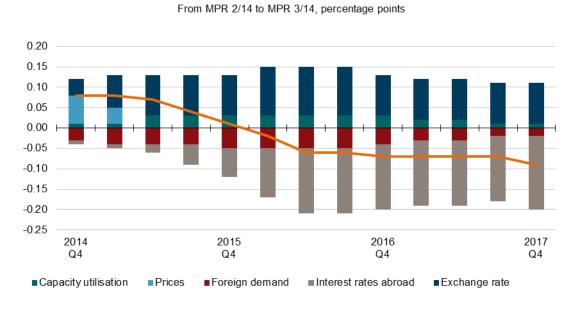


Chart 3.8 Factors behind changes in the interest rate forecast



Source: Norges Bank/NBW

The policy rate path based on criteria 1 and 2 fell to a lower bottom in September than the path published in June. The average rate for 2015 was 13 bps lower in the September path than in the June path. This is an indication that the changes since the June meeting would have contributed to a lower rate path before any judgments were made.

The Executive Board also discussed housing market developments. This was mentioned in the Monetary Policy Report, and in the same paragraph Norges Bank stated:

«... it was pointed out that the price rise so far this year may be a case of prices catching up after the weak developments in the housing market through autumn 2013. If financial imbalances build up further, it will be appropriate to assess the level of the countercyclical capital buffer requirement for banks.»

Norges Bank advised to that the countercyclical buffer should be left unchanged.

3.6 Monetary policy meeting 22 October, without MPR

The monetary policy meeting of 22 October was as in May, an intermediary meeting that did not include the preparation of a monetary policy report. In the press release the next day, Norges Bank stated:

«New information suggests that inflation and growth in the Norwegian economy are broadly in line with the September projections. Against this background, the key policy rate remains unchanged. At the same time, developments abroad and the fall in oil prices has increased the uncertainty regarding the outlook for the Norwegian economy.»

The NOK had weakened since September, partly due to lower oil prices. The banks had lowered their mortgage rates and the average interest rate on household borrowings was thus likely to be lower in the next few quarters than what had been assumed in September. Housing prices had risen more than expected and in the national budget, the government had planned to spend a little more oil money than had been anticipated. There were thus some factors that pointed to higher interest rates, but these were by no means sufficient to make up for the increased uncertainty on the downside resulting from falling oil prices and weaker growth in other countries. The executive board found no grounds for changing the interest rate, and since it was an intermediate meeting where no report was prepared, the board did not have to make any decisions with regard to future rate trends. No analysts in a Reuters survey expected any changes in the policy rate, and market reactions were fairly small.

3.7 Monetary policy meeting 10 December, with MPR

On 11 December Norges Bank announced that the executive board had decided the day before to cut the key policy rate from 1.50 percent to 1.25 percent. The period of unchanged interest rates thereby ended after 1002 days. On the day of the press release, Norges Bank published a new monetary policy report. The most important event since the September report was the fall in oil prices, which undermined the strength of the NOK and contributed to weakening the growth outlook for the Norwegian economy. The Central Bank governor summed up the situation as follows:

«Oil prices have fallen sharply and the outlook for the Norwegian economy has weakened. The interest rate has therefore been cut.»

The interest rate accounts showed that, in isolation, the weakening of the NOK contributed to a higher interest rate path, while expectations of lower demand favoured a lower interest rate path. Wage growth projections were trimmed, partly due to expectations of a drop in activity. This, too, contributed to lowering the interest rate path. In addition, interest rates in other countries had fallen a bit, though this had little effect on the interest rate path. The banks' lending margins had shrunk somewhat, which boosted the interest rate path a bit.

Norges Bank's analyses showed that the interest rate needed to be cut. In previous interest rate paths, the executive board emphasised that lower interest rates could result in housing prices and debt continuing to increase faster than household income. That was also the case in December. Economic projections were trimmed as a result of the fall in oil prices but there was considerable uncertainty about how big an effect it would have. In its December meeting, the executive board focused on mitigating the risk of a strong downturn in the Norwegian economy and thus decided to carry out a rate cut. The handling of this downside risk is described as an acceleration in the interest rate accounts.

In the December MPR, Norges Bank lowered the 2015 forecast for growth in Mainland GDP by \(^3\)4 percentage point to 1\(^1\)2 percent. Growth in mainland demand was cut by 1 percentage point. Petroleum investments were now projected to drop by 15 percent rather than 10 percent as in the previous report. More importantly projected growth in private consumption was trimmed by 1\(^1\)4 percentage point. The marked downward adjustment of the growth prospects for the coming year was an important justification for the decision to cut interest rates.

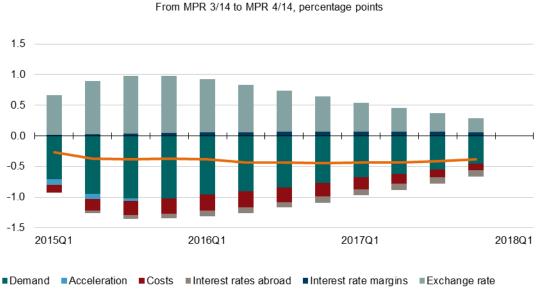
In the press release after the monetary policy meeting in December, the central bank governor said:

«The analysis in the Monetary Policy Report presented today implies a key policy rate of $1\frac{1}{4}$ percent, or somewhat lower, in the period towards the end of 2016.»

The interest rate path showed an average key policy rate of 1.23 percent in the first quarter of this year and 1.13 percent in the second quarter. This interest rate path entails a 50 percent probability of a rate cut in the March meeting 2015.

Otherwise, it should be noted that the model-based interest rate paths, which are only based on the criteria for flexible inflation control (1 and 2), showed a lower interest-rate path for 2015 in September than in December. But the consequences of not reducing the interest rate quickly enough if the trend turned out to be weaker than anticipated were deemed to be much greater than the consequences of lowering the interest rate too soon. The interest rate was therefore cut.

Chart 3.9 Factors behind changes in the interest rate forecast



Source: Norges Bank/NBW

Markets had, for a while, priced in a roughly 50 percent probability of a rate cut in December. According to a Reuters survey, 1 out of 16 surveyed expected a rate cut in December. 6 out of 16 expected the policy rate to be cut before end of June 2015, and no one expected rates to be raised over the next year. In the survey before the October meeting, 1 out of 11 surveyed expected a rate cut before the end of June 2015, so analysts, too, had lowered their rate

expectation during the autumn. Even though the analysts (except for one) forecasted an unchanged policy rate in December, several deemed the likelihood of a cut to be relatively high.

Markets reacted strongly. EURNOK rose from already high levels, and forward interest rates fell. 3-Month NIBOR fell 11 bps that day, and the 3m December FRA-contract also fell 11 bps for the day. The March and June 3m FRAs fell 14 bps after the decisions were announced and the 3-month forward interest rate curve fell 9-12 bps. Hence, the markets were not only surprised by the December rate cut, but also by the more dovish stance going forward.

In the monetary policy meeting in December, Norges Bank also prepared a recommendation for the Ministry of Finance on the countercyclical capital buffer. Though the recommendation itself was exempted from public disclosure, the analyses were presented in the monetary policy report along the same lines as in previous reports. In a press release on 19 December, Norges Bank wrote:

«The decision basis suggests that the buffer rate should be kept unchanged now. Should house prices continue to rise markedly faster than household income in the period ahead, with a further build-up in financial imbalances, it will be appropriate to advise the Ministry to raise the level of the countercyclical capital buffer.»

Norges Bank nonetheless recommended that the countercyclical capital buffer should be left unchanged at 1 percent.

Norges Bank has been directed to prepare a decision-making basis and make recommendation to the Ministry of Finance with respect to the countercyclical buffer. In this connection, Norges Bank and the Financial Supervisory Authority will exchange information and share analyses. The Financial Supervisory Authority is not obligated to give advice to the Ministry of Finance but nonetheless recommended in its letter of 11 December 2014 that the buffer requirement should be increased to 1.5 percent effective as of 31 December 2015. The Supervisory Authority especially emphasised that the rise in household debt and housing prices threatens financial stability. The Supervisory Authority also pointed to a strong rise in banks' earnings and concluded that it is "vital that most of the profit that can be expected in 2014 is retained to ensure that the banks are well-equipped to cope with a possible recession in the Norwegian economy". On 19 December, the Ministry of Finance kept the counter cyclical buffer at one percent as recommended by Norges Bank.

Chart 3.10 Market reactions after the December meeting

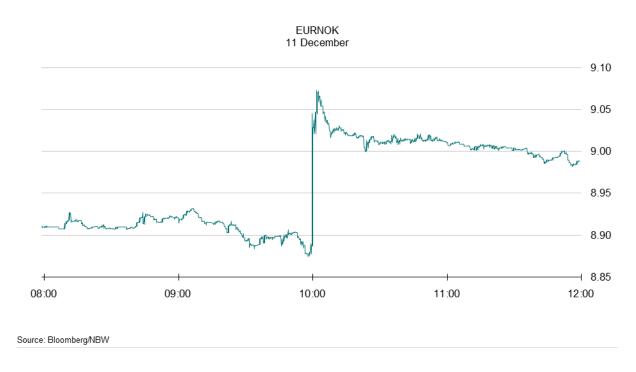
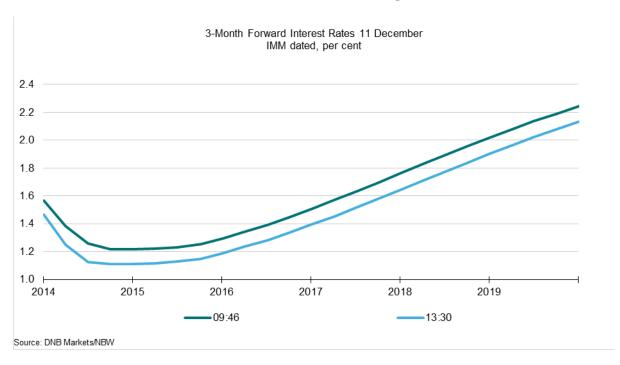


Chart 3.11 Market reactions after the December meeting



3.8 Evaluation

Before assessing Norway's 2014 monetary policy, we would like to stress that, on the whole, the main ingredients of the country's framework for how this policy is executed are sound. Our objections concern details of the system and nuances as regards how discretion has been exercised. We fully support the broad features of the monetary policy system as it has evolved in Norway and other Western economies over the last twenty years, and in our opinion, in these years Norges Bank has largely pursued its monetary policy goals in an excellent manner.

Our discussion of the Bank's policy execution is split into three parts. First, we will evaluate how Norges Bank exercises discretion when setting the key policy rate and making rate forecasts. In the Monetary Policy Reports, the central bank presents three different forecasts for the key policy interest rate. One is based on so-called criterion 1, and describes what the interest rate forecast would have been if it was solely based on a strict inflation target. The interest rate forecast based on criteria 1 &2 reflects the pursuit of a flexible inflation target, which in turn means that the bank balances the aim of stabilizing inflation against the aim of stabilizing capacity utilization in the economy. The Bank's third criterion is 'robustness'. This is meant to take the element of financial stability into account, as well uncertainty about the true workings of the economy and other judgments the bank may make that go beyond pure flexible inflation targeting. The interest rate forecast based on criteria 1 & 2 follows rather mechanically from the bank's forecasts for key macroeconomic variables. When we discuss Norges Bank's exercise of policymaking discretion, we will largely refer to the policy shaped by their third criterion.

The second part of our discussion relates to how the bank communicates with market participants. Are policy decisions anticipated by the market? Is the bank able to manage market expectations in the sense that the expectations of future policy rate changes tally well with the rate forecasts? Do decisions on policy rate changes and on changes in the rate forecast curve make sense in view of trends and events prior to the respective policy meetings?

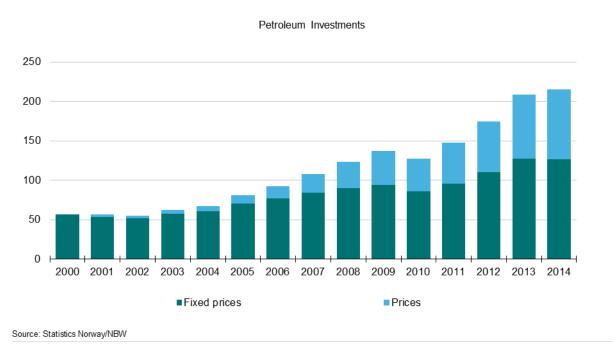
Thirdly, we look at how Norges Bank has balanced concerns about financial stability against the standard criterion of flexible inflation targeting. This balance depends on the availability of other macroprudential instruments, such as the countercyclical capital buffer.

We will start out by discussing the interest rate cut and the change in the interest rate forecast in the December meeting. After keeping policy rates unchanged for 1002 days, at this point in time Norges Bank lowered policy rates by 25 basis points.

The policy rate cut was unannounced in the sense that the previous Monetary Policy Report from September had signaled an unchanged policy rate through 2015. However, the policy rate forecasts based on flexible inflation targeting (criteria 1 & 2 have long suggested one or two rate cuts to a policy rate of 1.00 or 1.25 percent. In fact, in the December report the policy rate trajectory based on Criteria 1 & 2 had a slightly higher trough than in September report, with a 68 percent probability of a cut to 1.0 percent in the September report, but with a 50 percent probability of such a low interest rate in the December report.

The reason for the policy rate cut must therefore be found in discretionary use of the robustness criterion. In September, Norges Bank focused on financial stability, particularly that too low interest rates could lead to a rise in housing prices. In December, they were obviously concerned about falling oil prices and the consequent drop in investments in the petroleum sector.

Chart 3.12 Annual Petroleum Investments, bn NOK



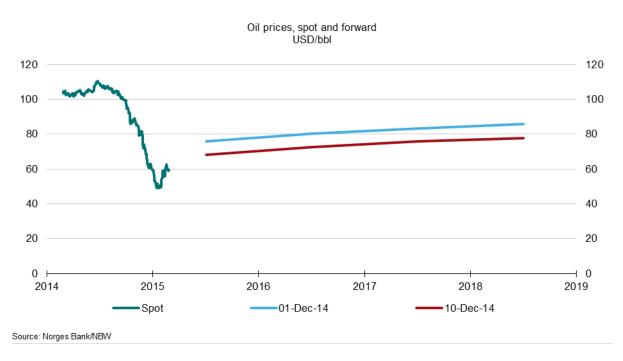
The rate cut was unannounced, but not entirely unexpected, since it is a well-known fact that the oil price is important for the Norwegian economy. A policy rate cut was expected either in December 2014 or in March 2015, see chart 4.11. Norges Bank chose to act early.

In our opinion, the policy rate cut could have been postponed. In December, the oil price had fallen to around 70 dollars per barrel. Forward prices were still rather high, around 80 dollars some years ahead. Oil sector investments had not fallen yet but were expected to fall in 2015. But oil investments have risen quite dramatically over the last few years, in volume but also because of higher prices. A situation with oil investments of more than 200 billion NOK was probably not sustainable, and a 20 percent drop over two years would only take us back to the level we were on a few years back.

A lower interest rate will, of course, not stop oil investments from falling when oil prices plummet. Norges Bank's intent must have been to bolster the general public's expectations of future economic performance, to prevent a precautionary drop in consumption. A lower interest rate differential between Norway and the outside world will weaken the value of the Norwegian Krone, and other sectors of the economy will be more willing to hire workers that have been made redundant from the oil-related sectors.

Norges Bank could have waited until falling oil prices had affected inflation and unemployment, but the board wanted to act proactively. This is the reason for the rather vague criterion 3 that necessitates a rate cut rather than flexible inflation targeting (Criteria 1 & 2).

Chart 3.13 Crude Oil Prices



In the wake of the financial crisis, proactive interest rate cuts could have been warranted because asset prices fell rapidly and consumer confidence seemed to plummet worldwide. We

are doubtful about whether the situation in Norway in December 2014 was comparable. Of course, both the spot price of oil and the forward price continued their fall in the months that followed. With hindsight, the rate cut may have been justified by recent developments. But when we assess Norges Bank's exercise of discretion in connection with monetary policy decisions, we must take the situation when the decision was made as the point of departure. As it turned out even though the oil price has fallen further, most macro-economic indicators have rather improved than the opposite.

Arguably, the December policy decision underplays the role of financial stability. Later in this report we will discuss whether monetary policy should primarily be governed by flexible inflation targeting or if the need to avoid substantial asset inflation should be taken into consideration. Here we just take for granted that financial stability is one of the factors that the bank takes into account to when setting interest rates.

We would like to stress that we do not subscribe to the view that there is a housing market bubble in Norway. A bubble would be a situation where the demand for housing was driven by expectation of further price increases, rather than fundamental factors. Housing price inflation would consequently become a self-fulfilling prophecy.

But even when one assumes that housing prices are largely determined by factors such as interest rates, unemployment rates and income growth, policy rate cuts can increase the price of real estate. If interest rates were to rise to 4-5 percent, for instance, housing prices could tumble to an extent that would create problems for home owners and the banks that have financed them. Households might, in such event, cut spending substantially and thus contribute to a drop in domestic demand.

A policy rate cut of 25 basis points in December 2014 instead of March 2015 is unlikely to significantly affect housing prices. But if Norges Bank's forecasts materialize, households' income growth will abate and labor market conditions will worsen. This will, in turn, curb growth in housing prices. At this stage, rate cuts may be appropriate.

High housing prices per se are not necessarily a problem, but high household debt often follows. Norwegian households are currently among the most indebted households in Europe. Lower interest rates stimulate additional borrowing and hence increased risk of financial instability.

To sum up so far, the discretionary element of Norges Bank's execution of monetary policy is largely covered by the so-called third criterion, referred to as the robustness criterion. Financial stability and a proactive response to the problems ensuing from falling oil prices are central elements here. We are not totally convinced that proactivity was essential in this case and think that financial stability concerns are real. On the whole, we would perhaps have chosen to postpone the policy rate cut and waited to see what happened. We do not claim that Norges Bank has made a mistake, since a case can be made for both courses of action. We also note that macroeconomic analysts who follow Norges Bank's decisions seem to have divided opinions about the December interest rate cut. What we miss is a more thorough discussion of the decision and a presentation of how the various arguments were assessed. Now it seems as if the decision was easy and that there were few objections. If this is the case, we are a bit concerned about the board's decision-making process.

We are, however, somewhat critical of how the decision was communicated to market participants. Norges Bank has started to use an interest rate change account, which is a diagram that shows the various factors on which the policy rate forecast depends. The highlighted factors vary from time to time. In the June report, the expected drop in petroleum investments is listed as a key reason for a lower forecast. In the September report, petroleum investments are not mentioned. In the December report, a factor called "acceleration" is given as the reason why the forecast for late 2014/early 2015 was trimmed. As we see it, this does not give a very good indication of I how the Bank will react if oil prices continue to slide. In actual fact, the oil price continued to fall after the December report was presented and dropped to an all-time low of under 50 dollars. Many market participants came to believe that the policy rate would be cut more in 2015 than what the Bank had communicated through its forecast. Now that the central bank has started communicating in various ways that falling oil sector activity has consequences for interest rate setting beyond what follows from changed projections with respect to inflation and economic activity, we think the bank's views on this needs to be communicated with more precision.

We will also comment briefly on the first three Monetary Policy Reports in 2014. The key policy rate was left unchanged for most of 2014. We have no argument with this. The interest rate forecast, however, varied in the different Monetary Reports. We refer to chart 4.2, which shows the interest rate forecasts from the four monetary policy reports. As can be clearly seen, the 4/13 and 1/14 forecasts are very similar, and yet different. The same holds true for the 2/14 and 3/14 interest rate paths. We are a little skeptical about whether very small changes of

the interest rate forecast, amounting to perhaps only a few basis points make sense. There are serious measurement problems in charting key macroeconomic quantities in an economy, as inflation and capacity utilization, and minor changes in the expected interest rate path could give the impression that this is a more accurate science than it is. Moreover, these small changes in the policy rate forecast could be seen as attempts from the bank's side to manipulate market expectations without ever changing the interest rate. When the interest rate was actually lowered in December, this came to some extent as a surprise. The interest rate forecast from the June meeting had included some probability of a lower policy rate. This information is valuable; it indicates whether the board is biased in one way or another. In September, this downside bias was removed. The market reaction was quite strong despite the relatively minor adjustments to the rate path. We also find it hard to justify the removal of the dovish bias. It is true that some key figures looked better in September but the investment survey for August supported the expectations of a marked decline in petroleum investments in 2015. This was a major reason for the downside bias in June. Furthermore, the ECB and the Riksbank both signaled further easing. The flexible inflation targeting rate path also stated that new information supported a lower rather than a higher rate path in the short term.

4. Various Issues to Be Addressed

4.1 Monetary policy, financial stability and the countercyclical capital buffer

Monetary policy is meant to stabilize inflation and productivity in an economy, but there is a risk that monetary policy can also have unwanted effects on asset inflation, especially housing prices. In the early 2000s, inflation was low in most Western economies, mainly due to low imported inflation, which in turn had to do with the integration of China and other emerging economies in the world economy. The low inflation triggered low interest rates, and a consequent rise in the prices of shares, real estate and assets other than bank deposits and bonds. Attempts to counteract low consumer price inflation could trigger asset inflation instead, and if higher interest rates drastically reduced the value of these assets later on this could lead to major losses for households and companies as well as for the financial sector and hence threaten the financial stability of an economy.

This is by now well understood, and most central banks take financial stability into account in the execution of monetary policy. In Norway, as mentioned, Norges Bank publishes possible interest rate paths based on three different criteria. The third criterion, "robustness", also takes financial stability into account.

One could argue that the robustness criterion in general and the financial stability factor in particular make monetary policy decision making fairly non-transparent. Transparency is of paramount importance in connection with monetary policy decision-making.. One could therefore argue that the interest rate policy should be governed by a flexible inflation target only, and that other policy instruments should be used to ensure financial stability. We agree with this view to a certain extent.

However, the alternative macroprudential policy instruments are not perfect. The Financial Supervisory Authority can regulate how banks lend money to the general public. It can, for example, stipulate down payment and own funds requirements for borrowers. Such regulation is politically controversial. Stipulating down payment and own funds requirements can be seen as inequitable, because it only affects certain segments of society.

Norges Bank advises the Ministry of Finance on the Countercyclical Capital Buffer. This buffer is part of a new system for bank regulation, compatible with the EU system, which is being phased in during the period from 2013 to 2016. The Countercyclical Capital Buffer is

currently set at 1 %, but will normally vary between 0 percent and 2.5 percent of risk-weighted assets.

Norges Bank dedicates a good deal of space in its Monetary Policy Reports to discussing the countercyclical buffer. Generally speaking, we applaud the system. The system is, however, quite new and has not been tested in times of crisis. What we expect is that the buffer will reduce the likelihood of banks collapsing if the prices of housing and other assets dive. This, of course, is very valuable. However, the system might have less of an effect on stabilizing asset prices. A drastic fall in housing prices can cause considerable macroeconomic upheaval even if banks are not driven to collapse or bankruptcy. Stabilizing the key policy rate itself, though, can contribute to stabilizing housing prices and asset values.

Of course, we are not suggesting that the key policy rate should not be used for policy purposes. We do think, though, that when the interest rate starts getting very low and housing prices have gone up strongly, any benefit of the doubt should weigh in favor of not lowering the policy rate further. In its 2014 Monetary Reports Norges Bank itself has explained that the aim of ensuring financial stability has kept them from lowering the policy rate. In December, the Bank felt that the need to act proactively in the face of a sharp drop in petroleum prices outweighed their concerns about the housing market. Norges Bank described the decision as simple. We are not entirely convinced and think serious objections to the timing could be raised. The arguments for a rate cut seem to be well founded, but the consideration for the risk of financial instability could warrant being less proactive.

4.2 Robustness and interest rate accounting

As mentioned several times already, Norges Bank publishes interest rate forecasts in different versions, depending on which criteria are used. Robustness constitutes the so-called third criterion – but 'robustness' is defined in quite a vague manner. For most of the year, robustness has basically referred to financial stability. The third criterion has meant that the policy rate has not been cut even if flexible inflation targeting by itself would have dictated a cut. In the December report, the need for a proactive response to falling oil prices outweighs the issue of financial stability.

The trouble with the robustness criterion is that it is very unclear what it really refers to. When Norges Bank changes the interest rate solely at its own discretion, and the reasons cited for its decisions are often divergent, this is not very enlightening for market participants or the general public. We know now that oil prices have implications for key policy rate decisions,

but we do not know with any certainty how the bank will react to a further oil price fall or if oil prices should bounce back to somewhere around the pre-fall level. How does the central bank's response to changes of oil prices function in practice?

We are also of the opinion that there is a lack of transparency in the communication of interest rate accounting to the market and the public. The interest rate account is meant to explain the factors that form the basis for changes in the interest rate forecasts. See chart 4.1 to see the factors affecting all of the rate paths last year.

The interest rate accounts include a number of factors. Some of them affect inflation and the production gap, i.e., the two elements on which flexible inflation targeting is based. Some factors relate to the discretionary element of the bank's policy making. The factors that are mentioned vary in the different policy reports. When we are told, for example, that 'acceleration' (the need for proactive behavior) lowered the interest rate path somewhat in early 2015, we are not given any details about how the bank and its board thinks the changed outlook for oil and gas related industries will influence rate setting.

This does not mean that we are opposed to the use of an interest rate account, merely that we think that the bank should provide more details about its reasoning especially about the discretionary factors that shape interest rate policy. In the end, it is the bank's board that determines monetary policy, and we would like to be better informed about the board's view of the role of discretionary elements in determining monetary policy. We will return to this below.

4.3 Minutes – a tool for better understanding the decision making process

Norges Bank is in many respects an open central bank, with its presentation of interest rate paths and interest rate accounts. In the Monetary Policy Reports, Norges Bank reels off a number of factors that affect the economy and the policy decisions. Norges Bank also publishes a number of research articles and staff memos to share information and knowledge. But in one sense Norges Bank is secretive: The absence of minutes from the monetary policy meetings. The issue of such minutes has been raised by several Norges Bank Watch committees. We agree with them and recommend publishing minutes shortly after each meeting.

Norges Bank has repeatedly stated that public minutes would disturb the working process in the Board. The Board is a collective unit where the Chairman (and Governor) presents the Board's view. The majority (five out of seven) of the board members are external members who hold regular full-time jobs and thus have only their spare time at their disposal to serve on Norges Bank's board. The argument against public minutes is that they could hamper the open and free discussions the members have today.

Market reactions after some of the meetings last year indicate that market participants do not fully understand the board's decision-making process. The monetary policy reports list arguments that have been discussed at the meetings. However, the reports do not disclose the importance assigned to the various arguments or whether there was any disagreement. The reports also refer to the economic forecasts, but the public is not informed of any discussions about the economic forecasts.

The December meeting can be used as an example. Norges Bank said

«Growth prospects for the Norwegian economy have weakened. Activity in the petroleum industry is softening and the sharp fall in oil prices is likely to amplify this tendency. This will have spillover effects on the wider economy and unemployment may edge up ahead.»

and also

«The Executive Board attaches importance to countering the risk of a pronounced downturn in the Norwegian economy. An overall assessment of the economic outlook and the balance of risks led the Executive Board to conclude that the key policy rate should be reduced now.»

But there may be a time lag between the oil price decline and when the effects hit the Norwegian economy. It is not evident that the response to the oil price decline should be an immediate rate cut. Interest rate cuts work their way through the economy primarily by affecting the foreign exchange rate and households' responses. Up to the time of the December report, the NOK had fallen substantially to historically weak levels. It could be argued that the effects on the NOK might be temporary and a rate cut in March or June may have had a more long-lasting effect on the NOK. A rate cut would stimulate housing demand further. In a situation with relatively strong growth in housing prices, this stimulation is undesirable. The primary reason for the downward adjustment of projected GDP growth in 2015 was an anticipated drop in private consumption. How much of this revision was related to oil prices, consumer sentiment and recent weak retail sales figures? What if retail sales

growth recovers? At the time Norges Bank lowered the policy rate, the NOK had weakened and market liquidity was very low in periods. Many investors were leaning towards selling NOK for foreign currencies, and NOK buyers were often absent. The policy decision seemed to increase the already high volatility. Did the board discuss such arguments? And how were they assessed?

Public minutes could provide the public with more detailed information about the board's discussions and assessments. It should be possible to find a way to formulate the minutes so they reflect the internal discussions. One suggestion would be to make the arguments and questions anonymous.

4.4 NOK purchases from petroleum revenues

Last year, Norges Bank started to purchase NOK and sell foreign exchange revenues from the State's Direct Financial Interest (SDFI) as a part of the foreign exchange transactions associated with the petroleum fund mechanism. In previous years, Norges Bank purchased foreign currencies. Norges Bank performs this task on behalf of the government. This arrangement is unique for Norway and is not a part of the monetary policy. However, some might observe that Norges Bank is purchasing its own currency and think this is a part of a currency stabilizing policy. Others, even those familiar with the arrangement, might suspect Norges Bank of using this mechanism to affect the currency in in certain situations.

Norges Bank has provided extensive information about this mechanism underlining that the purchases of NOK or foreign currencies are purely a technical issue, well separated from monetary policy. But there is still some and Norges Bank Watch has suggestions on how the information can be improved.

The Norwegian government receives substantial revenues from petroleum activities, both as revenues in NOK from taxation of petroleum companies and revenues in foreign currency from the government's own petroleum activities through the State's Direct Financial Interest (SDFI). The government spends a portion of total petroleum revenues every year over the central government budget. The remainder is transferred to the Government Pension Fund Global (GPFG) and is invested in foreign securities and real estate. The size of the various transactions determines whether there is a need for converting SDFI foreign exchange to NOK or for converting the government's NOK surplus from petroleum taxes in to foreign currencies.

However, this arrangement also involves some discretionary decision. First of all, Norges Bank aims to distribute the purchases evenly over the individual months and over the year. Secondly, Norges Bank suspended these purchases in mid-December, and argued that low marked liquidity can give undesirable variations in the NOK exchange rate. By the end of each month Norges Bank announces the size of the daily purchases for the coming month. Sometime Norges Bank surprises the market with their announcement. This was the case in September, November and December last year, and January this year.

Norges Bank Watch realizes that Norges Bank has limited possibilities when it comes to informing the public about the calculations and figures behind the monthly decision. Still, there are options. First of all, Norges Bank could be more specific about the factors contributing to changes of the purchases, for instance in qualitative terms. Secondly, the size of the petro buffer portfolio could be published as a part of Norges Bank's monthly balance sheet. Thirdly, it could publish information about planned changes in the petro buffer portfolio. A fourth, option would be to publish a path for monthly purchases. These recommendations may contribute to reducing the volatility surrounding the announcement of the daily purchases.

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