



NORGES BANK

1|21

MARCH

**MONETARY  
POLICY REPORT**  
WITH FINANCIAL STABILITY ASSESSMENT



# Contents

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This *Monetary Policy Report* is based on information in the period to 12 March 2021, with the exception of *Monetary policy assessment*, which is based on information in the period to the Committee's meeting on 17 March 2021. The *Report* was published on 18 March 2021 and is available at [www.norges-bank.no](http://www.norges-bank.no).

## Monetary policy in Norway

### OBJECTIVES

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. Monetary policy objectives and trade-offs are discussed in a box on page 45.

### 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 shocks 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. Prior to publication, several seminars and meetings are held at which analyses are presented to the Committee and economic developments, the balance of risks and the monetary policy stance are deliberated. On the basis of the analyses and deliberations, the Committee assesses future interest rate developments. The final policy rate decision is made on the day prior to the publication of the *Report*. The Committee's assessment of the economic outlook and monetary policy is presented in "Monetary policy assessment" in the *Monetary Policy Report*.

### REPORTING

Norges Bank places emphasis on transparency in its monetary policy communication. The Bank reports on the conduct of monetary policy in its *Annual Report*. The assessments on which interest rate setting is based are published regularly in the *Monetary Policy Report* and elsewhere.

## Countercyclical capital buffer

The objective of the countercyclical capital buffer is to bolster banks' resilience and to lessen the amplifying effects of bank lending during downturns. The Ministry of Finance sets the level of the buffer four times a year. Norges Bank draws up a decision basis and provides advice to the Ministry regarding the level of the buffer. The advice is submitted to the Ministry of Finance in connection with the publication of Norges Bank's *Monetary Policy Report*. The advice is published when the Ministry of Finance has made its decision. Norges Bank will recommend that the buffer rate should be increased when financial imbalances are building up or have built up. The buffer rate may be reduced in the event of an economic downturn and large bank losses, with a view to mitigating the procyclical effects of tighter bank lending. The buffer rate shall ordinarily be between 0% and 2.5% of banks' risk-weighted assets, but in special circumstances may be set higher.

## Decision-making process for *Monetary Policy Report* 1/21

At its meetings on 26 February and 9 March, the Committee discussed the economic outlook, the monetary policy stance and the buffer rate. On the basis of the deliberations and a recommendation from Norges Bank staff, the Committee made its decision on the policy rate on 17 March. The Committee also approved its advice to the Ministry of Finance on the buffer rate.

# Monetary policy assessment

The Covid-19 pandemic has led to a sharp downturn in the Norwegian economy. Low interest rates are dampening the downturn and mitigating the risk of a more prolonged impact on output and employment. There is substantial uncertainty surrounding the economic recovery ahead. Since the December 2020 *Monetary Policy Report*, higher infection rates and stricter containment measures have weighed on activity, but there are prospects for a somewhat faster upturn through 2021 than projected earlier.

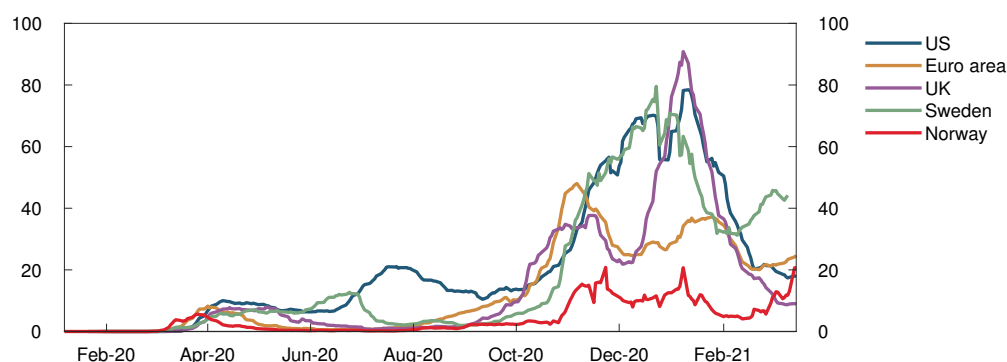
Norges Bank's Monetary Policy and Financial Stability Committee decided to keep the policy rate unchanged at 0% at the monetary policy meeting on 17 March. In the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely be raised in the latter half of 2021.

## Higher than expected global growth, but containment measures continue to impede the recovery

After the Covid-19 outbreak led to a marked decline in spring 2020, economic activity among Norway's trading partners has picked up considerably. Despite higher infection rates and stricter containment measures in many countries through autumn, overall activity held up and was higher in 2020 Q4 than projected in the December *Report*. Since December, the number of new cases has declined, but strict containment measures continue to weigh on economic growth. On the other hand, a faster vaccine rollout will likely lift growth through 2021. In addition, stronger fiscal stimulus in the US will boost growth. Increased capacity utilisation and higher commodity prices and freight rates will likely push up inflation ahead, but there are prospects that global inflation will remain close to or below inflation targets in the coming years.

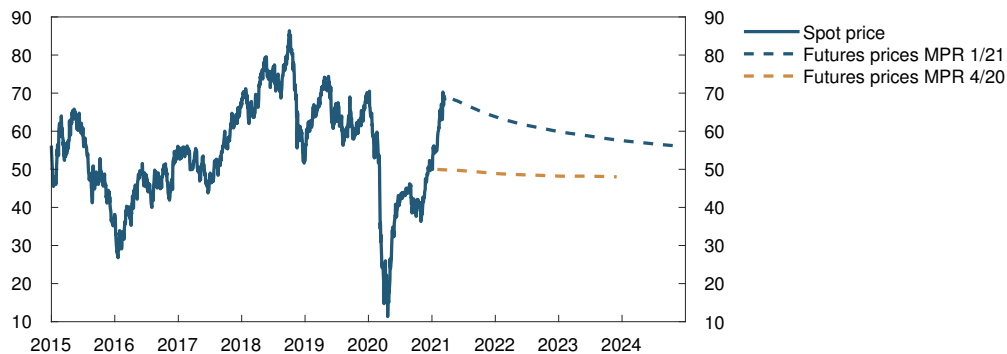
**Chart A Fewer new cases globally, but resurgence in a number of countries**

Seven-day moving average of new cases per 100 000 inhabitants



Sources: Refinitiv Datastream and Norges Bank

**Chart B Sharp rise in oil prices**  
USD per barrel



Source: Refinitiv Datastream

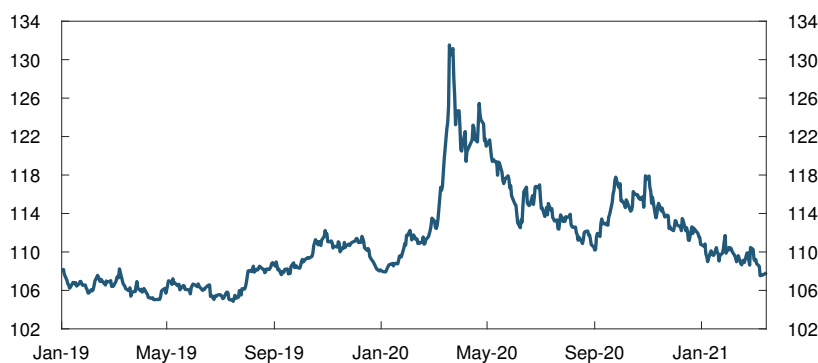
Market-implied rates indicate an increase in policy rate expectations since December, but there are still expectations of rates close to zero for some time ahead. The decline in infection rates and a higher supply of vaccines have fuelled a further rise in global equity markets. Since the December Report, long-term interest rates have also risen among all of Norway’s main trading partners.

Oil and gas prices have risen considerably since the December Report. Futures prices have risen less, indicating some decline in oil and gas prices in the coming years.

The krone exchange rate, as measured by the import-weighted index I-44, has appreciated in recent months and is now back at pre-pandemic levels. The krone appreciation likely reflects reduced uncertainty in global financial markets and a rise in oil prices. The krone is now stronger than projected in December.

Norwegian money market premiums have risen and have been higher than expected. Mortgage rates are little changed since the December Report. Market-implied rates indicate that Norwegian policy rate expectations have risen since December and now suggest that the next move will be a policy rate hike towards the end of 2021.

**Chart C The krone has appreciated**  
Import-weighted exchange rate index (I-44)



Source: Norges Bank

### Prospects for a pronounced recovery over summer

Economic activity in Norway has also picked up after a sharp fall in spring 2020. The recovery continued towards the end of 2020, but mainland GDP was still 1.5% lower in January than prior to the pandemic. The level was higher than projected in the *December Report*.

Higher household demand has been the main driver of activity in the mainland economy since spring 2020. Household consumption of goods has picked up markedly, but overall consumption remains low. National accounts figures show that consumption in 2020 Q4 was higher than projected in the *December Report* and that demand for services held up well despite stricter containment measures. A long period of limited consumption opportunities has led to an increase in household savings. This provides room for strong consumption growth ahead, but it is highly uncertain how quickly and how far the saving ratio will fall.

Since the turn of the year, economic activity has likely been hampered by higher infection rates and stricter containment measures, with services related to culture, hotels, restaurants, transport, as well as some retail trade segments in southeastern Norway particularly hard hit. At the same time, closed borders create challenges for industries heavily reliant on foreign labour. In February, the enterprises in Norges Bank's Regional Network reported a decline in activity over the past three months, but expected higher activity over the next six months.

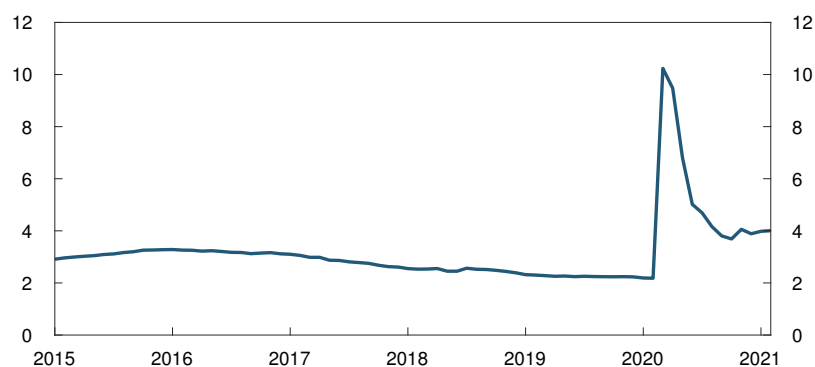
The number of furloughed workers has risen recently. Registered unemployment has risen to 4.0%, which is higher than projected in the *December Report*. Long-term unemployment has declined slightly but remains high.

The Government has taken new fiscal policy measures in response to higher infection rates and tighter containment measures, which implies higher public spending in 2021 than assumed in the *December Report*.

Information from the public health authorities suggests that the vaccine rollout may occur faster than assumed in the *December Report*. As an increasing share of the population is vaccinated, infection rates will decline and containment measures will be eased. This will give a clear boost to economic activity through 2021. There is still uncertainty about the evolution of the pandemic and its economic impact.

### Chart D Unemployment remains elevated

Registered fully unemployed as a share of the labour force. Seasonally adjusted. Percent



Source: Norwegian Labour and Welfare Administration (NAV)

House prices have continued to rise and have recently been higher than projected. Housing market turnover has been high, and the stock of unsold existing homes has declined markedly. Household credit growth has edged up slightly, in line with the projections in the *December Report*.

### Higher consumer price inflation, but underlying inflation has moderated

The underlying rise in prices measured by the consumer price index (CPI) adjusted for tax changes and excluding energy products (CPI-ATE) picked up through spring and summer. The rise is primarily attributable to higher imported goods inflation, reflecting the krone depreciation through winter and spring last year. In recent months, inflation has moderated, and in February, the 12-month rise in the CPI-ATE was 2.7%, somewhat lower than projected in the *December Report*. Norges Bank's Expectations Survey indicates that inflation expectations in the somewhat longer term are well-anchored around the inflation target.

Movements in energy prices have resulted in wide gaps between CPI and CPI-ATE inflation in recent years. A sharp rise in electricity prices contributed to an increase in 12-month CPI inflation from 1.4% in December to 3.3% in February, which was substantially higher than projected. Futures prices for electricity and fuel have increased since December and indicate a faster rise in energy prices in 2021 than expected earlier. CPI inflation may therefore prove to be markedly higher in 2021 than projected in the *December Report*.

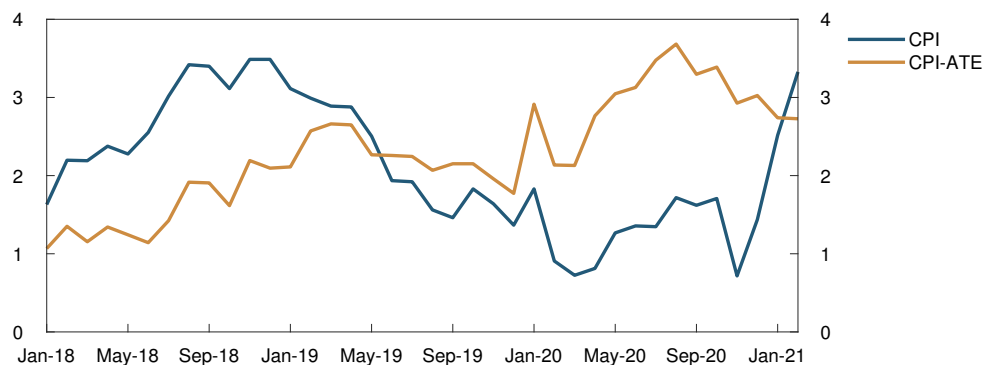
Wage growth in 2020 proved to be clearly higher than projected in the *December Report*. National accounts figures show growth in average annual wages of 3.1% in 2020, which is substantially higher than the negotiated wage norm. A marked decline in the number of employees in low-wage sectors by itself pushed up overall annual wage growth. These compositional effects have likely been more pronounced than assumed earlier. There are prospects for moderate wage growth ahead, but the pandemic and wide differences across sectors make it demanding to interpret wage and cost developments and increase the uncertainty surrounding nominal developments.

### Somewhat earlier rate hike

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.

#### Chart E Higher consumer price inflation, but underlying inflation has continued to drift down

CPI and CPI-ATE. Twelve-month change. Percent



Source: Statistics Norway

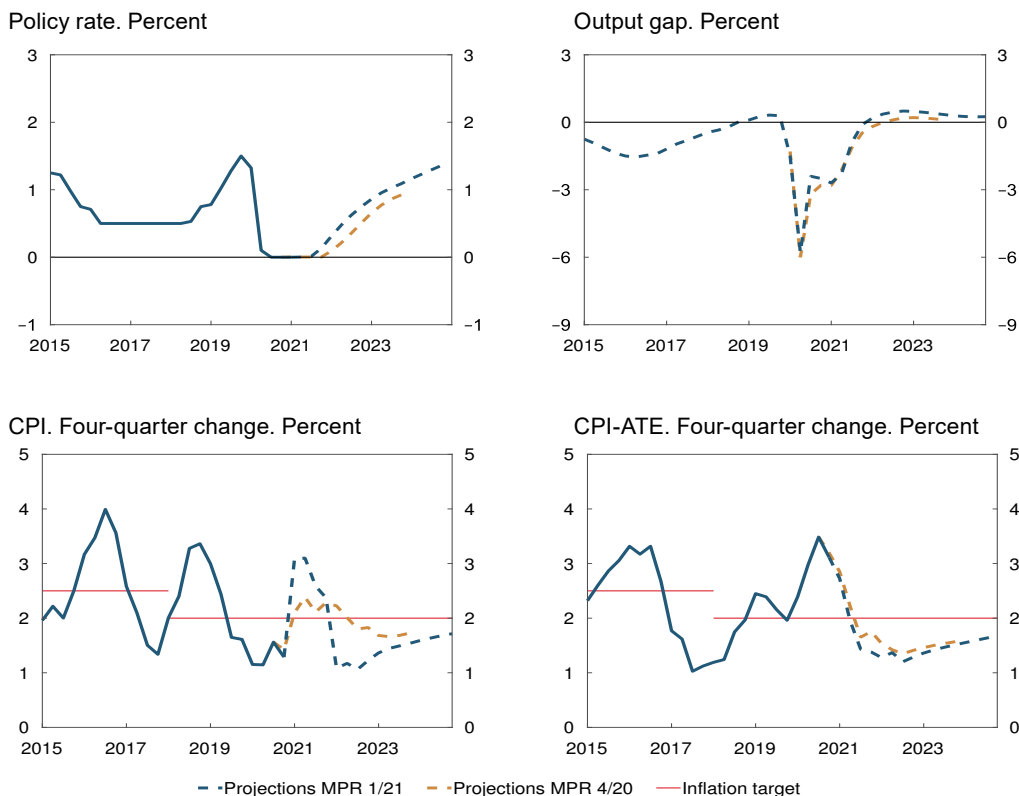


The Norwegian economy is in the midst of a deep downturn. Activity has picked up since spring 2020, but the recovery is being held back by higher infection rates and strict containment measures. On the other hand, new information suggests that a large portion of the adult population in Norway will be vaccinated before the end of summer. At the same time, global economic developments are better than expected. This may result in a faster pick-up in economic activity than previously projected. Nevertheless, it will probably take time for employment and unemployment to return to pre-pandemic levels. Underlying inflation is still above the target, but has moderated in recent months.

In considering the trade-offs facing monetary policy, the Committee placed weight on the contribution of low interest rates to speeding up the return to more normal output and employment levels. This reduces the risk of unemployment becoming entrenched at a high level. There are some signs of higher cost growth both globally and in Norway, but the krone appreciation and prospects for moderate wage growth suggest that inflation will move down ahead. The Committee also placed weight on the marked rise in house prices since spring 2020. A long period of low interest rates increases the risk of a build-up of financial imbalances.

In the Committee's current assessment, the overall outlook and balance of risks imply a continued expansionary monetary policy stance. In spring 2020, the policy rate was reduced to 0%. The Committee does not envisage making further policy rate cuts. When there are clear signs that economic conditions are normalising, it will again be appropriate to raise the policy rate gradually from today's level.

**Chart F Low policy rate helps to achieve the objectives of monetary policy**



Sources: Statistics Norway and Norges Bank

There is substantial uncertainty surrounding the economic recovery ahead, but there are prospects that economic activity will approach a normal level earlier than projected in the *December Report*. The policy rate forecast implies a gradual rise from the latter half of 2021. This implies a somewhat faster rate rise than projected in December. Capacity utilisation is projected to increase gradually so that the output gap turns positive at the beginning of 2022. Unemployment is projected to decline, but to remain somewhat higher than prior to the pandemic. Underlying inflation is projected to edge down over the next year and a half, before rising to 1.7% towards the end of the projection period.

The Committee decided unanimously to keep the policy rate unchanged at 0%. In the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely be raised in the latter half of 2021.

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17 March 2021

## ASSUMPTIONS REGARDING INFECTION RATES, CONTAINMENT MEASURES AND VACCINATION

In recent weeks, the number of new cases has increased sharply and the containment measures have been tightened. The near-term economic outlook for Norway and its trading partners will largely depend on the scale of containment measures ahead. This Special Feature provides a further account of the key assumptions regarding infection rates, containment measures and vaccination rates underlying the economic projections in this Report. To the extent possible, the assumptions rely on projections from the health authorities and signals from other government bodies.

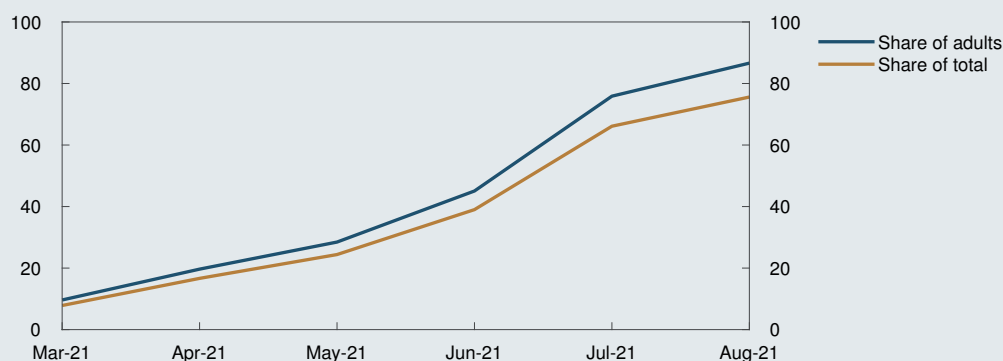
The vaccination projections in Norway are based on the scenario published by the Norwegian Institute of Public Health (NIPH) on 3 February 2021.<sup>1</sup> Under this scenario, all risk groups, including health personnel, will be offered a first dose before the end of May and the remainder of the adult population by the end of July. Based on these vaccination projections and associated assumptions regarding vaccine availability, the age groups receiving the various vaccine types and the number declining a vaccine, we have produced a rough estimate of vaccination coverage ahead (Chart G).<sup>2</sup> The projections indicate vaccination coverage of over 80% by the end of August, ie over 80% of the adult population could be fully vaccinated at that time. It is likely that infection rates will fall considerably once vaccination coverage reaches 50%-60% combined with some containment measures.

For Norway's advanced economy trading partners, it is assumed that the adult population will be vaccinated in the course of autumn 2021, slightly faster than assumed in December. At the same time, we now expect wider disparities in vaccination progress across countries.

As an increasing share of the population is vaccinated, the disease burden and pressure on the health system will ease, reducing the need for containment measures. As the adult portion of the population is now expected to be fully vaccinated faster than previ-

### Chart G Close to full vaccination coverage is assumed over summer

Vaccination coverage in Norway. Percent of adults and the whole population



Sources: Norwegian Institute of Public Health (NIPH) and Norges Bank

<sup>1</sup> The path in this scenario [Norwegian only] is close to path in the "sober" scenario published by the NIPH on 12 March.

<sup>2</sup> Based on NIPH assessments, which among other things imply that the AstraZeneca vaccine is not given to risk groups and persons aged over 65, that 10% decline a first dose and a further 5% decline a second dose.

ously assumed, containment measures may be lifted earlier. At the same time, the experience of unpredictable resurgences suggests that the authorities in both Norway and abroad will take a cautious approach to lifting the various containment measures.

We envisage that the lifting of containment measures can roughly be divided into three phases. Despite the rise in infection rates in recent weeks and perhaps a further rise in the near term, we still assume a downward trend in infection rates in the period to May. Along with gradually rising, but still low, vaccination coverage, this will allow easing some social contact recommendations and requirements related to schools and leisure activities, for example. We also assume that in this period, there will be some easing of restrictions aimed at the business sector.

However, the easing of measures that have a pronounced dampening impact on economic activity will most likely not start to speed up until May/June when all risk groups are vaccinated and vaccination of the remainder of the adult population has commenced. Thereafter, we expect a gradual normalisation through summer.

From September, most persons aged over 18 will be vaccinated, and vaccination coverage will have reached a relatively high level, allowing the bulk of the remaining containment measures to be lifted. There will likely still be some restrictions on cross-border travel and large cultural and sports events until the end of the year. Table A shows the projected easing of various area-specific containment measures in Norway. The assumptions are based on our interpretation of overall assessments by the NIPH.

Under the assumptions in this *Report*, the adult population will be fully vaccinated somewhat more quickly than assumed in the baseline scenario in the *December Report*. So far in 2021, vaccine availability, and thus vaccination coverage, have been lower than implicitly assumed in December. On the other hand, availability is projected to rise markedly in the period to summer, and we therefore expect a far faster vaccine rollout from April than was assumed in the baseline scenario in the *December Report*.

Containment measures have overall been tighter through 2021 Q1 than expected in December. While we in December implicitly assumed a gradual relaxation through 2021,

**Table A Timeline for phase-out of containment measures in Norway**

Area-specific measures <sup>1</sup>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Workplaces	Strict	Strict	Less strict	Some	Some	Some	Few or no	Few or no	Few or no	Few or no
Shops	Strict	Strict	Less strict	Some	Some	Some	Few or no	Few or no	Few or no	Few or no
Restaurants, cafés and bars	Strict	Strict	Less strict	Less strict	Some	Some	Some	Some	Few or no	Few or no
Entry into Norway	Strict	Strict	Less strict	Less strict	Less strict	Less strict	Some	Some	Some	Some
Travel	Strict	Strict	Less strict	Less strict	Less strict	Less strict	Some	Some	Some	Some
Events	Strict	Strict	Less strict	Less strict	Less strict	Less strict	Some	Some	Some	Some

■ Strict containment measures      ■ Some containment measures  
■ Less strict containment measures      ■ Few or no containment measures

<sup>1</sup> The classification of the various area-specific measures follows the division in the Government's overview of current national containment measures.

Source: Norges Bank

it now appears that containment measures could be phased out faster further ahead than envisaged in December. Nevertheless, we assume that at the end of 2021 there will still be some restrictions on international travel and large events at about the same level as envisaged in the December *Report*.

There is still substantial uncertainty surrounding infection rates and vaccination, and thus the phasing out of containment measures. The current wave of infections may prove longer than assumed here, and containment measures may have to be tightened further. New variants of the virus may emerge, and it is uncertain to what extent existing vaccines protect against new variants and their transmission. However, most vaccines are relatively flexible and can be adjusted to provide adequate protection against new variants, but this will shift the point in time at which the population is fully vaccinated. As vaccination coverage increases, the extent to which the vaccines protect against transmission will become clear.

On the other hand, it is also possible that vaccine availability from April will be broader than currently envisaged. For Norway, if the vaccination rollout is in line with the NIPH's most optimistic projection from 12 March, implying full vaccination of a large portion of the adult population as early as the end of July, containment measures may be phased out faster than assumed in this *Report*.

# 1 The global economy

In autumn 2020, a marked rise in Covid-19 infection rates led to the introduction of stricter containment measures in many countries. These measures are dampening activity among Norway's trading partners in the short term. Vaccination and an easing of containment measures are expected to boost growth from spring 2021. GDP among trading partners is projected to return to pre-pandemic levels in autumn 2021. Underlying inflation will likely be close to or below inflation targets in the years ahead. Market-implied rates indicate expectations of very low interest rates among trading partners for some time ahead.

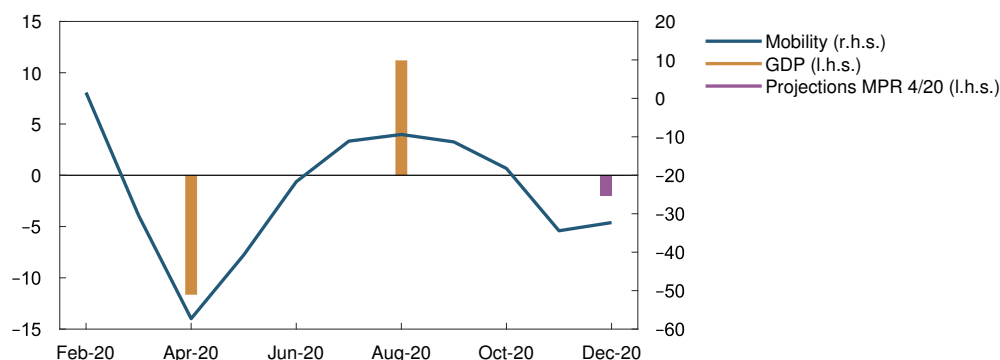
## Strict containment measures before vaccination boosts growth

Global economic activity has picked up considerably after the pronounced fall in spring 2020. In the December 2020 *Monetary Policy Report*, GDP among trading partners was projected to fall towards the end of the year amid higher infection rates, stricter containment measures and a fall in mobility. Trading partner GDP growth in 2020 Q4 was, however, markedly stronger than expected, particularly in the euro area and the UK. While the comovement between mobility data and GDP was clear in spring 2020, it is less so now (Chart 1.1). The negative economic impact of stricter containment measures therefore seems to be less pronounced than in spring 2020. This may be because the manufacturing sector has not been affected by closures to the same extent and because households have adapted through increased online shopping and continued use of services in spite of containment measures.

In most European countries, however, containment measures in 2021 Q1 have been far stricter than assumed in the December *Report*. In many countries, businesses in the food service and hotel sectors and non-essential shops have been closed for a long time. Curfews are still in place and events are banned. In spite of a decrease in infection rates, the spread of new variants is creating uncertainty. Vaccine rollouts have also been slow. Except for the UK, where 35% of the population have received their first vaccine dose, only a small percentage of the population in other European countries have received their first dose (Chart 1.2). Based on these conditions, the projections for GDP growth in the euro area, the UK and Sweden in 2021 Q1 have been revised down.

## Chart 1.1 Weaker comovement between GDP and mobility

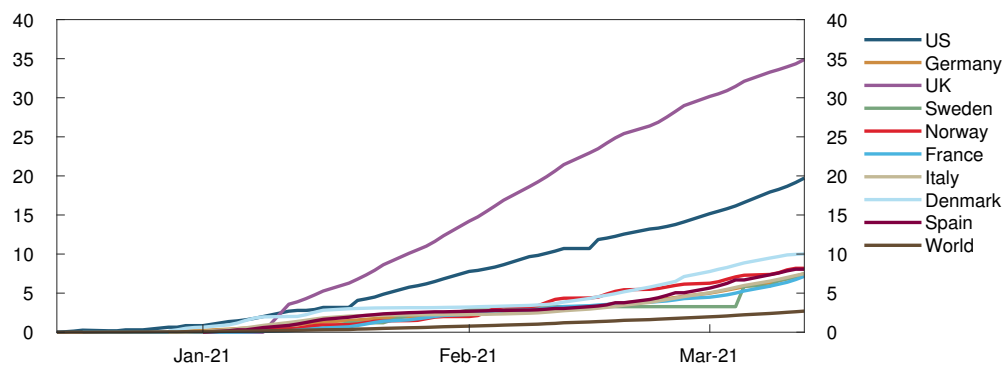
Mobility in retail and recreation for selected trading partners. Monthly average. Percent deviation from reference value. GDP. Quarterly growth. Percent



Sources: Google COVID-19 Community Mobility Reports, IMF, Refinitiv Datastream and Norges Bank

**Chart 1.2 Varying vaccination coverage abroad**

Share vaccinated with first dose. Percent



Source: Refinitiv Datastream

In the US, many schools have been closed since the outbreak of the pandemic, but measures aimed at the business sector through winter have not been as strict as in many European countries. With lower infection rates in recent weeks, a number of measures have even been eased. Vaccines are in ample supply, and 20% of the population have so far received their first dose. In addition, a fiscal stimulus package was adopted in December. US GDP growth in 2021 Q1 has been revised up substantially from the December Report.

In China and most of the other emerging economy trading-partner countries, growth in the second half of 2020 was higher than expected in the December Report. However, here too higher infection rates and stricter containment measures are dampening growth in the short term.

Since the December Report, a decrease in the number of Covid-19 cases and a higher supply of vaccines have boosted optimism and driven an upswing in global equity markets. Prospects for continued expansionary fiscal policy have also made a positive contribution. Long-term interest rates among Norway's main trading partners have risen since the December Report, with a particularly sharp rise in the US and the UK. Corporate bond risk premiums are little changed.

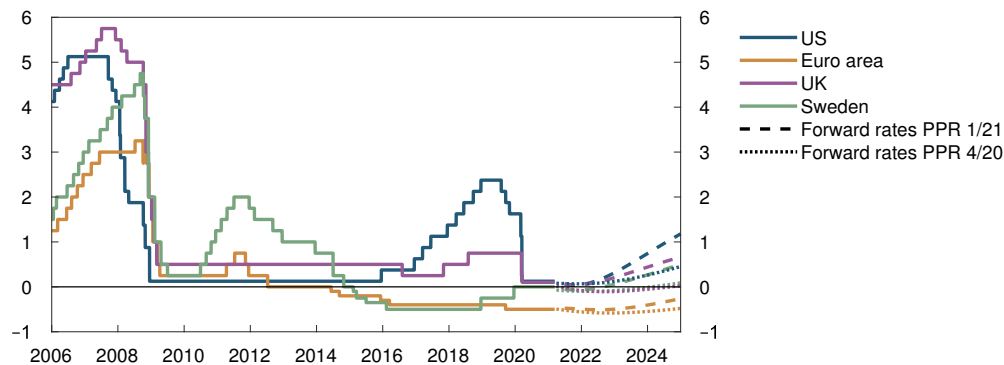
Higher growth and inflation expectations have pushed up policy rate expectations among Norway's main trading partners somewhat, primarily towards the end of the projection period. Market-implied rates now indicate expectations of higher policy rates in several countries around the turn of 2022/2023 (Chart 1.3). Large central banks have not communicated substantial changes in monetary policy and are still signalling very expansionary policy for some time ahead.

It is assumed that vulnerable and high-risk groups in advanced economy trading-partner countries will be vaccinated in the period to summer and that the adult population will have been vaccinated in the course of autumn. In addition, it is assumed that containment measures will be gradually eased from spring (see box on page 11). This will likely lift growth from 2021 Q2.

Expansionary monetary and fiscal policies are making a positive contribution to growth in most countries. In the US, a spending package of close to USD 1.9tn was recently adopted. The fiscal stimulus for 2021 is thus markedly larger than assumed in the December Report. US GDP growth in 2021 has been revised up substantially.

**Chart 1.3 Unchanged policy rates until latter half of 2023**

Policy rates and estimated forward rates in selected countries. Percent



Sources: Bloomberg, Refinitiv Datastream and Norges Bank

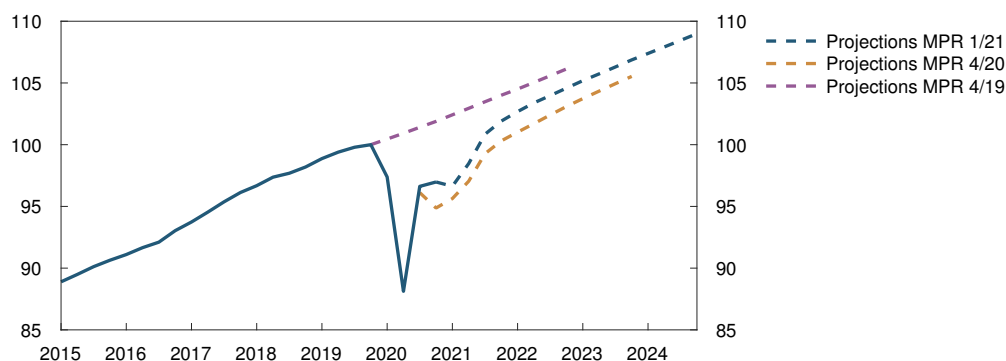
Trading partner GDP growth is projected at close to 5% in 2021 and over 4% in 2022 (Annex Table 1). GDP growth in 2021 has been revised up from the December *Report*. With such a path, GDP among trading partners will have returned to its pre-pandemic level in the course of autumn 2021 (Chart 1.4). Trading partner imports are projected to increase by more than 7% in 2021.

Capacity utilisation is expected to be appreciably lower than normal at the beginning of the projection period, then slightly higher than normal from 2022. Capacity utilisation has been revised up from the December *Report* over the entire projection period. Potential output has also been revised up, but it is still assumed that the Covid-19 pandemic in isolation will contribute to reducing potential output somewhat on the back of falling investment, lower productivity growth and a decline in potential employment.

There is considerable uncertainty about global economic developments ahead. Developments will depend on factors such as the level of infection, the scale of containment measures ahead and the speed of vaccine rollout (see box on page 11). In addition, owing to the pandemic, a larger share of the population may have dropped out of the labour force and potential growth further ahead may be lower than assumed in this *Report*. Growth may be higher than projected if the sharp rise in household saving during the pandemic reverses sooner and to a further extent than currently envisaged.

**Chart 1.4 GDP back at pre-pandemic levels during autumn 2021**

GDP trading partners. Index. 2019 Q4 = 100



Sources: Refinitiv Datastream and Norges Bank



### Moderate underlying inflation ahead

While inflation was very low in the second half of 2020, underlying inflation in the euro area increased markedly in January. Both the reversal of the VAT reduction in Germany and postponed winter sales contributed to the surprisingly high rate of inflation. Inflation has also been higher than expected in the UK. On the back of higher capacity utilisation, inflation among Norway's main trading partners for the years ahead has been revised up from the *December Report*. The rise in commodity prices, higher freight rates and a limited supply of shipping containers will likely also push up goods inflation ahead. Market-based inflation expectations have risen in both Europe and the US since the *December Report*. Underlying inflation is still projected to be somewhat below inflation targets in the euro area and Sweden throughout the projection period.

Producer prices for consumer goods imported to Norway, in foreign currency terms, increased in late autumn 2020 as a result of a sharp rise in food prices, particularly in Brazil. Since the *December Report*, the rise in producer prices has been higher than assumed, particularly for furniture and household equipment. The projections for 2021 have been revised up (Annex Table 1).

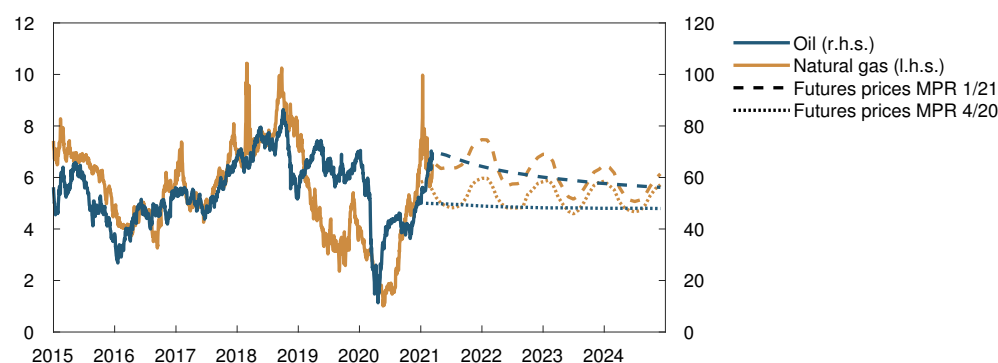
### Considerably higher oil and gas prices

Oil spot prices are now close to USD 70 per barrel, about the same as the pre-pandemic level. Oil spot prices have risen by almost USD 20 since the *December Report* (Chart 1.5). At the beginning of March, OPEC+ decided to continue the production restrictions that have supported the rise in oil prices since summer 2020. In the short term, global oil consumption may be constrained by virus containment measures and weak economic developments. However, oil consumption is expected to pick up as vaccination levels rise and economic developments normalise. Futures prices at the end of 2024, which are more than USD 10 lower than spot prices, may reflect an expectation that OPEC+ will in time seek to regain market shares when oil production by non-OPEC+ countries rebounds.

Spot prices for European gas have continued to rise since the *December Report* and are now considerably higher than pre-pandemic levels. Record-low winter temperatures in January and February resulted in higher gas consumption and lower gas inventories. A decrease in the supply of liquefied natural gas to Europe also contributed. A more moderate rise in futures prices indicates that the effects of these conditions are largely expected to diminish over time (Chart 1.5).

**Chart 1.5 Considerably higher spot prices for oil and natural gas**

Oil. USD per barrel. Natural gas. USD per MMBtu



Sources: Refinitiv Datastream and Norges Bank

# 2 Financial conditions

Interest rates on loans to households and corporations are low. Residential mortgage rates have shown little change in recent months. Money market rates have risen somewhat due to an increase in the money market premium, while bond risk premiums have drifted down. Long-term interest rates have shown a pronounced increase since the December 2020 *Monetary Policy Report*.

The krone exchange rate has appreciated and is stronger than projected earlier.

## 2.1 Interest rates

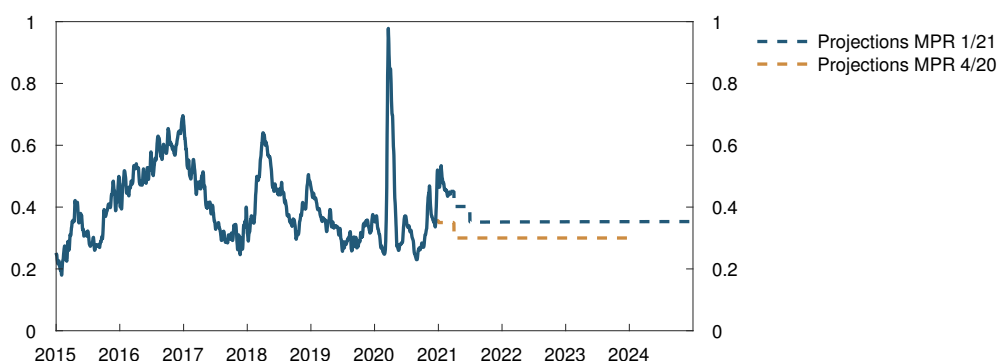
### Low lending rates

During the market stress in March 2020, the cost of bank and corporate funding increased markedly. On the back of the policy rate cuts and diminished market stress, interest rates on loans to households and corporations fell to historically low levels. In January 2021, the average residential mortgage rate in Norway was just below 1.9%, slightly lower than at the time of the December *Report*. Quoted floating interest rates for new residential mortgages indicate little change in the average rate since January.

The average interest rate on loans to corporations was 2.6% in January. Banks' corporate lending rates are normally linked to the three-month money market rate (Nibor). The money market rate reflects market-based policy rate expectations for the next three months and a risk premium, often referred to as the money market premium. Towards the end of 2020, the money market rate increased on the back of a marked rise in the premium. The premium has moved down since the beginning of the year, but is still higher than expected in the December *Report* (Chart 2.1). The rise in the money market premium is ascribable to increased demand for NOK at longer maturities in the FX swap market prior to periods of lower structural liquidity in the banking system. Nibor is designed in a way whereby an increase in the implied cost of NOK funding via the FX swap market translates into a higher money market premium. Norges Bank ensures that

**Chart 2.1 Higher money market premium than projected**

Percentage points



Sources: Refinitiv Datastream and Norges Bank

there is sufficient liquidity in the banking system every day.<sup>1</sup> Prior to periods of lower structural liquidity, banks may nevertheless want to buy NOK at longer maturities. In the projection, the premium moves down a little owing to higher structural liquidity. The premium then hovers around 0.35 percentage point through the remainder of the projection period, which is slightly higher than assumed in the *December Report*.

Bond risk premiums have continued to drift down since December. The premiums for wholesale funding facing non-financial corporations within most industries are now close to pre-pandemic levels, while premiums for bank bonds and covered bonds are lower than before the market stress intensified in March last year.

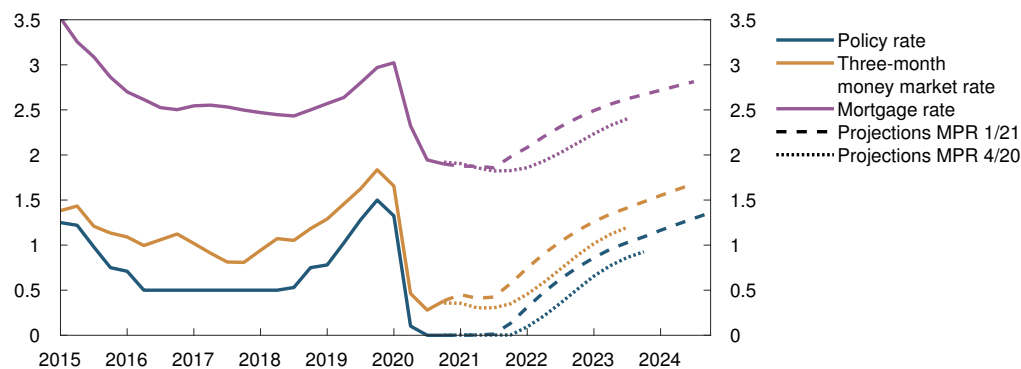
Banks primarily finance residential mortgages with wholesale funding and deposits. Banks normally pay the three-month money market rate plus the bond premium for wholesale funding. In sum, the price of wholesale funding outstanding has increased since the *December Report*. On the other hand, deposit rates have been stable since summer but fell below 0.4% in January. A number of consumer credit banks have recently announced lower deposit rates in 2021. Reduced deposit rates could improve bank profitability and provide room for lower lending rates.

Market-based policy rate expectations indicate an earlier rate hike than the market expected in December. Market-implied rates indicate that a first rate hike is expected towards the end of 2021, followed by three additional rate hikes in 2022. The market has priced in a policy rate of 1.5% towards the end of 2024, which is slightly higher than the projected policy rate in this *Report*.

The average residential mortgage rate is projected to remain close to today's level for a period ahead (Chart 2.2), followed by an increase owing to a rise in the policy rate. In 2024, the mortgage rate stands at 2.8%. The increase is slightly higher than projected in the *December Report*.

Norwegian long-term rates have shown a pronounced increase since December. Interest rates at the longest end have increased most. The increase is closely in line with the movement in international rates (Chart 2.3). Long-term interest rates are important for households that want to switch to fixed-rate loans, and since the *December Report* quoted interest rates on loans with a ten-year fixed rate has increased by more than 0.50

**Chart 2.2 Mortgage rates are still low**  
Percent

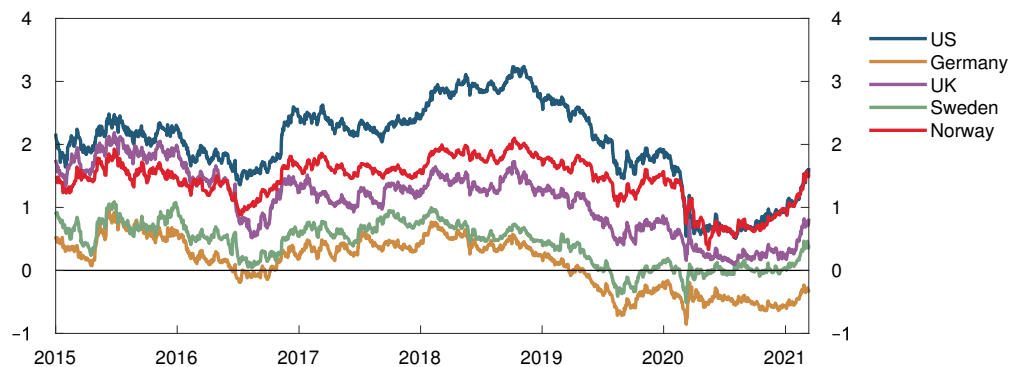


Sources: Statistics Norway and Norges Bank

<sup>1</sup> Read more about structural liquidity and Norges Bank's management of banks' reserves on Norges Bank's website: *The management of bank reserves: The system in Norway*.

**Chart 2.3 Long-term interest rates have risen**

Yields on 10-year government bonds in selected countries. Percent



Source: Bloomberg

percentage point. The share of households with fixed-rate loans is low, however. As a result, changes in the interest rate on banks' fixed-rate loans have little influence on the average residential mortgage rate.

## 2.2 Krone exchange rate

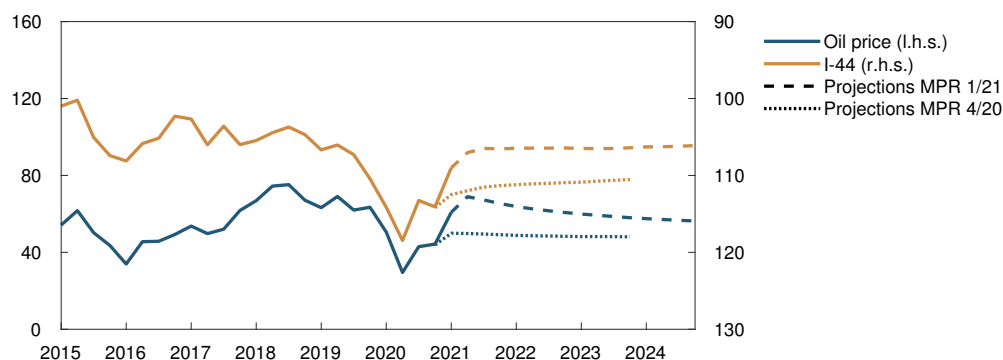
### Stronger krone than expected

The krone exchange rate, as measured by the import-weighted exchange rate index I-44, fell to record-low levels under the market stress in March 2020. Since then, the krone has appreciated against most currencies and is now back at pre-pandemic levels (Chart 2.4). In recent months, the krone has fluctuated somewhat, but has largely moved in line with developments in oil prices and risk sentiment in international financial markets. The krone has appreciated by about 5% since December and is stronger than projected in the December *Report*.

The krone is expected to remain close to today's level through the remainder of the projection period. This implies a stronger krone exchange rate than projected earlier. There is substantial uncertainty regarding the krone's long-term level.

**Chart 2.4 Stronger krone exchange rate than expected**

Import-weighted exchange rate index (I-44) and oil price



Sources: Refinitiv Datastream and Norges Bank

# 3 Norwegian economy

The recovery in the Norwegian economy continued towards the end of 2020, and mainland GDP growth was stronger than expected. Since the beginning of 2021, higher infection rates and stricter containment measures appear to have again dampened activity somewhat, and unemployment has increased slightly. In the period ahead, it appears that vaccination may proceed more quickly than assumed in the December *Monetary Policy Report*, so that containment measures can be relaxed earlier. At the same time, there is still uncertainty about the evolution of the pandemic and its economic impact ahead. The reopening of society is expected to give a clear boost to economic activity through 2021. Many employees will then return to work, but it will take time before unemployment approaches pre-pandemic levels. Capacity utilisation is projected to be close to a normal level by year-end 2021, a little earlier than projected in the December *Report*.

Underlying inflation has continued to decline in recent months as the effects of the krone depreciation in spring 2020 have diminished. Inflation is expected to continue to slow ahead, to about 1.3% in 2022, before rising to 1.7% towards the end of 2024.

## 3.1 Economic developments

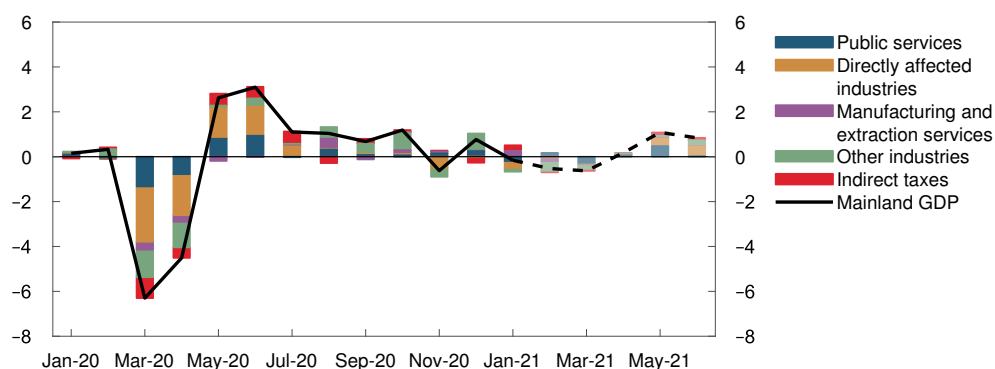
### Temporary drag on recovery

The Norwegian economy continued to recover towards the end of 2020, after the Covid-19 pandemic had triggered a sharp fall in activity in spring 2020. Economic developments were stronger than projected, and preliminary national accounts figures indicate that the containment measures are depressing economic activity somewhat less than previously assumed.

Since the turn of the year, higher infection rates have led to stricter containment measures, and the reopening of society has been postponed. Activity fell slightly in January,

**Chart 3.1 The recovery in the mainland economy is being held back temporarily**

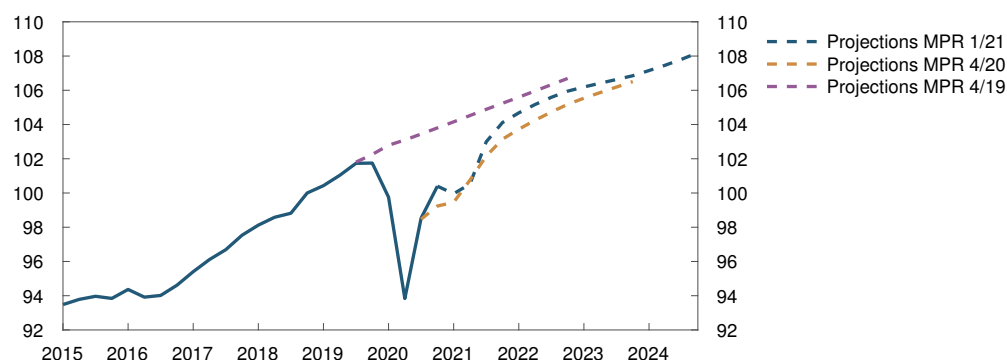
Mainland GDP. Contribution to monthly growth. Seasonally adjusted. Percent



Sources: Statistics Norway and Norges Bank

**Chart 3.2 Prospects for a pick-up in growth in latter half of 2021**

Mainland GDP. Seasonally adjusted. Index. 2018 Q4 = 100



Sources: Statistics Norway and Norges Bank

and mainland GDP was about 1.5% lower than before the Covid-19 outbreak. Services related to culture, hotels, food service and transport are particularly affected by the measures. In southeastern Norway, some retail trade segments have also been hit owing to recent mandated business closures. Strict rules for entering Norway are limiting the supply of foreign labour and are expected to weigh on construction activity in particular.

Higher infection rates and stricter containment measures are expected to lead to a fall in mainland GDP in 2021 Q1 (Chart 3.1). This is in line with the information from contacts in Norges Bank's Regional Network, who in February reported a fall in activity over the previous three months. In the following six months, contacts expected higher activity, in particular due to increased vaccination coverage.

New information from the Norwegian health authorities suggests that the vaccine rollout will be faster than previously assumed (see Special Feature on page 11 for more details). At the same time, there is still uncertainty about the evolution of the pandemic and its economic impact. The reopening of society is expected to give a clear boost to economic activity through 2021, driven in particular by services that have been hard hit by the containment measures through the pandemic. GDP growth is expected to pick up in the latter half of 2021, and there are prospects that mainland activity will return to pre-pandemic levels in 2021 Q3 (Chart 3.2).

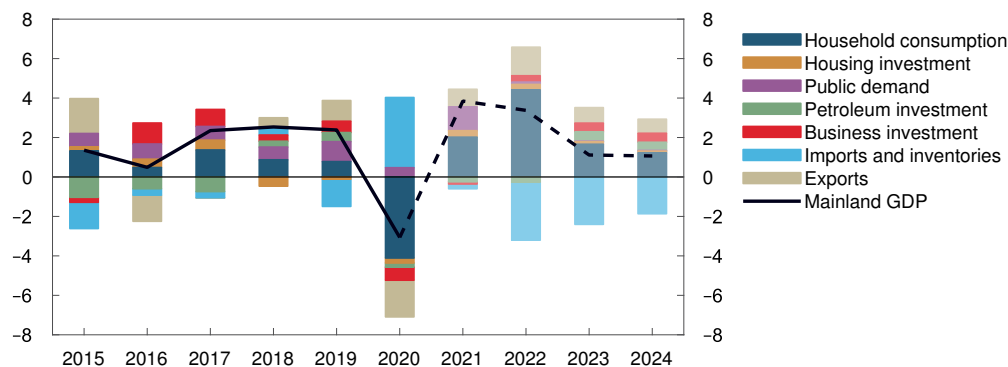
Activity in the Norwegian economy is projected to continue to pick up over the coming years (Chart 3.3). In 2022, growth is expected to be solid, primarily supported by a rise in household consumption. Continued low interest rates and spending of some of the money saved when consumption opportunities were limited underpin the expectation of a substantial increase in consumption.

GDP growth is expected to slow somewhat in 2023 and 2024, in pace with lower consumption growth. Higher activity among Norway's trading partners will boost exports in the coming years. Fiscal policy will support growth in 2021 through a number of measures to mitigate the economic impact of the pandemic. As from 2022, public demand is assumed to show little change.

#### **Household demand will slow temporarily**

Household consumption made a strong recovery in 2020 Q3 after falling sharply earlier in the year. In 2020 Q4, consumption was stable and higher than expected (Chart 3.4),

**Chart 3.3 Household consumption boosts growth ahead**  
Mainland GDP. Contribution to annual growth. Percentage points



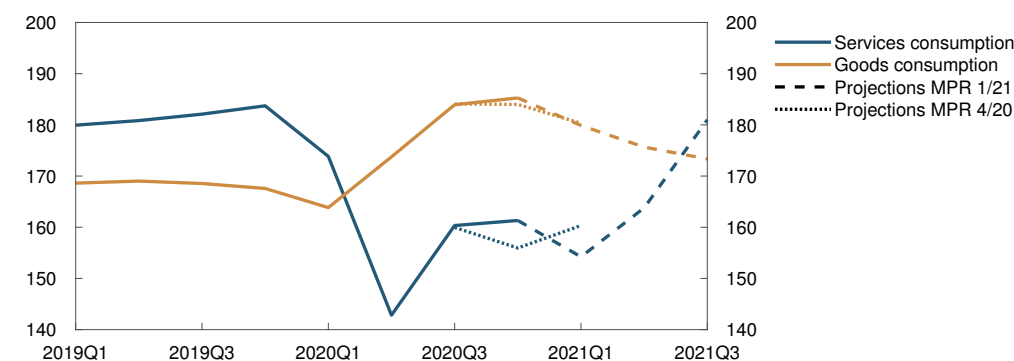
Sources: Statistics Norway and Norges Bank

primarily because the impact on industries directly affected by containment measures was less pronounced than envisaged.

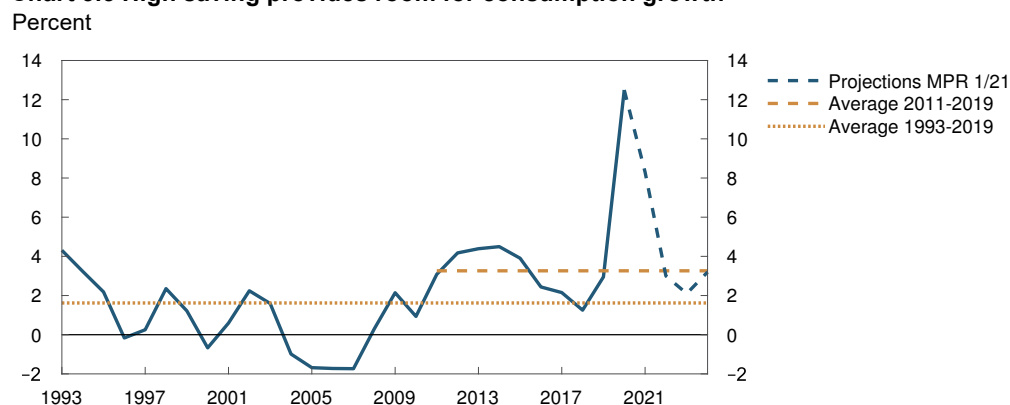
During the pandemic, services consumption has been hard hit by containment measures and in 2020 Q4, was still about 12% lower than the pre-pandemic level. The restrictions on services consumption have contributed to a shift towards goods consumption over the past year. As expected, goods consumption remained elevated in 2020 Q4, about 10% higher than pre-pandemic levels. Household spending abroad declined further in 2020 Q4 as expected and was more than 90% lower than pre-pandemic levels.

Norges Bank has access to data for a substantial share of Norwegians' debit and credit card transactions using BankAxept, Vipps, Visa and Mastercard. Total card usage indicates that services purchases in vulnerable industries fell considerably between 2020 Q3 and Q4. Card usage further indicates that levels of services purchases in these industries were higher in summer than shown in the national accounts, which contributes to some uncertainty about the level of household consumption and thus also about the level of the saving ratio. This may also indicate that services consumption correlates more closely with the containment measures than shown by preliminary national accounts figures. A higher correlation between containment measures and consumption may suggest that the increase in saving can be attributed more to containment measures

**Chart 3.4 Services consumption less affected by containment measures than expected**  
Goods and services consumption. Constant prices. Seasonally adjusted. In billions of NOK



Sources: Statistics Norway and Norges Bank

**Chart 3.5 High saving provides room for consumption growth**

Sources: Statistics Norway and Norges Bank

and fear of infection and less to caution due to heightened uncertainty about future income.<sup>1</sup>

Weak developments in vulnerable services continued into January and February 2021, and goods purchases so far in 2021 indicate some decline in goods consumption. Based on insights from payment card data, a close relationship between consumption and containment measures is expected to continue ahead. Household consumption is projected to fall in 2021 Q1, but will gradually pick up thereafter in the period to summer, as vaccines are rolled out and society is reopened. Travel restrictions are expected to continue to keep household spending abroad at a low level through autumn. Growth in goods consumption is expected to slow as the shift from services to goods consumption, driven by the pandemic, is reversed. As travel restrictions are lifted, rising travel activity is expected to boost household spending abroad.

Household saving has been high owing to a long period of limited consumption opportunities (Chart 3.5). Together with somewhat higher real wage growth, this is expected to contribute to strong consumption growth in the coming years. At the same time, it is highly uncertain how quickly and how far the saving ratio will fall. The projections for the saving ratio are little changed since the *December Report*.

### Higher housing investment ahead

After a brief decline in spring 2020, house price inflation and sales of existing homes picked up markedly and remained elevated through autumn and winter. Lower interest rates stimulate the housing market, and increased remote working and limited consumption opportunities may also have pushed up demand and the willingness to pay for housing.

House price inflation has been higher than projected in the *December Report*. In the period ahead, the rise in house prices is projected to slow gradually. There are prospects that house price inflation will be fairly low in the coming years, owing in part to higher interest rates, a normalisation of household consumption patterns and increased residential construction (see Section 5 for more about the housing market).

Housing investment increased more than expected towards the end of 2020. Over the past half-year, new home sales have risen, boosting expectations of increased residen-

<sup>1</sup> See Special Feature in *Monetary Policy Report 4/20* "Historic level of household saving".



tial construction and higher housing investment ahead. At the same time, strict rules for entering the country are creating challenges for the construction sector, which is heavily dependent on foreign labour. A number of Regional Network contacts report that this could be a challenge ahead. A limited supply of labour could therefore dampen housing construction activity and lead to delays, but how severe the consequences will be is uncertain.

### Improved investment outlook in the business sector

Mainland business investment was already falling at the onset of the pandemic in spring 2020, but strict containment measures and considerable uncertainty amplified the decline in the period to summer. Preliminary national accounts figures indicate that investment held up better over the second half of 2020 than expected.

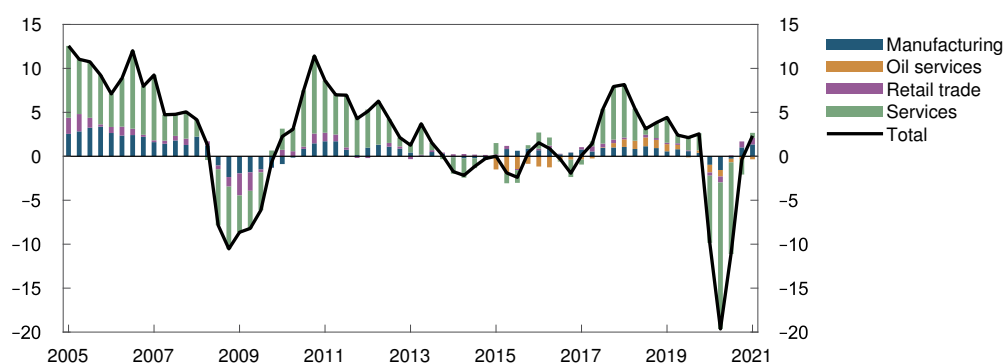
In the coming year, Regional Network contacts expect a slight increase in investment (Chart 3.6). Investment plans are therefore slightly higher than in the November survey. On the other hand, the investment intentions survey for manufacturing and electricity supply indicates lower investment in 2021. Overall, this has contributed to an upward revision of the Bank's investment expectations from the December *Report*, but some decline in investment is still expected in 2021. The fact that the reopening of society is drawing closer is probably helping to prevent weaker investment developments. At the same time, firms' climate-related adjustments may push up investment during the projection period (see Special Feature on page 36).

In the years to 2024, higher profitability and improved growth prospects for the Norwegian economy are expected to support mainland business investment. The projections for investment growth have been revised up for 2021, revised down somewhat for 2022 and are little changed for the remainder of the projection period.

The pandemic, the fall in oil prices and heightened uncertainty contributed to the fall in petroleum investment between 2019 and 2020. The decline was cushioned by the temporary tax reductions for oil companies adopted by the Storting (Norwegian parliament) in June 2020. Petroleum investment is expected to continue to fall in 2021 and 2022, even though the tax reductions in isolation push up investment and oil prices are approximately at their pre-pandemic level. This reflects the completion of a number of large development projects, while relatively few new development projects are likely to be started in 2021 and the first half of 2022 (Chart 3.7).

### Chart 3.6 Brighter business investment outlook

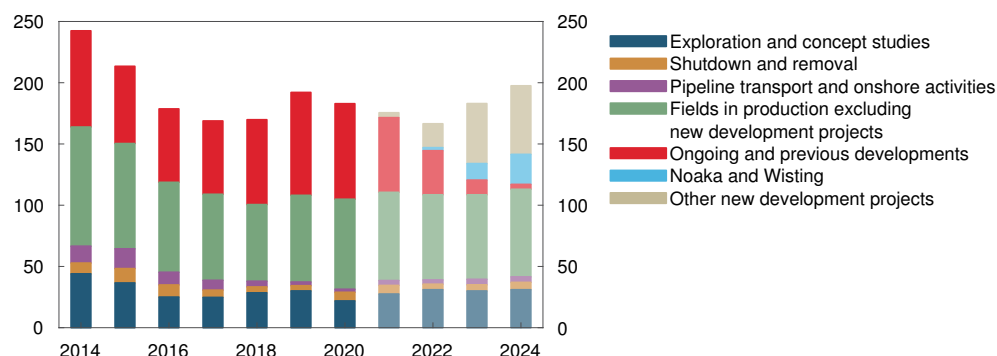
Expected change in business investment the next 12 months. Percent



Source: Norges Bank

**Chart 3.7 Petroleum investment picks up after 2022**

Petroleum investment. At constant 2021 prices. In billions of NOK



Sources: Statistics Norway and Norges Bank

The temporary tax reductions give oil companies strong incentives to launch development projects before the end of 2022. In line with this, oil companies have signalled that they will launch a number of development projects, including Noaka and Wisting, in the second half of 2022. Petroleum investment is therefore expected to rise markedly in 2023 and 2024. Investment will also be pushed up by oil companies' plans for substantial investment in projects that contribute to reducing greenhouse gas emissions.

Compared with the *December Report*, a higher level of petroleum investment is projected throughout the projection period. The projections for exploration and fields in production have been revised up in the light of the Q1 investment intentions survey and the substantial increase in oil and gas prices since the *December Report*. At the same time, projections for development projects have been revised down somewhat in the light of new information about forthcoming development projects.

**Higher export growth in the coming years**

Mainland exports picked up in the second half of 2020. In 2020 Q4, exports increased more than expected, owing to a stronger-than-expected increase in activity among Norway's trading partners. Nevertheless, exports fell by more than 8% in 2020, primarily owing to the lower number of travellers to Norway. The decline in oil service exports, driven by lower global investment activity, also clearly contributed to the fall in exports.

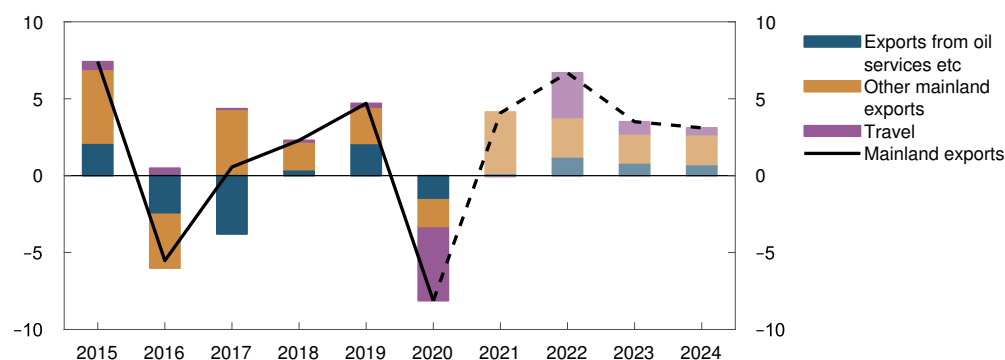
In anticipation of the lifting of travel restrictions and containment measures, travel activity is expected to remain low in the first half of 2021. Travel activity is expected to increase substantially through the latter half of 2021, even though some travel restrictions will still apply, and then continue to rise in the period to 2024. Oil service exports are projected to remain virtually unchanged in 2021, and then be pushed up by investment growth in the global petroleum industry over the coming years (Chart 3.8). Higher activity among Norway's trading partners is also expected to boost other exports ahead.

The projections for exports have been revised up somewhat since the *December Report*, reflecting somewhat higher projections for growth among Norway's trading partners and a substantial increase in oil prices. A stronger krone pulls in the opposite direction.

Following a considerable decrease in the first half of the year, imports picked up sharply in the second half of 2020. Like exports, imports have been dampened by travel restrictions. Further out, imports are expected to pick up substantially as domestic demand rises and travel restrictions are lifted.

**Chart 3.8 Exports expected to pick up**

Mainland exports. Contribution to annual growth. Percent



Sources: Statistics Norway and Norges Bank

**Public spending higher than projected**

Since the Covid-19 outbreak in March 2020, the Government has implemented extensive fiscal policy measures to mitigate the economic fallout of the pandemic and strict containment measures. In the National Budget for 2021, the Government proposed that many measures should be phased out in 2021 and that withdrawals from the Government Pension Fund Global (GPF) should decline substantially. After a number of resurgences of Covid-19 and the implementation of stricter containment measures, new measures have been adopted and existing government support measures have been expanded.

At the end of January, the Government presented a new stimulus package, which means that public spending in 2021 will be higher than projected in the *December Report*. The structural non-oil deficit is now assumed to be equivalent to 3.3% of the value of the GPF in 2021.<sup>2</sup> As a share of the GPF, the deficit is in line with the projections in the *December Report*, but the share is pulled down as the value of the GPF has risen more than assumed in the December projections.

In 2022, with the phasing-out of containment measures and lower growth in public demand, the deficit is expected to decrease to 3.1% of the GPF. Further out in the projection period, low growth in public demand is expected to contribute to a further decrease in the deficit to just below 3% in 2024. Although Norges Bank assumes close to zero growth in public demand, the phasing-out of containment measures will free up funds, which may lead to increased public spending for other purposes and activities.

**Labour market recovery somewhat delayed**

In December 2020, unemployment declined somewhat before higher infection rates and stricter containment measures resulted in a slight rise in unemployment in January 2021. Unemployment was stable at 4.0% in February. Labour market developments have been somewhat weaker than projected in the *December Report*.

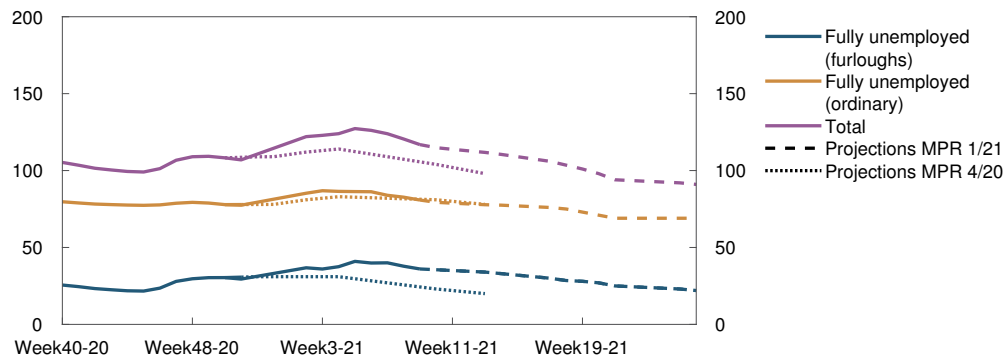
In February, just below 208 000 persons were registered as fully unemployed, partially unemployed or job seekers on labour market programmes. This is about twice as many as a year ago and represents 7.3% of the labour force.

The increase in unemployment since the turn of the year primarily reflects a higher number of furloughs (Chart 3.9). At the end of February, close to 73 000 employees were

<sup>2</sup> Based on the actual value of the GPF at the beginning of the year. Based on the estimated value of the GPF in the National Budget for 2021, the structural non-oil deficit in 2021 is assumed to be 3.5% of the GPF.

**Chart 3.9 Rise in furloughs**

Registered unemployed. In thousands



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

furloughed and just over half were fully furloughed. The total number of furloughs is the highest since August 2020. Nevertheless, the number of furloughs is still considerably lower than during the first lockdown in March 2020, when furloughs reached a peak of more than 270 000.

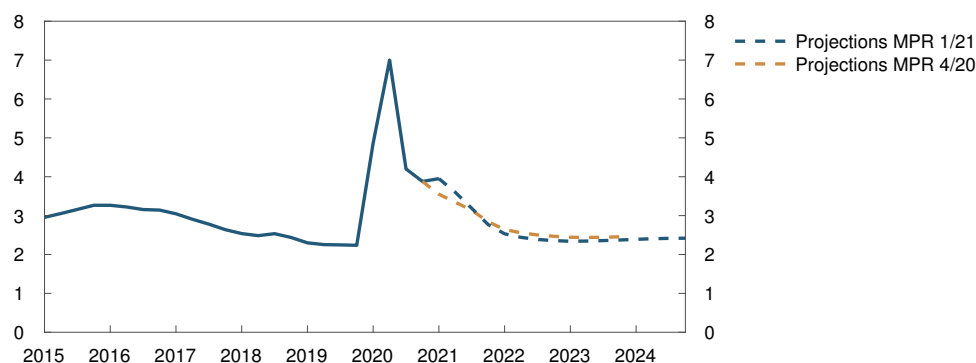
The rise in unemployment in 2021 has primarily been evident in sectors directly affected by containment measures, particularly services, tourism and transport. In addition, mandated business closures across much of the retail sector in some parts of Norway have also resulted in an appreciable rise in unemployment in retail and sales. Unemployment has increased most in Oslo, Viken and Vestland, reflecting the regional containment measures.

According to weekly data from the Norwegian Labour and Welfare Administration (NAV), the number of fully unemployed has decreased so far in March, while the number of partially unemployed has edged up. Some of Norges Bank's Regional Network contacts report that they have adjusted to the containment measures and found jobs for employees in other regions or functions.

Unemployment is expected to fall in the period to summer, but will likely remain higher than projected in the *December Report* after the increase at the beginning of the year. The number of vacancies has picked up considerably in 2021, and Norges Bank's Regional

**Chart 3.10 Lower unemployment going forward**

Registered fully unemployed as a share of the labour force. Seasonally adjusted. Percent



Sources: NAV and Norges Bank

Network contacts indicate an increase in hiring ahead. In 2021 Q2, a slightly faster decline in unemployment is expected as containment measures are likely scaled back and more furloughed employees return to work. Unemployment is expected to decline further until mid-2022 and then stabilise at slightly above its pre-pandemic level to the end of the projection period (Chart 3.10).

Employment rose more than expected in 2020 Q4 (Chart 3.11), reflecting higher-than-projected activity in the mainland economy in the same period. Developments in employment only partially reflect developments in registered unemployment. This is because furloughed employees are regarded as employed for the first three months of the furlough period and employees who are furloughed for a shorter period than this are therefore not captured in the employment statistics.

In 2021 Q1, some decline in employment is expected as unemployment has increased slightly and labour immigration will be limited by stringent travel restrictions. Employment is then expected to rise in the period to summer. This is in line with the estimates from the Regional Network, where contacts in services, retail trade and manufacturing anticipate higher employment in the coming months.

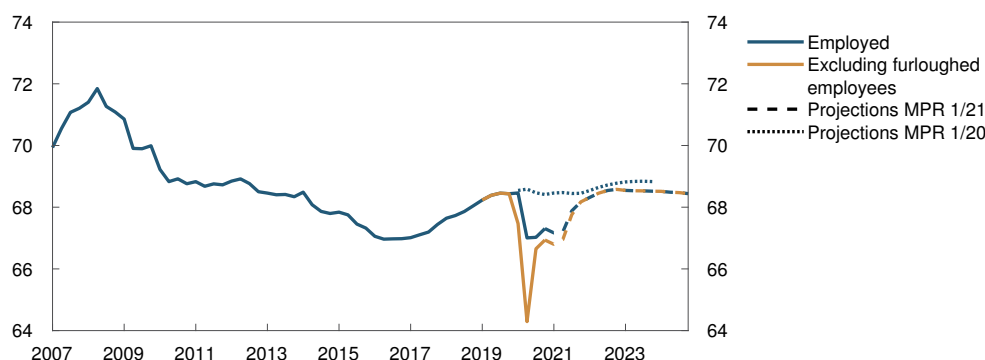
Labour immigration has fallen during the pandemic, owing to travel restrictions and lower labour demand. The stringent travel restrictions are expected to remain in place in the period to summer, and the number of non-resident workers is expected to decline further ahead, dampening employment growth. As the travel restrictions are lifted, labour immigration is expected to pick up again, in line with Statistics Norway's projections.

In the coming years, further growth in activity is expected to push up demand for labour and boost employment. Employment is projected to reach its pre-pandemic level in the first half of 2022.

The projection for employment growth in 2021 is unchanged, but the level is nevertheless higher than projected in the *December Report*. Somewhat higher employment growth is expected in 2022 owing to somewhat higher growth in the mainland economy than projected in December. Further out in the projection period, the employment level is little changed since the *December Report*.

**Chart 3.11 Higher employment than expected**

Employed as a share of the population aged 15–74. Seasonally adjusted. Percent



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

The pandemic and the sharp economic downturn may have long-term consequences for the labour market. The share of long-term unemployed, ie workers who have been fully unemployed for more than six months, has risen to a historically high level over the past year. Long-term unemployment has edged down in recent months, but is still at a high level. Long-term unemployment can reduce employability owing to factors such as erosion of skills, negative employer perceptions of the long-term unemployed and lower motivation to seek employment. About one in five long-term unemployed are on furlough, and their prospects for returning to work when society reopens may therefore be somewhat better.

Severe downturns have previously been followed by lower long-term labour force participation, most recently after the fall in oil prices in 2014.<sup>3</sup> The fact that the level of unemployment remains high and a large number of people are still long-term unemployed supports the Bank's assessment that the pandemic could have a prolonged negative impact on labour force participation.

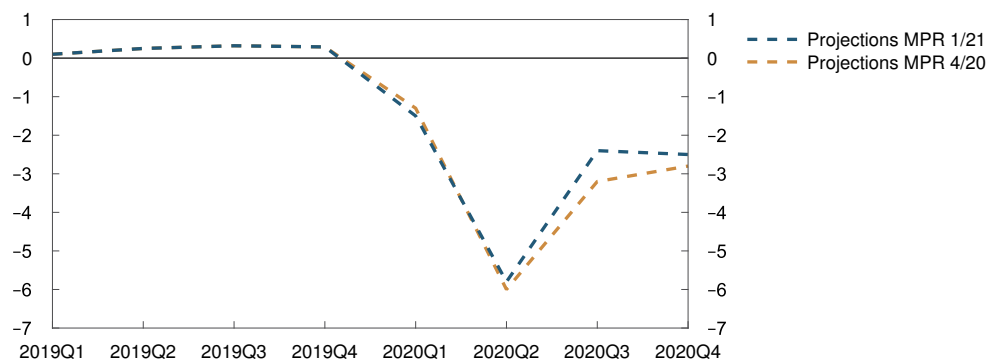
### Prospects for reduced spare capacity in the economy

There is still assessed to be considerable slack in the Norwegian economy following the sharp downturn in 2020. Nevertheless, there is considerable uncertainty regarding how much spare capacity there is and has been since the pandemic broke out. Containment measures and fear of contagion have affected both supply and demand in the economy. Assessing potential output in particular has been more demanding than normal.

It is the Bank's current assessment that capacity utilisation appears to be somewhat higher in 2020 than projected in the *December Report*. Preliminary national accounts figures show that both GDP growth and employment fell slightly less in 2020 than expected. Card transaction data also indicate that turnover in the service sector was higher in summer 2020 than preliminary national accounts indicate (see further details regarding the data on page 23). We have therefore revised up the projections for capacity utilisation in 2020 Q3. The same data also suggest slightly weaker developments in 2020 Q4 than shown in the national accounts. Against this background, capacity utilisation is now assumed to have declined slightly between 2020 Q3 and 2020 Q4 (Chart 3.12). The assessment of capacity utilisation is well in line with empirical model output (Chart 3.13).

**Chart 3.12 Upward revision of capacity utilisation in 2020**

Output gap. Percent

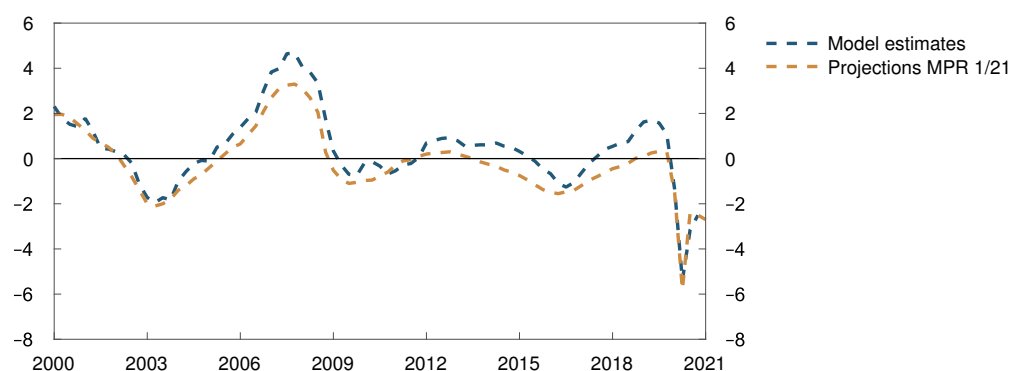


Source: Norges Bank

<sup>3</sup> See Ellingsen, N. and S.M. Galaasen (2021) "Langvarige konsekvenser i arbeidsmarkedet" [Long-term consequences for the labour market]. *Staff Memo 1/2021*, Norges Bank (Norwegian only).

**Chart 3.13 Considerable slack in the Norwegian economy**

Output gap. Percent



Source: Norges Bank

Capacity utilisation will likely decrease somewhat more in the current quarter owing to new public health restrictions and somewhat higher unemployment. As economic activity picks up again in the period to summer, capacity utilisation is expected to increase slightly. In the second half of 2021, there are prospects that capacity utilisation will increase more rapidly than projected in December as a result of higher growth in the mainland economy. The assumption that vaccination rollout will proceed somewhat faster than expected in December is a key precondition for such developments. Capacity utilisation will approach a more normal level at the end of 2021, which is somewhat earlier than projected in the *December Report*.

With solid growth in the mainland economy in 2022 and a further rebound in activity in subsequent years, there are prospects that capacity utilisation will continue to increase somewhat in the years ahead. Growth in potential output is projected to rise by an average of 1¼% annually in the period 2022–2024. Productivity is expected to rise by ¾% annually, while employment is projected to increase by ½%.

## 3.2 Costs and prices

### Higher wage growth than expected

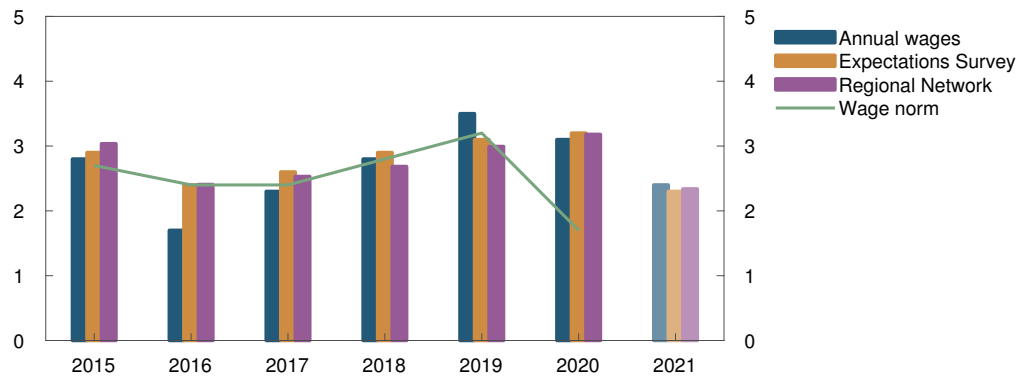
It is demanding to interpret wage and cost developments under Covid-19 pandemic conditions. The historically high number of furloughs and decline in employment in 2020 had an uneven impact on industries and occupations with different wage levels. Those earning lower than average wages were hardest hit. This entailed large compositional effects when measuring wage growth.

National accounts figures show that average annual wage growth in 2020 was 3.1%. This is clearly higher than the projection in the *December Report* and substantially higher than the negotiated wage norm. Compositional effects appear to have pulled up measured wage growth in the national accounts more than projected, but underlying wage growth in 2020 was likely also somewhat higher than expected.

Wage growth slowed markedly through 2020, according to quarterly wage statistics. This reflects waning compositional effects, but also the feed-through from high unemployment, low productivity and weaker business profitability to a moderate wage settlement.

**Chart 3.14 Expectations of lower wage growth in 2021**

Annual wage growth and wage expectations. Percent



Sources: Epinion, Ipsos, Opinion, Statistics Norway and Norges Bank

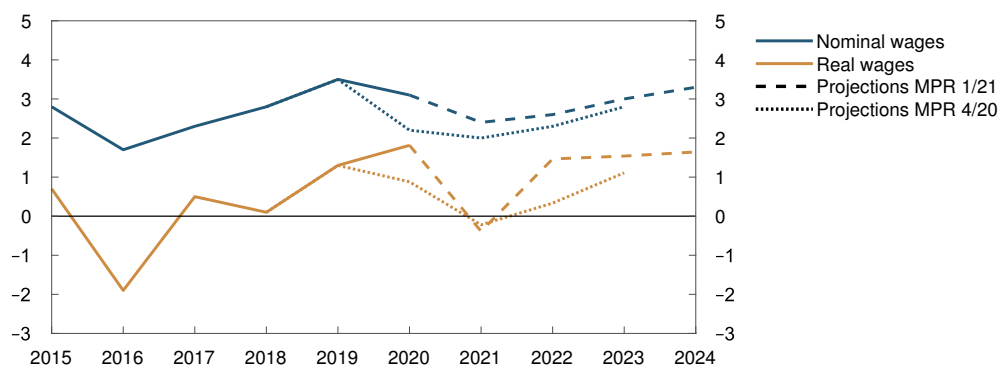
Measured average annual wage growth in the national accounts in 2021 is projected to fall to 2.4%. Wage growth at the beginning of 2021 appears to be low, and a number of compositional effects will likely be reversed, pulling down average wage growth. Nevertheless, wage growth is expected to move up through 2021. Unemployment is likely to move down, but still remains high. As economic activity normalises, business profitability will also improve. Inflation is also expected to pick up, which may push up wage growth.

The projection for 2021 is close to the expectations of Regional Network contacts and in Norges Bank's Expectations Survey (Chart 3.14). However, it is uncertain how much the surveys capture the potential for compositional effects to pull down annual wage growth in 2021.

Further out in the projection period, wage growth is expected to rise gradually to 3.3% in 2024 (Chart 3.15). The output gap turns positive after a period, and higher oil prices than in the December *Report* may gradually help improve profitability for a number of firms. However, productivity growth is still assumed to be relatively low. In isolation, this will hold back wage growth. According to Norges Bank's Expectations Survey, the social partners expect wage growth of 3.1% in five years.

**Chart 3.15 Prospects for moderate wage growth**

Wages. Annual growth. Percent



Sources: Statistics Norway and Norges Bank



There is uncertainty surrounding future wage growth. In the near term, compositional effects represent a substantial uncertainty factor for measured wage growth. Wage developments will also depend on the evolution of the pandemic ahead and how quickly economic conditions normalise (see also box on page 11).

### Lower underlying inflation

Underlying inflation moved up through spring and summer 2020, measured as the 12-month rise in consumer prices adjusted for tax changes and excluding energy products (CPI-ATE) (Chart 3.16). The rise primarily reflects higher imported goods inflation, owing to the krone depreciation through winter and spring 2020. In recent months, inflation has moderated somewhat, and in February, the 12-month rise in the CPI-ATE was 2.7%, somewhat lower than expected. The average 12-month rise in other indicators of underlying inflation was 2.4% in February.<sup>4</sup>

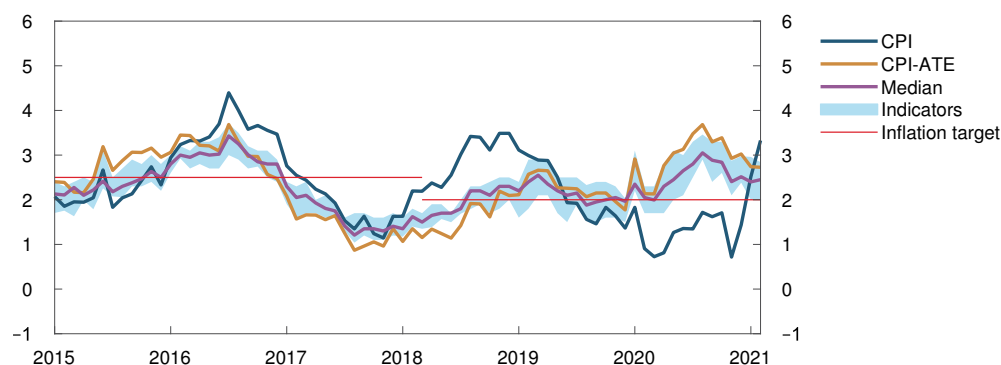
Developments in energy prices have resulted in wide gaps between the consumer price index (CPI) and CPI-ATE inflation in recent years. Since the December *Report*, there was a sharper and faster rise in electricity prices than expected, contributing to an increase in the 12-month rise in the CPI from 1.4% in December to 3.3% in February, considerably more than projected. The effect of reduced tax on items such as alcohol and sugar has also pulled down CPI inflation less than assumed.

Since summer, imported inflation has drifted down in line with the fading effects of the krone depreciation in 2020, but in recent months the decline has levelled off. In February, imported inflation rose and was a little higher than projected. The rise in prices for domestically produced goods and services has moderated further and was a little lower than projected. This may indicate that low capacity utilisation has contributed to a slightly faster decline in domestic inflation than assumed.

In the coming months, underlying inflation is expected to move down fairly quickly towards 2%, driven by a decline in both imported and domestic inflation (Chart 3.17). Fading effects of the krone depreciation in spring 2020 will pull down imported inflation, but higher global freight rates and prices for transport services may dampen the fall somewhat.

**Chart 3.16 Lower underlying inflation, but rise in CPI inflation**

CPI and indicators of underlying inflation. Twelve-month change. Percent

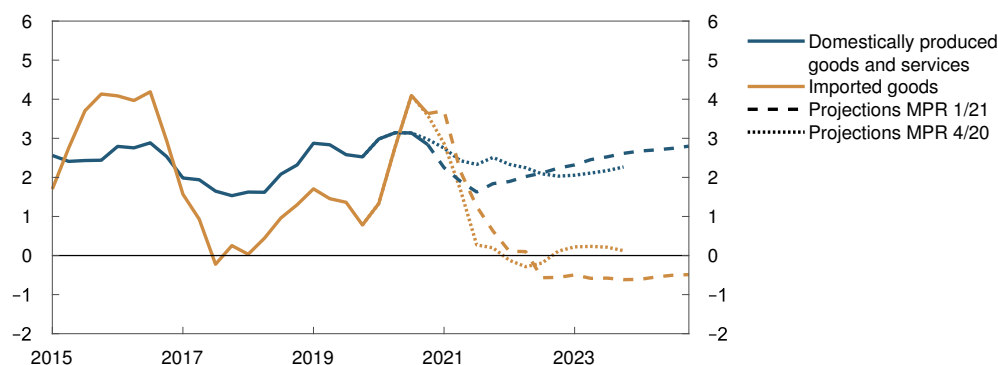


Sources: Statistics Norway and Norges Bank

<sup>4</sup> See Husabø, E. (2017) "Indicators of underlying inflation in Norway" *Staff Memo 13/2017*, Norges Bank, for a detailed review of various indicators.

**Chart 3.17 Prospects for lower imported inflation**

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



Sources: Statistics Norway and Norges Bank

At the same time, extraordinary conditions related to the pandemic are a source of uncertainty regarding inflation ahead. Low capacity utilisation in the Norwegian economy suggests that inflation will be low. Temporary changes in indirect taxes affect the measurement of tax-adjusted prices and will likely have a dampening effect on measured domestic inflation in summer (see box on page 35). On the other hand, extra costs related to containment measures, for example, may result in higher inflation than capacity utilisation in the Norwegian economy in isolation would indicate.

CPI-ATE inflation is projected to move down further to around 1.3% in 2022. Higher capacity utilisation in the Norwegian economy will give a boost to inflation further out in the projection period, and underlying inflation is expected to be 1.7% at the end of 2024. Prospects for a stronger krone suggest that imported inflation will be lower than assumed in the *December Report*, but a slightly higher rise in the prices for imported goods dampens the effect somewhat. Further out, prospects for higher wage growth will lead to somewhat higher domestic inflation than projected in December.

CPI inflation is expected to pick up further in the coming months and remain high before moderating in pace with lower electricity prices in 2022. The projections for CPI inflation for 2021 have been revised up considerably compared with the *December Report*, while the projections for 2022 have been revised down.

In the longer term, overall inflation expectations, as measured by Norges Bank's Expectations Survey, lie just above 2.0%.

In 2020, real wage growth was relatively high, but in 2021, a slight decline in real wages is expected. This reflects the wide fluctuations in electricity prices, which pulled down CPI inflation in 2020 and pulled it up in 2021. Moreover, compositional effects led to high wage growth in 2020 and dampen wage growth in 2021. From 2022, real wage growth is expected to pick up at a somewhat faster pace than in the *December Report*. This reflects an improvement in the terms of trade and somewhat lower unemployment ahead than projected in December.

**MEASURING PRICES DURING THE COVID-19 PANDEMIC**

Through the pandemic, the rise in prices for services that have been virtually unavailable owing to containment measures has been estimated. In February, around 2.5% of the basis for weighting the consumer price index (CPI) was extrapolated, based on either seasonal variations or the total CPI.

As an economic support measure, the low rate of value-added tax (VAT) on goods and services has been reduced from 12% to 6% in the period between 1 April 2020 and 1 July 2021. This applies to passenger transport and accommodation, and admission to cinemas, sports events, amusement parks and adventure centres. The VAT reduction has likely affected measured inflation. If businesses have reduced their retail prices less than implied by the reduction in the VAT rate in isolation, the tax-adjusted price level will have risen, all else equal. From 1 July 2021, VAT will be raised back to 12%. If businesses do not increase their prices correspondingly, the measured tax-adjusted price level will in isolation be lower than if VAT had remained unchanged.

## CLIMATE CHANGE, THE NORWEGIAN ECONOMY AND MONETARY POLICY

Climate change and the transition to a low-carbon economy is affecting global economic developments. More frequent extreme weather events are destroying crops, buildings and infrastructure. An increasing number of countries are setting ambitious goals to cut greenhouse gas emissions. Investment in renewable energy is growing rapidly worldwide, and investors, firms and customers increasingly demand sustainable behaviour. In Europe, emission allowance prices have risen substantially over the past years (Chart 3.A).

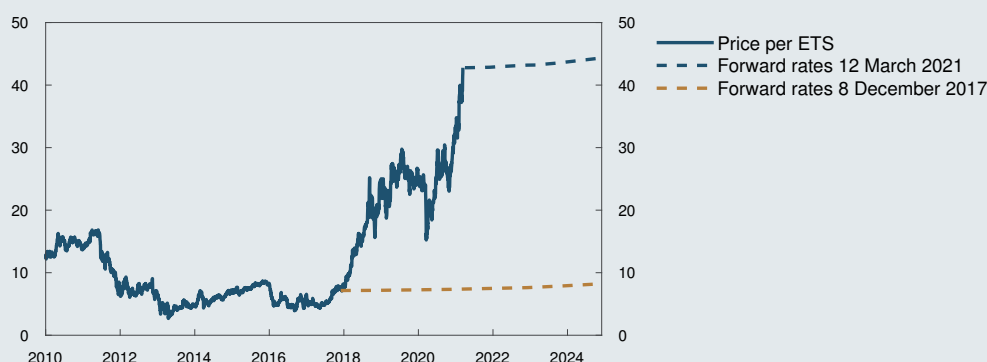
Climate change is a global challenge that must be addressed by political authorities, using instruments other than those at the disposal of central banks. Norway has committed to reducing its greenhouse gas emissions by at least 50% from the 1990 level by 2030 and is facing a substantial transition in the years ahead.

Green transitions are underway. In a new survey conducted among the enterprises in Norges Bank's Regional Network, almost 90% of the contacts say that climate-related factors, especially factors related to the transition to a low-carbon economy, are affecting the enterprise's business activities.<sup>1</sup> Changes in customer preferences and climate policy measures implemented by the authorities are reported to be the most important climate-related factors, and adjustments to these factors are expected to push up investment by many of the contacts surveyed (Chart 3.B). Many of the contacts surveyed also expect climate-related factors to increase their selling prices in the years ahead. This may reflect factors such as higher costs for many firms associated with adjustments to new climate policy requirements and higher prices for emission allowances. About half of the contacts in the survey report that climate-related changes are generating a need for new expertise, although this need is not expected to be met by any substantial new hires. Of the contacts in the survey, 8% say that climate-related factors will increase employment in their own enterprises, while 2% expect the opposite effect on employment.

The Regional Network survey indicates that climate-related changes may have an impact on macroeconomic variables such as investment, inflation and employment. In addition

**Chart 3.A ETS prices have increased**

Price of emission allowances in the EU ETS market. In EUR per tonne of CO<sub>2</sub>



Sources: Refinitiv Datastream and Norges Bank

<sup>1</sup> More results from this survey will be published in a forthcoming blog post on the *Bankplassen blog*. For results from the 2020 survey, see Brekke, H. and S. K. Erlandsen (2020) "Klimatilpasninger i næringslivet" [Climate-related adjustments in the business sector]. Blog post on the *Bankplassen blog*, 19 May (Norwegian only).

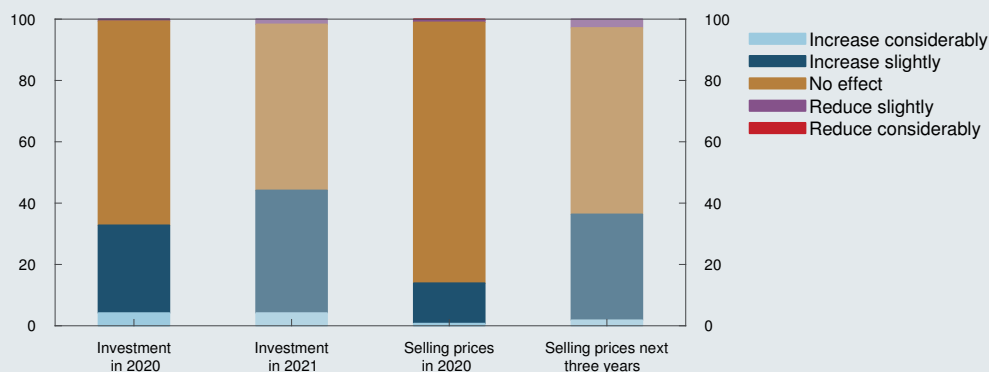
to affecting a number of macroeconomic variables, climate change and the transition to a low-carbon economy may affect the functioning of the economy. From a monetary policy perspective, a key question is what will happen to productivity in the transition period. Another question is how uncertainty regarding future climate-related changes – climate risk – affects investment decisions and asset prices today.<sup>2</sup> A third question is how climate change will dampen potential growth in the global economy and, if so, how that will influence the neutral interest rate level, ie the interest rate level consistent with monetary policy that is neither expansionary nor contractionary.

Climate-related changes may give rise to future challenges for monetary policy.<sup>3</sup> A potential implication of more frequent extreme weather events is larger fluctuations in inflation and output, making it difficult to distinguish between temporary and permanent shocks. Extreme weather events may also pull inflation and output in different directions, and, if the effects persist, affect monetary policy trade-offs. As different groups and sectors will likely be affected very differently by both climate change and the transition, the policy rate's effect on the economy could also change.

In monetary policy, flexible inflation targeting is a good starting-point for managing new developments, shocks and risks generated by climate change. Central banks and academia the world over are rapidly developing their understanding of how climate change and the transition to a low-carbon economy affect the macroeconomy and monetary policy. Norges Bank's economists are also working to enhance our understanding of these relationships, by increased analytical and research expertise in this area, increased cross-discipline collaboration and participation in international fora such as the Network for Greening the Financial System (NGFS).<sup>4</sup>

### Chart 3.B Climate-related conditions boost investment and prices

Actual and expected effect of climate-related conditions on contacts' investment and selling prices. Share of company's. Percent



Source: Norges Bank

2 Several studies show that climate risk can, amongst other things, affect asset prices and exchange rates. See for example, Bolton, P. and M. Kacperczyk (2020) "Do investors care about carbon risk?", *NBER Working paper 26968* and Kapfhammer, F., V. H. Larsen and L. A. Thorsrud (2020) "Climate risk and commodity currencies", *Norges Bank Working Paper 18/2020*.

3 See also NGFS (2020) "Climate Change and Monetary Policy: Initial takeaways". Network for Greening the Financial System, Technical document, June.

4 See Norges Bank's website for an overview of Norges Bank's work on climate and the economy (Norwegian only).

# 4 Monetary policy analysis

The policy rate was kept unchanged at 0% at the monetary policy meeting on 17 March. The monetary policy stance is expansionary and supports further growth in output and employment. The policy rate forecast implies a gradual rise in the policy rate from the latter half of 2021. The forecast has been revised up slightly since the *December 2020 Monetary Policy Report*, but implies a continued expansionary monetary policy for a long period ahead.

## 4.1 Objectives and recent developments

### Low and stable inflation

The primary objective of monetary policy is low and stable inflation. When the inflation target was introduced in 2001, the operational target of monetary policy was annual consumer price inflation of 2.5%. In March 2018, the target was changed to 2%. Average annual consumer price inflation has been around 2% since 2001 (Chart 4.1). According to Norges Bank's Expectations Survey, long-term inflation expectations are well-anchored close to the target.

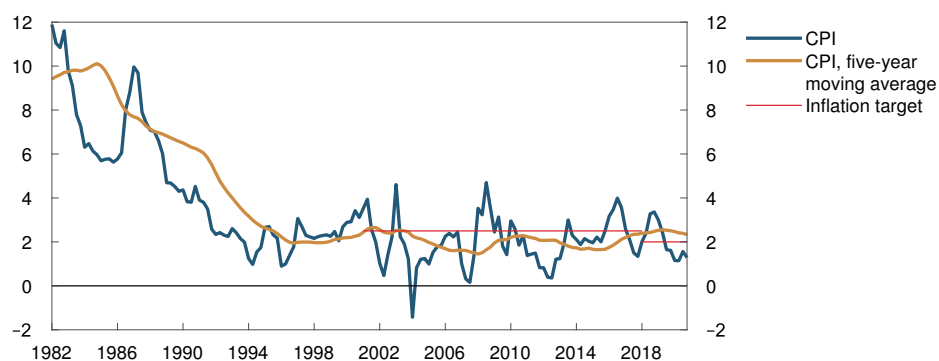
Inflation targeting shall be forward-looking and flexible so that it can contribute to high and stable output and employment and to countering the build-up of financial imbalances. Monetary policy objectives and trade-offs are described further in a box on page 45.

### An expansionary monetary policy

Since spring 2020, the policy rate has stood at 0%. This has resulted in a very low money market rate, in both nominal and real terms (Chart 4.2). The real money market rate, ie the inflation-adjusted rate, is now lower than a neutral level, which is projected to be close to 0%. The projection of the neutral real interest rate is highly uncertain (see *Monetary Policy Report 3/20*). The monetary policy stance is assumed to be expansionary as long as the real interest rate is below its neutral level.

**Chart 4.1 Average inflation close to target**

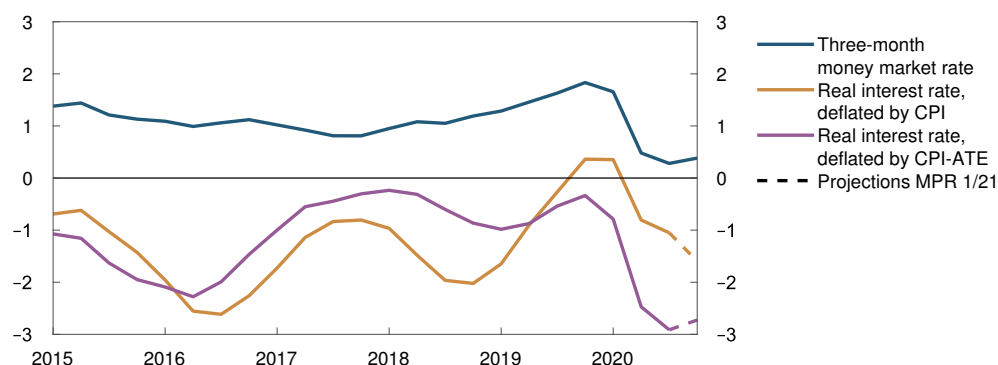
Consumer price index (CPI). Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank

**Chart 4.2 Low real interest rate**

Three-month money market rate and real interest rates. Percent



Sources: Statistics Norway and Norges Bank

An expansionary monetary policy stance helps to dampen the economic downturn caused by the Covid-19 pandemic. The policy rate path in the *December Report* implied that the policy rate would remain at 0% for more than one year ahead. From the first half of 2022, the policy rate would be raised gradually as activity approached a more normal level. The real interest rate was expected to be below a neutral level throughout the projection period.

## 4.2 New information and assessments

### Model-based interpretation of new information

To shed light on how new information influences the economic outlook, new information and assessments are incorporated into the modelling system, but the policy rate path in the *December Report* is kept unchanged.<sup>1</sup>

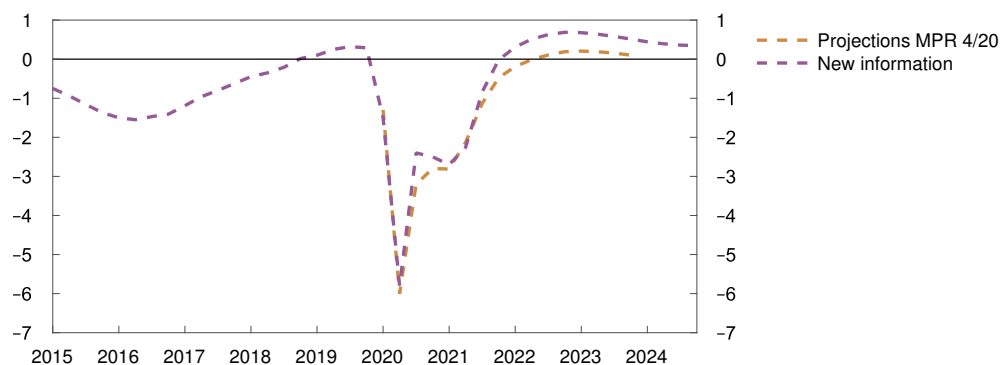
Growth in the Norwegian economy was stronger towards the end of 2020 than projected in the *December Report*. However, since the beginning of the year, rising infection rates and stricter containment measures have held back activity. Growth in the first half of 2021 is therefore expected to be somewhat weaker than projected in the *December Report*. Nevertheless, several factors point to moderately higher capacity utilisation ahead than projected in December. Vaccination is expected to proceed faster than previously anticipated. Containment measures are therefore expected to be phased out somewhat faster than previously assumed. Vaccination and the easing of containment measures among Norway's trading partners are also expected to proceed faster than envisaged earlier. Oil prices have risen markedly, which stimulates activity in petroleum-related industries. Therefore, except for the first half of 2021, the model-based exercise with an unchanged policy rate path implies somewhat higher capacity utilisation than in the *December Report* (Chart 4.3).

So far in 2021, underlying inflation has been somewhat lower than projected in the *December Report*. This is ascribable to lower-than-expected domestic inflation, which may suggest that low capacity utilisation has contributed to a slightly faster decline in domestic inflation than projected earlier. Looking ahead, inflation is projected to continue

<sup>1</sup> Normally, the projections are based on short-term forecasts for the current and subsequent quarter, while the Bank's macro-economic model NEMO is used to project the remainder of the forecast path. Given that the projections build on concrete assumptions linked to non-modelled factors such as infection rates, containment measures and vaccine availability, the period for short-term forecasts in this *Report* has been extended by one additional quarter, to 2021 Q3. This is one quarter shorter than in the *December Report*.

**Chart 4.3 Higher capacity utilisation with unchanged policy rate path**

Estimated output gap. Conditional on new information concerning economic developments and the policy rate forecast in MPR 4/20. Percent



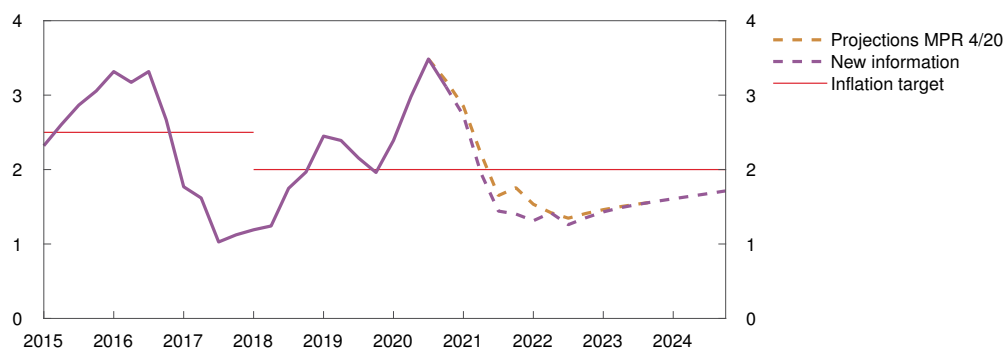
Source: Norges Bank

to moderate, and in the exercise with an unchanged policy rate path, inflation moderates a little faster than projected in the *December Report*, first on account of lower domestic inflation. Further out, this effect reverses, and in the exercise with an unchanged policy rate path, domestic inflation is slightly higher than projected in December on the back of prospects for higher capacity utilisation and wage growth. In the projection, overall inflation is slightly lower also later in the projection period, reflecting prospects for a stronger krone and thereby lower imported inflation, which is dampened somewhat by a slightly higher rise in prices for imported goods. Inflation in the exercise with an unchanged policy rate path will be slightly lower than projected in the *December Report*. In the model-based analysis with an unchanged policy rate path, inflation falls towards 1.3% through 2022, before rising to 1.7% towards the end of the projection period (Chart 4.4).

Higher capacity utilisation suggests in isolation a higher rate path. On the other hand, prospects for slightly lower inflation suggest a lower rate path. To show how the modelling system interprets the overall impulse from new information, we derive model-based rate paths. They show that new information may suggest a slightly higher rate path (see box on page 41). How this change can be attributed to the driving forces in the model is explained in the decomposition of the factors behind the changes in the rate path in Section 4.3.

**Chart 4.4 Slightly lower inflation with unchanged policy rate path**

CPI-ATE. Projections conditional on new information concerning economic developments and the policy rate forecast in MPR 4/20. Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank



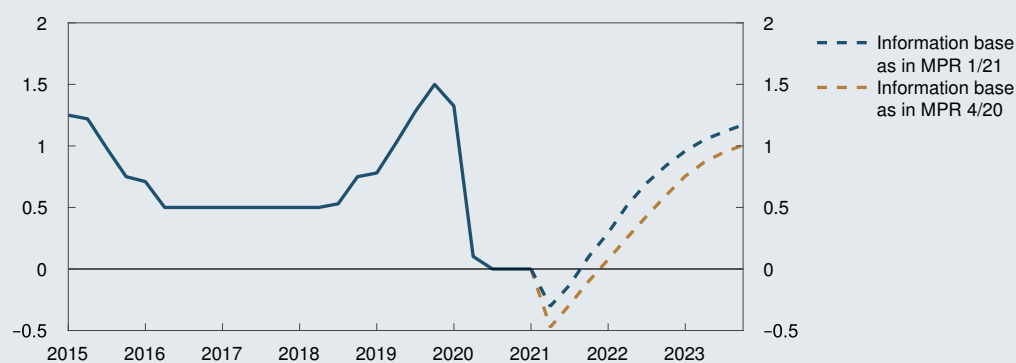
### MODEL-BASED POLICY RATE PATHS

In order to summarise the total impulse from new information to the monetary policy stance, we derive model-based interest rate paths. The paths show the policy rate developments that follow from the modelling system for different descriptions of the economic situation. By comparing a model-based path with a new and old information base, it can be shown how the model interprets the effect of updated information on the policy rate. This is illustrated in Chart 4.A.

The model-based rate paths will normally provide a good representation of how monetary policy responds to news. At the same time, they are not capable of capturing all of the Committee's assessments. For example, we note that the model-based rate path dips below zero, which means that the economic outlook according to the modelling system may imply a negative policy rate. It does not capture the Committee's assessments related to how low it is appropriate to set the policy rate in the current situation, since our main model does not take into account that the policy rate can have a different effect at very low levels. The model-based rate paths must be raised to zero by the use of judgement to reflect the Committee's assessment. When news pulls up the rate path so that the negative difference between the model-based rate path and zero is reduced, this will be captured as negative judgement bars in the decomposition chart. See Special Feature on the effect of news on the policy rate forecast when the policy rate is close to a lower bound in *Monetary Policy Report 4/20*.

**Chart 4.A News pulls up model-based path slightly**

Percent

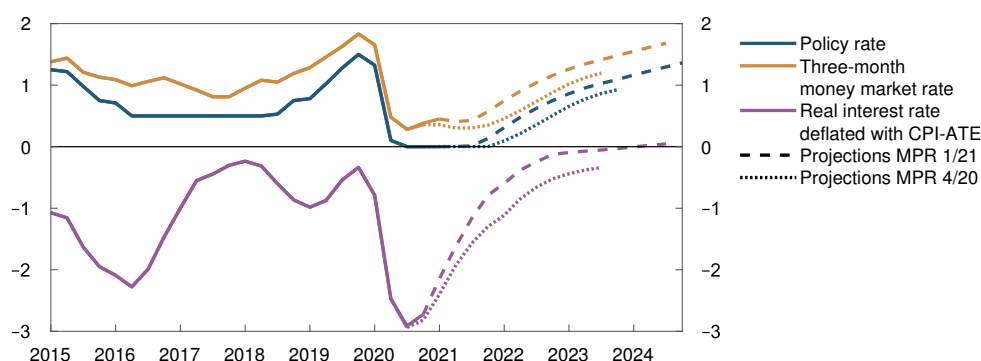


Source: Norges Bank

### Slightly higher policy rate path

The Monetary Policy and Financial Stability Committee decided to keep the policy rate at 0% at the monetary policy meeting on 17 March and expects that the rate will most likely be raised in the latter half of 2021. When there are clear signs that economic conditions are normalising, the Committee deems it appropriate to raise the policy rate gradually towards a more normal level. The policy rate forecast implies a rate at the current level until the latter half of 2021, followed by a gradual rise through the projection period. The policy rate is projected to rise a little faster than in the *December Report* (Chart 4.5).

**Chart 4.5 Slightly higher interest rate path, but still expansionary monetary policy**  
Percent



Sources: Statistics Norway and Norges Bank

A higher policy rate path also implies that the money market rate, which feeds through to bank lending rates, is projected to be higher than in the *December Report*. A higher projected money market rate also reflects a higher-than-projected money market premium (see discussion in Section 2). In the projection, the real money market rate moves somewhat higher than projected earlier, first driven by a higher premium and thereafter also by lower inflation and a higher policy rate. The real interest rate is projected to remain somewhat higher than in the *December Report*. The real interest rate level implies a continued expansionary monetary policy stance for a long period ahead.

A gradual normalisation of the policy rate reflects that economic activity is returning to a normal level. Through 2021, capacity utilisation is expected to increase in pace with substantial progress in vaccination coverage and the phase-out of containment measures, and the output gap is projected to be slightly positive at the beginning of 2022. An expansionary monetary policy will help to speed up normalisation of output and employment and bring inflation back to target further out. At the same time, a gradually higher policy rate, and thus higher lending rates, in combination with normalisation of household consumption patterns and increased residential construction, will have a dampening effect on house price inflation ahead (see further discussion in Section 5).

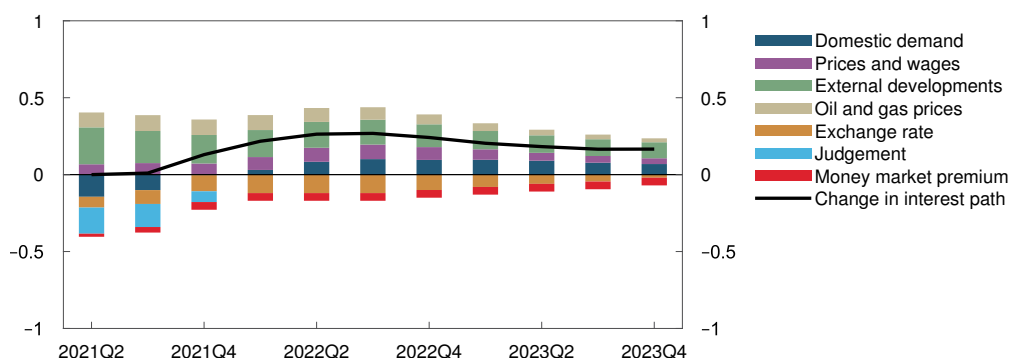
### 4.3 Decomposition of changes in the rate path

The main factors behind the changes in the policy rate forecast are illustrated in Chart 4.6. The bars show the various factors' contributions. The black line shows the overall change in the policy rate path.

The decomposition of the factors behind the changes in the forecast is based on model output, but there is no mechanical relationship between news that deviates from the forecasts in the *December Report* and effects on the new rate path. The bars in the decomposition chart excluding judgement are meant to reflect the normal reaction to news. They are not adjusted to take into account special circumstances, for example that news may affect interest rate setting differently when the policy rate is already at a very low level. The sum of these bars will correspond to changes in the model-based rate path owing to new information shown in the box on page 41. The bars for judgement-based assessments in the decomposition chart are a result of the Committee's overall assessment of the monetary policy stance.

**Chart 4.6 Slightly improved prospects pull up the interest rate path**

Cumulative contribution. Percentage points



Source: Norges Bank

**Rate path pulled up by improved prospects**

Spot and futures prices for oil and European gas have risen since the December *Report*. Higher *oil and gas prices* push up activity in petroleum-related industries and pull in the direction of a higher rate path (beige bars). The effect on the rate path is dampened because higher oil prices also lead to a stronger krone exchange rate, and thereby lower imported inflation and slightly weaker net exports. In this *Report*, the bars linked to oil and gas prices are smaller than they would normally have been for the same price change, since the pass-through from higher oil prices to petroleum investment is expected to be weaker than usual. This is because much of the potential for higher petroleum investment had already been realised on account of the petroleum tax package from 2020.

The projections for growth among Norway's trading partners have been revised up. This implies higher growth in imports from trading partners, and thereby growing demand for Norwegian export goods and rising activity in export-oriented manufacturing. Improved growth prospects also lift policy rate expectations among trading partners. Higher interest rates abroad suggest a weaker krone, resulting in both higher imported inflation and increased net exports. *External developments* therefore pull up the rate path (green bars).

Developments in *prices and wages* also pull up the rate path a little (purple bars). This reflects the upward adjustment of the projection for wage growth in 2021. This pulls up cost growth and results in slightly higher inflation further out.

From 2022, new information on *domestic demand* pulls up the rate path (dark blue bars). As in the latest reports, the path in these bars reflects our expectations concerning containment measures. Higher infection rates and stricter containment measures in 2021 Q1 are expected to result in a slower recovery in consumption than envisaged in December. This pulls down the rate path in the near term. From summer, a slightly faster-than-expected pace of vaccination contributes to higher consumption growth further out than previously projected and pulls up the rate path. Domestic demand is also lifted by house prices, which have risen more than expected so far in 2021 and are stimulating housing investment. Growth in business investment, which is now expected to be higher in both 2021 and 2022 than assumed earlier, also increases the contribution from domestic demand.

**A stronger krone and higher money market premium pull down the rate path**

Since the *December Report*, the *krone exchange rate* has appreciated markedly, and in the period ahead, the *krone exchange rate* is expected to remain close to today's level. The *krone* has appreciated more than assumed in the *December Report* and more than implied by movements in the interest rate differential and oil prices. This contributes to lower imported inflation and weaker developments in net exports and pulls down the rate path (orange bars).

The *money market premium* is projected to be higher than in the *December Report*. A temporarily higher premium normally has little effect on the policy rate, since it usually has little influence on interest rates facing the public. On the other hand, the impact of a persistent increase in the premium is expected to be more pronounced. Monetary policy will normally seek to neutralise a higher premium by reducing the policy rate to the same extent that the premium has risen. A higher long-term money market premium therefore pulls down the rate path further out (red bars).

**Model-based interpretation of the Committee's assessments**

At the monetary policy meeting on 17 March, the Committee decided to keep the policy rate unchanged at 0%, and in its assessment, the policy rate will most likely be raised in the latter half of 2021. In the model-based decomposition of the change in the policy rate path, a difference will normally arise between changes in the driving forces captured by the model and the Committee's assessments and decision. In the decomposition chart, this difference is interpreted as the Committee's judgement and is illustrated by the light blue bars. These bars keep the policy rate close to 0% to the end of 2021 Q3, and moderate the upward adjustment of the rate path in the latter half of 2021.

Negative judgement bars are consistent with the Committee's assessment that the policy rate will be raised when there are clear signs that economic conditions are normalising. According to the decomposition chart, the rate path is raised a little less than warranted by news alone. Positive news may also result in negative judgement bars in the decomposition chart later as long as the model-based path lies below zero (see box on page 41).

## MONETARY POLICY OBJECTIVES AND TRADE-OFFS

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 counteracting the build-up of financial imbalances. The various considerations are weighed against each other.

The policy rate is set with a view to stabilising inflation around the target in the medium term. The horizon will depend on the shocks to which the economy is exposed and the effects on the outlook for inflation and for output and employment.

Monetary policy can contribute to stabilising output and employment at around the highest possible level consistent with price stability over time. This level is determined by structural conditions such as the tax and social security system, the system of wage formation and the composition of the labour force.

When shocks occur, a short-term trade-off may arise between reaching the inflation target and supporting high and stable output and employment. Monetary policy should strike a reasonable balance between these considerations.

A flexible inflation-targeting regime where sufficient weight is given to the real economy can prevent downturns from becoming deep and protracted. This can reduce the risk of unemployment becoming entrenched at a high level following an economic downturn.

If there are signs that financial imbalances are building up, the consideration of high and stable output and employment may in some situations suggest keeping the policy rate somewhat higher than would otherwise be the case. To some extent, this can contribute to reducing the risk of sharp economic downturns further ahead. Nevertheless, the regulation and supervision of financial institutions are the primary means of addressing shocks to the financial system.

The conduct of monetary policy takes account of uncertainty regarding the functioning of the economy. Uncertainty surrounding the effects of monetary policy normally suggests a cautious approach to interest rate setting. This can reduce the risk that monetary policy will have unintended consequences. The policy rate will normally be changed gradually so that the effects of interest rate changes and other new information about economic developments can be assessed.

In situations where the risk of particularly adverse outcomes is pronounced, or if there is no longer confidence that inflation will remain low and stable, it may in some cases be appropriate to react more strongly in interest rate setting than normal.

# 5 Financial stability assessment

## – decision basis for the countercyclical capital buffer

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Norges Bank's Monetary Policy and Financial Stability Committee has advised the Ministry of Finance to keep the countercyclical capital buffer requirement unchanged at 1.0%.<sup>1</sup>

Creditworthy businesses and households appear to have ample access to credit. Banks' credit losses have declined, but developments in credit losses ahead remain uncertain. Norwegian banks are well equipped to absorb higher losses while maintaining credit supply. Prior to the reduction in March 2020, the countercyclical capital buffer requirement was set at 2.5% against the background of a build-up of financial imbalances over a long period. During the Covid-19 pandemic, property price inflation has risen markedly and household credit growth has edged up. The consideration of financial imbalances suggests in isolation a higher buffer requirement.

The Committee expects the buffer to return to 2.5% in the period ahead. On the basis of its current assessment of economic developments and prospects for bank losses and lending capacity, the Committee will advise increasing the buffer stepwise in the course of 2021.

### 5.1 Access to credit

Creditworthy businesses and households appear to have ample access to credit. Banks included in Norges Bank's Survey of Bank Lending reported small changes in credit standards for both households and businesses in 2020 Q4, and small changes are expected in 2021 Q1. Banks further reported that the removal of the expanded flexibility quota in the residential mortgage loan regulation at the end of 2020 Q3 has not appreci-

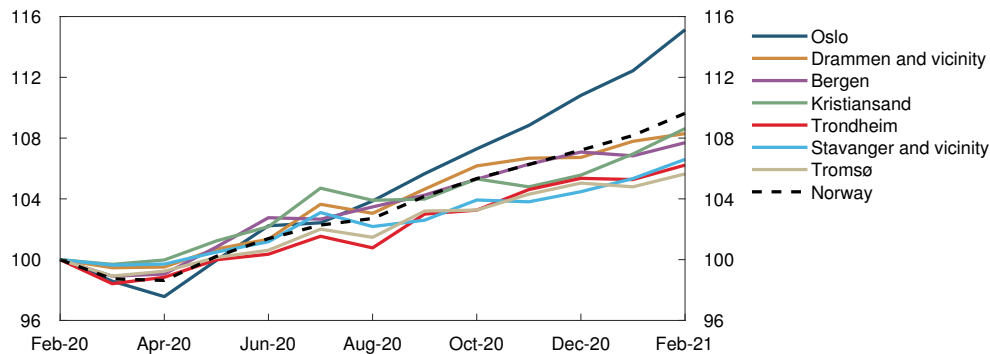
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<sup>1</sup> See letter from Norges Bank to the Ministry of Finance of 17 March 2021.

#### **FRAMEWORK FOR ADVICE ON THE COUNTERCYCLICAL CAPITAL BUFFER**

Advice on the level of the countercyclical capital buffer is based on an assessment of three main areas: (i) households' and business' access to credit, (ii) financial imbalances and (iii) the situation for banks. Banks' loss absorbency capacity is assessed in particular in the annual stress test of banks published in *Financial Stability Report*. More about Norges Bank's framework can be found in *Norges Bank Papers 4/2019: A framework for advice on the countercyclical capital buffer*. Updated charts with all the indicators included in the framework can be found on Norges Bank's website.

**Chart 5.1 Increased housing market pressures during the Covid-19 pandemic**  
Seasonally adjusted. Index. February 2020 = 100



Sources: Eiendomsverdi, Finn.no and Real Estate Norway

ably reduced the size of loans or banks' willingness to approve loans, but some banks reported a drop in mortgage approvals. Issuance volumes in the corporate bond market have been high in recent months and risk premiums for most industries are close to levels observed before the turbulence intensified in March last year (see Section 2).

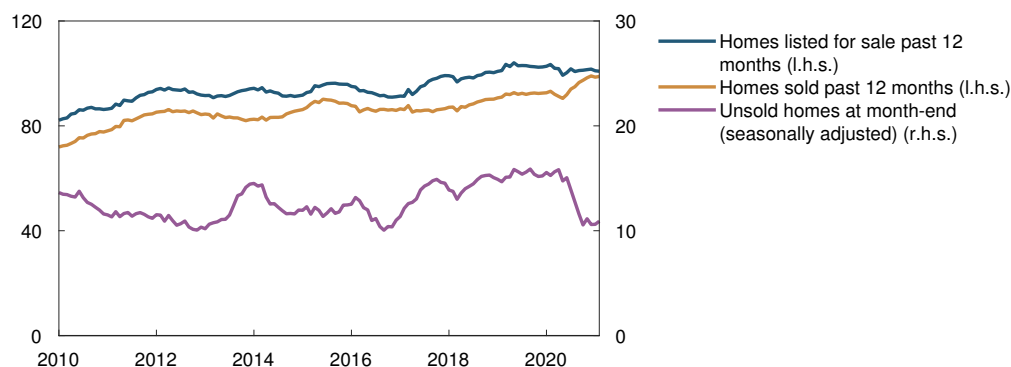
## 5.2 Financial imbalances

After rising rapidly over a long period, property prices and household debt ratios are at high levels. The sharp rise has led to a build-up of financial imbalances. In recent years, there have been signs of receding financial imbalances, owing to more moderate property price inflation and lower debt ratios. During the Covid-19 pandemic, house price inflation has moved up markedly, and debt ratios have risen. Commercial property prices fell in the first half of 2020, but the decline was more than reversed in the latter half of the year. The sharp rise in property prices is expected to be temporary. If property price inflation does not moderate ahead, it is also likely that credit growth will increase and financial imbalances may build up again.

### Continued high house price inflation

House prices fell in March and April 2020 but have since risen markedly (Chart 5.1). In the period to autumn 2020, the marked rise in prices was broadly based across Norway. In

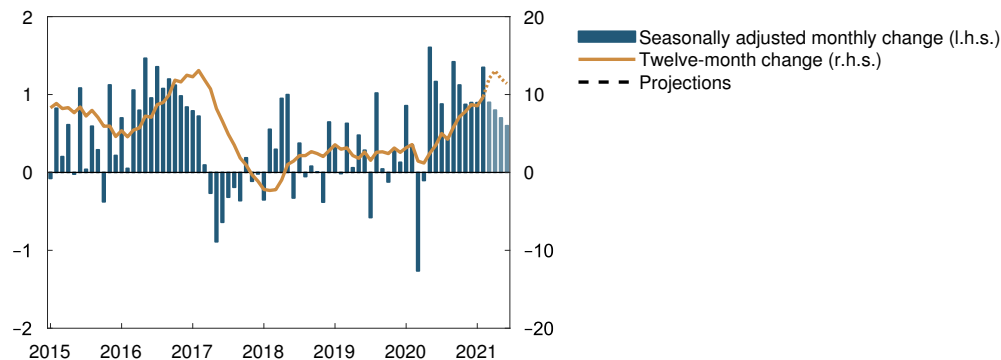
**Chart 5.2 High activity in the market for existing homes**  
In thousands of existing homes



Sources: Eiendomsverdi, Finn.no, Real Estate Norway and Norges Bank

**Chart 5.3 House price inflation is expected to recede**

Percent



Sources: Eiendomsverdi, Finn.no, Real Estate Norway and Norges Bank

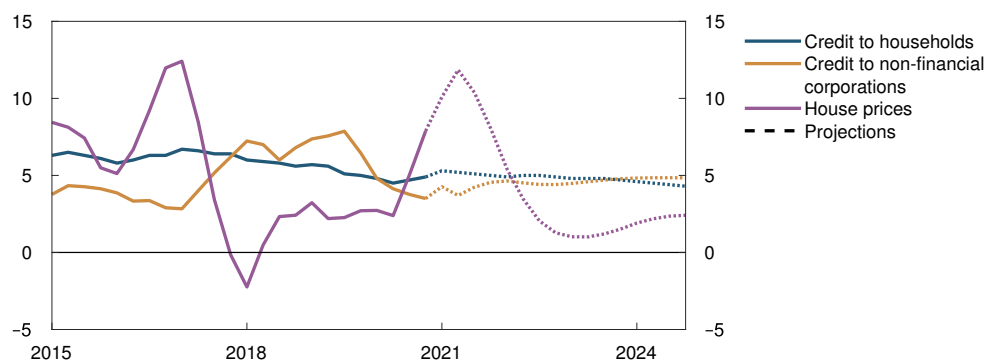
late autumn and in the new year, house price inflation was clearly highest in Oslo, while moderating somewhat elsewhere in the country. Sales of existing homes have been historically high, while the supply has remained fairly stable (Chart 5.2). As a result, the stock of unsold existing homes has declined markedly. High demand and limited supply in the housing market suggest that housing market pressures are substantial.

New home sales have also picked up since 2020, with sales at their highest level since 2016. At the same time, few new housing construction projects have been listed for sale during the pandemic. The number of unsold new homes has therefore declined, but remains at a fairly high level compared with previous years. The small number of new housing construction projects for sale likely reflects the large stock of unsold homes and stringent containment measures, such as closed borders, which can prevent construction workers from entering Norway. Housing construction is expected to pick up ahead, but be somewhat dampened by limited labour supply owing to closed borders in the near term (see Section 3.1 for further discussion).

High house price inflation primarily reflects low residential mortgage rates and homebuyers' likely preference for using a higher share of income for housing, in part because remote working has increased and consumption opportunities have otherwise been limited. Since the outbreak of the Covid-19 pandemic, house price inflation has been

**Chart 5.4 Prospects for moderate house price inflation and credit growth in the long term**

Four-quarter change. Percent

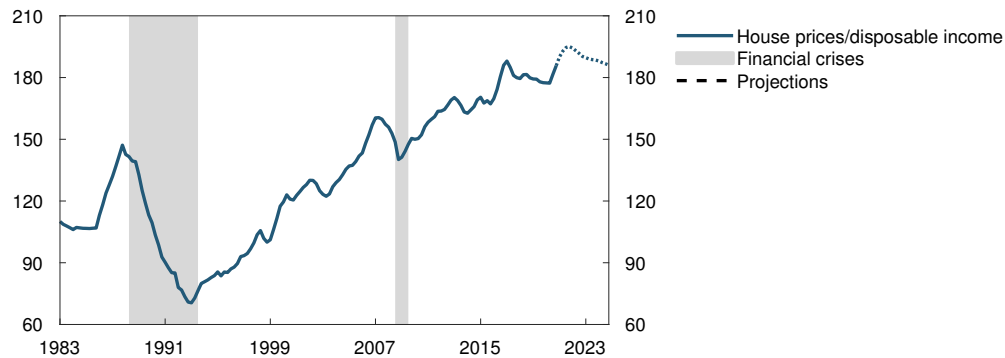


Sources: Eiendomsverdi, Finn.no, Real Estate Norway, Statistics Norway and Norges Bank



**Chart 5.5 House prices rising faster than income**

Index. 1998 Q4 = 100



Sources: Eiendomsverdi, Finn.no, Norwegian Association of Real Estate Agents (NEF), Real Estate Norway, Statistics Norway and Norges Bank

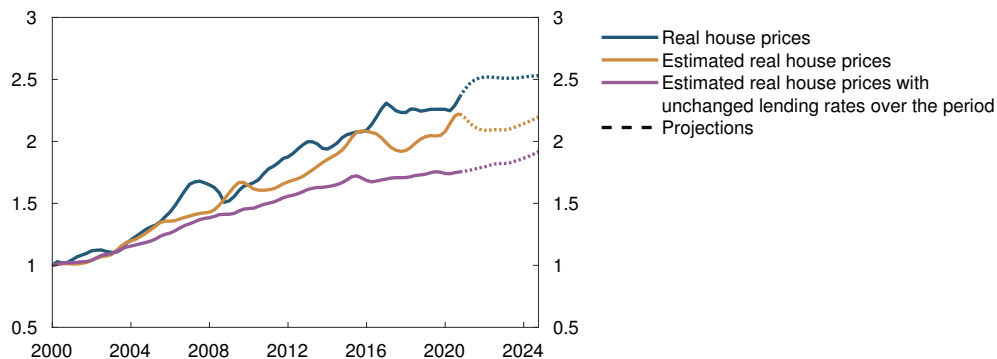
higher than projected, likely reflecting a larger-than-expected impact of both the fall in interest rates<sup>2</sup> and changes in household consumption patterns. In addition, higher unemployment and substantial uncertainty have curbed the rise in house prices to a lesser extent than expected. The temporary expanded flexibility quotas in the regulation on requirements for new residential mortgage loans have likely also helped to fuel house price inflation, while the ordinary quotas from 2020 Q4 appear to have had less of a tightening effect than expected in the December Report, particularly in Oslo.

Gradually higher lending rates, normalisation of household consumption patterns and increased residential construction are expected to dampen house price inflation ahead (Chart 5.3). In the coming years, house price inflation is projected to be fairly low (Chart 5.4 and Annex Table 3).

Even though the rapid rise in house prices is likely to be temporary, house prices are at a high level after rising faster than household income over a long period (Chart 5.5). After

**Chart 5.6 House prices are rising more than implied by income and interest rates**

Index. 2000 Q1 = 1



Sources: Eiendomsverdi, Finn.no, Norwegian Association of Real Estate Agents (NEF), Real Estate Norway, Statistics Norway and Norges Bank

<sup>2</sup> There is considerable variation in the estimates of how much house prices rise when the interest rate is reduced. For example, two studies show that over time, house prices rise by between 5% and 11% in the event of a prolonged reduction in the after-tax interest rate (see Ingholt, M.M. and S. Mæhlum (2020) "Boligprisboble i Norge?" [Housing bubble in Norway?]. Blog post published on the *Bankplassen blog*, 24 September 2020 (Norwegian only) and Anundsen, A.K. (2020) "Nordic house price bubbles?". Housing Lab Working Paper 4/2020. Oslo Metropolitan University.

2017, house price inflation was moderate and lower than income growth, but this has reversed again. High house prices are a key vulnerability in the Norwegian financial system.<sup>3</sup> Sharp and abrupt falls in house prices can trigger a tightening of household consumption and result in higher losses on bank loans. The sharp rise in house prices over the past year has increased housing market vulnerabilities and thus the risk of a future price fall. If high house price inflation does not moderate, the likely result will be higher household credit growth and a possible build-up of financial imbalances.

Even though house prices have risen faster than disposable income over a long period, the Bank's analyses indicate that interest rates and income can explain most of the house price inflation over the past 20 years (Chart 5.6).<sup>4</sup> During the Covid-19 pandemic, house prices have increased by more than what changes in lending rates and income would suggest. This partly reflects households' use of a larger share of their income on housing than previously. Moreover, recent analyses of microdata conducted by the Bank show that young homebuyers have not changed their home purchases significantly in the past 10 years, which indicates that house prices have not become unaffordably high.<sup>5</sup>

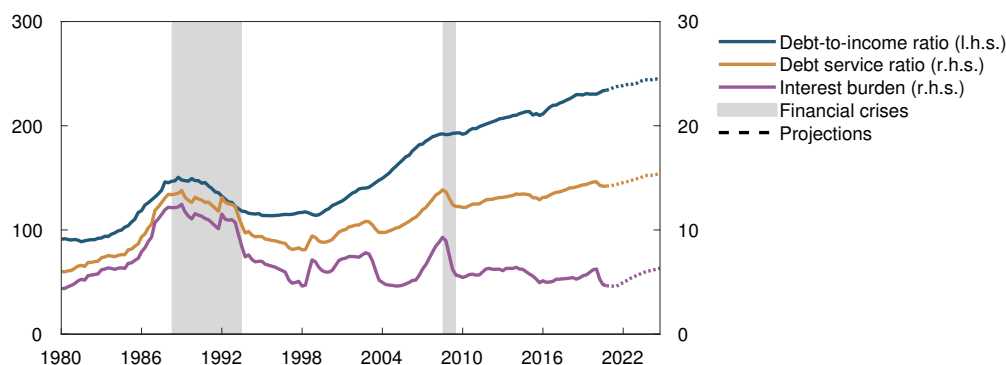
### Somewhat higher household and corporate credit growth

The Government's measures to restrain borrowing and the policy rate hikes in 2018–2019 contributed to a slowdown in household credit growth from 2017 (Chart 5.4). Since May 2020, credit growth has gradually picked up. In January 12-month growth was at 4.9%, as projected in the *December Report*. Increased housing market pressures have fuelled credit growth. In line with housing market developments, credit growth is expected to increase in the coming period. Thereafter, credit growth is expected to slow throughout the projection period (Chart 5.4 and Annex Table 3).

Going forward, household credit growth is expected to be higher than disposable income growth, so that debt ratios increase somewhat (Chart 5.7). Household debt ratios are already at high levels after having risen substantially over a long period. This makes many households vulnerable to income loss, higher interest rates and a fall in house prices. If many households reduce consumption at the same time, corporate debt-servicing capacity may weaken and banks' credit losses may increase. Nevertheless, some households may have become less vulnerable over the past year. High saving by many households has boosted

**Chart 5.7 Higher debt-to-income ratios ahead**

Percent



Sources: Statistics Norway and Norges Bank

<sup>3</sup> See *Financial Stability Report 2020*.

<sup>4</sup> See Ingholt, M.M. and S. Mæhlum (2020) "Boligprisboble i Norge?" [Housing bubble in Norway?]. Blog post published on the *Bankplassen blog*, 24 September 2020 (Norwegian only).

<sup>5</sup> See Lindquist, K.-G., L. Torkildsen and B.H. Vatne (2020) "Er unge boligkjøpere en truet gruppe?" [Are young homebuyers an endangered group?]. Blog post published on the *Bankplassen blog*, 18 December 2020 (Norwegian only).

their financial buffers, while high house price inflation has increased housing wealth for many. At the same time, other households have experienced income loss in connection with the Covid-19 pandemic, a particularly difficult situation for highly indebted households.

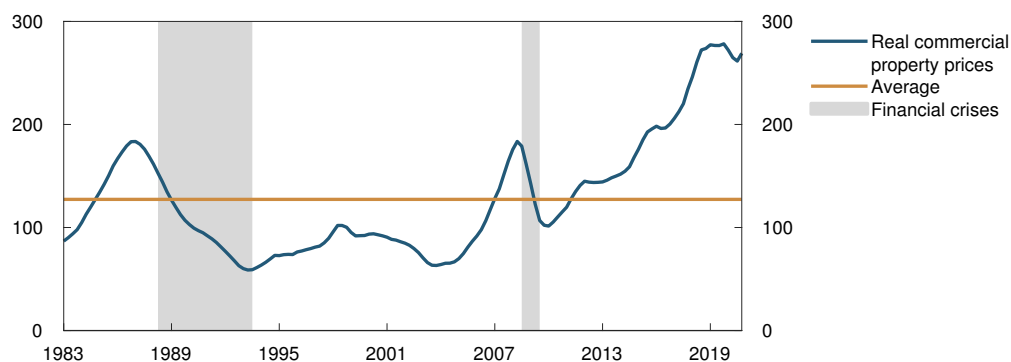
Reduced interest burdens owing to lower mortgage lending rates (Chart 5.7) and increased use of interest-only periods in spring 2020 alleviated the situation for vulnerable households that experienced income loss in connection with the Covid-19 pandemic. According to the banks in Norges Bank's lending survey, demand for interest-only periods was somewhat lower in 2020 Q4 than during the first wave of the pandemic. Moreover, an analysis of data from the debt register Gjeldsregisteret AS shows that while furloughs, unemployment and uncertainty increased in 2020, overall consumer debt fell.<sup>6</sup> In isolation, lower consumer debt reduces household vulnerability. However, the analysis also shows a higher proportion of non-performing consumer credit in the same period, which may reflect income loss among vulnerable households.

Mainland corporate credit grew markedly faster than GDP in the years prior to the banking crisis and financial crisis, but has risen more in pace with GDP over the past ten years. Growth in corporate credit from domestic sources picked up through 2017, but has fallen markedly since autumn 2019 (Chart 5.4). Through 2020 Q2 and Q3, corporate credit growth continued to fall, but has since picked up. In January, 12-month growth in corporate credit was 4.4%, which is higher than projected in the *December Report*. Bond issuance boosted credit growth. Commercial real estate and the construction sector made the main contributions to overall credit growth.

Developments in corporate credit growth are closely tied to developments in business investment. Growth in business investment was stronger than projected in 2020 Q4, and the projections have been revised up from the *December Report* (see Section 3.1). The banks in Norges Bank's lending survey for 2020 Q4 reported that the resurgence in infection rates and tighter containment measures in autumn 2020 did not lead to the same level of corporate demand for interest-only periods as during the first wave of the pandemic. Corporate credit growth is expected to continue to rise somewhat in the period ahead, before levelling off over the longer term (Chart 5.4).

**Chart 5.8 Commercial property prices are rising**

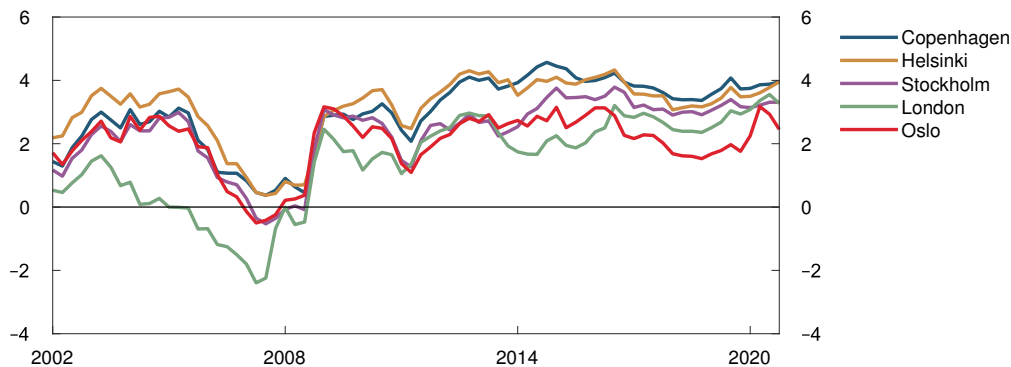
Index. 1998 = 100



Sources: CBRE, Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

<sup>6</sup> See Solheim, H. and B. H. Vatne: "Forbruksgjelden falt i 2020 - men misligholdet økte" [Consumer debt fell in 2020 - but defaults increased]. Blog post published on the *Bankplassen blog*. 28 January 2021 (Norwegian only).

**Chart 5.9 Risk premium on CRE in Oslo lower than in other European cities**  
Yield less five-year swap rate. Percentage points



Sources: CBRE and Datastream

### Higher commercial property prices

High commercial property prices are one of the key financial system vulnerabilities. The office segment is especially important for financial stability since banks' exposure to this segment is substantial. A relatively large share of the stock of office buildings is in Oslo, and selling prices for prime office space in Oslo are therefore an important indicator of commercial real estate (CRE) sector vulnerabilities.

Selling prices for prime real estate in Oslo rose over a long period, reaching high levels prior to the pandemic (Chart 5.8). Selling prices fell in the first half of 2020, but the decline was more than reversed in the latter half of the year. In 2020 Q4, prices were 11% higher than one year earlier and are now at historically high levels. Developments in commercial property prices contrast with earlier crises, when prices fell markedly. During the financial crisis of 2008, there was considerable financial turbulence, which led among other things to a sharp rise in risk premiums (Chart 5.9).

Commercial property selling prices are estimated as rental prices divided by yield.<sup>7</sup> The sharp rise in selling prices in 2020 Q4 partly reflects promising vaccine news at year-end 2020. The risk premium fell considerably in 2020 Q4, and even though long-term interest rates rose (see Section 2.1), the yield fell. Nevertheless, the risk premium is clearly higher than prior to the pandemic (Chart 5.9). At the same time, the risk premium in Oslo is at a low level compared with other cities.

Norges Bank's analyses show that rents have historically moved in line with developments in the real economy.<sup>8</sup> In 2020 Q4, rents were back to pre-pandemic levels. The Bank's models indicate that rents are now higher than implied by developments in the real economy. In isolation, this increases the risk of a correction in rents. At the same time, there are a number of possible explanations why rents have been higher than indicated by historical relationships. Sectors that typically rent prime office space, such as the legal, consulting and financial sectors, were less adversely affected during the pandemic than during earlier crises. In addition, support measures have also strengthened the capacity of the hardest hit businesses to service debt and pay rent.

<sup>7</sup> The yield reflects the return on alternative investments with the same risk, and the yield is ordinarily divided into a risk-free interest rate and a risk premium. Since the yield is calculated as selling prices divided by rental prices in the current period, it is also affected by the expected rise in rents.

<sup>8</sup> See Bjørland, C. and M. Hagen (2019) "What drives office rents?". *Staff Memo*, 12/2019. Norges Bank.

In the period ahead, market participants expect rents and yields to rise somewhat. The projections imply a moderate rise in commercial property prices ahead. The rapid rise in commercial property prices over the past six months has increased the risk of a future price fall. If commercial property price inflation does not slow markedly ahead, financial imbalances could build up again.

Banks' losses on CRE exposures are expected to be limited ahead (see box on page 57). However, there is considerable uncertainty regarding both developments in the real economy and long-term changes in the CRE market. If the Covid-19 pandemic leads to structural changes, such as a permanent increase in remote working, demand for office space may decline, increasing the risk of a pronounced fall in rents and selling prices. Over time, lower rents will reduce CRE companies' debt-servicing capacity, but these companies have increased their financial strength in recent years and are therefore better equipped in the event of a price fall. Other CRE market segments, such as hotels and retail, could also be affected by structural changes in the wake of the Covid-19 pandemic.

### 5.3 Banks

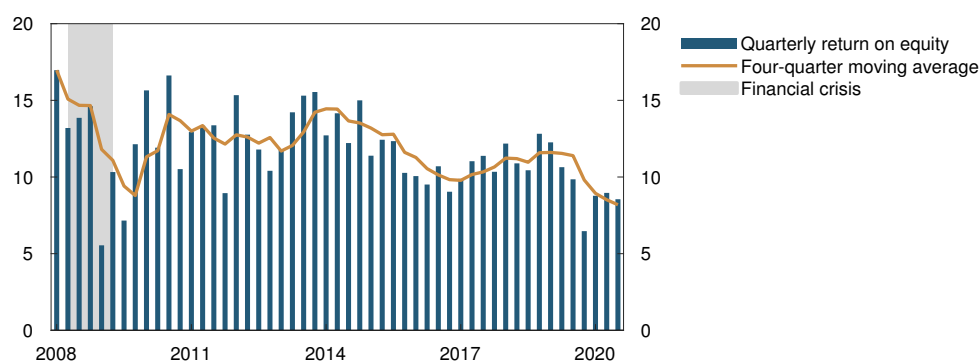
Banks have ample access to wholesale funding. The risk premiums Norwegian banks pay for senior bonds and covered bonds have fallen since the *December Report* and are now lower than in the period prior to the Covid-19 outbreak (see Section 2). Moreover, in the liquidity survey, banks reported improved access to long-term funding and Norwegian banks meet the net stable funding ratio (NSFR) requirement by an ample margin.

Norwegian banks are well equipped to absorb losses while maintaining credit supply. Banks' first line of defence against higher losses is maintaining profitability. The large Norwegian banks' return on equity fell markedly in 2020 Q1, but much of the decline has since reversed (Chart 5.10). In 2020 Q4, return on equity was lower than in the two preceding quarters, but the decline reflects non-recurring expenses affecting the earnings of a number of large banks in Q4. Excluding non-recurring expenses, profitability increased slightly between Q3 and Q4. Banks' internal, long-term profitability targets range between 9% and 12%, which are not expected to be achieved in 2021.

Banks' total loan loss ratio increased markedly to 1% in 2020 Q1, but declined through the year to just below 0.3% in Q4 (Chart 5.11). For 2020 as a whole, losses amounted to approximately 0.6% of exposures, which were the highest in almost 30 years but considerably lower than during the banking crisis. In Q4, the loan loss ratio for large banks

**Chart 5.10 Banks' profitability is still solid**

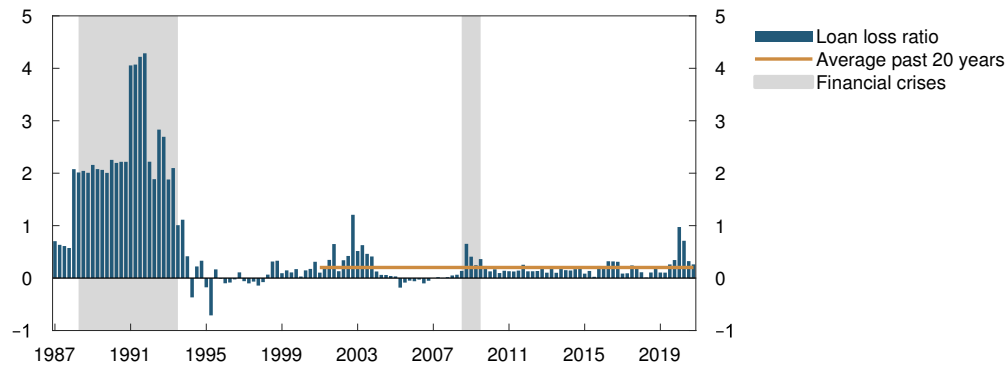
Return on equity. Annualised. Percent



Sources: SNL / S&P MI and Norges Bank

**Chart 5.11 Credit losses close to normal levels in 2020 Q4**

Credit losses as a share of lending. Annualised. Percent



Source: Norges Bank

rose marginally, primarily owing to additional impairment losses on oil-related exposures. The loss rate for consumer credit banks has been high over the past two years, but these banks account for a small share of total lending.

Norges Bank's estimates indicate that credit losses in 2021 and 2022 will be lower than in 2020 but higher than the average for the past 20 years (see box on page 57). Losses on oil service exposures are expected to be lower in 2021, while losses on exposures to other sectors are expected to increase slightly before declining in 2022. Losses ahead remain uncertain. Many sectors continue to be hard hit by the pandemic and measures to contain it, and banks' losses on exposures to these sectors depend on developments in infection rates. CRE market developments will be crucial for banks' credit losses, and the effect of the pandemic on demand for CRE ahead is uncertain.

The Ministry of Finance has recommended that Norwegian banks limit dividend payouts to 30% of total annual profits for the years 2019 and 2020, until end-September 2021.<sup>9</sup> All large Norwegian banks have proposed dividend distributions at the 30% limit before September, which would be adopted at general meetings in spring. Banks are also setting aside portions of their after-tax earnings for dividend payouts after September, in case the economic outlook should allow it and the dividend payout limits are not extended. Total proposed dividends amount to 40%-60% of total profits for the years 2019 and 2020. Banks' calculated capital ratios in Chart 5.12 take the proposed dividends into account. Were all dividends above the 30% limit to be cancelled, Norges Bank's calculations show that large Norwegian banks' overall Common Equity Tier 1 (CET1) capital ratios would rise by approximately 1 percentage point.

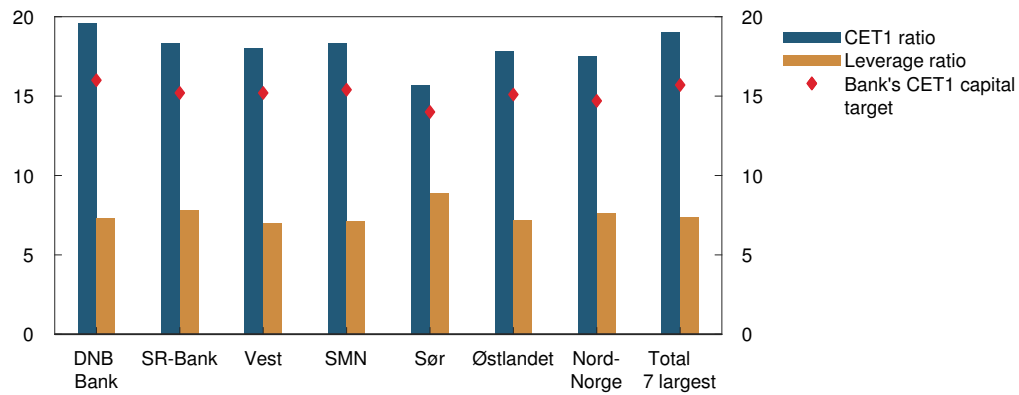
The largest banks fulfil their capital targets<sup>10</sup> by an ample margin (Chart 5.12). CET1 capital ratios rose by 0.8 percentage point between 2020 Q3 and Q4 and 1.2 percentage points in the course of 2020. Between 2020 Q3 and Q4, the leverage ratio also increased and the largest banks meet the leverage ratio requirement by an ample margin.<sup>11</sup> A number

<sup>9</sup> See press release from Ministry of Finance of 20 January 2021.

<sup>10</sup> Capital targets are defined here as regulatory requirements in 2020 with a 1 percentage point margin above the capital requirements. The systemic risk buffer requirement increased from 3% to 4.5% at year-end 2020 for Norwegian banks using the advanced IRB approach. At the same time, foreign exposures are no longer subject to the Norwegian systemic risk buffer requirement. According to banks' quarterly reports, the overall requirement increased by 0.3 percentage point for DNB and by between 1.2 and 1.5 percentage points for the other advanced IRB banks. For banks not using the advanced IRB approach, such as Sparebanken Sør, the change will be effective from year-end 2022. So far, foreign banks have not been subject to the Norwegian systemic risk buffer. On 2 February 2021, the Ministry of Finance requested that the ESRB recommend that other countries recognise the Norwegian systemic risk buffer so that foreign banks are also subject to the 4.5% systemic risk buffer for their exposures in Norway.

<sup>11</sup> The leverage ratio requirement is 6% for DNB and 5% for the remaining banks.

**Chart 5.12 Banks' capital adequacy is above the requirements**  
Largest Norwegian-owned banking groups. Percent



Sources: Banking groups' quarterly reports and Norges Bank

of banks report that they expect an increase in the countercyclical capital buffer to 2.5% over some time and assume this in their capital planning.

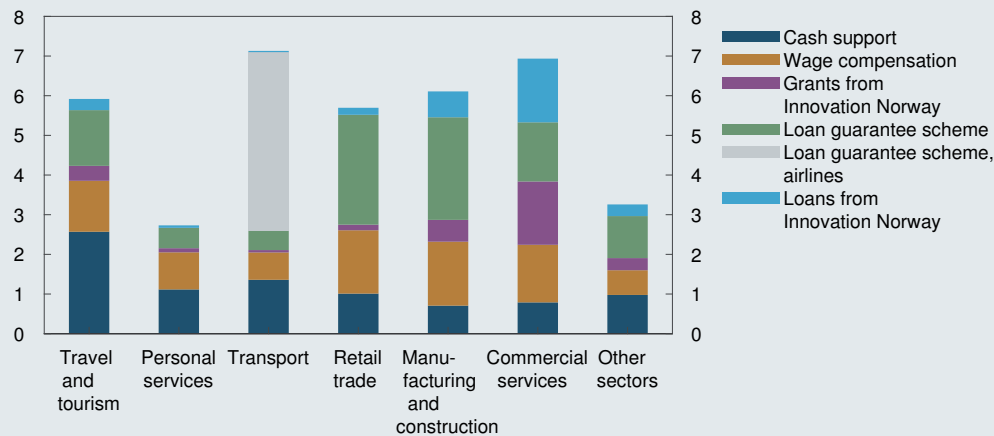
## LOWER CORPORATE CREDIT LOSSES

The Covid-19 pandemic and the measures to contain it have led to a historic fall in output for businesses in many different sectors. Nevertheless, the number of bankruptcies in 2020 was lower than normal. Extensive business support measures and the deferment of tax payments and bankruptcy petitions have held down the bankruptcy rate. Many of the support measures have been extended to summer 2021.

So far, a total of approximately NOK 38bn has been paid out through different support schemes established in connection with the pandemic, of which approximately half were in the form of subsidies.<sup>1</sup> Large amounts of support were paid out to a number of sectors (Chart 5.A). As a share of sector turnover, the schemes have provided clearly the most support to the severely affected tourism, personal services and transport sectors (Chart 5.B).

**Chart 5.A Wide-ranging support measures**

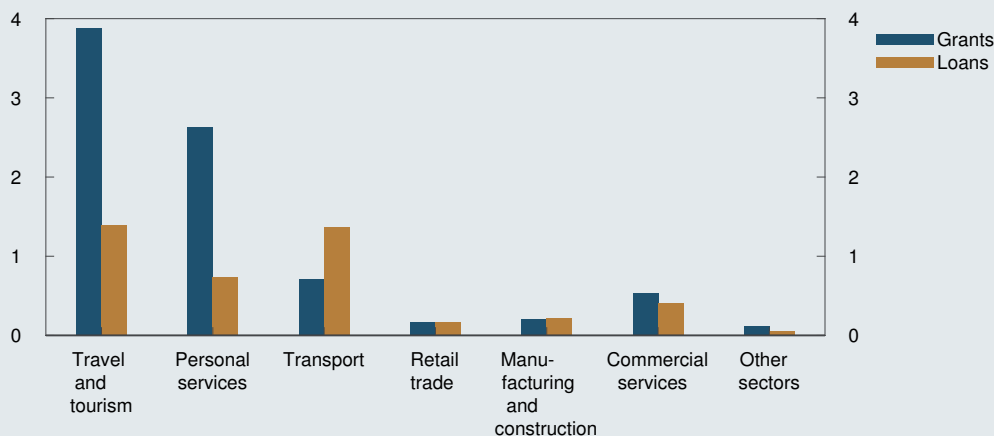
In billions of NOK



Sources: Innovation Norway, Ministry of Trade, Industry and Fisheries and Norges Bank

**Chart 5.B The hardest hit sectors receive the most relative to turnover**

Grants and loans as a share of sector turnover in 2019. Percent



Sources: Innovation Norway, Ministry of Trade, Industry and Fisheries and Norges Bank

<sup>1</sup> See Hjelseth, I.N., H. Solheim and B.H. Vatne (2021) "Myndighetenes næringslivsrettede støttetiltak har dempet risikoen for utlånstap under pandemien" [Government support measures for businesses have dampened the risk of credit losses during the pandemic]. *Staff Memo 3/2021*. Norges Bank (Norwegian only). Included in the calculations are measures categorised as extraordinary or with more than twice the limit compared with the budget for 2020, and the Norwegian Labour and Welfare Administration's (NAV) wage guarantee and reimbursement scheme as published on the StatBank's pages for public support for business R&D in 2020 on the National Data Catalogue website. The reduction and deferment of direct and indirect tax payments are key additional measures, as are investments by the Government Bond Fund.



The extensive support measures have had a dampening effect on banks' credit losses. Norges Bank's calculations show that the losses absorbed by the largest banks as a whole were equivalent to approximately 1.4% of their corporate exposures in 2020 (Chart 5.C), and that over two-thirds of these losses were on oil service and international shipping exposures.

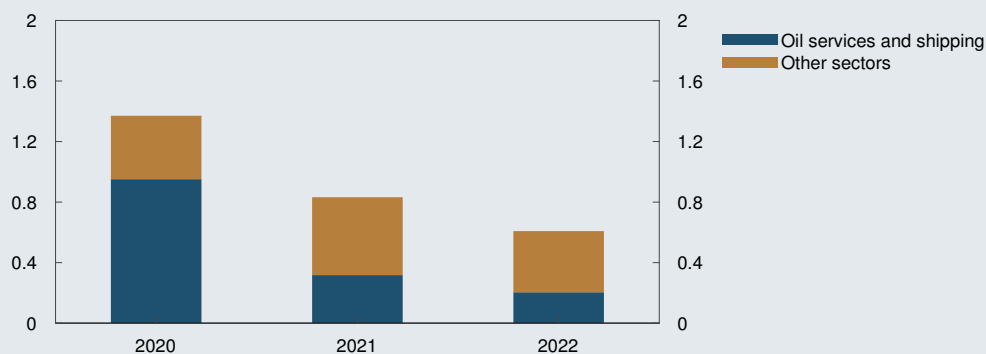
There is still uncertainty related to credit losses ahead. Credit losses on oil service exposures are also expected to be substantial in 2021, albeit markedly lower than in 2020 (Chart 5.C). For other sectors in 2021, total credit losses are expected to be somewhat higher than in 2020, before receding in 2022. The loss projections are broadly unchanged from the Bank's previous loss assessment (see *Financial Stability Report 2020*).

The increased loss projections for 2021 in sectors other than oil services reflect expectations of higher losses on exposures to sectors including tourism, personal services and transport, which have been hardest hit by the pandemic and containment measures (Chart 5.D). However, these sectors account for a small share of total corporate exposures.

Commercial real estate (CRE) is the sector accounting for the largest share of banks' corporate exposures (Chart 5.D). So far, losses on CRE exposures have been moderate. If the economic recovery continues approximately as expected in this *Report*, loss provisions for CRE are also expected to remain moderate in 2021 and 2022.

**Chart 5.C Credit losses still expected to decline in 2021 and 2022**

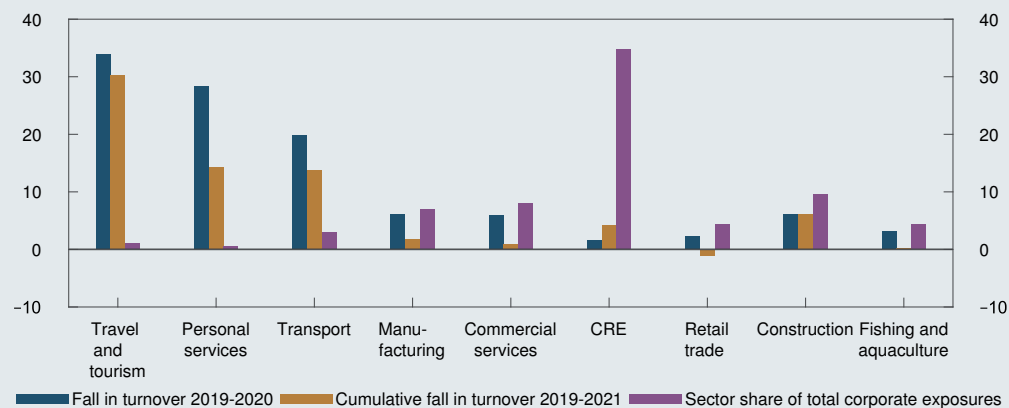
Projected credit losses as a share of corporate loans. Percent



Source: Norges Bank

**Chart 5.D Banks' exposures to the hardest hit sectors are minimal**

Estimated fall in turnover and share of lending by sector. Percent



Sources: Finanstilsynet (Financial Supervisory Authority of Norway) and Norges Bank

# Annex

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Detailed tables of projections

**Table 1 International projections**

Change from projections in Monetary Policy Report 4/20 in brackets	Weights <sup>1</sup> Percent	Percentage change from previous year				
		2020	2021	2022	2023	2024
<b>GDP</b>						
US	10	-3.5 (0.1)	6.3 (2.8)	3.8 (0.6)	1.4 (-0.7)	1.3
Euro area	35	-6.8 (0.7)	5.2 (1.3)	4.2 (-0.2)	1.6 (-0.3)	1.5
UK	11	-9.9 (1.2)	5.1 (-0.1)	6 (1.3)	2.3 (-0.7)	1.1
Sweden	13	-3 (0.2)	3 (0.1)	3.7 (-0.2)	2.1 (-0.1)	1.9
China	7	2.3 (0.5)	8.2 (0)	5.5 (-0.1)	5.6 (0)	5.6
13 trading partners <sup>1</sup>	100	-4.8 (0.6)	4.9 (0.7)	4.2 (0.1)	2.3 (-0.2)	2
5 trading partners <sup>2</sup>		-5.1 (0.6)	5.3 (0.9)	4.5 (0.2)	2.2 (-0.3)	2
<b>Prices</b>						
Underlying inflation <sup>3</sup>		1.1 (0)	1.4 (0.4)	1.5 (0.2)	1.7 (0.1)	1.8
Prices for consumer goods imported to Norway <sup>4</sup>		0.3 (-0.1)	0.6 (0.3)	0.7 (0.1)	0.7 (0)	0.8

1 The aggregate includes: Euro area, China, UK, Sweden, US, Brazil, Denmark, India, Poland, South Korea, Singapore, Thailand and Turkey. Export weights.

2 The aggregate includes: China, Euro area, Sweden, UK and US. Export weights.

3 The aggregate for underlying inflation includes: Euro area, Sweden, UK and US. Import weights.

4 In foreign currency terms. Including compositional effects.

Sources: IMF, Refinitiv Datastream and Norges Bank

**Table 2a Consumer prices. Twelve-month change. Percent**

	2020			2021			
	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>Consumer price index (CPI)</b>							
Actual	1.4	2.5	3.3				
Projections MPR 4/20 <sup>1</sup>	1.8	1.5	2.3	2.7			
Projections MPR 1/21				3.4	3.3	3.0	3.0
<b>CPI-ATE</b>							
Actual	3.0	2.7	2.7				
Projections MPR 4/20	3.3	2.5	2.9	3.1			
Projections MPR 1/21				2.7	2.1	1.9	1.8
<b>Imported consumer goods in the CPI-ATE</b>							
Actual	3.6	3.3	3.8				
Projections MPR 4/20	3.5	2.5	3.3	3.9			
Projections MPR 1/21				4.1	2.7	2.1	1.6
<b>Domestically produced goods and services in the CPI-ATE</b>							
Actual	2.7	2.4	2.3				
Projections MPR 4/20	3.1	2.4	2.6	2.6			
Projections MPR 1/21				2.1	1.9	1.8	1.9

1 There were errors in the published monthly projections for the CPI in MPR 4/20. The table shows correct projections from the December Report.

Sources: Statistics Norway and Norges Bank

**Table 2b GDP for mainland Norway. Quarterly change. Seasonally adjusted. Percent**

	2020		2021	
	Q3	Q4	Q1	Q2
Actual	5.0	1.9		
Projections MPR 4/20			0.8	0.2
Projections MPR 1/21			-0.4	0.6

Sources: Statistics Norway and Norges Bank

**Table 2c GDP for mainland Norway. Monthly change. Seasonally adjusted. Percent**

	2020			2021			
	Dec	Jan	Feb	Mar	Apr	May	Jun
Actual	0.8	-0.2					
Projections MPR 4/20	-0.2	0.1	0.9				
Projections MPR 1/21			-0.5	-0.6	0.2	1.1	0.8

Sources: Statistics Norway and Norges Bank

**Table 2d Registered unemployment (rate). Percent of labour force. Seasonally adjusted**

	2020			2021			
	Dec	Jan	Feb	Mar	Apr	May	Jun
Actual	3.9	4.0	4.0				
Projections MPR 4/20	3.9	3.7	3.6	3.4			
Projections MPR 1/21				3.9	3.8	3.6	3.4

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

**Table 3 Projections for main economic aggregates**

Change from projections in <i>Monetary Policy Report 4/20</i> in brackets	Percentage change from previous year (unless otherwise stated)					
	In billions of NOK 2020	2020	2021	2022	2023	2024
<b>Prices and wages</b>						
CPI		1.3	2.8 (0.6)	1.1 (-0.9)	1.5 (-0.2)	1.7
CPI-ATE		3.0	1.9 (-0.2)	1.3 (-0.1)	1.4 (-0.1)	1.6
Annual wages		3.1	2.4 (0.4)	2.6 (0.3)	3.0 (0.2)	3.3
<b>Real economy<sup>1</sup></b>						
Gross domestic product (GDP)	3399	-1.3	3.8 (-0.2)	3.4 (0.3)	1.2 (-0.4)	1.0
GDP, mainland Norway	3036	-3.1	3.8 (0.1)	3.4 (0.3)	1.1 (-0.4)	1.1
Output gap, mainland Norway (level)		-3.1	-1.5 (0.1)	0.4 (0.4)	0.4 (0.2)	0.3
Employment, persons, QNA		-1.3	0.3 (0.0)	2.0 (0.2)	0.7 (-0.2)	0.4
Registered unemployment (rate, level)		5.0	3.4 (0.2)	2.4 (-0.1)	2.4 (0.0)	2.4
<b>Demand<sup>1</sup></b>						
Mainland demand	3119	-4.4	3.4 (-0.3)	5.1 (0.6)	2.2 (0.0)	0.4
- Household consumption	1487	-8.0	4.1 (-1.8)	9.0 (1.5)	3.2 (0.1)	2.3
- Business investment	313	-6.3	-1.1 (5.2)	3.3 (-2.1)	4.5 (0.2)	4.6
- Housing investment	191	-4.0	5.2 (0.5)	4.4 (0.6)	2.0 (-0.3)	1.4
- Public demand	1128	1.4	3.3 (-0.1)	0.3 (0.1)	0.1 (-0.1)	0.1
Petroleum investment	180	-4.8	-4.0 (2.0)	-5.0 (-1.0)	10.0 (0.0)	8.0
Mainland exports	637	-8.1	4.1 (0.3)	6.7 (1.1)	3.5 (-0.1)	3.1
Imports	1125	-12.3	5.0 (-0.1)	8.5 (0.6)	5.3 (0.5)	4.4
<b>House prices and debt</b>						
House prices		4.5	10.1 (3.4)	3.0 (0.6)	1.2 (-0.6)	2.2
Credit to households (C2)		4.9	5.0 (0.2)	4.9 (0.5)	4.7 (0.3)	4.3
<b>Interest rate, exchange rate and oil price</b>						
Policy rate (level)		0.4	0.0 (0.0)	0.5 (0.2)	1.0 (0.2)	1.3
Import-weighted exchange rate (I-44) (level)		115	107.3 (-4.5)	106.4 (-4.7)	106.5 (-4.2)	106.2
Money market rates, trading partners (level)		0.0	-0.2 (0.0)	-0.1 (0.1)	0.1 (0.2)	0.4
Oil price, Brent Blend. USD per barrel		41.8	65.6 (16.0)	62.2 (13.6)	59.0 (10.8)	56.9
<b>Household income and saving<sup>1</sup></b>						
Real disposable income excl. dividend income		3.3	0.5 (-1.6)	2.6 (0.6)	1.9 (0.1)	2.7
Saving ratio (rate, level)		15.5	12.6 (0.9)	7.0 (-0.1)	6.2 (0.2)	7.4
Saving ratio excl. dividend income (rate, level)		12.5	8.3 (0.6)	3.0 (0.0)	2.1 (0.0)	3.2
Net lending excl. dividend income (rate, level)		7.1	3.4 (0.1)	-2.0 (-0.2)	-3.6 (-0.4)	-3.7
<b>Fiscal policy</b>						
Structural non-oil deficit as a percentage of GPF <sup>2</sup>		3.9	3.3 (0.0)	3.1 (-0.1)	3.0 (-0.1)	2.9

<sup>1</sup> All figures are working-day adjusted.

<sup>2</sup> Government Pension Fund Global measured at the beginning of the year.

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

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