The role of monetary policy during the Covid-19 pandemic

Speech by Governor Øystein Olsen at the Centre for Monetary Economics (CME) / BI Norwegian Business School on 6 October 2020

Introduction

I would like to thank the Centre for Monetary Economics (CME) and BI for again organising this event. I greatly appreciate this opportunity to elaborate on Norges Bank's thinking with regard to monetary policy.

Since last year, the Covid-19 pandemic has turned our world upside down. From being close to the peak of an upturn, Norway and many parts of the world are now in the midst of a historically deep downturn. Virtually every country has had to adopt stringent containment measures to limit the spread of infection. The term used globally is the Great Lockdown – a shutdown of society. The economic consequences are substantial. In Norway, the downturn was amplified by a fall in oil prices.

Chart: Historical decline in GDP

In many countries, the decline in GDP in the second quarter was the largest ever recorded. In the UK, activity fell by as much as 20 percent. Although the decline has not been as deep in Norway, we are also experiencing the most severe economic downturn in a single year since the Second World War.

The theme of my speech last year was the monetary policy toolkit. Let me reiterate two messages I emphasised. First, there is a difference between the monetary policy tools we use in normal times and the tools that may be warranted in a crisis. Second, not all the measures in use in other countries are equally suited to Norway.

Over the past half-year, we have deployed many of the tools in the monetary policy toolkit I discussed the last time I was here. In today's speech, I would like to review what we have done. I will also touch upon some of the monetary policy challenges we are facing in a longer-term perspective. However, first I would like to briefly reflect on where we stand at the moment and our expectations with regard to economic developments ahead.

A historically deep downturn

Chart: A dramatic six months

The Covid-19 pandemic is a global health emergency with few historical parallels. We have to go 100 years back in time – to the Spanish flu – to find an epidemic of similar severity. Globally, Covid-19 has so far resulted in more than 35 million confirmed infections and more than one million deaths. In Norway, the first case was discovered on 26 February. Two weeks later, much of the country was closed down. Although we have succeeded in keeping infection and mortality rates at relatively low levels so far, the situation has been difficult to manage for the health authorities in Norway, as in other countries.

The first wave of Covid-19 was quickly brought under control, and from the end of April and through summer, many of the containment measures could be eased. Better control of infection rates, a partial reopening and forceful economic measures contributed to a pick-up in economic activity.

Chart: Gradual improvement

But the pandemic is still taking a toll on the Norwegian and the global economy. In Norway, activity is still lower than at the start of the year. Even though many furloughed employees have returned to work in recent months, unemployment remains high.

Just under two weeks ago, Norges Bank published new projections for developments ahead. Although activity has picked up, it will take time for it to return to its pre-pandemic level. Capacity utilisation in the economy is not expected to be close to a normal level until the end of 2023. According to the Bank's projections, unemployment will then still be somewhat higher than its level in early March.

There is considerable uncertainty regarding the pace of economic recovery, not least due to the uncertainty regarding the continuing spread of the virus and how soon a vaccine will become widely available. Looking somewhat further ahead, uncertainty is related to the persistent effects of the pandemic.

In recent weeks, we have seen that Covid-19 has flared up again in a number of places – in Norway and among Norway's trading partners. As a result, further relaxation of measures has been put on hold, and in certain areas measures have been tightened. This could put a brake on the upswing in the near term.

Chart: Private consumption during the pandemic

Households account for around half of total mainland demand. The stringent containment measures led to a sharp decline in private consumption. There was also a clear shift away from services and towards goods. Travel plans had to be put on hold and much of the cultural sector was shut down.

Even though consumption has picked up appreciably since spring, the level is still lower than at the beginning of the year and is mirrored by a marked rise in household saving. Higher saving is partly due to limitations on spending options. However, higher saving also reflects considerable uncertainty about the economic outlook.

The saving ratio will likely return to a more normal level. The upswing in consumption could be very rapid if a large number of households choose to spend their accumulated savings. On the other hand, it may well be the case that the severity of the crisis has given rise to uncertainty that will lead to a structural shift in saving for an extended period. People may also "bake in" a higher probability of other severe crises ahead and adapt their behaviour accordingly.

The shift in demand is also resulting in differences in the impact of the economic downturn across sectors. The service sector in particular is being severely affected by containment measures. In the tourism and cultural sectors, many businesses have experienced large falls in their revenues. Services consumption is still appreciably lower than its pre-pandemic level. This shift plays an important role for output and employment. The impulses from service consumption to the wider economy are far stronger than the impulses from goods consumption.

Chart: Consequences of the Covid-19 pandemic

Service businesses are also being affected by lower corporate market demand. Events have been cancelled and travel activity is low. Norges Bank recently asked enterprises in its Regional Network about what the consequences of the pandemic would be in the coming year.[1] Four out of five enterprises reported that they would reduce travel activity. One out of three expect lower investment activity, including many service businesses.

Chart: Higher unemployment among young people

As many young people work in services that were fully or partially closed in March, younger age groups in particular were affected by furloughs and redundancies. Young people also have lower seniority and less work experience than older workers and are therefore the first to be laid off when businesses downsize. Those entering the labour market now are finding it more difficult to gain a foothold. A number of studies show that unemployment at a young age may have particularly adverse consequences for future labour force attachment, especially if unemployment persists over some time.[2] This highlights the importance of limiting both the depth and duration of the economic downturn.

Economic downturns have previously accelerated structural changes, and this could also occur this time. Productivity may rise in the longer term as a result. Over a somewhat shorter time horizon, however, the Bank expects both productivity and potential employment to be lower than the pre-pandemic level. Despite support schemes aimed directly at businesses in vulnerable industries, closures will occur. Employees will have to adapt to new jobs. Experience shows that this can take time. If unemployment remains high for a long period, the risk increases of workers permanently leaving the labour force. Business

closures and bankruptcies may result in permanent losses of productive capital. In combination with lower investment activity, this may reduce productivity.

Forceful economic measures

The authorities have implemented large-scale measures to mitigate the negative consequences of the pandemic and the measures to contain it. During the lockdown phase in March and April, it was of particular importance to support employees and businesses affected financially. Unnecessary bankruptcies had to be avoided and the ties between employers and employees maintained. Key tools included financial subsidies and changes to the rules governing layoffs.

As long as the pandemic and the containment measures depress demand in some sectors, fiscal policy is best suited to meeting the challenges facing employees and businesses. Measures can be targeted at the hardest-hit industries and employee groups. At the same time, oil revenue spending has risen to a high level.

Chart: Measures adopted by Norges Bank

Monetary policy has also contributed to countering the negative economic effects of the crisis. The policy rate has been reduced from 1.5 percent to 0 percent. The policy rate has never been this low. It will most probably remain at zero for some time ahead. The economic downturn is severe, and there is considerable uncertainty surrounding the outlook. This suggests that the policy rate should be kept on hold until there are clear signs that economic conditions are normalising.

Low rates improve the liquidity situation for businesses and households experiencing a loss of income. In addition, the policy rate cuts this spring have likely stimulated activity, for example in the housing market. A pronounced fall in house prices would have amplified the downturn. As society gradually reopens, low interest rates can contribute to a more rapid return to a normal level of economic activity. This may reduce the risk of unemployment becoming entrenched at a high level.

Early in the pandemic, Norges Bank also had to work along another front. There was considerable turbulence in financial and credit markets in March and April. It was important to prevent the health crisis and the crisis in the real economy from also developing into a financial and banking crisis. Norges Bank implemented a number of measures to improve market liquidity. We offered banks extraordinary F-loans. The maturity of these loans was longer than normal, up to one year, and banks could borrow the amount they wanted at a rate equal to or slightly above the policy rate. We also eased collateral requirements. An important aim has been to ensure that the policy rate cuts passed through both to money market rates and to bank lending rates. Similar measures to strengthen liquidity and improve the functioning of financial markets were implemented by other central banks. All in all, these measures have resulted in a decline in unusually high funding market risk premiums.

At one point, Norges Bank also chose to take the unusual step of intervening in the foreign exchange market. Owing to market turbulence and poor liquidity in the krone market, the krone depreciated to a historically weak level. To ensure a well-functioning market, Norges Bank announced its readiness to purchase NOK to support the currency. The aim was to ensure that the market functioned normally. The krone has appreciated since those dramatic days in March, against the background of abating uncertainty in global financial markets and rising oil prices. However, the krone is still weaker than at the start of the year.

Other central banks have stretched monetary policy further than Norges Bank. Since the financial crisis, they have made substantial purchases of government bonds and other assets. The aim is to make monetary policy more expansionary by reducing the cost of loans with longer maturities. Over the past half-year, already existing programmes have been expanded and new programmes have been added.

In last year's CME speech, I explained why QE is not an appropriate option in Norway. The reasons are that Norway's government bond market is much thinner than in other countries, and the share of fixed-rate loans is relatively low. The Bank's assessment is that the costs of adopting such instruments could outweigh the benefits.

Chart: Central bank balance sheets have expanded

Large-scale asset purchases have expanded central bank balance sheets. However, as we see in the chart, Norges Bank's balance sheet has also expanded during the pandemic. An important explanation of the sharp rise is the substantial increase in F-loans for banks. In addition, the NOK depreciation caused an increase in the value of our foreign exchange reserves in NOK terms.

During spring, measures were also needed for the banking system, although these were primarily of a preventive nature. On the advice of Norges Bank, the Ministry of Finance reduced the countercyclical capital buffer banks must hold. The aim was to reduce the risk that banks tightened lending and thereby amplified the economic downturn.

Monetary policy challenges

Chart: Policy rates close to zero

Let me now turn to the road ahead and some challenges facing monetary policy. Central banks have again reacted swiftly and forcefully to counter a severe economic downturn. Norges Bank is not alone in setting the policy rate at a very low level; many other central banks' policy rates are now around zero percent. Although the pandemic has led to an even sharper decline in economic activity than in the wake of the 2008 financial crisis, the policy rate cuts have been far smaller in the current crisis. There are two reasons for this. First, policy rates in most other countries were already at low levels when the pandemic broke out. This was not the case at the beginning of the financial crisis. Second, there is a limit to how low it is appropriate to set the policy rate. A rate that is already at a low level when shocks occur limits the opportunities available to a central bank to counter a downturn.

Before the financial crisis, most economists regarded zero as the lower bound for policy rates. At the same time, this limit was mainly of theoretical interest. Experience from the past decade has changed perspectives on the lower bound, and we now talk of "the effective lower bound" rather than "the zero lower bound".

The lower bound for the policy rate is not a sharp boundary. It is more accurate to regard it as an area where the pass-through from the policy rate to lending and deposit rates faced by households and businesses gradually becomes weaker and where the rate has uncertain and, in part, undesirable effects on financial markets. These conditions may vary across countries. When the policy rate approaches zero, central banks must make difficult assessments surrounding the question of a further rate cut.

Central banks that did not already have negative policy rates have been reluctant to cross the zero line during the Covid-19 pandemic. Norges Bank does not envisage making further policy rate cuts from the current level. Nevertheless, the possibility of further reducing the policy rate has not been ruled out. This may, for example, be appropriate in periods of severe financial market turbulence and sharply rising risk premiums.

Chart: Norges Bank's forward guidance

An important monetary policy instrument in addition to policy rate setting is forward guidance, ie signals from a central bank about the likely future path of the policy rate. The intention is to strengthen the pass-through to long-term market rates and to convey policy signals to market participants that can inform their investment decisions. Most central banks signal future monetary policy primarily through verbal communication, often supplemented by output and inflation projections.

However, some central banks, including Norges Bank, are more explicit: we publish our own policy rate forecasts. This slide shows the Bank's latest policy rate forecast together with the projections for inflation and the output gap. In our assessment of the outlook and balance of risks, the policy rate will be kept at zero percent for some time ahead. Let me expand on how the Bank's policy rate path should be understood in the light of the lower bound on the policy rate. To do this, I will show you some model simulations in a simplified, stylised version of the Bank's main model NEMO.

Chart: Assume no lower bound

The calculations are based on the assumption that a severe negative shock occurs, such as the Covid-19 pandemic. Assume first that there is no lower bound and that the impact of the policy rate is approximately the same when it is negative as when it is positive, a kind of simplification used in most macro models, including NEMO. The model will then describe developments as illustrated by the dark blue lines. The low, negative policy rate contributes to normalising economic conditions and to inflation that reaches the target further out. But this path is, of course, a hypothetical one. We know that the policy rate will not operate normally at such low negative levels. We also believe that there are costs related to possible side-effects in financial markets when the rate falls below zero, which are not taken into account in our model.

In a scenario where conditions are taken into account that the model cannot include, the central bank stops at zero percent and keeps the rate there for a period. Based on the model, which has many of the same properties as NEMO, developments in this scenario are as illustrated by the light blue line. The downturn is slightly deeper, and it takes a little longer for the economy to normalise and for inflation to return to target. That is also why the rate rises slightly more slowly than in the path indicated by the dark blue line. According to the model analysis, it appears that the central bank is less able to attain its policy objectives when the policy rate is kept at zero percent. However, as mentioned, such model exercises do not capture all the conditions that are important for interest rate setting.

Choosing a specific policy rate path always entails a trade-off between different considerations. A lower path can result in a faster rise in activity, as illustrated by the model analysis. But at the same time, an even lower policy rate could also lead to the build-up of financial imbalances and thereby greater risk of a future downturn. Modelling and quantifying the risk associated with very low rates is very demanding. Even though research and model development, both internationally and internally at Norges Bank, are making progress in this area, these assessments must, in practice, be conducted "outside the model". The dark blue path is only "optimal" in the model-based technical sense, and it does not take into account that the policy rate operates differently when it is negative or that such a path can entail increased risk of future instability. The light blue path can therefore be interpreted as the actual "optimal" path when these considerations are taken into account.

The interest rate developments that central banks aim for are anchored in the monetary policy framework and strategy. A number of central banks are currently reviewing, or have recently reviewed, their monetary policy strategies. These processes began before the pandemic broke out, but the pandemic has brought some of the challenges to the fore, for example those related to the lower bound.

In August, the Federal Reserve announced some interesting changes to its framework.[3] One of the changes is that it now focuses on maintaining *average* inflation at two percent over time. This means that it aims to push inflation above two percent if it has been below two percent for a period. This was underpinned by the Fed's forward guidance provided at its

latest monetary policy meeting in September. The Fed announced that the policy rate was expected to be kept unchanged until "inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time". [4]

One important motivation for this change in the Fed's strategy was to contribute to a firmer anchoring of inflation expectations. When the public expects periods when monetary policy is limited by the lower bound to be more frequent in the future, inflation expectations could fall. By aiming to overshoot the target when the economy normalises, instead of only bringing inflation up to target, the central bank can counteract expectations that inflation will become too low. Successfully anchoring inflation expectations around the target also affords the central bank greater leeway to influence the real economy and thereby contribute to high and stable output and employment.

Chart: Average inflation targeting

A strategy focusing on average inflation can be illustrated by the purple path in the chart. Here, the rate is kept at zero even longer than in the light blue path. As a result, the output gap becomes positive after a period and inflation overshoots the target. This can also make today's monetary policy more expansionary through the expectations channel. It is assumed in the model simulations that economic agents are to some extent forward-looking and rational. With expectations that the rate will remain at zero for longer than in the light blue path, aggregate demand and inflation increase somewhat faster. However, this effect is very uncertain and depends in particular on the *credibility* of the strategy. If inflation is rising appreciably above target, the central bank may nevertheless raise the policy rate to counteract further wage and price pressures. This is the credibility problem the Fed is seeking to address by changing strategy.

One important motivation for the Fed's new strategy is, as mentioned, a desire to anchor inflation expectations more firmly. The combination of an economic downturn and a policy rate constrained by the lower bound entails a risk that inflation in the US will fall and remain low.

Chart: Weaker krone in a downturn

For a small open economy such as Norway, this is less of a challenge. The krone tends to depreciate markedly when a pronounced negative shock occurs, as observed during the financial crisis in 2008, the fall in oil prices in 2014 and now, when the pandemic broke out. While inflation in major economies falls when demand weakens, a krone depreciation has often pushed inflation <u>above</u> the target for a period. This can contribute to underpinning inflation expectations and, in isolation, make the lower bound less binding. There appears therefore to be less of a need in Norway for intentionally aiming to bring inflation to the opposite side of the target to counteract a fall in inflation expectations in a downturn.

The strategy behind Norges Bank's interest rate forecast is more comparable with the light blue path than the purple. We aim for an inflation rate of 2 percent

over time. But in contrast to the Fed, we have no ambition to compensate for an inability to achieve policy objectives by driving inflation above 2 percent further out. One reason is that it would entail a risk of a further pick-up in price and wage inflation. A strategy of keeping the rate low for a long period could also come into conflict with the consideration of avoiding a build-up of financial imbalances.

Our experience with flexible inflation targeting has been positive. Inflation will fluctuate somewhat around the target – both because inflation cannot be finetuned and because we also aim to promote high and stable output and employment and to counteract the build-up of financial imbalances. Living with some inflation variability around the target poses no problem as long as inflation prospects are anchored close to the target.

Conclusion

Let me conclude. Over the past six months, a global health crisis has caused a sharp economic downturn. The authorities have implemented large-scale countermeasures. Central banks have used many of the tools in the monetary policy toolkit. The banking system has been ensured ample access to liquidity and has solid buffers to absorb losses, allowing banks to maintain the supply of credit to households and businesses. Not least, the policy rate has been reduced to a historically low level, where it will most likely remain for some time ahead. An important consideration is to bring output and employment back to more normal levels as quickly as possible. This reduces the risk of more long-term damage to the economy.

Looking ahead, there is a limit to how much farther monetary policy can be stretched to stimulate the real economy. Internationally, there was little room for manoeuvre even before the onset of the pandemic. Central banks have taken extensive action since then, not least in order to counteract financial market turbulence. But stretching monetary policy too far runs the risk of triggering new imbalances further ahead.

Footnotes

1) See Brekke, H. and F. Eger (2020) Forthcoming article in the Bankplassen blog (bankplassen.norges-bank.no) (in Norwegian only).

2) See eg Gregg, P. and E. Tominey "The wage scar from male youth unemployment". *Labor Economics*, Volume 12, Issue 4, August 2005.

3) Boards of Governors of the Federal Reserve System (2020): «Federal Open Market Committee announces approval of updates to its Statement on Longer-Run Goals and Monetary Policy Strategy.» Press Release, 27 August 2020 4) Boards of Governors of the Federal Reserve System (2020): «Federal Reserve issues FOMC statement.» Press Release, 16 September.