Norges Bank Watch 2018

An independent Evaluation of Monetary Policy in Norway

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FOREWORD

Each year the Centre for Monetary Economics (CME) at The Department of Economics, BI Norwegian Business School, appoints an independent group of experts to evaluate monetary policy in Norway.

This year the committee consists of Jeanette Strøm Fjære, Macroeconomist at DnB Markets, and myself, Professor in Economics at BI Norwegian Business School.

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 presented each year in a White Paper to Parliament.

Oslo, February 27, 2018

Centre for Monetary Economics

Tommy Sveen

NORGES BANK WATCH 2018 – EXECUTIVE SUMMARY

Section 2 reviews and comments on Norges Bank's monetary policy in 2017. Throughout the year the evidence of a cyclical recovery in Norway became clearer. Inflation, on the other hand, was lower than expected in 2017 and short-term inflation forecasts were revised significantly downwards through the year. Longer term inflation forecasts were however revised up. Norges Bank emphasised the cyclical recovery and longer term inflation over short-term inflation. NBW supports this judgement.

The key policy rate was kept unchanged at 0.5 per cent, but the forecast for the key policy rate (the rate path) was raised in June, September and December, after Norges Bank significantly lowered the path in March. The rate path presented in December 2017 was slightly higher than the path from December 2016. Moreover, the trough of the rate path was raised from 0.40 to 0.50 per cent in MPR 2-17, removing the downside bias. Hence, from MPR 2-17 the rate path did no longer signal that a rate cut was more likely than a rate hike in the near term.

NBW judges the interest rate account as a valuable and effective tool in educating the public about Norges Bank's policy assessments. However, the account might give an impression of a higher level of precision than is actually the case. That can give rise to communicational challenges. Judgemental assessments were included in the account from MPR 4-16. Since the interest rate account is constructed to illustrate how *changes* in input variables affect the rate projections in a *consistent* way, judgemental assessments do not naturally fit into the interest rate account. Therefore, the demand for clear qualitative communication in addition to the interest rate account becomes crucial for the public's understanding of how this factor affects monetary policy decisions.

Norges Bank has in our view become clearer in its communication on judgemental assessments through 2017. NBW welcomes continued improvement on this matter. For example, Norges Bank could include a permanent box in the report where the status of the judgemental assessments is explained.

NBW is positive to the changes made in the structure of the monetary policy report and the attempt to better coordinate the assessment of the Executive Board, the press release and the message presented at press conference. In addition, Norges Bank has started publishing minutes and voting from the policy meetings and has increased the number of policy meetings from six to eight. In NBWs view, these changes contribute to more openness regarding monetary policy. There are still room for improvement, however. The minutes are very brief and do not provide much information about differences in opinions and Norges Bank has omitted the press conference at in-between meetings. NBW notes that Norges Bank has been reluctant to make policy changes at the in-between meetings.

NBW stresses that it is important that market-sensitive information is made available to all market participants at the same time.

The starting point of our discussion of policy issues is the Report of the Law Commission on the Act relating to Norges Bank and the Monetary System. NBW praises the Commission for having presented in-depth analysis of conceptual issues. NBW notes that the Report suggests separating the Government Pension Fund Global from Norges Bank.

Under the current act, Norges Bank must submit the matter to the Ministry before making any decision of special importance. NBW supports the proposal to abolish this duty. Moreover, we are positive to raising the bar before the government can use its instruction right.

NBW agrees with the Commission that the new act should state a purpose for Norges Bank. We also agree that maintaining price stability and an efficient and secure payment system should be the main responsibility of a central bank. In NBWs view, the central bank "shall otherwise contribute to high and stable output and employment and promote stability of the financial system". Compared to the proposal by the Commission, NBW argues that financial stability should be given the same subordinate role as real economic stability.

NBW does not support the proposal to give Norges Bank executive authority in the work to promote financial stability. We are also negative to give Norges Bank the responsibility to set the counter-cyclical capital buffer and the responsibility for regulating residential mortgage loans. These policy tools strongly overlap with traditional regulation of the banking sector. NBW still argues that Norges Bank should have financial stability as a separate objective.

NBW argues that Norges Bank should be able to use the exchange rate as a policy tool in special circumstances. We are therefore negative to the suggestion by the Commission that Norges Bank should not be able to make decisions about the exchange rate regime.

NBW supports the proposal to establish a committee for monetary policy and financial stability. The division of responsibilities between the committee and the new board warrants further analysis, however. NBW is also skeptical to the proposal that Norges Bank should have three members in the committee, the third of which should be suggested by the Governor and appointed by the board and not the government, which is the case for the other committee members.

1. Introduction

This report, Norges Bank Watch 2018, is an evaluation of the conduct of monetary policy in Norway in 2017. In addition, the report discusses some of the proposals by the Commission on the new central bank act.

In section 2 we review and comment on Norges Bank’s monetary policy in 2017. Most of the comments concern communication and the judgemental assessments in the so-called interest rate account, but the report also comments on the fact that Norges Bank has increased the number of interest rate meetings and at the same time reduced the number of press conferences. Last, the report makes a critical remark on how market-sensitive information is made available to market participants.

Section 3 discusses several of the proposals by the Commission on the new Norges Bank Act. First, we welcome the proposal by the Commission that the act should state a clear purpose of Norges Bank. We propose that financial stability should be given a somewhat subordinate role along with real economic activity and we discuss whether the central bank could contribute to both high and stable employment. Third, we argue that Norges Bank should not be given the executive authority to promote financial stability and we are negative to the proposal of giving Norges Bank the executive responsibility to set the countercyclical capital buffer and to give guidelines for residential mortgage loans. Fourth, we argue that Norges Bank should have the authority to temporary change the exchange rate regime if that is needed to achieve the goal of monetary stability. Last, we welcome the proposal to establish a committee for monetary policy and financial stability.

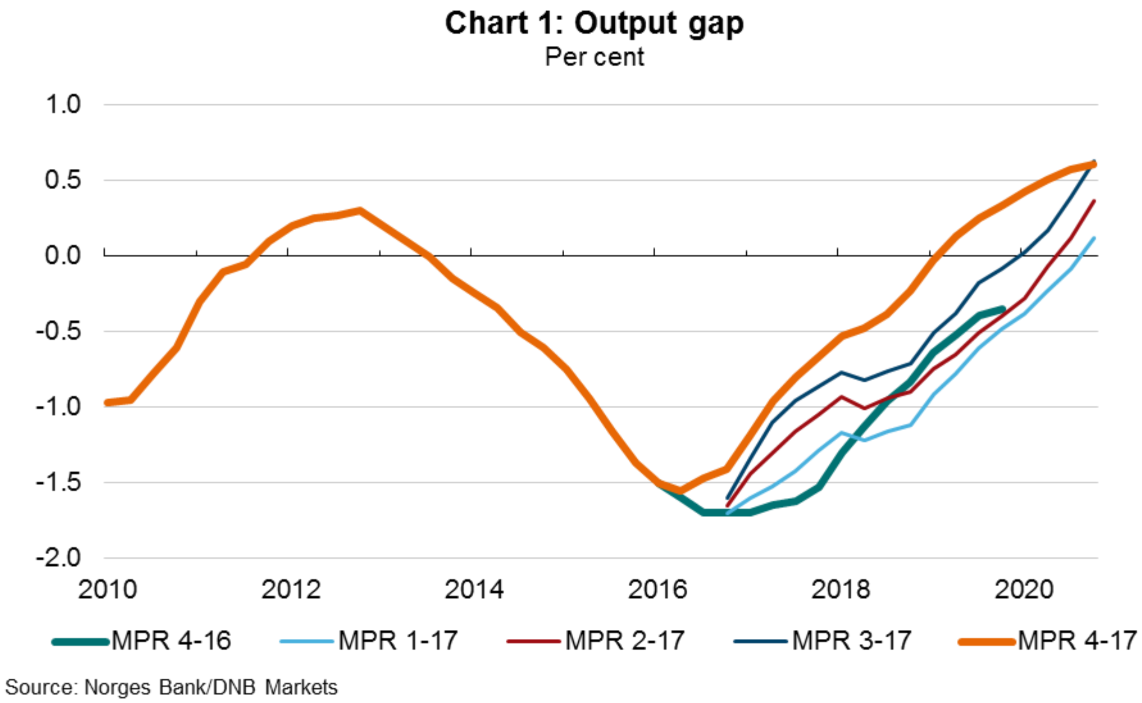
The committee met with the Ministry of Finance on November 21, 2017, and with Norges Bank on December 20, 2017. We wish to thank Norges Bank, Kyrre Aamdal, Kjersti Haugland, Ragnar Juelsrud, Arent Skjæveland and Harald Wieslander for help and constructive comments.

2. Monetary Policy and Communication in 2017

2.1 Introduction

In this section we first review monetary policy in 2017. Norges Bank kept policy rates unchanged at 0.5 per cent, but when the evidence of a cyclical recovery in Norway became clearer throughout the year, the bank removed the downside bias in the rate path.

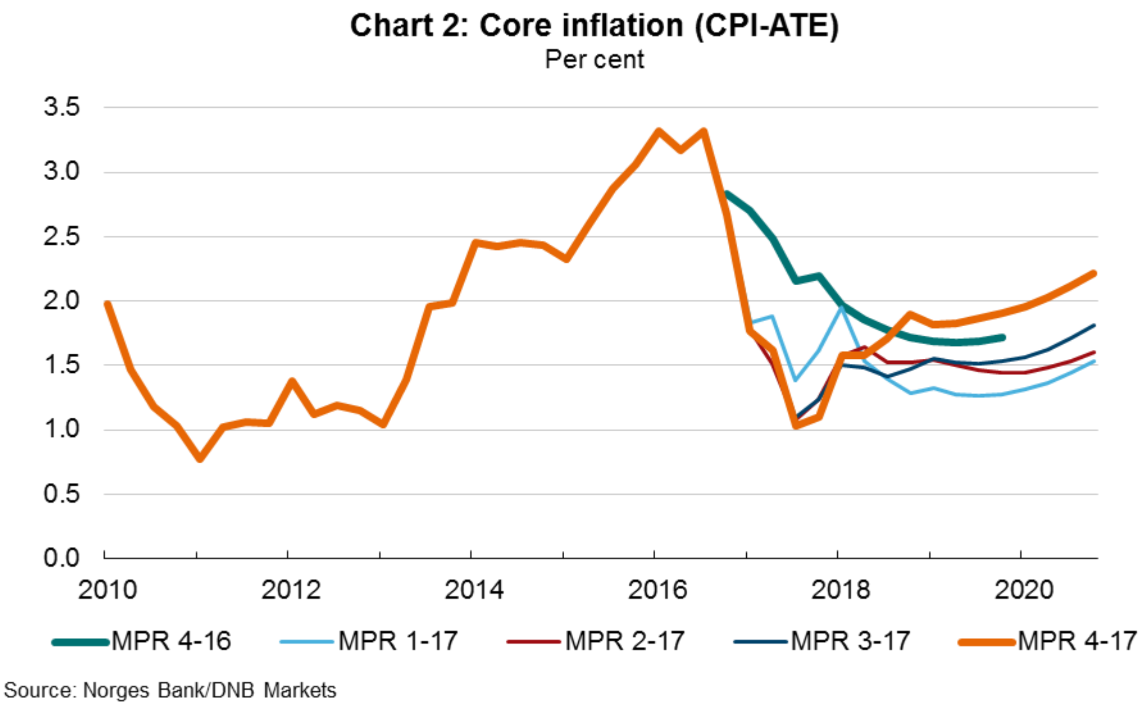
Most of the section concerns communication and, in particular, the judgemental assessments and the interest rate account. While we see the account as a valuable contribution to openness concerning monetary policy, it also gives rise to communicational challenges. This has been particularly true since judgemental assessments were included in the interest rate account in December 2016.



2.2 Monetary policy in 2017

Higher capacity utilisation and lower inflation

After a downturn in 2015 and 2016, last year was characterized by several positive surprises for the Norwegian economy and the evidence of a cyclical recovery became clearer throughout the year. GDP grew steadily by 0.6-0.7 per cent each quarter and unemployment fell, both as measured by the Labour force survey (LFS) and by the Norwegian Labour and Welfare Administration (NAV). Employment according to the National Accounts picked up through 2017, while LFS employment was significantly weaker. Norges Bank seems to emphasise the National accounts due to potential measurement errors in LFS. Norges Bank Watch (NBW) judges this as a reasonable assessment. The output gap was revised upwards through 2017 and was in December 2017 expected to close during the first half of 2019.



Inflation on the other hand was lower than expected in 2017 and short-term inflation was revised significantly downwards through the year. Norges Bank was not alone in revising short-term inflation forecasts downwards. Most analysts were surprised by how fast and by how much inflation fell. In December 2017 core inflation (CPI-ATE) was 1.4 per cent, hence 1.1 percentage points below Norges Bank's inflation target. Despite downward revisions of the short-term inflation forecasts, longer term forecasts have been revises up. Norges Bank has emphasised the cyclical recovery and the outlook for long-term inflation over short-term inflation. NBW supports this judgement.

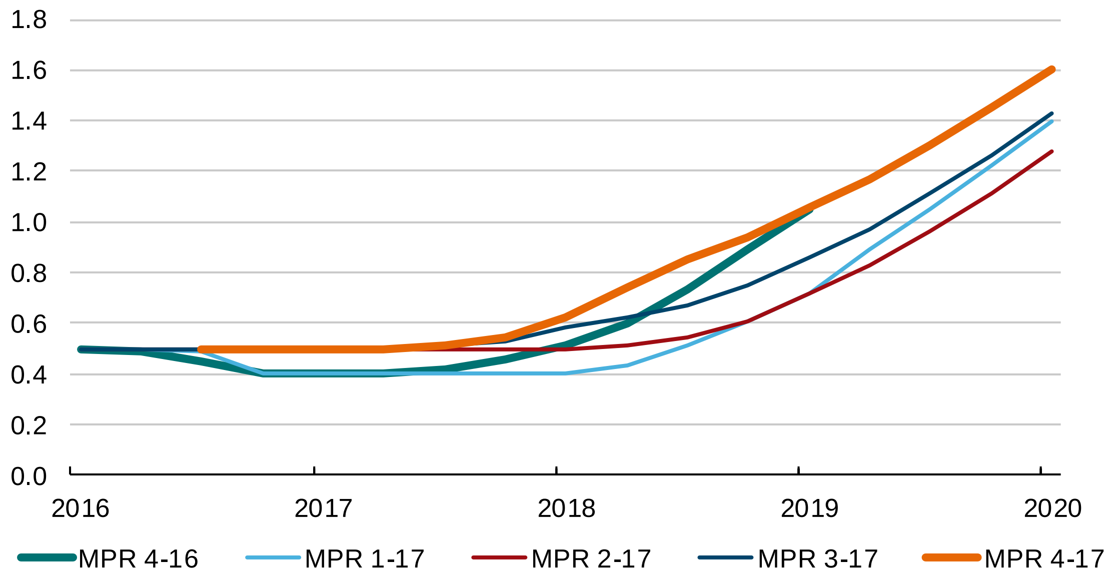
Unchanged policy rate, higher rate path and removal of downside bias

The key policy rate was kept unchanged at record low 0.5 per cent last year, after being lowered by 1 percentage point between December 2014 and March 2016 as a response to the oil-induced economic slowdown. A continued negative output gap, low rates abroad and inflation below target were arguments in favour of keeping monetary policy expansionary in 2017. An improvement in the Norwegian economy and thereby a reduced risk of a severe downturn were reasons against lower rates. Besides, rapid house price growth going into 2017 and a high and increasing debt burden for Norwegian households were signs that financial imbalances were building up, partly caused by the low interest rate level. We will come back to Norges Bank's judgemental assessments regarding financial imbalances below.

Norges Bank's forecast for the key policy rate (the rate path) was lowered significantly in March 2017, but raised in June, September and December. The rate path presented in December 2017 was slightly higher than the path from December 2016, see chart 3.

Chart 3: Forecast key policy rate

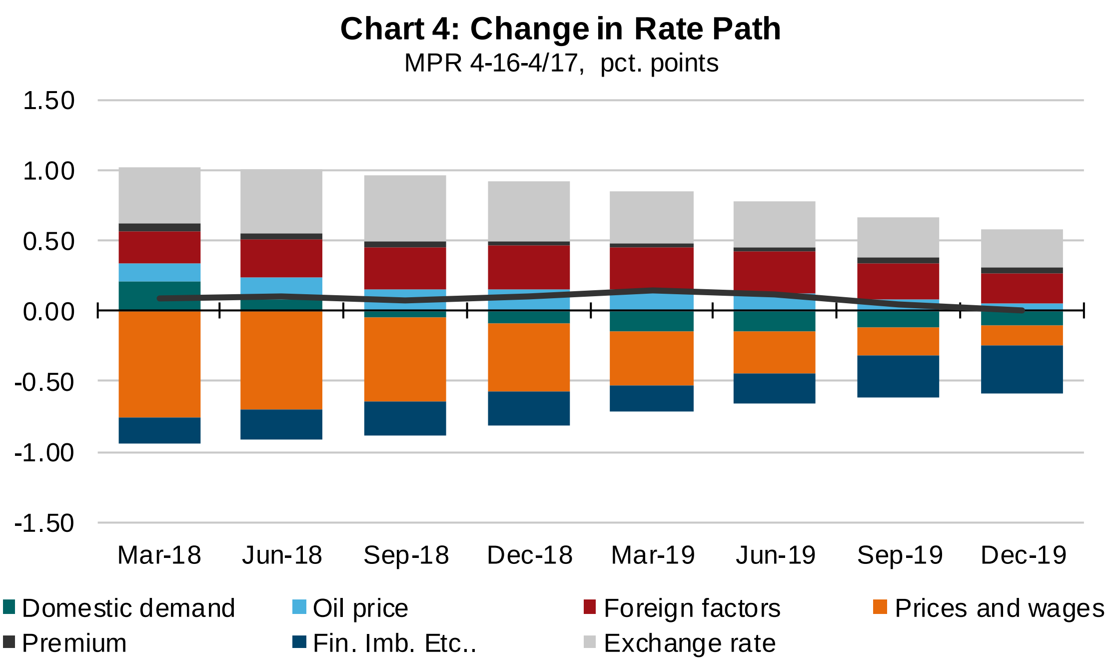
Per cent



Source: Norges Bank/DNB Markets

Despite the rate path from MPR 4-17 being only slightly higher than the one from MPR 4-16, there are substantial differences in the factors behind the rate path, see the "interest rate account" in chart 4.

The most important factor pulling the rate path higher through 2017 was the exchange rate, which has been markedly weaker than expected, especially in MPR 2-17 and 4-17. Foreign factors also contributed to a higher rate path, mainly due to an upward revision of growth prospects abroad. Moreover, the oil price pulled the rate path upwards in 2017, but chart 4 exaggerates the positive contribution from this factor. The oil price was for the first time included as an individual factor in the interest rate account in MPR 3-17. As the oil price rose more than expected in the second half of the year, it contributed to lift the rate path in MPR 3-17 and 4-17. The contribution from negative oil price surprises in MPR 1-17 and 2-17 were not illustrated by separate oil price boxes, but instead included in the boxes for domestic demand, prices and wages and the exchange rate.



Source: Norges Bank/DNB Markets

The most important factors pulling the rate path down were prices and wages. The negative contribution was particularly large in MPR 1-17. Core inflation was one percentage point below expectations, at 1.6 per cent in February. Even more importantly, wage growth was revised downwards for 2016 and the years thereafter. Financial imbalances and uncertainty also pulled the rate path down through 2017.

The increase in the rate path from MPR 4-16 to MPR 4-17 implied a change from a rate cut being more likely than a rate hike near term, to a neutral stance. The rate path in MPR 4-16 indicated a downside bias for the policy rate with a trough at 0.4 per cent, which was interpreted as a conditional probability of 40 per cent of a 25 basis points rate cut by most analysts and market participants. In MPR 1-17 Norges Bank lowered the rate path significantly in 2018-2020, but the trough of the rate path was kept unchanged. By choosing not to reduce the trough, the central bank signalled a reluctance to present a rate path indicating a probability above 50 per cent of a rate cut despite downside surprises on wages and inflation. This was related to the Bank's risk- and judgemental assessments, which we will return to shortly. The trough of the rate path was raised from 0.4 to 0.5 per cent in MPR 2-17, removing the downside bias. Hence, the rate path did no longer signal that a rate cut was more likely than a rate hike in the near term.

Source: Bloomberg/DNB Markets

The decisions to leave the policy rate unchanged and the adjustments of the rate path during 2017 were mostly well in line with analysts' expectations. Relatively muted marked reactions after the announcements indicate that the decisions did not take markets by surprise. Indeed, the NOK strengthened quite sharply in December 2017 (see chart 5) as the rate path was raised somewhat more than expected, but the reaction should be seen in light of the weak level of the NOK at the time. A more muted reaction in forward rate agreement (FRA) rates supports this point.

2.3 Judgemental assessments and the interest rate account

The interest rate account

Norges Bank is unique in publishing an interest rate account, explaining the factors contributing to each basis point change in the central bank's rate projections, see chart 4.

Few other central banks publish rate projections or rate paths. Riksbanken in Sweden and Reserve Bank of New Zealand publish a similar rate path to that of Norges Bank. Also, the Czech National Bank publishes rate projections. The US Federal Reserve publishes the so called "dot-charts" showing individual members of the monetary policy committee's assessments of the policy rate ahead. Bank of Japan also publishes a "dot-chart". Neither the European central bank (ECB), Reserve Bank of Australia (RBA), Bank of Canada nor Bank of England publish rate projections or interest rate accounts.

The interest rate account is part of Norges Bank's strategy of being open and transparent. NBW judges the interest rate account as a valuable and effective tool in educating the public about the policy assessments made and notes that Norges Bank is a frontrunner internationally. There are, however, communicational challenges related to the precision of the interest rate account. Explaining each basis point change in the Central Bank's rate projection might give an impression of a higher level of precision than is actually the case.

These challenges became more apparent in 2016 when judgemental assessments regarding financial imbalances and uncertainty about the low interest rate level became increasingly important arguments for not lowering rates further (see also Norges Bank Watch 2017). Judgemental assessments have the way NBW understands it always been important for policy decisions. In 2016 however, the judgemental assessments had such a large impact on the interest rate account that Norges Bank was forced to be more explicit about them.

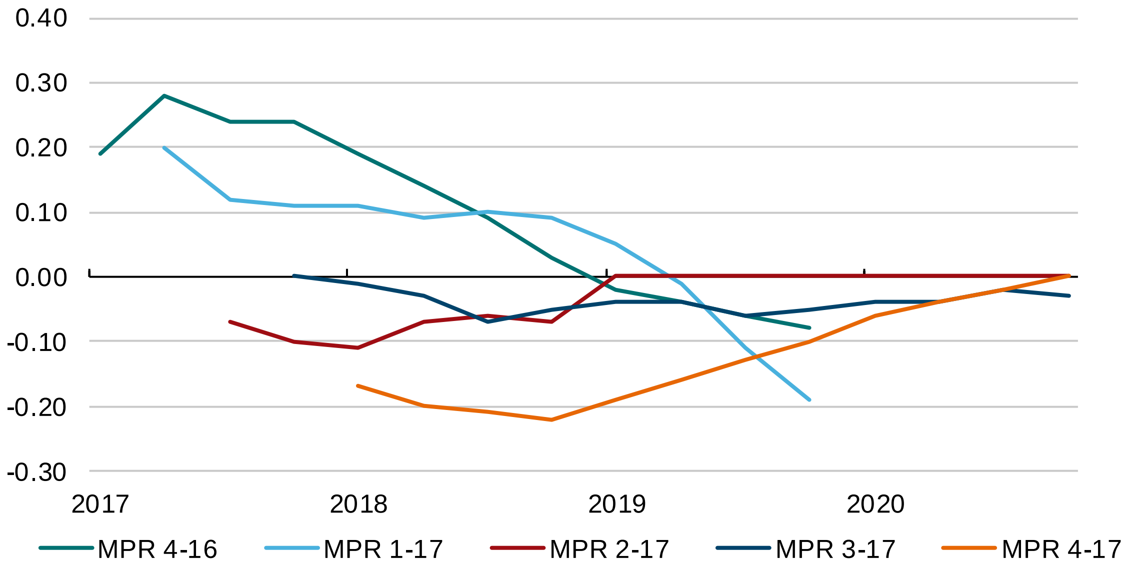
The judgemental assessments in 2016 were to a large extent connected to concerns regarding the rapid house price growth through 2016 combined with a high and increasing debt burden for Norwegian households. In addition, Norges Bank saw an increasing risk that financial imbalances were building up that could increase the likelihood of, as well as the size and duration of, a potential future economic downturn. In the literature, such assessments are well-known and often referred to as "leaning against the wind", see for example, Gerdrup et al. (2017). Second, the judgemental assessments were related to uncertainties regarding the functioning of monetary policy with very low interest rates. The two considerations mentioned above are interconnected and therefore difficult to assess independent of each other.

Judgemental assessments in the interest rate account

Before MPR 4-16, the judgemental assessments were indirectly included in the interest rate account through the traditional factors such as prices and wages and domestic demand. In MPR 4-16 Norges Bank included financial imbalances and uncertainty as an individual factor in the interest rate account. In the interest rate accounts thereafter, traditional factors such as domestic demand and prices and wages were to a large extent based on Norges Bank's main model NEMO and models for short-term forecasting (SAM), while judgemental assessments were included separately. Due to this change it is hard to make direct comparisons of interest rate accounts before and after MPR 4-16.

Chart 6: Judgemental assessments

Contribution to rate path. Percentage point



Source: Norges Bank/DNB Markets

As shown in chart 6, financial imbalances and uncertainty lifted the rate path by up to 20 basis points in MPR 1-17. House prices and credit growth had been more or less as expected and did not entail an increased risk of financial imbalances since the previous report. However, other news pointed to a lower rate path or even a rate cut, but Norges Bank did not find it appropriate cutting rates or indicating more than 50 per cent probability of a rate cut at that point.

It is hard to see why the impact of financial imbalances and uncertainty was reduced from 20 basis points in the second quarter of 2017 to 12 basis points in the third quarter. The only rationale the way NBW sees it is that these basis points were exactly what was needed to counteract effects from other factors. In our view, judgemental assessments functioned as a floor for the rate path at that time.

In MPR 2-17 financial imbalances and uncertainty pulled the rate path down. House prices had started falling and one could argue that the risk of financial imbalances building up had become somewhat reduced. Another reason for using judgemental assessments as an argument for a lower rate path was that other news at the time pulled the rate path upwards. Uncertainty related to the low interest rate called for a careful approach, not only when news pointed to a lower policy rate, but also when they pointed to a higher rate. Again, it is hard to understand why financial imbalances and uncertainty pulled the rate path down by 7 basis points in the fourth quarter of 2018, while not affecting the rate path at all in the first quarter of 2019, if not interpreting this as judgemental assessments being a residual post to make the changes in the rate path smaller. The same arguments can be made for the negative drag from financial imbalances and uncertainty in MPR 3-17 and MPR 4-17, at a time when other news were pointing to a higher rate path. At that time, house prices had continued to fall, indicating that household credit growth would abate in time and that the need for "leaning" became less urgent.

NBW is not criticising Norges Bank's judgemental assessments. On the contrary, NBW supports these assessments and believes a flexible approach to monetary policy provides the best result.

The challenge lies in presenting judgemental assessments as a part of the interest rate account. The reason is that this factor seems to be more of a residual making the rate path look the way Norges Bank finds appropriate, rather than a precise measure of how changes in input variables since the previous report contribute to changes in the interest rate prospects. NBW understands that judgemental assessments should in fact produce the most appropriate rate path. The challenge is that the interest rate account is constructed to illustrate how *changes* in input variables affect the rate projections in a *consistent* way. The financial imbalances and uncertainty factor is as exemplified above not solely based on changes since the previous report. Moreover, it cannot be expected to be treated consistently over time and cannot even be measured consistently over time. Therefore, judgemental assessments do not really fit into the interest rate account context.

That being said, NBW is not arguing to remove judgemental assessments from the interest rate account, as it is an open and honest quantification of the judgemental assessments Norges Bank is making at each point in time. But since this factor has a different status than the other factors, the demand for clear qualitative communication in addition to the interest rate account becomes crucial for the public's understanding of how this factor affects monetary policy decisions.

Norges Bank has in our view become clearer in its communication on judgemental assessments through 2017. In MPR 1-17 it was not straight forward to understand what Norges Bank meant by judgemental assessments in chapter 4.2: *"The assessment of the monetary policy trade-offs takes into account uncertainty surrounding the functioning of the economy and conditions that imply a risk of particularly adverse economic outcomes. The light blue bars illustrate the overall judgement of monetary policy, which also includes risk assessments that the modelbased analysis does not take into account. The overall assessment implies that the key policy rate is held at a higher level in the coming years than the expected path for inflation and capacity utilisation, in isolation, would suggest. On the other hand, the key policy rate is kept low for a somewhat longer period."*

In MPR 4-17 the judgemental assessments were explained in a much clearer way than in MPR 1-17: "*When the key policy rate is very low, the uncertainty surrounding the effects of monetary policy is greater than when the rate is at a more normal level. Even minor changes in monetary policy may then lead to reactions that are difficult to predict and may result in fluctuations in financial markets and asset prices. The uncertainty surrounding the effects of monetary policy suggests a cautious approach to interest rate setting, also when it becomes appropriate to increase the key policy rate. A housing market correction in line with the projections in this Report reduces the risk of an abrupt and more pronounced decline further out. The need for keeping the key policy rate higher with a view to preventing a further build-up of financial imbalances therefore appears to have diminished somewhat. The Bank's overall judgement suggests that the interest rate path is adjusted up somewhat less than new information alone would indicate. This use of judgement is expressed by the light blue bars."*

NBW welcomes continued improvement on this matter. For example, Norges Bank could include a permanent box in the monetary policy report where the status of judgemental assessments compared to other factors in the interest rate account is made clear and an explanation of what the total judgemental assessments generally consist of is specified. More details on how the judgemental assessments change from report to report, which would of course vary over time, could also be included as a variable part of this permanent box. With a permanent box it will be easier to find and follow the reasoning behind judgemental assessments. Such a change would probably not make it easier to project how Norges Bank will change its rate path ex ante, but it will likely make it easier to understand Norges Bank's assessments ex post.

2.4 Communication, minutes and more interest rate meetings

Norges Bank has done several changes in its communication through 2017. First, the structure of the monetary policy report is changed and the press release, the executive board's assessment and the message presented at the press conferences are more coordinated. Second, Norges Bank has started publishing minutes and voting from monetary policy meetings. Third, Norges Bank has increased the number of policy meetings from six to eight (from 2018) and is no longer holding press conferences at meetings without a monetary policy report (in-between meetings). All in all, NBW is positive to these changes and sees them as a contribution to more openness regarding monetary policy.

More coordinated communication and new structure of monetary policy reports

Norges Bank has worked on coordinating the message given in the press release and the executive board's assessment. As of MPR 2-17 the press release was more or less identical to the last few paragraphs of the executive board's assessment in the monetary policy report. NBW supports the change as it makes the message from Norges Bank clearer and misunderstandings regarding the main message less likely. This is supported further by a message at the press conference that has become more in line with the communication in the report and press release.

In addition, the structure of the monetary policy report was changed in 2017. The new reports include an overview chapter in the beginning of the report and several short boxes. NBW is positive to the changes in the monetary policy report. The new chapter 1 is a useful summary both for readers in need of a brief overview and those who read the full report in detail. Moreover, the small boxes are informative and make the report easier to read.

Minutes and voting from monetary policy meetings

At the policy meeting in May 2017 Norges Bank announced that it would start publishing minutes from the monetary policy meetings as of 21 June 2017. Voting from the policy meetings would be included in the minutes. The voting would also be included in the executive board's assessment.

Voting and minutes from monetary policy meetings have been a recurrent wish in previous NBW reports, see for example NBW 2017 and NBW 2015. Norges Bank's decision to start publishing minutes is welcomed by NBW, but at the same time we question how much information they give in its current form.

The votes so far have been unanimous, and hence no alternative opinions have been put forward. NBW assumes that information about alternative views will be presented in the case of future decisions that are not unanimous.

Minutes published so far are very brief and do not provide much information about the differences in opinion within the board. The only sentence providing additional information is the one concerning voting. We continue to ask for more complete minutes that shed light on the differences of opinions within the board and the trade-offs being discussed.

NBW does not request minutes covering detailed views of each member of the executive board, such as for example the minutes from the Swedish Riksbank. The minutes published by the Federal Reserve, Bank of England and the ECB could however be used as guidelines. In these minutes, anonymous views are briefly put forward along with differences of opinions, discussions and alternative views. Bank of Japan's "Summary of Opinions" could also be used as inspiration as a briefer alternative.

More detailed minutes and speeches held by members of the executive board expressing individual member's views would be more natural in the case of a monetary policy committee where all members were specialising in monetary policy issues. We will discuss the question of a monetary policy committee in part 3.

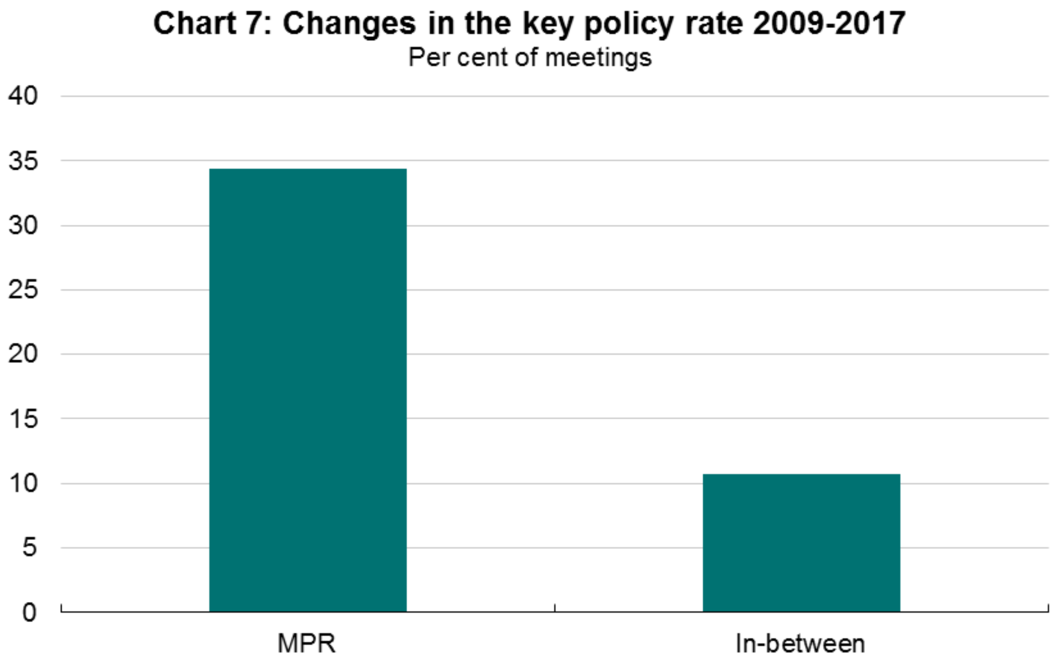
More policy meetings, less press conferences
In May Norges Bank announced that it had decided to increase the number of policy meetings from six to eight per year as of 2018. There will still be four monetary policy reports a year, but the number of in-between meetings will increase from two to four. This was announced at the same time as the decision to publish minutes was made known. According to Norges Bank's Governor Øystein Olsen the aim of these changes was "…seeking to increase monetary policy transparency".

NBW applauds the increase in the number of policy meetings, as the time between meetings in December and March and in June and September was previously too long in our view. In the new setup, the time between meetings is more symmetric and in line with many other central banks. For example, Federal Reserve, the ECB, Bank of England and Bank of Japan all have eight policy meetings a year. However, NBW does not agree that reducing the number of press conferences from six to four is a step in the direction of more transparency. In addition, we believe the value of more policy meetings fades if Norges Bank does not make a new overall assessment at each meeting, including in-between meetings.

The decision to skip press conferences at in-between meetings should be seen in light of the fact that Norges Bank does not publish a new monetary policy report, new forecasts or monetary policy analysis at these meetings. Hence, one could argue the governor does not have additional information to provide for a press conference. A press conference can therefore be viewed as redundant or even contributing to increased confusion about the message given in the press release. One could also argue that this setup works well in other central banks, as for example in the Federal Reserve.

Still, NBW recommends re-introducing press conferences at in-between meetings to give the public the possibility to ask questions regarding the monetary policy decisions. This is of course of particular interest in cases of unexpected changes in monetary policy. To avoid the need to invite for a press conference at short notice implicitly giving policy signals, NBW calls for regular press conferences as in the previous set up.

NBW also notes that Norges Bank has been reluctant to make policy changes at in-between meetings the last years. To illustrate this point, NBW has looked at the policy meetings from 2009 to 2017. In this time frame Norges Bank has had 60 policy meetings and the policy rate has been changed at 14 of these meetings. 32 of the meetings were with a monetary policy report and 28 were in-between meetings. At meetings with a policy report the policy rate was changed 11 times, which corresponds to 34 per cent of the meetings. The policy rate was changed at 3 of the in-between meetings, hence 11 per cent of the meetings.



Source: Norges Bank/DNB Markets

Such a comparison does not make sense unless we see the rate changes in light of surprises in inflation and output gap. Ideally, the surprises should also be measured up against the rate path. NBW has made an effort to measure such surprises by looking at actual core inflation compared to Norges Bank's short-term forecasts and actual gross unemployment measured by NAV compared to Norges Bank's unemployment forecasts. We find that inflation surprises are indeed larger at the rate meetings with a policy report, but the difference is not as large as the difference in policy response. Gross unemployment surprises are actually about the same at meetings with a monetary policy report and in-between meetings. The results are quite robust to different measures of inflation surprises, but change with different time periods.

This simple exercise is based on a few observations and therefore is not suitable for measuring statistical differences. Besides, it does not correct for how far inflation and unemployment is from target or if surprises bring us towards or further from target. Neither does it say anything about which plans Norges Bank had for the policy rate to begin with. Still, it indicates that Norges Bank was more reluctant making policy changes at in-between meetings than at meetings with a policy report in the time period 2009-2017. NBW finds it important that Norges Bank makes a new overall assessment of monetary policy at each meeting, including in-between meetings.

All the interest rate changes at in-between meetings in our time frame were made in 2009, hence during the financial crisis. This was a period of rapid and large rate changes. Also, all changes at in-between meetings were signalled in preceding monetary policy reports. This might indicate that Norges Bank is also reluctant to deviate from plans at in-between meetings.

More in-between meetings are still welcomed, as Norges Bank's reluctance to change policy at these meetings seems to have varied over time. There might be an increased need for these meetings in periods with more frequent changes in the policy rate. Moreover, the policy meetings can be useful also without policy changes, as the central bank can use the meetings to provide information about assessments since the previous meeting to the public. These assessments can be valuable to receive more frequently, even if they do not result in a policy response.

Market sensitive information should be given to all market participants

Information from Norges Bank that could cause reactions in financial markets should be made available to all market participants at the same time. Such information is not necessarily related to the most obvious case of the policy rate decision.

Norges Bank announced Friday 17 November 2017 it would offer a full allotment, non-sterilized F-loan from 29 December 2017 to 2 January 2018, hence over the turn of the year at a fixed rate of the policy rate plus 15 basis points. The announcement was done by email (in Norwegian) to Norwegian banks that participate in Norges Bank's market operations, but was not announced publicly before Monday 20 November.

The offering of the F-loan contributed to lower three month Nibor (the lending rate in the Norwegian money market with three months maturity), the most important Norwegian reference rate. Nibor fell from 0.80 per cent Thursday 16 November to 0.71 per cent on Monday 20 November, most likely as a result of the announced F-loan giving an incentive for banks to lend over the turn of the year.

The change in Nibor from 16 November to 20 November confirms that the announcement of the F-loan was market sensitive information. NBW thinks it is unfortunate that such information was published by email and that, for example, many foreign banks became aware of the F-loan in a rather arbitrary way because information in English was not made available at the same time as the email to Norwegian banks was sent out.

NBW notes that a plan for the non-sterilized, fully allotted F-loans with fixed rate in 2018 was published through a press release 12 February 2018. The press release was made available in both English and Norwegian at the same time. NBW supports publishing market sensitive information through press releases available also in English and recommends that this is done also in the future. It would have been better if such a press release was published also at 17 November 2017.

2.5 Conclusions

Throughout the year the evidence of a cyclical recovery in Norway became clearer. Short-term inflation forecasts were revised downwards, however, but longer-term forecasts were revised upwards. Norges Bank emphasised the cyclical recovery and longer-term inflation forecasts and NBW supports this judgement.

NBW is positive to the interest rate account, but we argue that it gives rise to communicational challenges. This issue has become more important due to judgemental assessments, that were included in the account from MPR 4-16. These assessments do not naturally fit into the interest rate account and therefore the demand for clear qualitative communication becomes crucial.

Norges Bank has in our view become clearer in its communication on judgemental assessments through 2017. NBW welcomes the continued improvement on this matter. For example, Norges Bank could include a permanent box in the report where the status of the judgemental assessments is explained.

NBW is positive to the changes made in the structure of the monetary policy report and the attempt to better coordinate the assessment of the Executive Board, the press release and the message presented at press conference.

Norges Bank has started publishing minutes and voting from the policy meetings and has increased the number of policy meetings from six to eight. In NBWs view, these changes contribute to more openness regarding monetary policy. There is still room for improvement, however. The minutes are very brief and do not provide much information about differences in opinions and Norges Bank has omitted the press conference at in-between meetings. NBW notes that Norges Bank has been reluctant to make policy changes at the in-between meetings.

NBW stresses that it is important that market-sensitive information is made available to all market participants at the same time.

3. Policy Issues for Norges Bank – the new Central Bank Act

In this section we discuss policy issues for Norges Bank. Our main point of departure is the Norwegian Official Report (NOU) 2017: 13 on the new central bank act. The Commission was appointed by Royal Decree on April 10, 2015, and the Report was submitted to the Ministry of Finance on June 23, 2017. The Commission was headed by former Secretary General of the Ministry of Finance and former Governor of Norges Bank, Svein Gjedrem.

NBW praises the Commission for presenting an in-depth analysis of conceptual issues related to the conduct of monetary policy. We have read through it, pen and paper in hand. The Report consists of seven parts. In addition to the proposal for a new central bank act and comments to the act, the Report also includes discussions of central parts of the proposed act. It is beyond our scope to comment on all parts of the Report, we will instead focus on some issues we think is of particular importance. In many cases, we support the recommendations of the Commission. There are also some cases where we think more work is needed before a decision can be reached, and in some cases, we disagree with the suggestions made by the Commission.

On June 15, 2016, the Commission was asked by the Ministry of Finance to extend the mandate and also consider the organization and management of Norges Bank and the Government Pension Fund Global (GPFG). We note that the Commission recommends to separate the GPFG from Norges Bank. We agree with NBW 2012 that "the responsibilities of the external members of Norges Bank's Executive Board are outgrowing the current institutional design". This is an important issue, however, we think the proposal entails solutions to this issue even if the GPFG stays within Norges Bank. More precisely, NBW supports the proposal to establish a committee for monetary policy and financial stability. We will return to this issue below.

In addition to the Report, we have also read through many of the consultation answers. We will not go into detail or comment on all the issues that are brought up, but we will refer to letters from some of the main contributors.

3.1 Norges Bank's independence

The current central bank act does not include a section stating Norges Bank's purpose and responsibilities. The current act states that Norges Bank is the central bank of Norway and that the bank "shall be an executive and advisory body for monetary, credit and foreign exchange policy". Moreover, it states that "[t]he King in Council may adopt resolutions regarding the operations of the Bank", and that "[t]he King makes decisions regarding the exchange rate arrangement for the krone and changes in the exchange rate level of the krone." The act is thus clearly written with a fixed exchange rate regime in mind, where the decision to change the exchange rate level is done by the government. We support the view of the Commission that the new central bank act should state a clear purpose and responsibility. This will enhance transparency and central bank independence. Under the current arrangement, Norges Bank is given a mandate with specific tasks and instruments, and the Commission proposes that this should be so also under the new act. Having goals set out already in the central bank act will limit how much the government can influence the mandate, and enhance central bank independence.

The Commission also suggests other measures that we think will increase central bank independence. First, to remove the submission duty according to which Norges Bank must submit the matter to the Ministry before it makes any decision of special importance. Second, to raise the bar before the government can use its instruction right.

The submission duty has been criticized by several previous NBW. Brifely, the argument is that if the central bank is responsible for achieving the goals set up in the mandate, it needs to have instrument independence. Under the current act, it is unclear if the Ministry, if it wanted to, could influence policy. Therefore, NBW welcomes the suggestion to abolish this passage from the current act.

Many NBW reports have argued that the submission duty is particularly unfortunate when combined with the instruction right. NBW support the suggestion to raise the bar. The chosen wording is similar to that of the Bank of England, where the government can instruct the central bank in extraordinary circumstances. We agree with the Commission that there might be circumstances where it is necessary for the Ministry to instruct the central bank, since with instrument independence, there might be cases under rare circumstances where monetary policy is conducted with other goals than those set out in the mandate. In such cases, Norges Bank will have the possibility to express its views before the Ministry uses its instruction right. Also, the "Storting shall be notified of resolutions as soon as possible". NBW thinks this operating procedure would insure that the instruction right is only used in the above stated circumstances.

The idea in the proposal for a new central bank act is that Norges Bank should have goals set by the government and independence in its use of instruments to achieve those goals. NBW notices that the so-called Cuikerman-index (Cuikerman, Webb, and Neyapti, 1992) for central bank independence would give a central bank a higher score if it sets its own goal. For this reason, the ECB is seen as one of the most independent central banks. ECB's framework was role modelled on the institutional independence of the German Bundesbank. The latter needs to be understood in light of German history and Germany's experience with very high inflation in the interwar period. The Swiss National Bank (SNB) is also viewed as one of the most independent central banks. The Swiss National Bank Act article 5 specifies a set of goals that are somewhat more specific than those in the proposed Norwegian central bank act. The independence of the SNB is given by in article 6, which states that the SNB is prohibited from "seeking and accepting instructions from Federal authorities". NBW thinks there is a trade-off between central bank independence and democratic legitimacy, and that the current proposal strikes a good balance between these concerns.

3.2 The purpose of Norges Bank

The purpose of Norges Bank is stated in the first chapter of the proposed act. Section 1-2 reads:

(1) *The purpose of Norges Bank's functions is to maintain monetary stability and promote stability of the financial system and an efficient and secure payment system.*
(2) *Norges Bank shall otherwise contribute to high and stable output and employment.*

The Commission argues that safeguarding the value of the currency should be the main responsibility of the central bank. This is uncontroversial. In the end, the central bank is the monopoly supplier of (narrow) money to society and should therefore have the responsibility of safeguarding the value of that asset. NBW agrees that a stable value of money is crucial and probably the most important contribution a central bank can make to achieve real economic stability.

The formulation "monetary stability" is somewhat vague, but is to be combined with a more specific mandate formulated by the authorities. An alternative is to specify a more specific objective already in the act, for example, that the purpose of Norges Bank's functions is to maintain price stability. This is the formulation chosen by the Swiss National Bank (see above). However, "price stability" is still not sufficiently specific to facilitate straightforward evaluations of the central bank.

NBW agrees with the Commission that maintaining an efficient and secure payment system should be part of the purpose and responsibilities of a central bank alongside with a stable currency. This fits well with the fact that the central bank is responsible for the interbank payment and settlement system. NBW is less sure that financial stability belongs in the first point. More on this issue is discussed below.

3.3 High employment as an independent monetary policy goal

International experiences

There are a few central banks with explicit goals for employment. The Federal Reserve (Fed) has a dual mandate for monetary policy. The goals of maximum employment and price stability is assigned equal weights. In the Fed act the goals are formulated as follows:

"The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."

Currently, Fed does not have a quantitative target for "maximum employment". It previously operated with a 6.5 percent unemployment threshold. This was introduced in December 2012 as a threshold for starting to consider a policy rate hike, but was removed in March 2014. In the minutes from the March 2014 meeting FOMC argued not to operate with similar thresholds in the future:

"Thus, most participants felt that quantitative thresholds, triggers, or floors should not be a part of future statement language, with a number of participants noting the uncertainty associated with defining and measuring the unemployment rate and the level of employment that would be most consistent with the Committee's maximum employment objective, or other similar concepts."

The Reserve Bank of Australia (RBA) has a mandate that assigns equal weigh to "stability of the currency", "the maintenance of full employment" and "the economic prosperity and welfare of the people of Australia". In both the Fed and the RBA the operational framework and conduction of monetary policy in practice are very similar to that in central banks considering themselves as “flexible inflation targeters” without explicit targets for employment.

Several other central banks have goals that involve supporting high employment in one way or another. Riksbanken has a main goal of price stability, but also aims at supporting economic policies such as maintaining sustainable growth and high employment. ECB aims at supporting the economic policies conducted by the government of the member states in addition to the main goal of price stability. Bank of England Act states that Bank of England (BoE) shall “maintain price stability, and subject to that, to support the economic policy of her Majesty’s Government, including its objectives for growth and employment.”

Arguments in favour of a goal of high employment

Standard economic models widely used among central banks suggest that monetary policy cannot affect potential growth or the “natural unemployment rate” (NAIRU), also referred to as the long-run level of unemployment. One could argue that high employment therefore should not be a goal of the central bank, but left to other policy areas better fitted to affect employment in the long run. Such areas could – as Norges Bank formulated it in the CME-speech held by Governor Øystein Olsen 26 October 2017 – be “wage and income formation, the tax and social security system and the functioning of the labour market”. Norges Bank ended this speech with the following message: “Delivering low and stable inflation is the best contribution monetary policy can make to favourable and stable developments in the economy over time”

Hence, it is not straightforward that a central bank act should include a goal of high employment in addition to the price stability target. However, there could be factors not covered by standard models that favour such a goal.

Hysteresis

Hysteresis is a concept explained by Ball (1999) as follows: “At a given point in time, there exists a NAIRU: pushing unemployment below a certain level causes inflation to rise. But as demand pushes unemployment away from the current NAIRU, this causes the NAIRU itself to change over time”. Hence, the theory of hysteresis suggests that short-term changes in demand can affect the long-run level of unemployment. The intuition behind hysteresis is that a negative demand shock that make people unemployed, can result in these people loosing skills or motivation needed to retain a job when demand picks up. Therefore, they stay unemployed long-term or leave the labour force.

Norges Bank seems to sympathise with such an argument. In the speech referred to above, the Governor argues that hysteresis could play a role: “Many countries, including Norway, have experienced that employment losses in connection with an economic downturn are not fully reversed following a turnaround; for example, unemployment may become entrenched at a high level or the labour force may be reduced. In the literature, this is referred to as hysteresis. Research indicates that the costs of a downturn may be far higher than the immediate output loss.”

Asymmetry or NAIRU-intervals

There are also other theories that could support a goal of high employment. Due to capacity constraints in upturns there are limits to how high employment can become. Employment cannot exceed the labour force and other inputs can limit production. As a result, the fall in employment in downturns is not necessarily compensated by an equal increase in employment in upturns. This asymmetry means that the average level of employment could be lower than the level of employment that corresponds to NAIRU.

In addition, one could question the concept of NAIRU as just one single unemployment rate. As mentioned by Holden (2017), and explained by Driscoll and Holden (2004), NAIRU could just as well be an interval. Driscoll and Holden’s analysis is based on individuals whose utility does not only depend on their own wage, but also the wage of others. In case of a NAIRU-interval, targeting the lowest unemployment rate compatible with stable inflation makes sense.

NBW supports a target of high employment, but finds it important that the primary goal of the central bank remains that of price stability. NBW agrees that asymmetric shocks and hysteresis are arguments for the central bank aiming for high– not only stable – employment. Besides, well-anchored inflation expectations might increase Norges Bank’s ability to focus on employment, as argued by Holden (2017). However, it is not obvious that this cannot be done within the current flexible inflation targeting framework. As Norges Bank formulates it in the CME-speech:

“In practice, monetary policy conducted by a central bank with a dual mandate will not necessarily differ from that of a central bank operating a flexible inflation-targeting regime. A central bank with a flexible inflation-targeting regime will also be concerned with the level of employment.”

If the central bank act includes an explicit goal of high or maximum employment, NBW agrees with Norges Bank and the Commission that this should not be a dual mandate as that of the Fed, even if the practical differences are small.

There are several reasons why the price stability target should be the main focus of Norges Bank. Moreover, it is important that the mandate is clear on what is Norges Bank's main responsibility, for example, in the case of a crisis.

First, Norges Bank has to a large extent the tools available to secure price stability. However, it does not have the same ability to affect the long-term level of employment. In the case of a dual mandate, other policy areas better fitted to affect employment could possibly leave the responsibility of high employment solely to Norges Bank, which can result in a lower long-term level of employment Second, it is difficult to measure the optimal level of employment. This can result in policy mistakes in addition to making the evaluation of monetary policy difficult, see, for example, Andersson and Claussen (2017). Third, and last, a goal of high employment might make the policy rate lower over time. Financial stability concerns on the other hand might make the policy rate higher over time.

3.4 Financial stability as a goal for Norges Bank

The Commission proposes that financial stability should be an aim of Norges Bank. This can be motivated by the fact that the central bank is the lender of last resort. For in times of financial distress, the central bank is expected to provide liquidity to prevent distress from spreading from one bank to another. In addition, the Commission proposes that Norges Bank is given a more pronounced role for macroprudential policy and related to that the executive responsibility to set the countercyclical buffer requirement (and possibly tools related to regulations of residential mortgage loans). We will return to the issue of new instruments later.

Main objectives of economic policy are to foster economic efficiency and sustainable economic growth, to reduce inequality and to stabilize the economic development. The Commission recognizes that monetary policy is important both for the level and stability of real economic activity. Therefore, they propose that: "Norges Bank shall otherwise contribute to high and stable output and employment". The use of the words "otherwise contribute" suggests that real economic stability is given a subordinate role. It is important to note, as is done in the Report, that the level and stability of employment is mainly determined by other factors than monetary policy, in other words, by structural conditions and other policy areas. Therefore, NBW agrees with the Commission that employment and real activity should be given a subordinate role.

NBW would argue that the same is true for financial stability. Since, it can be argued that the most important contribution the central bank can make to achieve financial stability, is to safeguard the currency and maintain real economic stability. Financial imbalances often build up in periods of excessive real economic growth – in fact Norges Bank uses this as an argument for putting more weight on real economic stability than a pure flexible targeting regime would imply. In addition, deep recessions and periods with large changes in the currency value, will often endanger the financial system.

NBW therefore proposes to rewrite section 1-2 as follows:

(1) The purpose of Norges Bank's functions is to maintain monetary stability and promote an efficient and secure payment system.
(2) *Norges Bank shall otherwise contribute to high and stable output and employment and stability of the financial system.*

NBW's suggestion implies that high and stable employment and financial stability are given subordinate roles. The difference is not intended to be important in normal times. The central bank should trade off variations in inflation against variations in real economic activity and they should set policy rates with an eye on how policy might affect financial stability". However, the employment level will mostly be influenced by fiscal policy and labour market laws, regulations and institutions, while financial stability will mostly be influenced by a diverse set of regulations which are not decided by Norges Bank.

An alternative is to abolish the reference to financial stability in section 1-2 (1). However, it is important that the law stresses financial stability as a goal in itself. NBW echoes the points made in NBW 2017 and questions Norges Bank's view that: "[t]he consideration of robustness is not an objective in itself, but is included because it may yield improved performance in terms of inflation, output and employment over time." Periods of financial distress will most certainly lead to lower output and employment. However, there will be real costs even if Norges Bank were able to completely stabilize inflation and the real economy. The reason is that during financial distress, profitable investments will lack financing. Also, when interest rates are cut to increase demand, profitable investments will be replaced by less profitable investments and by increases in consumption. This will not restore efficiency.

3.5 Functions of Norges Bank

Section 1-3 in the proposed act describes the functions of Norges Bank. In accordance with the objective to safeguard the currency, section 1-3 (1) states that "Norges Bank shall be the executive and advisory authority for monetary policy". This is uncontroversial since, in order for Norges Bank to achieve the goals, it needs executive authorities to do so.

Section 1-3 (2) is more problematic. It reads: "Norges Bank shall further have executive and advisory authority in the work to promote financial stability." We think that this authority naturally lies with the Financial Supervisory Authority of Norway (Finanstilsynet).

The Commission aims to give Norges Bank a more pronounced role for macroprudential policy – regulation aimed at reducing systemic risk. In particular, the Commission proposes to give Norges Bank the executive responsibility to set the countercyclical buffer requirement. It also proposes that the government should consider giving Norges Bank the responsibility to regulate residential mortgage loans. In hearing letters to the proposal (Finanstilsynet 2017 and Norges Bank 2017), both Finanstilsynet and Norges Bank's Executive Board is critical to delegating such responsibilities to Norges Bank and point out that these policies are important for microprudential regulations as well. Furthermore, Finanstilsynet is also critical to delegating the executive responsibility over the countercyclical buffer to Norges Bank. Under the current framework Norges Bank advices the Ministry of Finance on the countercyclical buffer, while Finanstilsynet expresses its opinion before the Ministry makes its final decision. Finanstilsynet notes that in Sweden, Finland and Iceland, the financial supervisory authorities have the executive responsibility to set the countercyclical buffer. In Denmark, the Ministry of Industry, Business and Financial Affairs makes the decision. The Commission argues that since Norges Bankis given instrument independence, it will insulate the decision from political pressure. As pointed out by Finanstilsynet, it is possible to achieve the same degree of instrument independence if Finanstilsynet has the executive responsibility for macroprudential policy.

What are the aims of the countercyclical buffer? Norges Bank writes, "[t]he objective of the countercyclical capital buffer is to strengthen the resilience of the banking sector to an economic downturn and counter excessive fluctuations in the credit supply that may amplify the economic cycle." Thus, the objective of the countercyclical buffer is not only to make banks more resilient in an eventual downturn, but also to smooth the credit cycle. There are good reasons to do so. In an influential paper, Jordà, Schularick and Taylor (2013) use data from 14 advanced economies over more than one hundred years to analyse the extent to which high credit growth affects the outcome in economic downturns. They find that expansions with high credit growth tend to be followed by deeper recessions and slower recoveries. Using the same method as Jordà et al., (2013), but for a shorter sample, Hansen and Torstensen (2016) analyse growth in housing prices and household credit and the fall in consumption in the following downturn. Interestingly, the authors find no relationship between housing investment and housing prices preceding the downturn and consumption in the downturn, when they control for the effect from credit growth. However, their findings suggest that rapid credit growth in the household sector tends to imply a larger contraction in consumption in downturns.

NBW notes that, in recent years Norges Bank persistently used increases in household debt ratios (combined with increases in housing prices) to justify the level of the countercyclical buffer. This does not imply that Norges Bank has increased the buffer to curb household credit growth, but it indicates that the central bank views household credit as an important indicator for financial stability.

The question is whether the countercyclical buffer affects household credit growth. In a recent paper, Juelsrud and Wold (2018) analyse the effect of changes in capital requirements. The authors use data on bank balance sheets to investigate bank behaviour following the 2013 increase in capital requirement in Norway. Their results are very interesting and have potentially important implications for macroprudential policy. Capital requirements are formulated as a minimum requirement on equity relative to the level of risk-adjusted assets, that is the so-called capital ratio. In principle, banks can therefore increase their capital ratio either by increasing the amount of equity (the nominator) or by reducing the amount of risk-adjusted assets (the denominator). Interestingly, the authors find that banks that had to increase their capital ratio in order to meet the new requirements, did so almost exclusively by reducing the amount of risk-adjusted assets. How did the banks reduce their risk-weighted assets? Primarily by reducing credit supply to the corporate sector and only secondarily by reducing credit supply to households. This is interesting and important. The empirical results, for example, Hansen and Torstensen (2016), indicate that household debt and house prices are important for the business cycle. However, it is not clear whether changes in the buffer affect credit supply to households. Does this mean that the countercyclical buffer does not work? Obviously no, since banks will be more resilient to downturns. However, the buffer seems blunter than expected, as far as its effect on household credit is concerned.

There are good reasons to view excessive credit growth – both in the household and the corporate sector – as a potential danger for financial stability. Therefore, it seems wise to make banks more resilient to downturns when credit growth is high. If the buffer cannot affect household credit growth, policymakers are wise to consider other and more effective policy tools. Regulating mortgage loans to households is one possibility, the work by Juelsrud and Wold (2018) suggests that adjusting risk weights might be another.

NBW does not think Norges Bank should be given the responsibility of the countercyclical buffer. Macroprudential policy tools strongly overlap with policy tools used in traditional regulation of the banking sector and the financial industry in general. Therefore, the gain from coordination within Finanstilsynet seems large.

3.6 Norges Bank's monetary policy instruments

The Commission underscores that the goals of the central bank should be consistent with its instruments. This is important. The most important policy instrument for Norges Bank is the key policy rate, in other words, the sight deposit rate. NBW agrees with the Commission that under normal circumstances, the only instrument the central bank should use is the conventional key policy rate.

However, recent history has told us that there might be circumstances where changing the policy rate is not sufficient to achieve a balanced development of inflation and real economic activity. In his CME-speech in October 2015, Governor Øystein Olsen discussed "[h]ow central banks influence interest rates". The starting point of the talk was the fact that internationally interest rates had fallen to very low levels. Some central banks, for example Riksbanken, had negative policy rates, while others had turned to other unconventional monetary policy measures. We will return to these measures below.

Negative interest rates

The traditional theoretical view has been that there is a zero lower bound on nominal interest rates. The reason is that when the deposit rate is zero, deposits and cash are perfect substitutes for storing value, any attempt to lower the interest rate on deposits below zero, would then imply that households and firms shift from deposits to cash. There is an even stronger reason for why borrowing rates cannot be negative. For with negative borrowing rates, even for limited periods of time, the households could borrow unlimited amounts, hold it in cash and spend the return. Households would then not have a meaningful budget constraint.

These simple theories ignore that there are costs of storing cash and using it for transactions. Holding unlimited amounts of cash would certainly also involve quite a bit of risk. Hence in practice, even borrowing rates could be, at least somewhat, negative.

It is unclear to what extent cutting policy rates below zero has expansionary effects on the economy. In his CME-speech, the Governor conjectured that, "even though the zero lower bound is not absolute, the effect of further cuts will diminish as rates approach or fall below zero". This view is confirmed in recent empirical research by Eggertsson, Juelsrud, and Wold (2017). The authors analyse bank level data in Sweden and find that the cross-sectional variation in bank lending rates increased significantly when the policy rate moved into negative territory. In fact, some banks actually reacted to cuts in the policy rate by increasing their lending rates. The authors conclude that negative rates severely influence how effective rate cuts are in stimulating the economy. They argue that when rates on reserves become negative, this will negatively affect bank profits in such a way that rate cuts may end up being contractionary.[1]

Quantitative easing and credit easing

What other options does theory (and practice) provide when interest rates are low and the central bank wish to stimulate the economy? Two policy tools that have been extensively discussed in the literature and also applied by several central banks are quantitative easing (QE) and credit easing (CE). QE refers to changes on the asset side of the central bank balance sheet, more precisely, to policies aimed at expanding the amount of reserves. The idea is to put downward pressure on interest rates by buying securities. Many economists are sceptical to whether QE actually works. In theory it is not clear why buying one risk-free asset (government bonds) by issuing another risk-free asset (central bank reserves) should influence interest rates. As long as interest rates on both reserves and short-run government bonds are zero, the two assets should be perfect substitutes. What about buying longer-term assets? This is related to the portfolio-balance effect. If the central bank buys long-term bonds, the price of those assets should increase (and the interest rate fall) if reserves and long-term bonds are imperfect substitutes. If they are close substitutes, the price effect will be small and QE will not affect interest rates on long-term government bonds.

Cúrdia and Woodford (2010a, 2010b 2011, 2016) have extended the workhorse new Keynesian model to include financial intermediation, in their 2011 paper they discuss the central bank balance sheet as a monetary policy instrument. In their framework, extending

[1] This is related to, but different from, Brunnermeier and Koby (2017) and their work on the "reversal interest rate".

central bank reserves beyond the satiation point has no effect on interest rates, even when the zero lower bound is binding. CE, on the other hand, is potentially an effective policy instrument. In their reduced-form modelling of the financial intermediary, there is a wedge between borrowing and lending rates. The reason may be costs of intermediation combined with adverse selection due to asymmetric information between borrowers and the financial intermediary. Importantly, the cost of lending is increasing in the credit volume. CE in their model is direct credit lines to borrowers from the central bank. This lending is costly, but when the interest rate wedge increases, CE might be used to reduce the wedge and thereby dampen the effect of the financial distress.

Another related and well-cited paper is Gertler and Karadi (2011). They model CE as a swap between private assets and central bank reserves. The authors note that "unlike private intermediaries, the central bank does not face constraints on its leverage ratio". In financial distress, when the borrowing constraints of financial intermediaries tighten, the central bank can step in and, in effect, lift some of the leverage away from the balance sheet of the intermediaries onto its own.

Both QE and CE are still controversial instruments. The former because its effect on the economy is unclear, while the latter because it has elements of fiscal policy.[2] Nevertheless, NBW would argue not to restrict – by law –such unconventional policies in extraordinary periods. Therefore, NBW supports the Commission's proposal that Norges Bank should retain the right to trade in financial assets and supply its own credit instruments. NBW recognizes the disagreement in the literature about the effectiveness of both QE and CE, but thinks both instruments should be part of the toolbox of a central bank.

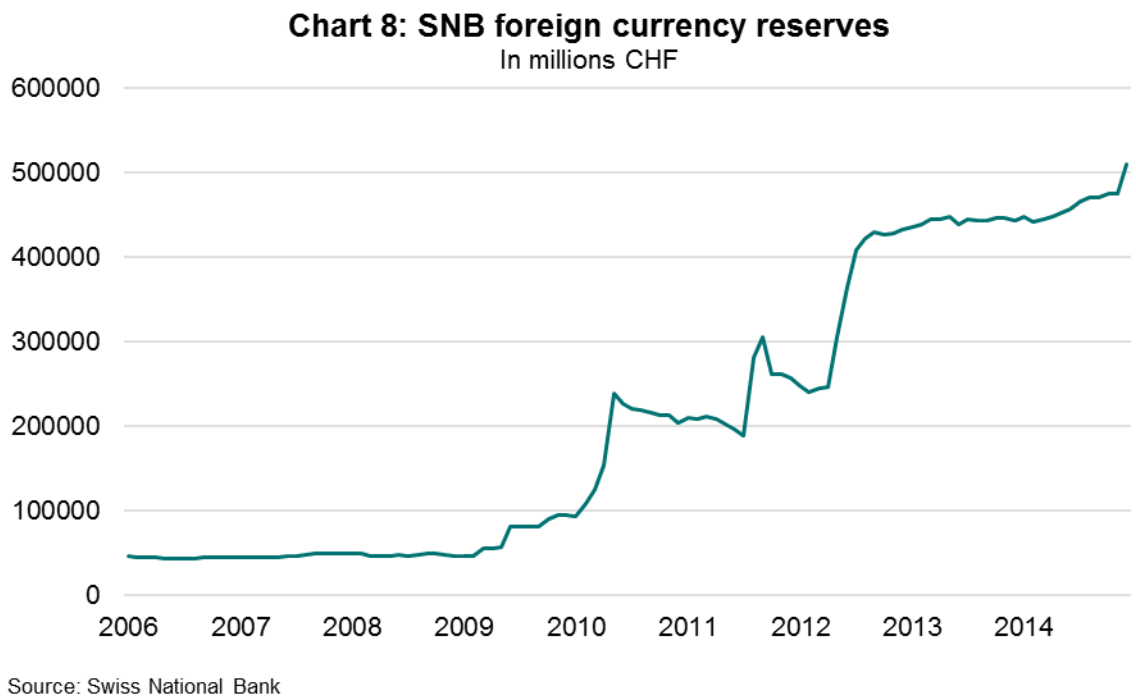
3.7 The exchange rate as a policy instruments

As mentioned earlier, the current central bank act is written with a fixed exchange rate regime in mind. Chapter 1 section 1 states that Norges Bank: "shall be an executive and advisory body for monetary, credit and *foreign exchange policy*. It shall […] monitor developments in the money, credit and *foreign exchange markets*." In the proposed act much of the references to exchange rates and foreign exchange markets are omitted. The Commission proposes that decisions about the exchange rate regime should be made by, "the King in the Council of State". This formulation means that the decision cannot – as is the case under the current act – be delegated. However, a (temporary) fixed exchange rate regime can be an instrument to achieve the inflation target when interest rates hit the negative lower bound. The fixed exchange rate is then not the target in itself, but the central bank may wish, for example, to

[2] See discussion in the Report on page 318.

set a floor on the exchange rate to stimulate the economy. This is related to Svensson's (2003) "foolproof way". He suggested that countries in a liquidity trap could devalue the currency and announce a temporary exchange rate peg until the economy is out of the trap.[3]

The inflation target is still the goal for monetary policy, but the central bank uses the exchange rate floor as an instrument while the interest rate is at the effective lower bound. In principle, there are no limits to how much the central bank can supply of its own currency, it is therefore much easier to keep the currency from appreciating than to keep it from depreciating. In the depreciating case, when the currency reserves are depleted, the central bank would have to increase interest rates to defend the currency. The experience with the European Exchange Rate Mechanism (ERM) in the early 1990's showed us that defending a depreciating currency is not an easy task.



It is unclear whether a temporary exchange rate peg constitutes a change in the exchange rate regime. For how long can the currency be pegged before we have a fixed exchange rate regime? Uncertainty about how long a temporary fixed exchange rate can last might reduce the credibility of the floor. A lack of credibility might trigger speculative attacks on the currency. Therefore, a floor that is not seen as credible tends to increase the foreign currency

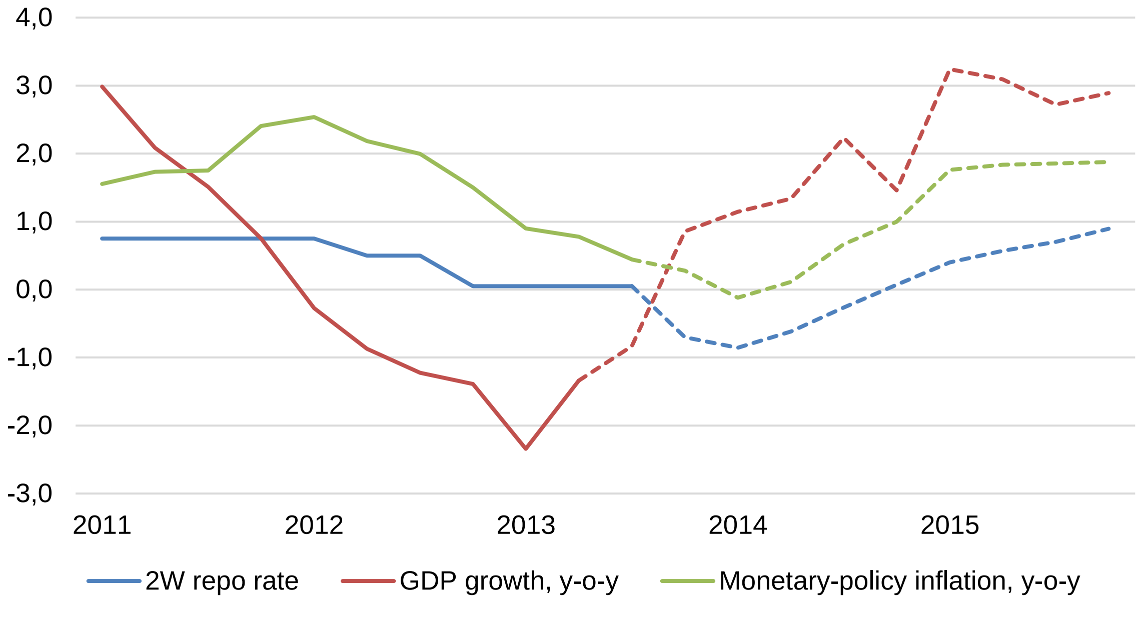
[3] If the inflation target is higher than that of the main trading partners, the central bank should announce an upwards-crawling peg.

reserves – which constitutes potential losses for the central bank when the floor is lifted. However, with a credible floor the increase in foreign reserves can be limited and therefore also the potential losses.

Both the Swiss National Bank (SNB) and the Czech National Bank (CNB) has intended to use exchange rate floors as policy instruments. The SNB announced a fixed exchange rate floor on September 6, 2011, the bank said it was "prepared to buy foreign currency in unlimited quantities". The reason was a strong appreciation of the Swiss Franc during and after the financial crises, see Chart 8 above. On January 15, 2015, the floor was abandoned, but the reasons why are unclear. What is clear, is that the amount of currency used to support the peg was large, see the Chart above. Some say the reason was the possibility of large losses on foreign currency reserves, while others have pointed to the fact that the economy developed much better than expected in light of the strong appreciation.

Chart 9: Czech GDP growth, inflation and policy rate

Per cent



Source: Czech National Bank

The CNB introduced a floor on the Koruna on November 7, 2013, to stimulate the economy and to stop the rate of inflation from falling into negative territory. The economy had been declining since the autumn of 2011 and in 2012 GDP contracted by somewhat more than 1 per cent. Inflation fell too and in the last inflation report in 2013, the CNB forecasted a temporary negative monetary-policy relevant inflation rate in early 2014. Policy rates were effectively zero from November 1, 2012, when the CNB Board decided to set the two-week repo rate to 0.05 per cent. On November 7, 2013, the CNB Board decided to keep the two-week repo at 0.05 per cent and at the same time “intervene on the FX market to weaken the koruna so that the exchange rate of the koruna against the euro is close to CZK 27/EUR”.

The floor was initially expected to be lifted at the end of 2014, but this was later postponed and the floor was first abandoned in an extraordinary policy meeting on April 6, 2017. At that point, inflation was above the inflation target, but within the admissible band, and unemployment had fallen from close to 8 per cent in early 2014 to somewhat below 5 per cent. Thus, unlike the Swiss experience, the Czech policy is generally viewed as being successful. Inflation has stayed above the target since the floor was lifted and GDP growth has picked up. The CNB have returned to conventional policy and the CNB Board actually decided to increase key policy rate to 0.25 per cent on August 3, 2017. The policy rate is now at 0.75 per cent.

NBW thinks it is important that a one-sided and temporary exchange rate peg, that is “the foolproof way”, remains a policy option for Norges Bank. NBW disagrees with the Commission’s suggestion to limit the extent to which decisions on the exchange rate regime can be delegated.

3.8 The organization of Norges Bank – the committee

According to chapter 2 section 5 of the current central bank act, the Executive Board and the Supervisory Council are the supreme authorities of Norges Bank. The Executive Board has executive and advisory authority. This implies that the Executive Board is responsible for monetary policy and the advice on the countercyclical buffer, to inform and advice the Ministry on relevant matters, to provide liquidity to society including the provision of banknotes and coins, to promote an efficient and secure payment system, and to invest the GPFG in the international stock and bond markets. Many of the tasks are delegated to the Governor and his divisions and employees. The Executive Board is headed by the Governor and consists of seven other members – the two Deputy Governors and five external members. The external members have full-time engagement outside Norges Bank and therefore limited time to prepare for board meetings. This has been a recurrent topic of NBW reports in the past.

The current act states that the: “Supervisory Council shall supervise the Bank’s activities and ensure that the rules governing the Bank’s operations are observed.” There is an important exception from this rule, stated later the same section: “The Executive Board’s exercise of discretionary authority under the Act is not subject to the Supervisory Council's supervision." Therefore, decisions on the key policy rate and advice on the countercyclical buffer fall outside the supervision of the Supervisory Council.

The Commission proposes to establish a new Committee for Monetary Policy and Financial Stability who should take over important parts of the responsibility from the Executive Board. More precisely, the Commission proposes that the Committee takes over the discretionary authority of the Executive Board. The Committee is thus to take over responsibility for the authorities that is not currently supervised by the Supervisory Council. While we are positive to establish a professional committee for monetary policy and financial stability, we are not entirely convinced that the division of supervisory responsibilities between the Ministry and the Supervisory Council is the right yardstick when dividing responsibilities between the committee and the new board. We think this part of the Report warrants further analysis. We are also not convinced by the arguments for why Norges Bank should have majority in the committee and we think it is unclear to what extent the third member will be truly independent of the Governor and the Deputy Governor.

3.9 NBW view

The starting point of our discussion of policy issues is the Report of the Law Commission on the Act relating to Norges Bank and the Monetary System. NBW praises the Commission for having presented in-depth analysis of conceptual issues. NBW notes that the Report suggests separating the Government Pension Fund Global from Norges Bank, but does not discuss this issue.

NBW supports the proposal to abolish Norges Bank's duty to submit matters of special importance to the Ministry before making any decision. Moreover, we are positive to raising the bar before the government can use its instruction right.

NBW agrees with the Commission that the new act should state a purpose for Norges Bank. We also agree that maintaining price stability and an efficient and secure payment system should be the main responsibilities of a central bank. In NBWs view, the central bank "shall otherwise contribute to high and stable output and employment and promote stability of the financial system". Compared to the proposal by the Commission, NBW argues that financial stability should be given the same subordinate role as real economic stability.

NBW does not support the proposal to give Norges Bank executive authority in the work to promote financial stability and to give the bank the responsibility to set the countercyclical capital buffer and the responsibility for regulating residential mortgage loans. NBW still argues that Norges Bank should have financial stability as a separate objective.

NBW argues that Norges Bank should be able to use the exchange rate as a policy tool in special circumstances. We are therefore negative to the suggestion by the Commission that Norges Bank should not be able to make decisions about the exchange rate regime.

NBW supports the proposal to establish a committee for monetary policy and financial stability. The division of responsibilities between the committee and the new board warrants further analysis. NBW is also skeptical to the proposal that Norges Bank should have three members in the committee, the third of which should be suggested by the Governor and appointed by the board and not the government, which is the case for the other committee members.

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