

MAY 2020

MONETARY POLICY UPDATE

Contents

M	ONETARY POLICY ASSESSMENT	4
	Weak outlook for the Norwegian economy	8
1	THE GLOBAL ECONOMY	9
2	FINANCIAL CONDITIONS	12
	2.1 Interest rates	12
	2.2 Krone exchange rate	14
3	NORWEGIAN ECONOMY	16
	3.1 Output and demand	16
	3.2 Labour market and capacity utilisation	20
	3.3 Costs and prices	22
	Fiscal policy measures	25
	Substantial uncertainty surrounding the economic outlook	26
4	BANKS	28
Αl	NNEX	33
	Table 1 International projections	34
	Table 2 Projections for main economic aggregates	35

Monetary policy in Norway

OBJECTIVE

Monetary policy shall maintain monetary stability by keeping inflation low and stable. The operational target of monetary policy shall be annual consumer price inflation of close to 2% over time. Inflation targeting shall be forward-looking and flexible so that it can contribute to high and stable output and employment and to countering the build-up of financial imbalances.

IMPLEMENTATION

Norges Bank sets its policy rate with the aim of stabilising inflation around the target in the medium term. The horizon will depend on the disturbances to which the economy is exposed and the effects on the outlook for inflation and the real economy. In its conduct of monetary policy, Norges Bank takes into account indicators of underlying consumer price inflation.

DECISION PROCESS

The policy rate is set by Norges Bank's Monetary Policy and Financial Stability Committee. Policy rate decisions are normally taken at the Committee's monetary policy meetings. The Committee holds eight monetary policy meetings per year. The *Monetary Policy Report* is published four times a year in connection with four of the monetary policy meetings.

Decision process for the Monetary Policy Update (May 2020)

Forecasts of the Norwegian economy are normally only prepared for the monetary policy meetings in connection with the *Monetary Policy Report*. In the light of the coronavirus outbreak and the extraordinary situation in the Norwegian economy, updated forecasts were nevertheless presented to the Committee ahead of the monetary policy meeting in May.

At its meetings on 24 and 30 April, the Committee discussed the outlook and the monetary policy stance. On the basis of the discussions and recommendation from Norges Bank staff, the Committee made its decision on the policy rate on 6 May 2020. The Committee's assessment of the economic outlook and monetary policy is presented in "Monetary policy assessment" on page 4.

Monetary policy assessment

Activity in the Norwegian economy has fallen sharply owing to the coronavirus outbreak. The uncertainty surrounding developments ahead is unusually high. Low interest rates cannot prevent the coronavirus outbreak from having a substantial impact on the Norwegian economy, but can help dampen the downturn. This reduces the risk of a more prolonged impact on output and employment.

Norges Bank's Monetary Policy and Financial Stability Committee decided to reduce the policy rate from 1.5% to 0.25% in March. At the monetary policy meeting on 6 May, the Committee decided to reduce the policy rate to 0%. The Committee does not envisage making further policy rate cuts.

Sharp global downturn and very low oil prices

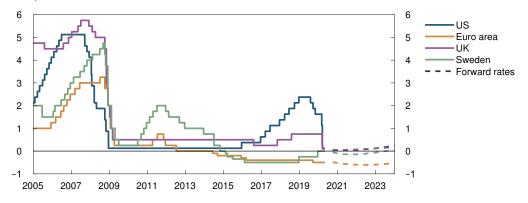
The coronavirus outbreak and containment measures have thrown the global economy into a severe economic downturn. Unemployment has increased markedly. Fiscal measures have been introduced in many countries to alleviate the situation. Central banks have cut policy rates and taken extensive measures to stabilise financial markets. Marketimplied rates indicate very low rates among our trading partners for a long time ahead.

The sharp global downturn has led to a marked contraction in global oil consumption and low oil prices. Total oil production is substantially higher than consumption, with little spare storage capacity. Against this background, oil prices are likely to remain low in the coming period. Futures prices indicate that oil prices will pick up in the years ahead.

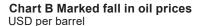
There has been considerable financial market volatility in the wake of the coronavirus outbreak both abroad and in Norway. Equity indexes have declined, and bond risk premiums have risen. Premiums in the Norwegian money market rose rapidly up to mid-March. Partly reflecting high risk premiums, the policy rate cut in March did not result in a corresponding reduction in interest rates facing firms and households. Like other central banks,

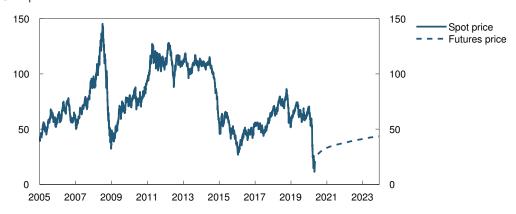
Chart A Low global interest rates

Policy rates and estimated forward rates in selected countries. Percent



Sources: Bloomberg, Refinitiv Datastream and Norges Bank





Source: Refinitiv Datastream

Norges Bank has taken a range of measures to improve market liquidity and to ensure that a lower policy rate passes through to money market rates and bank lending rates. Money market volatility has recently abated, and money market and bond premiums have fallen.

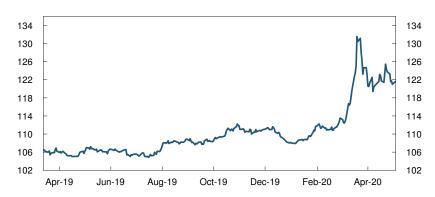
Lower oil prices and uncertainty about the economic fallout of the outbreak have weakened the krone exchange rate. On 19 March, the krone hit record-weak levels against a number of currencies. At that time, uncertainty in the NOK market was particularly high and limited liquidity contributed to amplifying NOK movements. In order to support a well-functioning NOK market, Norges Bank has made extraordinary NOK purchases totalling NOK 3.5bn in the foreign exchange market.

Abrupt and deep downturn in the Norwegian economy

In order to contain the spread of coronavirus, on 12 March the Government introduced the most far-reaching measures seen in Norway in peacetime. The coronavirus outbreak and containment measures have led to production halts and lower activity across a range of businesses. Large parts of the economy have been affected. Many employees have been furloughed or made redundant. In recent weeks, restrictions have been eased. A gradual reopening of society will lead to a rebound in economic activity.

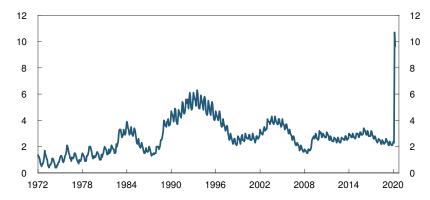
Petroleum investment will show a pronounced decline in the coming years. Oil companies have cut investment plans in the face of the oil price decline. Demand for Norwegian

Chart C Substantial krone depreciation Import-weighted exchange rate index (I-44)



Source: Norges Bank

Chart D Furloughs have resulted in high unemploymentRegistered fully unemployed as a share of the labour force. Percent



Source: Norwegian Labour and Welfare Administration (NAV)

export firms has fallen sharply, reflecting both a sharp contraction among our trading partners and a drop in foreign tourists.

The authorities have deployed extensive measures to dampen the economic fallout of the coronavirus outbreak. Financial support is being provided to prevent bankruptcy of viable businesses and to alleviate the situation of households that have suffered a loss of income.

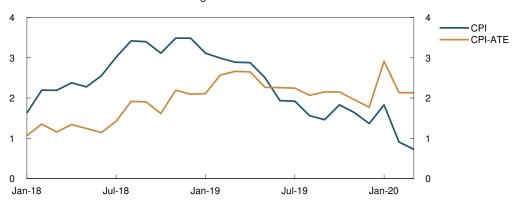
Norwegian banks are solid. Banks' credit losses have increased recently, but solid profitability enables banks to absorb large credit losses. On the advice of Norges Bank, the Ministry of Finance reduced the countercyclical capital buffer requirement for banks from 2.5% to 1% in March. This could help discourage banks from tightening lending in the face of prospects for reduced earnings.

Krone depreciation will lead to a temporary rise in inflation

In March, underlying inflation was close to the inflation target of 2%. The sharp fall in energy prices has curbed the rise in the consumer price index. The krone depreciation and higher energy prices are expected to push up price inflation ahead.

This year's wage settlement has been postponed until August because of the pandemic. Profitability has deteriorated in large parts of the business sector. Combined with high unemployment, this points to weak developments in real wages.

Chart E Underlying inflation close to inflation target CPI and CPI-ATE. Twelve-month change. Percent



Source: Statistics Norway

Policy rate reduced to 0%

The operational target of monetary policy is annual consumer price inflation of close to 2% over time. Inflation targeting shall be forward-looking and flexible, so that it can contribute to high and stable output and employment and to countering the build-up of financial imbalances.

The Norwegian economy has entered a historically deep downturn. Extensive containment measures in Norway, the oil price fall and economic contraction among our trading partners have led to a sharp fall in mainland output and a pronounced rise in unemployment. It is assumed that containment measures are gradually eased, and that economic activity in Norway picks up ahead. Nevertheless, it will likely take time for output and employment to return to the levels prevailing before the pandemic.

Low interest rates cannot prevent the coronavirus outbreak from having a substantial impact on the Norwegian economy, but can help dampen the downturn. Low interest rates reduce borrowing costs, making it easier for indebted Norwegian firms and households to weather a demanding period. At the same time, low interest rates may help reduce the risk of a sharp fall in house prices. As the situation normalises, low interest rates will support a faster rebound in activity, which may reduce the risk of persistently low employment.

The uncertainty surrounding the economic outlook is unusually high. Developments depend on the evolution of the pandemic and duration of containment measures abroad and in Norway, but also on how households and businesses respond to the easing of restrictions.

In discussing the balance of risks, the Committee gave particular weight to the risk that the downturn could have a prolonged impact and that unemployment could become entrenched at a high level. The Committee also discussed the risk of a marked rise in inflation while activity remains low. This could occur in the event of a further krone depreciation, higher costs due to the coronavirus outbreak, or shortages of some goods and services. High unemployment and low wage growth are nevertheless expected to dampen inflation in the somewhat longer term.

In the Committee's assessment, the overall outlook and balance of risks imply a very expansionary monetary policy stance. In March, the policy rate was reduced by 1.25 percentage points to 0.25%. With a policy rate close to zero, there is a limit to how much further it can be lowered. Other countries have experienced that policy rates can continue to have an impact at slightly below zero, but it is uncertain how negative rates could influence the economy and financial markets, particularly in the current situation. The Committee emphasises that it is now of particular importance to ensure well-functioning financial markets.

The Committee decided unanimously to reduce the policy rate by 0.25 percentage point to 0%. In the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely remain at today's level for some time ahead. The Committee does not envisage making further policy rate cuts.

Øystein Olsen Ida Wolden Bache Jon Nicolaisen Ingvild Almås Jeanette Strøm Fjære

6 May 2020

NORGES BANK

WEAK OUTLOOK FOR THE NORWEGIAN ECONOMY

The uncertainty surrounding the economic outlook is unusually high. Developments depend on the evolution of the pandemic and duration of the containment measures abroad and in Norway, but also on how households and businesses respond to the easing of restrictions.

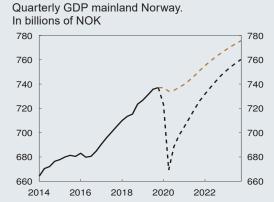
In the analysis in this report, as a technical assumption the policy rate is held constant at 0% throughout the projection period.

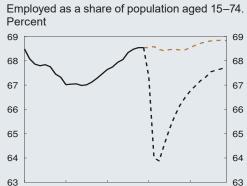
The downturn in the Norwegian economy is assumed to come to halt during spring. As containment measures are scaled back, activity is expected to increase gradually, but it will probably take time before output and employment return to the level before the pandemic (Chart F).

The krone depreciation and higher energy prices will lift price inflation ahead. Delays and disruptions in global value chains and lower productivity may also push up inflation. On the other hand, weak demand and high unemployment will restrain price and wage inflation. Overall consumer price inflation is projected to rise in the coming year before edging lower.

We normally present forecasts for variables such as inflation with a fan chart that illustrates the uncertainty in the projections. This time, the uncertainty is especially difficult to quantify, and the projections are therefore presented in charts without uncertainty bands (see box on page 26 on uncertainty surrounding the economic outlook).

Chart F Weak outlook for the Norwegian economy

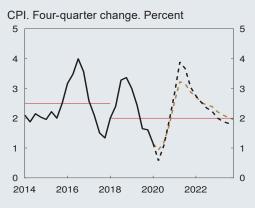


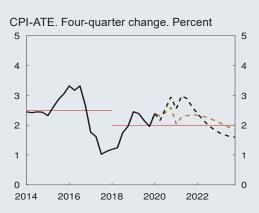


2018

2020

2022





- - Projections monetary policy meeting May 2020 - - Projections MPR 1/20 — Inflation target

2014

2016

Sources: Statistics Norway and Norges Bank

1 The global economy

Economic prospects have deteriorated considerably. Coronavirus has spread throughout the world, and many countries have introduced extensive containment measures. A significant decline in activity is projected among Norway's main trading partners in the first half of 2020. It is assumed that containment measures will be eased gradually and that global growth will pick up in the course of autumn. The projections are highly uncertain. The oil spot price has been at its lowest level in 20 years. Futures prices indicate that the oil price will begin to rise in the second half of 2020.

An abrupt and deep decline in the global economy in 2020

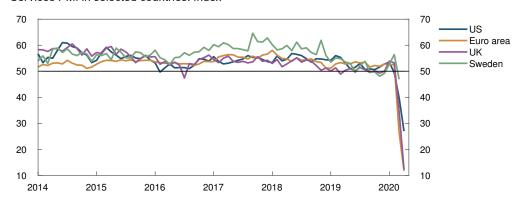
The coronavirus outbreak in China has developed into a global pandemic. Extensive containment measures have been introduced in many countries. Restrictions have been imposed on both domestic and cross-border travel. In many countries, schools and daycare centres are closed, and some countries have introduced curfews. Many businesses have been ordered to shut down, and others have seen a substantial decline in demand. The service sector is severely affected, particularly the transport and tourist industries. A significant number of businesses risk bankruptcy, and many people have already lost their jobs. Some countries have eased a few restrictions in recent weeks and started a gradual reopening, but a complete reversal of the measures will likely take a long time.

In many countries, the authorities have introduced fiscal stimulus packages in an attempt to alleviate the difficult economic situation. In addition, a number of central banks have lowered their policy rates to a very low level. Many central banks have also introduced extensive measures to improve the functioning of financial markets and ensure the transmission of monetary policy rates to market rates. The measures include the provision of liquidity in the form of loans to the banking system and programmes involving purchases of government bonds and corporate bonds. In many countries, the measures deployed are on a far larger scale than during the financial crisis. Forward rates indicate that policy rates among our main trading partners will remain at very low levels for an extended period ahead.





Chart 1.2 Sharp decline in service sector Services PMI in selected countries. Index



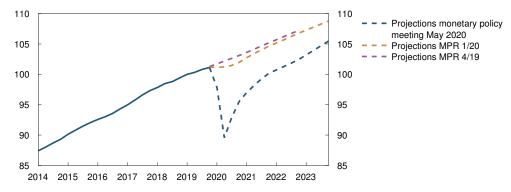
Source: Refinitiv Datastream

As a result of the coronavirus outbreak, financial conditions tightened sharply from the end of February, particularly owing to a marked fall in global equity indexes (Chart 1.1) and a substantial increase in credit premiums, especially for high-yield bonds. At the same time, long-term interest rates fell markedly. Financial market volatility has abated in recent weeks. Global equity indexes have risen and are approximately at the same levels as in the March 2020 *Monetary Policy Report*. Long-term interest rates have increased in Europe.

Available statistics indicate that trading partners' economic activity has fallen markedly so far in 2020. Figures from China, the country first affected by the virus, show a decline in output and demand of between 10% and 20% in the months when the shutdown was at its most extensive. Between 2019 Q4 and 2020 Q1, GDP in China contracted by close to 10%. In the same period, euro-area GDP fell by close to 4%. Activity indicators for Norway's main trading partners fell considerably in March and April, with the service sector showing a particularly sharp decline (Chart 1.2). In a number of countries, the indicators are at their lowest levels since these measurements began. Unemployment has risen sharply in the US. The number of unemployment benefit applicants has increased by 30 million over the past six weeks, an increase equivalent to more than 18% of the labour force. In the period ahead, statistics will probably show a marked decline in household consumption and in investment.

It is very difficult to estimate the scale of the decline in the activity level due to the pandemic and the speed of the recovery. Developments will depend on factors such as the scale of the outbreak, the duration of the containment measures, the impact of the authorities' support measures and possible longer-term changes in household and business behaviour. It is assumed that the containment measures will be eased gradually and that economies will function more normally in the course of autumn, resulting in a rise in global growth. GDP for trading partners is projected to fall by more than 6.5% in 2020 (Annex Table 1). The downward revision from the December 2019 Report, published before the coronavirus outbreak, is 8.5 percentage points for 2020. In the Bank's projections, GDP in 2020 falls considerably more than during the financial crisis in 2009. Expansionary monetary and fiscal policies and a lower oil price dampen the downturn in most countries. In the projections, GDP growth for trading partners increases to close to 5% in 2021 and 3% in 2022. GDP for trading partners does not return to pre-virus levels until mid-2022 (Chart 1.3). The projections for import growth have been revised in line with the changes in the GDP growth projections.

Chart 1.3 Abrupt and deep decline in the global economy GDP trading partners. Index. 2019 Q1 = 100



Sources: Refinitiv Datastream and Norges Bank

The projections are highly uncertain. If the spread of the virus and the containment measures increase or persist for longer than currently envisaged, developments may be weaker than projected. Activity may pick up faster than expected if the virus is contained more quickly and the various restrictions are lifted earlier than assumed (see box on alternative scenarios for global and domestic economic developments on page 26).

The sharp fall in demand and the oil price and the rise in unemployment will likely restrain price and wage inflation in both the short and medium term. Prices for some goods and services may nonetheless rise owing to supply problems or labour shortages in some sectors. The projections for underlying inflation among trading partners have been revised down for the years ahead.

Very low oil and gas prices

The oil spot price has fallen by around USD 15 per barrel since the March *Report* and has recently been about USD 20. OPEC+ countries decided at the beginning of April to cut oil production from the beginning of May by an amount close to 10% of global production. In mid-April, the International Energy Agency (IEA) estimated that global oil consumption would contract by close to 25% in 2020 Q2 as a result of the pandemic and the sharp decline in economic activity. With production substantially outstripping consumption, oil storage capacity may reach its limit. Spot prices may therefore stay low in the short term. Futures prices indicate that the oil price will rebound in the second half of 2020 and be around USD 45 per barrel at end-2023 (Chart B). Futures prices are lower than in the March *Report*. Expectations of increased oil prices are conditioned on a gradual rebound in global oil consumption, while oil production may be reduced.

Gas prices have also fallen since the March *Report*. European gas inventories are now at historically high levels. Futures prices for European gas indicate that gas prices may gradually recover in the period to 2023, but are nonetheless lower than in March.

NORGES BANK

2 Financial conditions

Uncertainty surrounding the consequences of the coronavirus outbreak has led to considerable financial market volatility, and there have been wide fluctuations in money market and bond risk premiums. The policy rate was lowered by 1.25 percentage points in March. Bank lending rates have fallen less. At the monetary policy meeting in May, the policy rate was reduced to 0%. The average residential mortgage lending rate is also assumed to edge down ahead.

Combined with the oil price decline, the uncertainty related to the coronavirus outbreak has contributed to substantial fluctuations in the krone exchange rate, and the krone is weaker than at the time of the March 2020 *Monetary Policy Report*. With a low oil price and uncertainty caused by the outbreak, the krone is expected to remain weak ahead.

2.1 Interest rates

Wide fluctuations in money market rates

The three-month money market rate Nibor expresses market expectations of the policy rate in the next three months plus a risk premium. Market-implied rates indicated in advance a certain likelihood that the policy rate would be reduced at the monetary policy meeting in May.

The Nibor premium has shown wide fluctuations in recent months and rose sharply in the period to mid-March. The sharp rise primarily reflected higher US money market premiums. Higher US dollar premiums affect the Nibor premium because Norwegian banks borrow and invest in money markets abroad.

MONETARY POLICY SINCE THE MARCH REPORT

At an extraordinary monetary policy meeting on 12 March, the policy rate was lowered by 0.50 percentage point to 1.00%. The analyses in the March *Report*, which was published on the following day, showed that the economy was entering a downturn, and there were prospects for a rise in unemployment. Norges Bank's Monetary Policy and Financial Stability Committee gave weight to the considerable uncertainty resulting from the coronavirus outbreak and the risk of a pronounced economic downturn.

The situation in the Norwegian economy deteriorated further in the days that followed. Owing to the measures to contain the spread of coronavirus, many businesses had to shut down or reduce activity and unemployment rose markedly. The coronavirus outbreak had an increasingly severe impact on the global economy, and the oil price had fallen further. Financial market turbulence had intensified and higher money market and bond premiums raised financing costs for Norwegian businesses. The krone exchange rate had depreciated considerably. At a second extraordinary monetary policy meeting on 19 March, the policy rate was lowered by a further 0.75 percentage point to 0.25%. The Committee did not rule out that the policy rate could be reduced further.

2021

2022

2023

0

Chart 2.1 Market turbulence led to spike in money market premiums Percentage points

Sources: Refinitiv Datastream and Norges Bank

2016

2015

2014

2017

2018

2019

2020

Extensive liquidity measures

Since market turbulence intensified in March, Norges Bank has taken a range of measures to improve liquidity and to ensure that a lower policy rate passes through to money market rates (see box). So far, the measures seem to have pushed down money market premiums. Similarly, the measures launched by the Federal Reserve have contributed to a decrease in US dollar premiums recently, which has also pulled down the Nibor premium. The premium, as calculated by Norges Bank, has fallen since the March Report (Chart 2.1). The premium is assumed to remain around today's level in the years ahead.

Higher credit premiums

Bond premiums have risen markedly since the March *Report*. Premiums on senior bank bonds are now 0.40 percentage point higher than in March, while covered bond premiums have risen overall by 0.1 percentage point. The rise in credit premiums in March was somewhat smaller, but more abrupt, than during the financial crisis in 2007 and 2008. Large enterprises can obtain funding directly in the bond market, but risk premiums have risen sharply also in this market during the period. The increase in risk premiums is likely due to both a deterioration in market liquidity and the pricing in of higher credit risk.

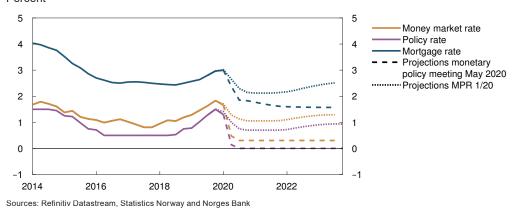
Credit premiums have fallen back somewhat in recent weeks, likely reflecting increased liquidity provision by Norges Bank and government support measures aimed at the business sector.

Lower residential mortgage lending rates

Well-functioning banks are important for ensuring that the policy rate passes through to interest rates facing households and businesses. Norwegian banks are solid. Banks' credit losses have risen recently, but solid profitability enables them to absorb large losses. On the advice of Norges Bank, the Ministry of Finance reduced the countercyclical capital buffer requirement for banks from 2.5% to 1% in March. This could help discourage banks from tightening lending in the face of prospects for reduced earnings (see Section 4).

Banks' quoted lending rates at end-April indicate that the average residential mortgage lending rate has decreased by about 0.85 percentage point since the March Report. The fact that the reduction in the policy rate in March has not had a stronger impact on residential mortgage rates may reflect the high money market premiums in March and an increase in bank bond premiums. The reduction in the policy rate in May is assumed

Chart 2.2 Lending rates have fallen less than the key policy rate Percent



to pass through to bank lending rates, and the residential mortgage rate is expected to be close to $1\frac{3}{4}$ % in the years ahead (Chart 2.2).

Banks' corporate lending rates are normally directly linked to Nibor. The political authorities have approved a loan guarantee scheme for businesses and a financial support scheme for businesses with a large fall in turnover. Both schemes will reduce the risk of bank credit losses and will likely contribute to a further decrease in lending rates.

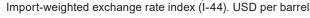
2.2 Krone exchange rate

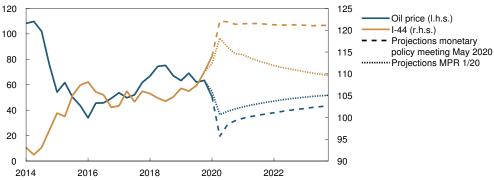
Weaker krone

The krone exchange rate, as measured by the import-weighted exchange rate index I-44, is now around 4% weaker than at the time of the March *Report* (Chart 2.3). A lower oil price and uncertainty about the economic consequences of the coronavirus outbreak have likely contributed to the depreciation.

The exchange rate has shown substantial fluctuations since the March *Report*, and on 19 March the krone reached record-low levels against a number of currencies. Uncertainty in the NOK market was particularly high at that time, and the exchange rate movements were amplified by limited liquidity. On the same day, Norges Bank announced that, given the extraordinary conditions in the foreign exchange market, there might be a need to

Chart 2.3 Weak krone and low oil price





Sources: Refinitiv Datastream and Norges Bank

intervene in the market by purchasing NOK. To support market functioning, Norges Bank made extraordinary NOK purchases in the foreign exchange market totalling NOK 3.5bn in March. A slight easing of uncertainty in global financial markets towards the end of March likely contributed to a renewed appreciation of the krone.

In an environment of low oil prices and uncertainty about the impact of the coronavirus outbreak, the krone is expected to remain weak throughout the projection period.

EXTENSIVE LIQUIDITY MEASURES

The coronavirus outbreak and extensive global containment measures have led to considerable market volatility, with wide fluctuations in money market and bond risk premiums. Norges Bank has taken a range of measures to improve liquidity and to ensure that a lower policy rate passes through to money market rates and bank lending rates.

Extraordinary F-loans

Norges Bank has since 13 March offered extraordinary F-loans to banks. F-loans are now being offered with maturities from one week up to 12 months. The F-loans are provided against collateral and at a floating rate. All the loans have been fully allotted, and extraordinary F-loans will be offered as long as necessary.

Changes in the guidelines for pledging securities for loans from Norges Bank

On 18 March, Norges Bank announced temporary changes in the guidelines for pledging securities for loans from Norges Bank to increase use of its extraordinary lending facility (F-loans).

Temporary US dollar liquidity arrangement between the Federal Reserve and Norges Bank

On 19 March, Norges Bank and a number of other central banks announced the establishment of temporary US dollar liquidity arrangements (swap lines) with the US Federal Reserve. These facilities were designed to address the considerable demand for US dollars in global financial markets and the resulting high premiums on US dollar funding. Norges Bank has therefore offered US dollar three-month F-loans to banks. The loans are offered against collateral in the form of securities pre-approved by Norges Bank with an additional haircut for foreign exchange risk.

NORGES BANK

3 Norwegian economy

The Norwegian economy has entered a historically deep downturn. The coronavirus outbreak, extensive containment measures in Norway, the oil price fall and economic contraction among Norway's trading partners have led to a sharp fall in mainland output and a rise in unemployment to a very high level.

The uncertainty surrounding developments ahead is unusually high. Developments depend on the evolution of the pandemic and the duration of containment measures abroad and in Norway, but also on how households and businesses respond to the easing of restrictions.

The decline in the Norwegian economy is assumed to come to a halt in spring, and activity is expected to pick up gradually as containment measures are scaled back. Between 2019 and 2020, a decline in mainland GDP of around 5% is projected. There are prospects that unemployment will recede ahead, but it will take time before it returns to the level prevailing before the pandemic.

3.1 Output and demand

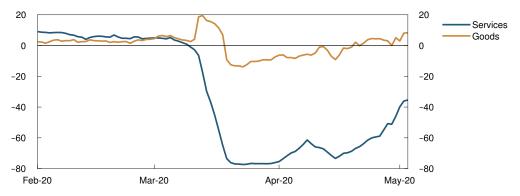
Abrupt and sharp fall in activity

During the first two months of 2020, activity in the mainland economy was close to normal. In March, this picture changed drastically. In order to contain the spread of coronavirus, extensive measures were introduced, including a ban on entry, business closures and the closure of schools and daycare centres (see box). The strong measures have led to production halts and reduced activity across a range of businesses. Tourism ground to a halt, cultural events were cancelled and retail sales fell.

Daily bank card transaction data (via BankAxept) indicate a sharp fall in household consumption when the containment measures were introduced (Chart 3.1). Service purchases showed the steepest fall, but the fall in retail sales was also substantial. In April, retail sales gradually rose and were somewhat higher at the end of the month than in the same period in 2019. Service purchases via BankAxept increased markedly in the second half

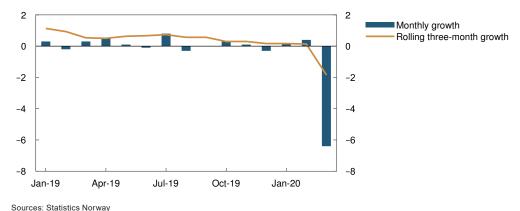
Chart 3.1 Sharp fall in consumption

Value of debit card transactions via BankAxept in 2020 relative to 2019. Percent



Sources: BankAxept and Vipps AS

Chart 3.2 Reduced activity in the Norwegian economy Growth in mainland GDP. Seasonally adjusted. Percent



of April but at the end of the month were still considerably lower than in the same period in 2019.

The lockdown has rippled through large parts of the economy. Preliminary data show that mainland GDP fell by 6.4% in March (Chart 3.2). The decline has been most pronounced in services, but manufacturing output has also fallen.

The economic decline is being amplified by the sharp contraction among Norway's trading partners in the wake of the coronavirus outbreak. In addition, the pronounced oil price fall is weighing on activity in the Norwegian economy. A low policy rate and extensive fiscal policy measures will help dampen the decline (see box on fiscal policy on page 25).

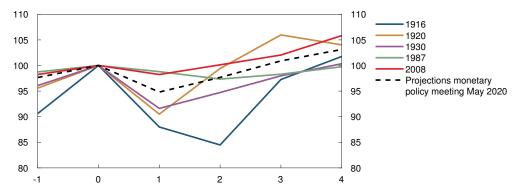
In recent weeks, some containment measures were eased. Further easing is assumed in the period ahead, but a number of measures will likely remain in force through autumn. The easing will contribute to a gradual pick-up in activity. Responses from a sample of Regional Network contacts in April indicate that there will be a sharp fall in activity in 2020 Q2. Four out of ten enterprises expect activity to normalise in 2021 at the earliest.

The decline in the Norwegian economy is assumed to come to a halt in spring, and a modest pick-up in activity is expected ahead. Overall, mainland GDP in 2020 Q2 is projected to be around 9% lower than in 2019 Q4. Following growth in the second half of the year, mainland GDP in 2020 is expected to be around 5% lower than in 2019. A steeper economic downturn has not been seen in Norway in peacetime since the 1930s (Chart 3.3).

Uncertainty surrounding the outlook is unusually high

Uncertainty surrounding economic developments ahead is unusually high. Developments depend on the evolution of the pandemic and the duration of containment measures abroad and in Norway, but will also be heavily influenced by how households and businesses adapt. Even if containment measures are gradually eased, there is reason to believe that many will tend to avoid areas posing a contagion risk. Firms may continue home office arrangements and replace air travel and hotel stays with video conferences. Holidays may be spent in Norway rather than abroad. The uncertainty created by the coronavirus outbreak will likely result in increased household saving and postponement of business investments. The scale and duration of such changes are uncertain. It is also

Chart 3.3 It will take time before the decline reverses
Developmentas in mainland GDP compared with earlier crises



Sources: Statistics Norway and Norges Bank (Historical Monetary Statistics for Norway - Part III (forthcoming)).

possible that some behavioural changes will persist after the pandemic is over (see box on page 26 on the uncertainty surrounding the economic outlook).

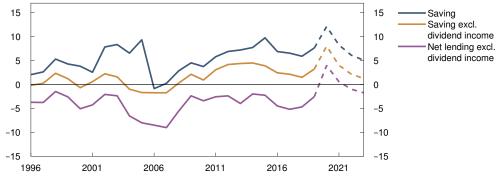
In the years ahead, growth in the mainland economy is expected to be higher than observed in recent years, but it will take time before the decline reverses. Activity is expected to be back at approximately its pre-virus level in a couple of years, but still lower than projected in the March 2020 *Monetary Policy Report* (Chart F).

Uncertainty may result in high saving

High public demand and a gradual normalisation of household consumption is likely to contribute to higher economic activity next year. Nevertheless, it may take time before consumption is back at pre-virus levels. Prospects for low wage growth and high unemployment suggest weak growth in household disposable income ahead, even though new and expanded support schemes will partially compensate for loss of income for those without jobs.

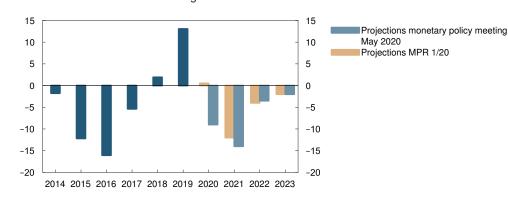
The containment measures have prompted a sharp rise in saving in 2020 (Chart 3.4). The easing of restrictions will contribute to lower saving ahead, but with the uncertainty created by the outbreak, it may take time before saving normalises.

Chart 3.4 Containment measures and high uncertainty may result in high saving Household saving and net lending. Share of disposable income. Percent



Sources: Statistics Norway and Norges Bank

Chart 3.5 Sharp fall in petroleum investments Petroleum investment. Annual change. Percent



Sources: Statistics Norway and Norges Bank

Exports will likely rise as growth eventually picks up among trading partners. With higher external demand, a weak krone may also lift exports. A weak krone also suggests lower imports. At the same time, it will probably take time before the flow of tourists into and out of Norway normalises.

Sharp fall in investment

Already prior to the coronavirus outbreak, there were prospects that petroleum investment would decline in the years ahead. The outbreak has led to a sharp fall in oil and gas prices, increased uncertainty surrounding futures prices and to slower progress on new and ongoing projects. Oil companies have therefore cut their investment plans, and investment on the shelf is projected to fall far more than projected in the March *Report* (Chart 3.5). At the same time, the decline is expected to be dampened by changes to petroleum taxation.

EXTENSIVE CONTAINMENT MEASURES

In order to contain the spread of coronavirus, on March 12 the Government introduced the most far-reaching measures seen in Norway in peacetime. They included closing all daycare centres and educational institutions, prohibiting cultural and sporting events, closing all bars and clubs that do not serve food, prohibiting person-to-person services, such as hairdressers, skin care, physiotherapy, opticians and psychologists and closing fitness centres and indoor swimming pools. The authorities urged the use of home offices, while advising against the use of public transport. Those who had been in contact with infected persons had to be quarantined, as did all Norwegian citizens returning from abroad. Foreign nationals without a critical reason to stay in the country were denied entry.

In recent weeks, some of these measures were eased. Daycare centres have opened, and pupils in the lowest grades may again physically attend school. Person-to-person services have been allowed to reopen. The ban on entry for foreign nationals has been relaxed to give EEA nationals leave to enter for work purposes. The authorities have announced that there will be a gradual and controlled easing of containment measures further ahead.

There are also prospects for a pronounced decline in mainland business investment. The Storting (Norwegian parliament) has approved extensive support schemes for businesses experiencing a loss of revenue, but profitability in many business sectors will nevertheless fall in 2020. Along with prospects for low capacity utilisation in the economy, this will likely contribute to reduced investment activity. Moreover, the uncertainty created by the outbreak suggests that investment projects will be postponed.

Lower housing market activity

Since the containment measures were implemented, housing market activity has slowed, and house prices have fallen a little. The sharp rise in unemployment, along with uncertainty surrounding the outbreak, will contribute to reduced demand and lower prices in the housing market in the coming period. Prospects that housing supply may also edge lower will likely help to counter these effects. As uncertainty related to the pandemic abates, low interest rates and improvements in labour market conditions are expected to boost demand. House prices are projected to fall by around 5% between March 2020 and March 2021, before showing a moderate rise.

New home sales have fallen recently, and housing investment is also expected to fall sharply in 2020. Looking further ahead, housing investment is projected to pick up again, in pace with rising house prices.

3.2 Labour market and capacity utilisation

High unemployment

At the beginning of 2020, unemployment was low, and employment was estimated to be close to potential. The coronavirus outbreak has resulted in furloughs by a large number of firms, and the number of unemployment benefit applications to the Norwegian Labour and Welfare Administration (NAV) has risen sharply. Hardest hit are hotel and food service employees, more than 60% of whom have applied for unemployment benefits (Chart 3.6). The largest share of benefit applications are from furloughed employees, but ordinary benefit applications have also risen markedly, reflecting downsizing by many businesses.

At the end of April, 269 000 persons were registered as fully unemployed, or 9.6% of the labour force. In addition, 5.0% were registered as partially unemployed. Unemployment edged lower between March and April but is still very high. About 60% of the fully unemployed are furloughed, according to NAV. If furloughed employees are excluded, unemployees are excluded, unemployees are excluded.

Chart 3.6 A large share of wage earners has applied for unemployment benefits Applications for unemployment benefits, 9 March – 28 April. By sector. Percent

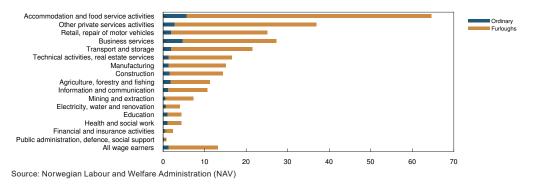
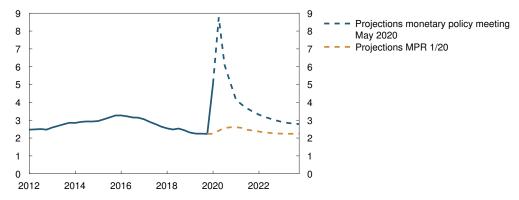


Chart 3.7 Sharp rise in unemployment

Registered unemployed as share of the labour force. Fully unemployed. Percent



Sources: Norwegian Labour and Welfare Administration (NAV) and Norges Bank

ployment is thus around 3.8%. It has been 15 years since registered unemployment was that high.

Unemployment has risen in all age groups, but especially among the youngest cohorts, who are entering the labour market. Among persons aged between 20 and 24, unemployment has risen from 3.3% of the labour force in February to 15.2% in April.

While furloughed employees receiving unemployment benefits are counted as unemployed by NAV, Statistics Norway counts them as employed in the first three months of furlough. According to Statistics Norway's Labour Force Survey (LFS), the number of employed edged up between February and March. However, the high number of furloughs are reflected in the 8.9% decline in the number of employed persons in work between February and March. The number of hours worked also fell sharply.

Lower employment rate

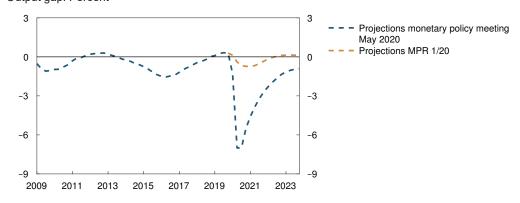
A substantial share of furloughed staff are expected to return to their jobs as containment measures are scaled back. Since many are likely to be back after less than three months, their furlough will not be reflected in the employment statistics. Nevertheless, there is reason to expect that a number of businesses will have to close or reduce staffing on a more permanent basis, so that furloughed employees are made redundant, and employment declines. One in four of the Bank's Regional Network contacts is now planning for lower employment in the period to summer. This is far more than in February, when fewer than one in ten indicated plans to reduce staffing.

It is assumed that registered unemployment will fall fairly quickly in the coming months, falling towards 5% towards the end of 2020, before declining more gradually in the coming years (Chart 3.7). Employment will likely fall markedly in 2020, increasing thereafter as activity in the Norwegian economy picks up. Employment towards the end of the projection period is projected to be at the same level as at the end of 2019.

Measured as a share of the population, employment among residents will likely fall sharply in 2020. We believe that employment will rise thereafter, but still be somewhat lower at the end of the projection period than pre-virus (Chart F).

NORGES BANK

Chart 3.8 Abrupt fall in capacity utilisation Output gap. Percent



Source: Norges Bank

Abrupt fall in capacity utilisation

At the beginning of 2020, capacity utilisation in the Norwegian economy was assessed to be close to a normal level (Chart 3.8). The coronavirus outbreak and containment measures have led to mandatory business closures, quarantining of workers and disruptions in value chains. In the course of a few weeks, unemployment has risen to a historically high level. More than half of the unemployed are on furlough, according to NAV, and there is reason to believe that many of these will return in a relatively short time to the jobs from which they are furloughed. It is difficult to project capacity utilisation with such abrupt shifts, but the current assessment is that the amount of spare capacity in the economy is very high.

There is a risk that the economic downturn will have prolonged effects on potential output. Among other things, business closures and bankruptcies can result in loss of capital equipment. There is also a risk that the sharp economic decline will have prolonged effects on the labour market. Workers who are idled for an extended period may lose skills. Young persons who do not enter the labour force after completing schooling and education also risk remaining outside it when demand picks up. Long-term unemployment may result in some leaving the labour force permanently. Growth in potential employment is therefore projected to be somewhat lower than previously envisaged.

Capacity utilisation in the economy is expected to rise gradually in the years ahead, but it is expected to take time before it returns to a normal level. Employment is still expected to be lower than potential at the end of 2023.

3.3 Costs and prices

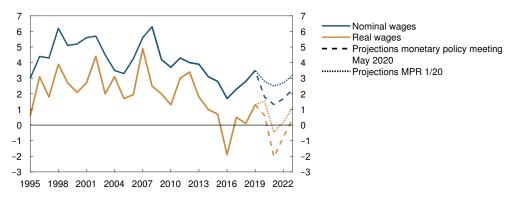
Prospects for low wage growth

Owing to the coronavirus outbreak, this year's wage settlement has been postponed to August. Turnover has fallen sharply in many sectors. Government support schemes are providing relief, but overall profitability is likely to decline. Many businesses have had to close or curtail operations. For many of those who have been able to remain in operation, containment measures have led to increased costs and lower productivity. Together with high unemployment, this points to very moderate pay increases in 2020.

On the other hand, the average wage level may be pulled up by the large-scale downsizing in low-wage sectors. The pay increases awarded in 2019 will also contribute to a

Chart 3.9 Prospects for low wage growth

Wages. Annual change. Percent



Sources: Statistics Norway and Norges Bank

higher average wage level in 2020 than in 2019. Overall, annual wage growth in 2020 is expected to be just below 2%.

Low oil prices and high unemployment are also expected to have a dampening effect on wage growth in the years ahead. The factors pulling up wage growth in 2020 will likely go into reverse in 2021, and wage growth is projected to be lower in 2021 than in 2020. Further ahead, wage growth is expected to edge higher as economic activity picks up (Chart 3.9).

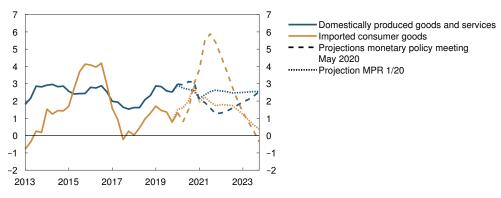
Weak demand will restrain inflation

In 2019, consumer prices in Norway rose by 2.2%. In the first months of 2020, CPI inflation slowed markedly, reflecting a fall in electricity prices. At the same time, the rise in the CPI adjusted for tax changes and excluding energy products (CPI-ATE) picked up slightly. In March, twelve-month CPI inflation was 0.9%, while twelve-month CPI-ATE inflation was 2.1%. In the near term, measured price developments may be affected by insufficient data (see box).

The sharp krone depreciation will likely lead to a pronounced rise in inflation in the coming year, especially imported consumer goods inflation. Higher costs and lower productivity

Chart 3.10 Weak krone will push up near-term inflation

Domestically produced goods and services and imported consumer goods in CPI-ATE. Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank

MEASURING THE CPI DURING THE CORONAVIRUS OUTBREAK

The CPI comprises a basket of goods and services weighted to reflect the goods and services consumed by households. The weights are updated in January of each year and remain unchanged through December. The coronavirus outbreak and extensive containment measures have had an impact on household consumption, and there is practically no turnover in some markets. This means that in April, and probably for some months to come, there will not be sufficient data for some service components to measure prices. Statistics Norway, which compiles the CPI, has indicated that the most suitable method for dealing with the lack of price observations will be to assume the same price change for service components where consumption is zero as the change in the total CPI. In the projections, use of this method is assumed. Overall, it pulls down CPI-ATE inflation in the coming period.

owing to the coronavirus outbreak may push up the rise in prices for some goods and services. At the same time, delays and disruptions in global production chains may result in reduced supply and a higher rise in prices for some goods. On the other hand, low wage growth, weak demand and high unemployment will help restrain the rise in prices for domestically produced goods and services.

Overall, CPI-ATE inflation is expected to rise in the coming year, moderating thereafter. Electricity futures prices suggest that CPI inflation further out will be higher than CPI-ATE inflation. Inflation in 2021 is expected to be higher than the inflation target, but to drift down thereafter to below 2% further out (Chart F).

With the current path for CPI inflation and wage growth, real wages should decline by close to 2% between 2019 and 2023.

Price developments are shrouded in uncertainty. There is a risk that shortages of some goods or services may drive up prices when demand rebounds. In addition, the price-driving effect of lower productivity and higher costs owing to firms' containment measures may be greater than currently assumed. On the other hand, if the downturn proves more prolonged than assumed, price and wage inflation may turn out lower.

¹ See https://www.ssb.no/en/priser-og-prisindekser/artikler-og-publikasjoner/how-does-the-corona-situation-affect-cpi for a more detailed review.

FISCAL POLICY MEASURES

The authorities have launched a range of fiscal policy measures to help dampen the economic impacts of the coronavirus outbreak. To date, the economic measures are primarily aimed at supporting businesses and households that are now suffering a loss of income. Among other things, companies suffering a substantial fall in turnover will receive compensation for a share of their fixed costs and employer social security contribution rates will be reduced in May and June. The periods where employers are required to pay wages to employees on sick leave or furlough have been reduced. At the same time, the government will pay furloughed employees full wages (up to six times the National Insurance Scheme basic amount (G)) during the first 20 days of the furlough period. In addition, new income security schemes have been established for the self-employed, freelancers and students.

In all, the economic measures presented are estimated to increase the 2020 structural, non-oil budget deficit by NOK 139bn,¹ or just under 5% of mainland GDP.

In addition, temporary changes to petroleum tax have been proposed, where oil companies' capital can be depreciated immediately for special petroleum tax purposes in 2020 and 2021 rather than over six years. This is estimated to reduce government revenues by a total of NOK 100bn in 2020 and 2021, but as this entails a reduction in the cash flow from petroleum activity, it does not affect the structural, non-oil budget deficit. Nor is the structural, non-oil budget affected by the postponement of a number of tax payments and the establishment of loan and guarantee schemes totalling NOK 100bn.

At the same time, the Government has announced that further measures may be implemented aimed at stimulating economic activity as containment measures are eased. The revised budget for 2020 will be presented on 12 May, and it was also announced that a separate proposition on the exit from the crisis will be introduced around the end of May.

The measures implemented so far imply a structural, non-oil deficit of around 4% of the value of the Government Pension Fund Global (GPFG) in 2020. In the National Budget for 2020, the structural deficit was estimated at 2.6% of the value of the GPFG in 2020.

Growth in public demand is expected to pick up sharply as society gradually reopens. On an annual basis, the growth projections for 2021 in particular have been revised up (Annex Table 2).

Even though growth in public demand is projected to increase, total petroleum revenue spending is assumed to decline towards 3% of the value of the GPFG through the projection period, as the extraordinary support measures implemented so far are largely temporary and spending on support schemes will fall as economic activity picks up.

 $^{1\}quad Estimate \ based \ on \ Prop. \ 73\ S\ (2001-2020)\ Proposition \ to \ the \ Storting \ (draft \ resolution), \ 3\ April \ 2020.$

SUBSTANTIAL UNCERTAINTY SURROUNDING THE ECONOMIC OUTLOOK

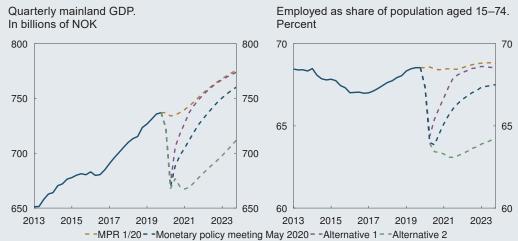
The uncertainty surrounding the economic outlook is unusually high. We have therefore chosen to illustrate part of the uncertainty by designing two alternative economic scenarios. In one scenario, growth recovers faster than projected in this report, while in the other the downturn becomes deeper and longer than projected.

In Alternative 1, the infection rate remains low, and most restrictions are eased early summer without a rebound in the pandemic. We also assume that extensive economic support measures are kept in place until a recovery gains a solid footing. In Alternative 2, the easing of restrictions through spring is followed by a rebound in the infection rate, culminating in a new peak later this year. In this scenario, containment measures are kept in place longer, and there may also be a need to reintroduce certain measures. Both scenarios assume that an antiviral vaccine or drug is found in two years at the latest. Simplifying, we assume that the evolution of the virus and duration of containment measures abroad and in Norway are similar in both scenarios. The assumptions about oil prices and economic developments abroad are thus different in the two scenarios.

The projections for the coming quarter are based on our assessment of developments in individual industries under the two alternative assumptions about infection rates at home and abroad. Further out, when the situation normalises, the scenarios are based on our macroeconomic model NEMO. As a technical assumption, the policy rate is held constant at zero until the model-based analysis implies a rate rise.

In Alternative 1, activity rapidly picks up again, and unemployment shows a marked fall (Table 3.A and Chart 3.A). Since the containment measures are eased relatively quickly, there is no reason to expect a substantial impact on long-term potential output. In this scenario, the model-based analysis implies a gradual rate rise towards the end of the projection period.

Chart 3.A Substantial uncertainty surrounding the economic outlook



Sources: Statistics Norway and Norges Bank

In Alternative 2, the downturn in the Norwegian economy becomes deeper and longer than in the baseline scenario. Persistent uncertainty induces firms to exercise restraint in investing and households to save more. Combined with weak global developments, low oil prices and reduced income growth, it takes longer for demand, and hence output and employment, to return to normal. Persistently high unemployment leads to an increase in labour force exit, resulting in lower potential output than in the baseline. A long period of low investment pulls in the same direction. Both output and employment pick up after a while, but the activity level at the end of the projection period will still be a good deal lower than the pre-virus level. Even with extensive fiscal measures, the model-based analysis implies a policy rate of close to zero throughout the projection period.

Table 3.A Projections for main economic aggregates

	Percentage change from previous year (unless otherwise stated)								
		Alternative 1				Alternative 2			
	2020	2021	2022	2023	2020	2021	2022	2023	
International									
GDP trading partners ¹	-4.4	6.1	2.6	2.1	-8.6	1.1	2.7	2.6	
Oil price ²	33.4	40.7	49.5	56.3	31.8	29.4	29.6	29.1	
Norway									
GDP, mainland Norway	-3.8	5.0	2.7	1.5	-6.6	-1.7	2.4	2.5	
- Household consumption	-5.0	6.1	3.2	2.0	-11.8	-2.1	4.4	4.4	
- Petroleum investment	-8.0	-10.0	-1.0	4.0	-12.0	-20.0	-14.0	-8.0	
- Business investment	-10.4	4.4	2.3	0.6	-16.1	-11.9	4.0	4.5	
Registered unemployment rate (level)	5.9	2.8	2.4	2.4	7.2	6.3	5.7	5.1	
Exchange rate (I-44) (level)	119.3	117.9	115.4	112.9	121.3	126.9	125.3	122.0	
Annual wages	1.9	2.0	2.5	3.2	1.4	0.0	0.0	0.5	
CPI-ATE	2.6	2.5	2.2	1.9	2.6	2.5	1.6	0.7	

¹ The aggregate includes: China, the euro area, Sweden, UK and US. Export weights. 2 Brent Blend. USD per barrel

Sources: Refinitiv Datastream, Statistics Norway and Norges Bank

4 Banks

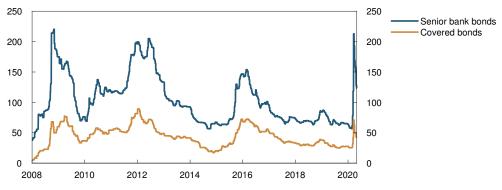
Norwegian banks are solid. Banks have improved their liquidity and lossabsorbing capacity in recent years. The coronavirus pandemic and low oil prices have resulted in domestic bank credit losses, but high profitability enables banks to withstand considerable credit losses. There is substantial uncertainty associated with losses ahead.

Norwegian banks well able to weather financial market volatility

Extensive containment measures, combined with the oil price fall and uncertainty associated with the consequences of the coronavirus outbreak, have resulted in considerable market volatility. Risk premiums on banks' wholesale funding increased markedly in March (Chart 4.1). Although premiums have fallen considerably recently, they are still at relatively high levels. Covered bonds have been less affected than unsecured bank bonds, partly owing to lower credit risk. Banks' bond issuance has been low since the market turbulence started. Banks' equity prices declined by more than 30% between the end of February and 18 March (Chart 4.2), but have advanced somewhat since then. The trend was similar for the other major Nordic banks, while there was a somewhat more pronounced fall in European banks' equity prices.

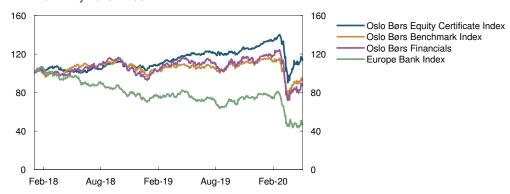
Foreign exchange market volatility and a substantial krone depreciation also led to a deterioration in banks' funding conditions. Banks were not directly affected as their foreign currency debt is hedged. Norwegian asset managers, who have a large share of currency-hedged foreign investments, had to reduce their hedging positions by buying back some of the positions with foreign currency when the value of their currency-hedged equity and bond holdings fell. These buy-backs were partly financed by sales of NOK-denominated securities, including covered bonds and bank bonds. In addition, the krone depreciation led to increased sales of securities in order to meet margin calls in currency hedge contracts. This contributed to a further increase in bank bond premiums and amplified the krone depreciation. Selling pressure came to a halt, and the pressure on risk premiums subsided when the krone appreciated and the substantial decline in the value of foreign investments abated.

Chart 4.1 Increased risk premiums on Norwegian banks' bond funding Five-year maturity. Basis points over three-month Nibor



Source: DNB Markets

Chart 4.2 Fall in Norwegian bank share prices and equity certificates Index. 2 January 2018 = 100



Sources: Bloomberg and Refinitiv Datastream

The coronavirus pandemic and extensive containment measures led to substantial turmoil in the global financial system in March (see Section 1). Investors fled from risky investments, and liquidity in many markets dried up. To increase banks' lending capacity, many countries relaxed capital buffer requirements introduced after the global financial crisis in 2008. Together with extensive liquidity and fiscal measures, this has helped stabilise the market. Bond market funding conditions for banks and corporates have gradually improved since end-March.

Foreign funding markets are important for Norwegian banks. About half of banks' bond funding is in foreign currency, with a large share raised in European markets. The US market is also very important for the Norwegian funding market as it affects the premium in the Norwegian money market rate (see Section 2). Prices for converting foreign exchange funding into NOK through currency swaps are also affected by US market conditions. Compared with the financial crisis, Norwegian banks are so far less affected by the turmoil in the US market, partly because Norwegian banks are now less reliant on the US money market for short-term funding. Longer funding maturities better enable banks to weather a period of limited access to funding.

Norwegian banks were well able to weather the volatility in funding markets. In line with the Liquidity Coverage Ratio (LCR) requirement, banks have large holdings of liquid assets, particularly covered bonds. Norwegian banks can thus obtain liquidity either by selling securities in the market or by pledging securities in loan contracts. Because of the extraordinary F-loans from Norges Bank (see Section 2), banks did not sell securities from liquidity reserves, but pledged more securities as collateral for loans from Norges Bank. This helped prevent a further tightening of banks' funding markets. Several Norwegian banks have also purchased covered bonds issued by their own mortgage companies in order to pledge them as collateral for loans from Norges Bank.

Even though the cost of wholesale funding is still relatively high and issuance is low, banks will also have sufficient liquidity ahead. Norwegian banks' funding is diversified. Bonds and commercial paper account for around a third of funding and are primarily long-term. Customer deposits, which account for around 40% of funding, have remained stable.

Ample liquidity has enabled Norwegian banks to provide liquidity support to customers and defer principal payments. This is important because many businesses are suffering a sharp fall in revenue, many employees have been furloughed and Norwegian households have large mortgages. Substantial drawdowns on credit and liquidity facilities will increase banks' funding needs. Drawdowns on such facilities have not been substantial so far.

Banks can absorb higher losses and have lending capacity

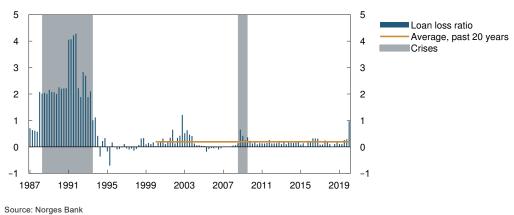
Banks have recognised considerable domestic credit losses in 2020 Q1 (Chart 4.3). Reported credit impairment by DNB and SpareBank 1 SR-Bank corresponds to annual loss rates above 1%.¹ This is on a par with the highest loss rates reported by the Norwegian banking sector in the 2000s, but is still lower than during the banking crisis (Chart 4.3). In addition, a number of foreign branches reported substantial impairment on their loans in Norway. Increased credit impairment primarily reflects a weaker economic outlook and higher bank credit risk due to the coronavirus outbreak and the oil price decline.

New accounting rules for impairment recognition, IFRS 9, require recognition of credit impairment based on more forward-looking assessments than under the previous accounting standard (IAS 39).² Banks must therefore adjust credit impairment to a greater extent than previously when the economic outlook changes, which may lead to earlier recognition of losses in bad times. According to many of the banks that have published their first-quarter results, a substantial share of impairment in the quarter is ascribable to this change in the rules. At the same time, the effects may have been dampened by new guidelines from Finanstilsynet (Financial Supervisory Authority of Norway) and EU supervisory authorities. Under these guidelines, banks are not obliged to recognise impairment for loans to customers whose repayments have been temporarily deferred due to the pandemic if these customers will not be negatively affected in the longer term.

Norwegian banking sector profitability has been solid compared with other European banks (Chart 4.4). Mergers, efficiency measures and the development of digital self-service platforms have reduced operating costs as a share of operating income (cost-to-income ratio). Solid profitability improves loss-absorbing capacity before equity capital has to be drawn on. In 2019, for example, the Norwegian banking sector's profit before credit losses and tax was able to cover an annual loss rate above 1.5%. However, it is uncertain whether the banks will be able to maintain profitability before extraordinary losses in the face of downturns and crises. Norwegian banks managed to do this during the banking crisis and financial crisis.

Norwegian banks are solid. Since the financial crisis, banks have substantially increased their capital buffers to meet stricter regulatory requirements (Chart 4.5). Banks satisfy





¹ Most of the other Norwegian banks publish their results in the first half of May and they are therefore not discussed in this report.

² See Financial Stability Report 2019, page 43, and Andersen, H. and I.N. Hjelseth (2019) "How does IFRS 9 affect banks' impairment recognition in bad times?" Staff Memo 9/2019. Norges Bank.

100 20 100 20 80 80 16 16 60 60 12 12 40 8 40 8 20 20 4 n n n Return on equity CET1 ratio Cost-to-income ratio Leverage ratio

Chart 4.4 Norwegian banks are profitable and solid Percent

Sources: Financial Supervisory Authority of Norway (Finanstilsynet) and The European Banking Authority (EBA)

the capital requirements by an ample margin. Both risk-weighted capital and leverage ratios are higher than those of other European banks (Chart 4.4). On the advice of Norges Bank, the Ministry of Finance reduced the countercyclical capital buffer requirement for banks from 2.5% to 1% in March. The reduction of the buffer will likely help the large banks cope with loss rates above 2%, while maintaining normal credit growth without breaching the capital requirements in 2020.³ This is consistent with the results of the stress test in *Financial Stability Report* 2019. Credit losses above 2% have not been observed for banks as a whole since the banking crisis in the early 1990s.

Norway Sweden Denmark Italy Germany Banks in the EU

As developments in banks' credit losses will depend on how long the coronavirus pandemic lasts and whether oil prices remain low, there is considerable uncertainty about losses ahead. Equity analysts expect the loans of the largest Norwegian banks to be written down by about 0.5% in 2020, but their estimates vary.⁴ In the short term, banks' credit loss risk is primarily associated with developments in oil-related industries.⁵ Banks will likely have to recognise substantial losses on oil-related exposures in 2020. Several banks have already reported substantial losses on exposures to these industries in Q1. The oil service industry was severely hit after the fall in oil prices in 2014, but it was largely bondholders who took the losses. Today, most of the oil service companies' bond debt has been written down, and much of their equity capital is lost. Many of these companies therefore have small buffers to draw on. If oil prices remain low, financial problems in the oil service industry may intensify. Banks' credit loss risk in the longer term is primarily linked to developments in the commercial real estate (CRE) market. CRE loans account for about 40% of banks' Norwegian corporate exposures and have historically been the main source of bank losses during crises.

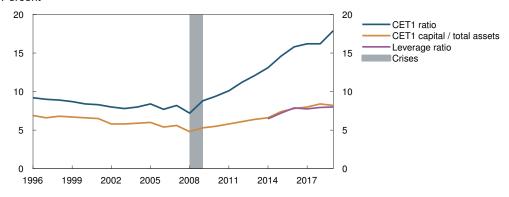
³ The projections are based on the profitability of the major Norwegian banks at end-2019 and the reduction of the countercyclical capital buffer to 1%. Norges Bank assumes a decline in pre-tax operating profit before losses of 30% compared with 2019 and that risk-weighted assets (the denominator of the capital adequacy ratio) increases by 5%, ie Norwegian banks' credit growth is about 5% provided that the risk weights remain constant. Based on these projections, all of the seven largest Norwegian banks have a margin against expected total capital requirements above 0.5 percentage point.

⁴ According to Bloomberg consensus data at 4 May.

⁵ See further discussion in Hjelseth, I. N. (2020) "Nye tap på utlån til oljeleverandørnæringen" [New losses on exposures to the oil service industry]. Published on the Bankplassen blog on 7 May 2020 (Norwegian only).

Chart 4.5 Norwegian banks have increased their capital buffers substantially after the financial crisis

Percent



Source: Financial Supervisory Authority of Norway (Finanstilsynet)

There are a number of factors that may help limit credit losses ahead. The authorities have approved various support measures (see Section 3). For example, the government guarantees 90% of banks' losses on loans granted under the guarantee credit facility for companies. Industries facing financial problems prior to the coronavirus outbreak, such as oil services, will not be able to make use of the measures to the same extent. At the same time, banks had already prior to the pandemic recognised impairment losses and reduced exposures to oil-related industries. This will likely limit banks' losses on these exposures ahead.

Banks can increase their loss-absorbing and lending capacity by withholding dividend and bonus payments, reducing costs or increasing margins. A number of Norwegian banks are retaining all or substantial portions of their profits for 2019. According to Norges Bank's lending survey for 2020 Q1, banks continue to provide credit to creditworthy businesses and households, but they are more restrictive in lending to new borrowers.⁶ Banks expect some tightening of lending standards in 2020 Q2. For corporate customers, banks reported that approval rates are higher for loans backed by government guarantee schemes. Household credit growth has declined in recent years, while corporate credit growth has moved down since autumn 2019. Credit growth is expected to edge down further in the coming period (Chart 4.6).

Chart 4.6 Decline in domestic credit growth Mainland Norway. Twelve-month change. Percent



 $^{6 \ \} See {\it Survey of Bank Lending 1/2020}. \ Norges \ Bank.$

Annex

Tables and detailed projections

TABLE 1	INTERNATIONAL PROJECTIONS

Change from projections in	Percentage change from previous year						
Moneatry Policy Report 1/20 in brackets.	2019	2020	2021	2022	2023		
GDP							
US	2.3 (0)	-6 (-7.2)	4.6 (2.6)	2.8 (0.9)	2.1 (0.5)		
Euro area	1.2 (0)	-8.9 (-9.1)	4.8 (3.1)	2.9 (1.3)	2 (0.7)		
UK	1.4 (0)	-7 (-7.4)	4.5 (3)	2.4 (0.8)	1.9 (0.5)		
Sweden	1.3 (0)	-6 (-6.5)	4.8 (3)	2.7 (0.7)	1.9 (0)		
China	6.3 (0.2)	1 (-3.7)	6.6 (0.5)	5.2 (-0.6)	8.1 (2.5)		
Trading partners ¹	2 (0.1)	-6.7 (-7.6)	4.9 (2.7)	3 (0.8)	2.7 (0.8)		

Prices

Underlying inflation ²	1.4 (0)	1.2 (-0.3)	1 (-0.6)	1.5 (-0.3)	1.7 (-0.1)
Prices for consumer goods imported to Norway ³	1.7 (0)	0.7 (0)	0.2 (-0.3)	0.6 (-0.1)	0.7 (0)

Sources: Refinitiv Datastream and Norges Bank

The aggregate includes: China, the euro area, Sweden, UK and US. Export weights.
 The aggregate for underlying inflation includes: the euro area, Sweden, UK and US. Import weights.
 In foreign currency terms. Including compositional effects.

TABLE 2 PROJECTIONS FOR MAIN ECONOMIC AGGREGATES

	Percentag	ge change from previous year (unless otherwise stated)				
Change from projections in	2010		Projec		2000	
Monetary Policy Report 1/20 in brackets.	2019	2020	2021	2022	2023	
Prices and wages						
CPI	2.2	1.2 (-0.1)	3.4 (0.4)	2.5 (0.0)	1.9 (-0.2)	
CPI-ATE	2.2	2.5 (0.1)	2.8 (0.6)	2.1 (-0.2)	1.7 (-0.3)	
Annual wages	3.5	1.8 (-1.0)	1.3 (-1.2)	1.7 (-1.0)	2.3 (-0.9)	
Real economy						
GDP, mainland Norway	2.4	-5.2 (-5.6)	3.0 (1.7)	3.3 (1.3)	2.2 (0.7)	
Output gap, mainland Norway (level)	0.2	-5.2 (-4.8)	-3.6 (-3.0)	-1.8 (-1.8)	-1.0 (-1.1)	
Employment, persons, QNA	1.7	-3.1 (-3.4)	0.0 (0.0)	2.4 (1.4)	1.3 (0.4)	
Registered unemployment rate (level)	2.3	6.3 (3.8)	3.8 (1.3)	3.1 (0.8)	2.8 (0.6)	
Demand						
Mainland demand	2.3	-5.2 (-5.6)	3.4 (2.1)	3.3 (1.5)	2.5 (0.6)	
- Household consumption	1.8	-7.7 (-7.7)	4.9 (3.4)	4.4 (2.2)	2.9 (0.5)	
- Business investment	5.7	-15.8 (-14.3)	-5.8 (-5.6)	5.6 (4.4)	4.9 (3.4)	
- Housing investment	-0.5	-10.2 (-6.0)	-2.3 (-5.0)	4.1 (1.7)	4.3 (2.3)	
- Public demand	2.7	3.0 (0.7)	4.6 (3.3)	1.3 (0.1)	1.1 (0.0)	
Petroleum investment	13.1	-9.0 (-9.5)	-14.0 (-2.0)	-3.5 (0.5)	-2.0 (0.0)	
Mainland exports	5.5	-10.6 (-10.4)	6.5 (3.7)	8.5 (3.9)	6.5 (3.1)	
Imports	5.2	-10.9 (-8.7)	2.3 (1.8)	5.3 (3.4)	4.1 (1.3)	
House prices and debt						
House prices	2.6	-1.8 (-4,8)	-1.0 (-5,1)	3.9 (-0,4)	3.9 (0.5)	
Credit to households (C2)	5,0	3.5 (-1.0)	4.8 (0.1)	4.1 (-0.8)	3.8 (-0.8)	
. ,						
Interest rate, exchange rate and oil price						
Policy rate (level)	1.1	0.4 (-0.6)	0.0 (-0.7)	0.0 (-0.8)	0.0 (-0.9)	
Import-weighted exchange rate (I-44) (level)	107.6	119.8 (4.5)	121.5 (8.1)	121.2 (9.9)	121.1 (11.1)	
Money market rates, trading partners	0.5	0.1 (0.1)	-0.2 (0.0)	-0.1 (-0.1)	0.0 (-0.1)	
Oil price, Brent Blend. USD per barrel	64.4	32.6 (-10.2)	35.4 (-9.0)	39.4 (-9.0)	42.4 (-8.6)	

Sources: Eiendomsverdi, Finn.no, Norwegian Labour and Welfare Administration (NAV), Real Estate Norway, Refinitiv Datastream, Statistics Norway and Norges Bank

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