NORGES BANK

3|21

SEPTEMBER

MONETARY POLICY REPORT

WITH FINANCIAL STABILITY ASSESSMENT

The *Monetary Policy Report with financial stability assessment* is published four times a year, in March, June, September and December. The *Report* assesses the interest rate outlook and forms the basis for Norges Bank's advice on the level of the countercyclical capital buffer. The *Report* includes projections of developments in the Norwegian and global economy.

Editor: Øystein Olsen

Contents

This *Monetary Policy Report* is based on information in the period to 17 September 2021, with the exception of *Monetary policy assessment*, which is based on information in the period to the Committee's meeting on 22 September 2021. The *Report* was published on 23 September 2021 and is available at 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 49.

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 mitigate the amplifying effects of bank lending during downturns. Banks should build and hold a countercyclical capital buffer when financial imbalances are building up or have built up. Large financial imbalances entail a risk of an abrupt decline in demand from households and businesses and large bank losses. In the event of an economic downturn that causes or potentially causes higher credit losses and clearly reduced access to credit, the buffer should be lowered to increase banks' lending capacity. The buffer rate shall ordinarily be between 0% and 2.5% of banks' risk-weighted assets, but in special circumstances may be set higher.

From 10 September 2021, Norges Bank was given decision-making responsibility for the countercyclical capital buffer and advisory responsibility for the systemic risk buffer. Norges Bank sets the countercyclical capital buffer requirement four times a year. The decision and assessments are presented in this *Report*. Norges Bank's framework for the countercyclical capital buffer is described in *Norges Bank Papers* 4/2019.

Decision-making process for *Monetary Policy Report* 3/21

At its meetings on 3 and 14 September, the Committee discussed the economic outlook, the monetary policy stance and the countercyclical capital buffer rate. On 22 September, the Committee decided on the policy rate and the buffer rate, on the basis of the deliberations and a recommendation from Norges Bank staff.

Monetary policy assessment

The reopening of society has led to a marked upswing in the Norwegian economy, and activity is now higher than its pre-pandemic level. Since the June 2021 *Monetary Policy Report*, unemployment has fallen further. Infection rates have risen, but a large proportion of the adult population is now vaccinated. A normalising economy now suggests that it is appropriate to begin a gradual normalisation of the policy rate.

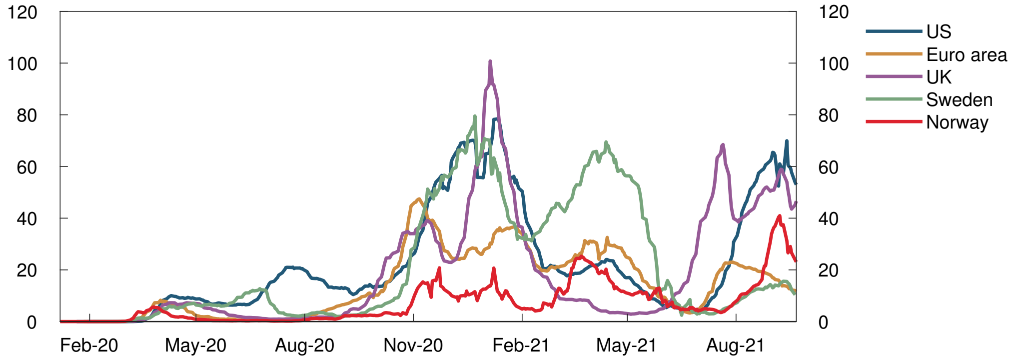
Norges Bank's Monetary Policy and Financial Stability Committee decided to raise the policy rate from 0% to 0.25% at its meeting on 22 September. Based on the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely be raised further in December.

The global recovery continues

The easing of Covid-related restrictions has led to a clear upswing in economic activity among Norway's trading partners, as projected in the June *Report*. Through summer, the spread of the Delta variant resulted in higher infection rates in many countries. The share of fully vaccinated has risen among most trading partners, and so far there has not been any significant tightening of Covid-related restrictions among advanced economies. The rise in cases is expected to weigh somewhat on the economic recovery in the coming period, but expansionary monetary and fiscal policies will likely help sustain a relatively solid rate of growth. Overall economic activity among trading partners is projected to be back at its pre-pandemic level during the current quarter.

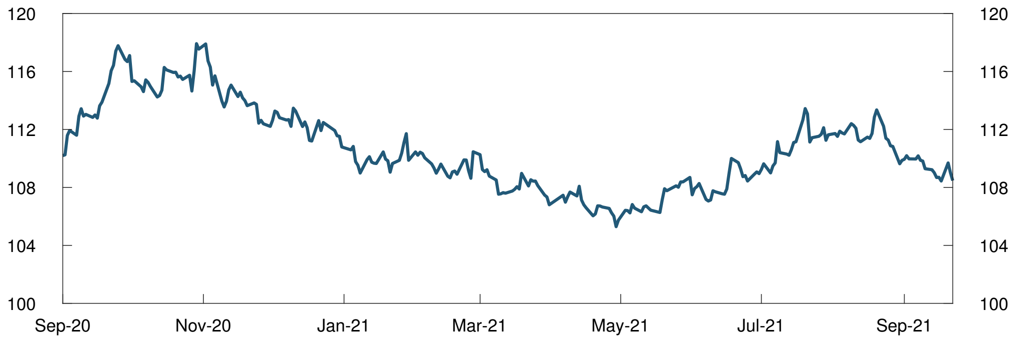
The pandemic has fuelled substantial price increases for some goods and services, and headline consumer price inflation has risen in many countries. Underlying inflation in the US and UK has been somewhat higher than projected. Nevertheless, there are prospects for moderate underlying inflation among trading partners in the coming years.

Chart A Higher infection rates in a number of countries
New cases per 100 000 inhabitants. Seven-day moving average



Sources: Refinitiv Datastream and Norges Bank

Chart B The krone has been weaker than expected
Import-weighted exchange rate index (I-44)



Sources: Refinitiv Datastream and Norges Bank

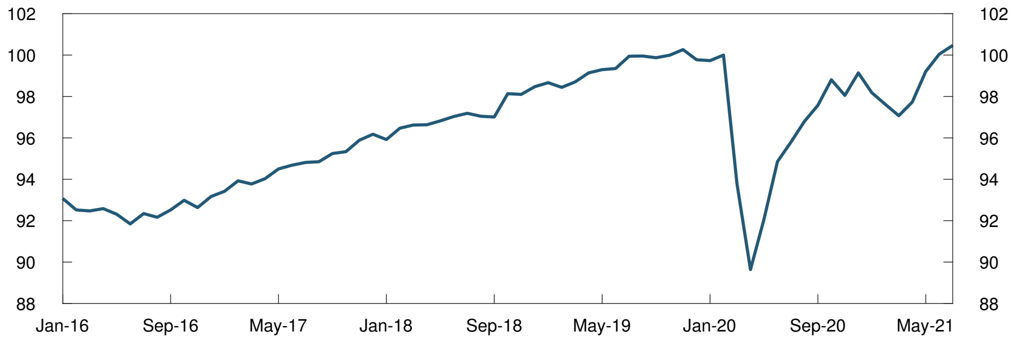
Foreign central banks are signalling a continuation of loose monetary policy for some time ahead. Policy rate expectations among Norway's trading partners have increased slightly since June and indicate that rates will be broadly at current levels in the period to the end of 2022, rising gradually thereafter.

US long-term interest rates have fallen a little since the June *Report*, likely on the back of unease about infection rates and uncertainty regarding the economic outlook. This uncertainty may also have affected the krone exchange rate, which has been weaker than projected in June. Oil prices are little changed since June, while gas prices have risen substantially. Advanced economy equity markets have posted further gains.

The premium in the Norwegian money market has edged higher but has been somewhat lower than projected in the June *Report*. Residential mortgage rates are little changed. Forward money market rates have risen a little, indicating expectations of a gradual policy rate rise ahead.

Activity in the Norwegian economy is now higher than its pre-pandemic level
After falling sharply in 2020, overall activity in Norway has picked up again. The easing of Covid-related restrictions has led to a brisk upswing in the Norwegian economy. In July, mainland GDP was a little higher than prior to the pandemic and broadly as projected in the June *Report*. The recovery was particularly strong in private services, which have been hit hardest by Covid-related restrictions.

Chart C Activity is now higher than its pre-pandemic level
GDP for mainland Norway. Seasonally adjusted. Index. February 2020 = 100



Source: Statistics Norway

Infection rates in Norway have risen after summer, especially among the young. Hospitalisations have also risen, but considerably less than earlier in the pandemic. A large proportion of the adult population is now vaccinated, and vaccination of younger age groups is underway. A high vaccination rate has reduced the need for Covid-related restrictions, and the economic impact of higher infection rates is therefore expected to be less pronounced than previously. At the same time, there is still uncertainty regarding the evolution of the pandemic and the effectiveness of existing vaccines. New virus variants may cause new infection waves even in countries with a high vaccination rate, and it cannot be ruled out that a retightening of restrictions may be necessary.

Higher infection rates are likely weighing somewhat on the economic upturn, but there are still prospects that activity will continue to rise through autumn. The upswing is expected to be strongest in the service sector segments that have been hit hardest by the pandemic. In August, Norges Bank's Regional Network contacts reported higher capacity utilisation and growing labour shortages in most sectors. Nevertheless, contacts expect solid growth over the next six months, especially in services.

Owing to limited spending options, households have accumulated substantial savings during the pandemic, providing room for strong private consumption growth ahead. Household purchases of goods and services rebounded through summer and have been higher than expected. In August, Regional Network contacts reported improved profitability and plans for higher investment in the coming year.

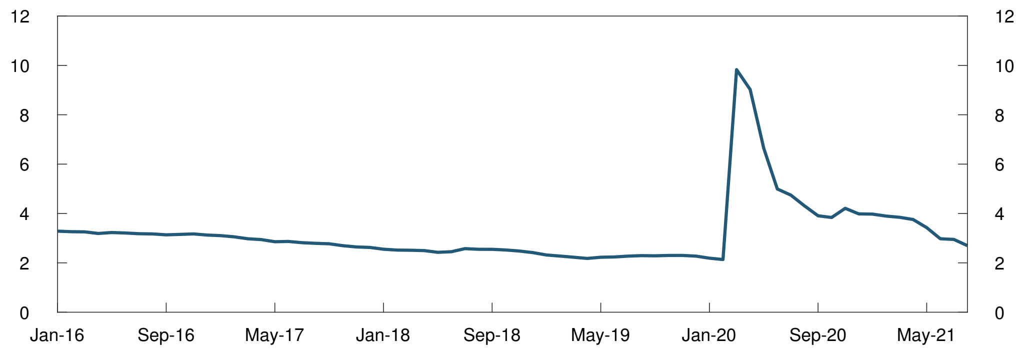
The reopening of society has enabled more persons to return to work. Seasonally adjusted registered unemployment has fallen more than expected and was 2.7% in August. At the same time, a large share of unemployed have been out of work for over half a year. Long-term unemployment increases the risk of a permanent drop-out from the labour market.

Through the pandemic, extensive fiscal measures have been implemented to dampen the economic impact of the pandemic and the stringent measures to contain it. With the reopening of society and a normalising economy, the Government has signalled that most support measures will be phased out in the course of autumn.

Housing market activity remains high, but house price inflation has moderated. Through summer, the rise in house prices has been somewhat lower than projected. Household credit growth has been broadly in line with expectations.

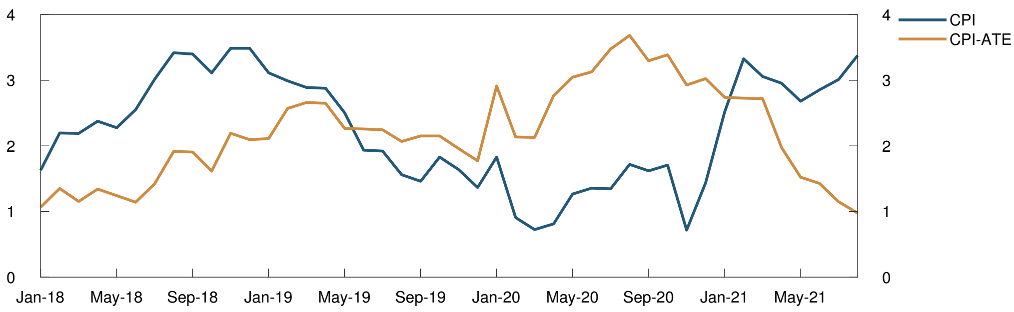
Chart D Unemployment has fallen further

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



Source: Norwegian Labour and Welfare Administration (NAV)

Chart E Underlying inflation has declined further
CPI and CPI-ATE. Twelve-month change. Percent



Source: Statistics Norway

Increased wage expectations
Underlying inflation, as measured by the consumer price index (CPI) adjusted for tax changes and excluding energy products (CPI-ATE), picked up through spring and summer 2020 but has since declined. In August, the 12-month change was 1.0%, as projected in the June *Report*. The rise in prices for both domestically produced goods and services and imported consumer goods has slowed since May.

A rise in energy prices led to a substantial increase in 12-month CPI inflation towards the end of 2020 and into 2021. After inflation moderated through spring, a resurgence in energy prices has led to a renewed rise in 12-month CPI inflation, which was 3.4% in August. Electricity and fuel futures prices indicate that CPI inflation will remain elevated to the end of 2021, declining thereafter. Longer-term inflation expectations appear to remain anchored close to the 2% target.

Average annual wages rose by 3.1% in 2020. A considerable decline in the number of employed in low-wage sectors contributed to lifting the average wage level. As a rising number of unemployed return to work, this compositional effect will likely pull down wage growth. Current wage statistics and signals from expectations surveys suggest that wage growth in 2021 will be higher than projected in the June *Report*, and annual wage growth for 2021 is now projected at 3.0%.

The pandemic is creating uncertainty regarding price and wage inflation ahead. For example, bottlenecks may arise in distribution chains, and some occupational labour shortages may be greater than assumed. This may lead to increased pressure on prices and wages.

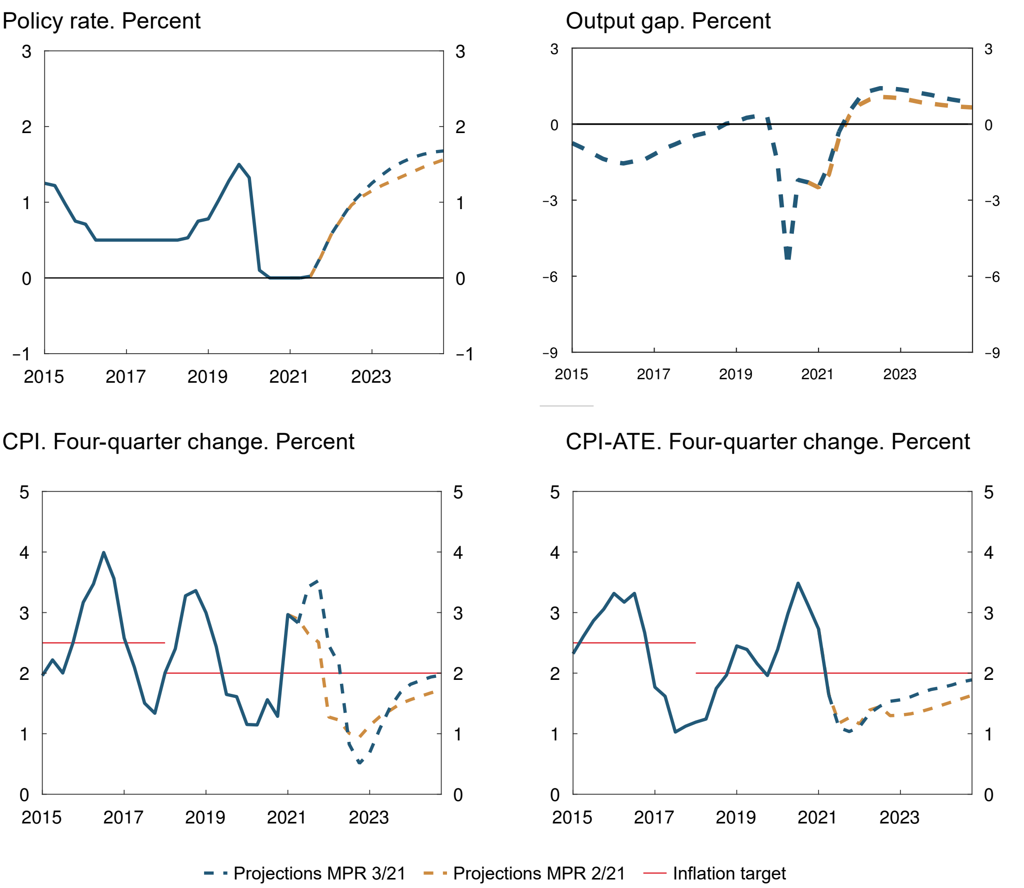
Gradual rise in the policy rate
The operational target of monetary policy is annual consumer price inflation of close to 2% over time. Inflation targeting shall be forward-looking and flexible, so that it can contribute to high and stable output and employment and to countering the build-up of financial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

The reopening of society has led to a marked upswing in the Norwegian economy, and activity is now higher than its pre-pandemic level. Unemployment has fallen further, and capacity utilisation appears to be close to a normal level. Infection rates have risen after summer, but a high vaccination rate has reduced the need for Covid-related restrictions. The economic upswing will likely continue through autumn. Underlying inflation is low, but increased activity and rising wage growth will help push inflation up towards the inflation target. A normalising economy suggests that there is no longer a need to maintain the current degree of monetary accommodation. The objective of countering the build-up of financial imbalances also suggests higher interest rates. Uncertainty surrounding the effects of higher interest rates warrants a gradual rise in the policy rate.

In its discussion of the balance of risks, the Committee was concerned with the uncertainty surrounding the evolution of the pandemic and the restraining effect that new virus variants could potentially have on the economic upturn. At the same time, there is still a risk that the pandemic will have lasting consequences for employment. This favours supporting economic growth to enable the unemployed to return to work more quickly. On the other hand, capacity constraints may result in faster-than-expected price and wage inflation. Nevertheless, the Committee judges that the risk of inflation becoming too high is limited.

Based on the Committee's current assessment of the outlook and balance of risks, it will be appropriate to raise the policy rate gradually in the coming period. The policy rate forecast indicates a rate of 1% one year ahead and 1.7% towards the end of 2024. Higher capacity utilisation and higher inflation prospects have contributed to a somewhat higher policy rate forecast compared with the June forecast. Capacity utilisation is now close to a normal level and is expected to rise further in the coming year before gradually falling. Unemployment is expected to fall further and then remain close to its pre-

Chart F Gradual rise in policy rate helps to achieve the objectives of monetary policy



Sources: Statistics Norway and Norges Bank

pandemic level. Underlying inflation is projected to hover around 1% in the coming period, before rising to close to 2% towards the end of 2024. If the economic outlook changes, the policy rate forecast will also be adjusted.

The Committee decided unanimously to raise the policy rate to 0.25%. Based on the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely be raised further in December.

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22 September 2021

Assessment of the countercyclical capital buffer requirement

In June, the decision was made to raise the countercyclical capital buffer rate to 1.5%, effective from 30 June 2022. At its meeting on 22 September, Norges Bank's Monetary Policy and Financial Stability Committee decided to maintain this requirement. Based on the Committee's current assessment of economic developments and the prospects for bank losses and lending capacity, the buffer rate will be raised to 2.0% in December, effective from 31 December 2022.

On 3 September, the Government decided to give Norges Bank decision-making authority for the countercyclical capital buffer and advisory responsibility for the systemic risk buffer, effective from 10 September. Norges Bank sets the countercyclical capital buffer rate four times a year. The decision and assessment are presented in this *Report*. In its work on setting the buffer rate, Norges Bank exchanges relevant information and assessments with Finanstilsynet (Financial Supervisory Authority of Norway). Norges Bank's framework for the countercyclical capital buffer is described in *Norges Bank Papers* 4/2019.

The objective of the countercyclical capital buffer is to bolster banks' resilience and mitigate the amplifying effects of bank lending during downturns. Banks should build and hold a countercyclical buffer when financial imbalances are building up or have built up. In the event of an economic downturn that causes or could cause higher credit losses and a marked reduction in access to credit, the buffer rate should be lowered with a view to increasing banks' lending capacity. The buffer rate shall ordinarily be between 0% and 2.5% of banks' risk-weighted assets, but may be set higher under extraordinary conditions .

The countercyclical capital buffer rate was reduced from 2.5% to 1.0% in March 2020, in response to the coronavirus outbreak and containment measures that led to a sharp fall in activity in the Norwegian economy. The reduction in the buffer rate mitigated the risk that a tightening of credit conditions could have amplified the downturn caused by the pandemic. In June 2021 and on the advice of Norges Bank, the Ministry of Finance decided to raise the buffer rate again to 1.5%, effective from 30 June 2022.

The reopening of society has led to a marked upswing in the Norwegian economy, and activity is now higher than its pre-pandemic level, with unemployment falling further. Higher infection rates are likely weighing somewhat on the economic upturn, but there are still prospects that activity will continue to rise through autumn.

Creditworthy businesses and households appear to have ample access to credit. Banks have the capital and liquidity to maintain credit supply. In Norges Bank's lending survey, banks reported unchanged credit standards in 2021 Q2 and do not expect changes ahead. In recent months, growth in banks' corporate lending has picked up. Issuance volumes in the corporate bond market have been high since the turn of the year, and risk premiums are now close to pre-pandemic levels.

Norwegian banks are profitable. Banks' credit losses increased in 2020 Q1, but have since declined. Overall, losses amounted to approximately 0.1% of total lending in the first half of 2021, which is about half of the average for the past 20 years. Losses are expected to be low in the period ahead. Loss prospects are somewhat more uncertain than normal owing to uncertainty surrounding the future evolution of the pandemic. Banks' capital ratios fell somewhat in 2021 Q2, primarily owing to faster lending growth. Norwegian banks are well equipped to meet a higher countercyclical capital buffer rate while maintaining credit supply.

Prior to the reduction in March 2020, the countercyclical capital buffer rate was set at 2.5% against the background of a build-up of financial imbalances over a long period. Before the outbreak of the pandemic, the Committee judged that imbalances were no longer building up. Property price inflation had been moderate for several years, and household debt-to-income ratios had levelled off. During the pandemic, residential and commercial property prices have increased substantially, and household credit growth has accelerated . Property price inflation has recently been more moderate. The consideration of financial imbalances suggests a higher buffer rate.

In June, the decision was made to raise the countercyclical capital buffer rate to 1.5%, effective from 30 June 2022. At its meeting on 22 September, Norges Bank's Monetary Policy and Financial Stability Committee unanimously decided to maintain this requirement. Based on the Committee's current assessment of economic developments and the prospects for bank losses and lending capacity, the buffer rate will be raised to 2.0% in December, effective from 31 December 2022 . The Committee expects the buffer rate to return to 2.5% somewhat further out.

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22 September 2021

1 The global economy

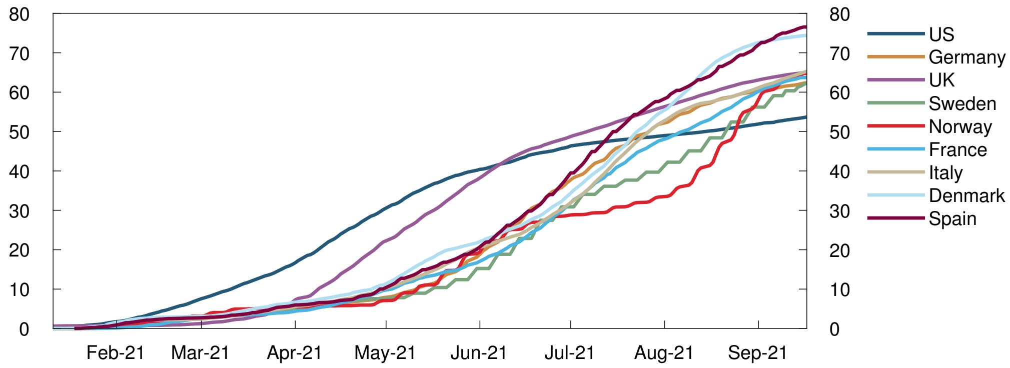
An easing of Covid-related restrictions led to a marked rise in economic activity among Norway's trading partners in spring 2021. The spread of the Delta variant through summer has led to a rise in infection rates in many countries. GDP growth for Norway's trading partners as a whole is nonetheless expected to remain relatively robust over the coming quarters. GDP will likely return to its pre-pandemic level in the course of 2021 Q3. Overall consumer price inflation has risen markedly in a number of countries, but there are still prospects for moderate underlying inflation in the years ahead. Market-implied rates indicate expectations of very low interest rates among trading partners for some time ahead.

Vaccination and easing of Covid-related restrictions lift growth

After a long period of strict Covid-related restrictions, easing started among Norway's advanced economy trading partners in spring, which, combined with lower infection rates, contributed to strong GDP growth. Activity increased by close to 5% in the UK and over 2% in the euro area between Q1 and Q2, with particularly strong growth in household goods and services purchases. Despite solid growth, the level of euro area activity was still 2.5% lower than prior to the pandemic. Growth was more moderate in the US, but the level of activity is already slightly higher than prior to the pandemic. Overall developments in trading partner GDP in Q2 were as projected in the June 2021 *Monetary Policy Report*.

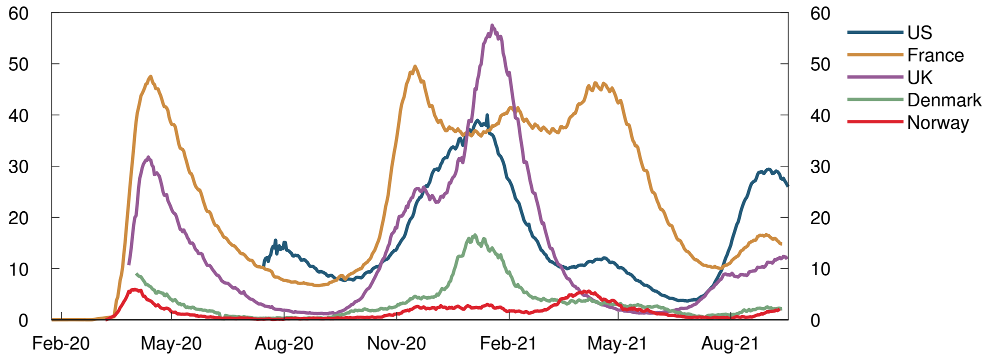
Since the June *Report,* the spread of the Delta variant has led to rising infection rates in many countries. The increase has been substantial in the US, UK and several emerging market economies and moderate in other European countries. Incentives to increase vaccination rates have been introduced in recent months. In the US and a number of European countries, vaccination or frequent testing is now required for public and private sector employees and for customers wishing to make use of various services. The share of the population that is fully vaccinated is about 75% in Denmark and Spain, somewhat lower in Norway and other European countries and a little more than 50% in the US (Chart 1.1).

Chart 1.1 High shares of the population fully vaccinated in a number of countries
Share of population fully vaccinated. Percent



Source: Refinitiv Datastream

Chart 1.2 Marked increase in hospitalisations in the US
Number of Covid patients in hospital per 100 000 inhabitants

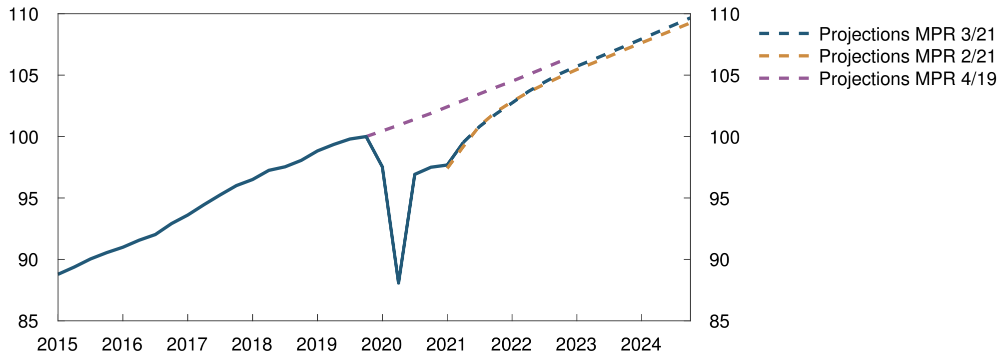


Source: ourworldindata.org

So far, the increase in infection rates has resulted in a limited rise in Covid hospitalisations in Europe. In the US, where the vaccination rate is lower, Covid hospitalisations have risen sharply and are now at the same level as at the beginning of February (Chart 1.2). Thus far, Covid-related restrictions have not been tightened substantially in advanced economies (see box on page 17), but trading partner GDP growth is expected to be somewhat more subdued in the coming quarters as a result of the rise in infection rates. In addition, high energy prices are dampening household consumption of other goods and services. The projections for growth in the latter half of 2021 have been revised down from the June *Report*. Trading partner GDP will likely return to its pre-pandemic level in the course of Q3 (Chart 1.3).

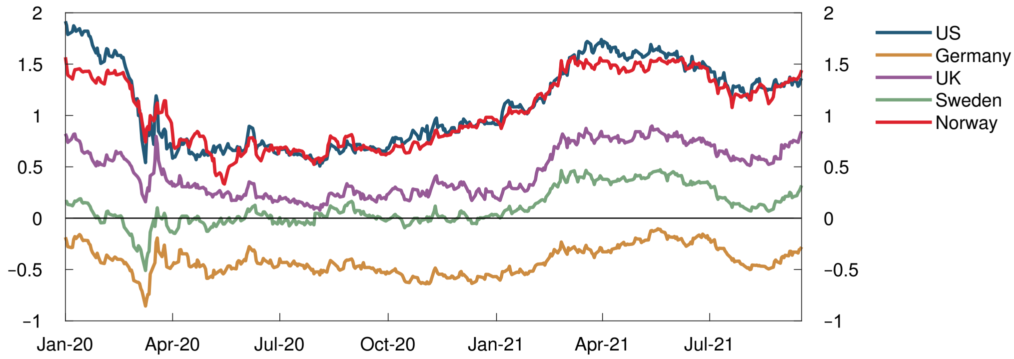
Expansionary monetary and fiscal policies are having a positive impact on growth in most countries. For the US, the projections in this *Report* assume that the infrastructure package will be approved. For the euro area, the "NextGenerationEU" support scheme is assumed to lift growth towards the end of the projection period. This scheme is designed to boost the post-pandemic recovery and contribute to structural reforms, digitalisation and the transition to a greener economy. GDP growth among trading partners is projected at over 5% in 2021 and 4% in 2022 (Annex Table 1). Overall, the projections for GDP growth are little changed from the June *Report*. Capacity utilisation is projected to be lower than normal in 2021, before rising to a slightly higher-than-

Chart 1.3 GDP back at its pre-pandemic level during 2021 Q3
GDP for trading partners. Index. 2019 Q4 = 100



Sources: Refinitiv Datastream and Norges Bank

Chart 1.4 Long-term rates have fallen slightly in the US
Yields on 10-year government bonds in selected countries. Percent



Source: Bloomberg

normal level in the course of 2022 and to the end of the projection period. Trading partner imports are projected to increase by over 7% in 2021.

Higher consumer price inflation

The pandemic has contributed to a substantial rise in prices for some goods and services. In summer, the 12-month rise in the consumer price index (CPI) moved up to over 5% in the US and 3% in the euro area. A sharp rise in energy prices (see box on page 41) contributed to almost half of the 12-month rise in the euro area. Underlying inflation has not increased markedly in the euro area, but is now at 4% in the US, with higher prices for used cars, hotel accommodation and air travel contributing to the sharp rise. Underlying inflation in the US and the UK has been higher than projected in recent months.

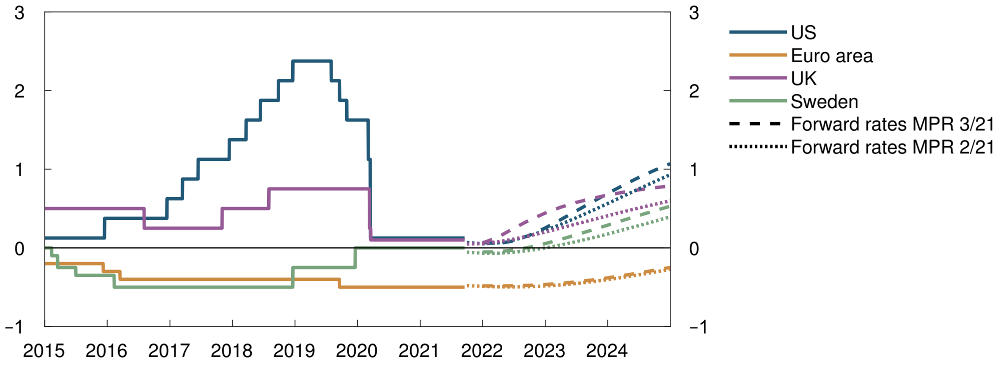
Increased producer and commodity prices and higher freight rates will likely continue to push up the rise in prices for some goods in the period ahead. The fall in prices for both goods and services in 2020 also pushes up 12-month inflation in the second half of the year. Market-implied inflation expectations still indicate some probability of persistently high inflation in the years ahead, but long-term inflation expectations appear to be well-anchored in both the US and the euro area. In the coming years, underlying inflation is expected to slow to 2.5% in the US, while remaining somewhat below the inflation targets in the euro area and Sweden. The projections for trading partners as a whole have been revised up from the June *Report* for the entire projection period.

Producer prices for consumer goods imported to Norway, in foreign currency terms, have risen more than expected, with a particularly sharp rise in food prices in recent months. The projections for 2021 and 2022 have been revised up (Annex Table 1).

Continued very expansionary monetary policies abroad

Unease about the evolution of the pandemic and uncertainty about the global economic outlook have likely contributed to slightly lower long-term interest rates in the US since the June *Report,* while interest rates in Europe are little changed (Chart 1.4). Central banks abroad are still signalling the need for very expansionary monetary policy for some time ahead. Market-implied rates indicate that policy rates among Norway's trading partners will remain at about today's level until the end of 2022, rising gradually thereafter (Chart 1.5). Policy rate expectations are slightly higher than in June.

Chart 1.5 Unchanged policy rates for some time ahead
Policy rates and estimated forward rates in selected countries. Percent



Sources: Bloomberg, Refinitiv Datastream and Norges Bank

Favourable corporate profit announcements and expectations of higher earnings have boosted US equity markets. Corporate bond risk premiums are little changed since June.

Uncertainty about the economic consequences of the pandemic

There is considerable uncertainty surrounding the global economic outlook. Developments will depend on factors such as the number of people vaccinated and vaccine effectiveness both over time and against any new virus variants. A larger share of the population may have dropped out of the labour force as a result of the pandemic, 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. Price and wage inflation may then be higher than currently projected.

GRADUAL REOPENING DESPITE HIGHER INFECTION RATES

The spread of the Delta variant led to higher infection rates in many parts of the world through summer 2021, but there are now signs that infection rates are declining. Covid cases have also increased markedly in Norway, but are now showing a falling tendency. A high and rising vaccination rate is contributing to keeping the number of hospitalisations low. Society is expected to move towards a "normal everyday life with increased preparedness" in the course of autumn, which is somewhat later than envisaged in June.

Low disease burden despite high infection rates
Infection rates in Norway have risen more sharply than assumed in the June *Report*, primarily driven by high transmission rates among children and adolescents, while the impact on vaccinated persons has been very limited. There have recently been signs that infection rates are decreasing. A further decline is expected in the period ahead, even though the projections in this *Report* take the possibility of a seasonal rise in infection rates in autumn or winter into account. The projections assume that there will be no Covid flare-ups in 2021 that would require a renewed tightening of national restrictions.

In spite of a sharp increase in infection rates, the rise in hospital admissions has been relatively modest, probably because an increasing percentage of the population is well-protected and because Covid now primarily affects children and adolescents, who generally have milder symptoms. A continued rise in the number of fully vaccinated persons will contribute to keeping the disease burden at a low level. The assumptions regarding the path for infection and morbidity rates in this *Report* are based on our interpretation of current statistics and projections made by the Norwegian Institute of Public Health (NIPH).

Infection rates among Norway's main trading partners decreased to a low level at the beginning of summer, before the spread of the Delta variant led to new waves of the virus in most countries. While infection rates have declined in the euro area, Denmark and Sweden, rates in the US and UK are still at high levels. As in Norway, the disease burden has been appreciably lower in this wave than previously, with the exception of the US, where vaccination coverage is still relatively low. Infection rates are also high in many Asian countries. Overall, infection rates abroad have been higher than expected. The number of Covid cases among trading partners as a whole is assumed to continue to fall ahead, but new smaller flare-ups are expected in some countries in 2021.

Higher vaccination coverage
So far, about 75% of the Norwegian population have received at least one vaccine dose, and around 65% have so far been fully vaccinated. Close to 85% of the 16–17 age group have received their first dose, and some municipalities have now started vaccinating the 12–15 age group.

It now appears that around 90% of the population from the age of 18 will be fully vaccinated by mid-October, approximately as assumed in June. The assessment of the vaccination outlook is based on the scenario published by the NIPH on 13 August and updated information up to and including 17 September.

For Norway's advanced economy trading partners, the projections assume that a large share of the population will have received two vaccine doses by the end of 2021. This is about the same as assumed in June, but it has become clear since then that a number of countries will also offer a third dose. In addition, vaccination programmes have been expanded to include children from the age of 12. Higher vaccine demand is also contributing to prospects that full vaccination coverage in all the emerging market economies will take somewhat longer than expected in June.

Gradual reopening

In April, the Government launched a four-phase reopening plan, conditioned on developments in infection rates, disease burden and vaccination coverage. The first three phases have been completed so far, and the revised plan is now to keep the level of restrictions at Phase 3 until society can be reopened to allow for "normal everyday life with increased preparedness".

It is assumed that the last phase of normalisation can begin when 90% of the adult population is fully vaccinated and infection rates decline, probably in the course of October. This means that a slightly tighter regime of measures is now envisaged for Q4 than assumed in June. In addition, high infection rates could also give rise to self-regulating behaviour in the short term that could dampen economic activity somewhat. In line with signals from the authorities, restrictions on international travel and large-scale cultural events are expected to remain in place until the end of 2021.

Among Norway's advanced economy trading partners, Covid-related restrictions as a whole have been broadly as assumed in the June *Report*. Reopening has come a long way in most countries, but there are still differences across countries with regard to restrictions for fully vaccinated persons. Some restrictions on travel and events are expected to remain in place for somewhat longer than previously assumed.

Continued uncertainty

There is still considerable uncertainty around the evolution of the pandemic and global vaccination. With high infection rates in many countries, combined with low vaccination rates, there is a persistent risk of new outbreaks. At the same time, new variants could spark virus flare-ups, even in countries with high vaccination coverage, thereby prompting new restrictions. Widely varying global vaccination coverage increases the risk of the emergence of new variants. In Norway and some other Western countries, uncertainty around the supply of vaccines and vaccination has decreased somewhat since June.

2 Financial conditions

Interest rates on loans to households and corporations are at historically low levels. Residential mortgage rates have shown little change in recent months, while interest rates on loans to corporations have edged up following a rise in money market rates. A higher policy rate is expected to lead to higher lending rates in the years ahead.

The krone exchange rate is slightly weaker than at the time of the June 2021 *Monetary Policy Report*. Unease about infection rates during summer and uncertainty about global growth prospects may have contributed to the weakening. The krone is projected to strengthen again ahead.

2.1 Interest rates

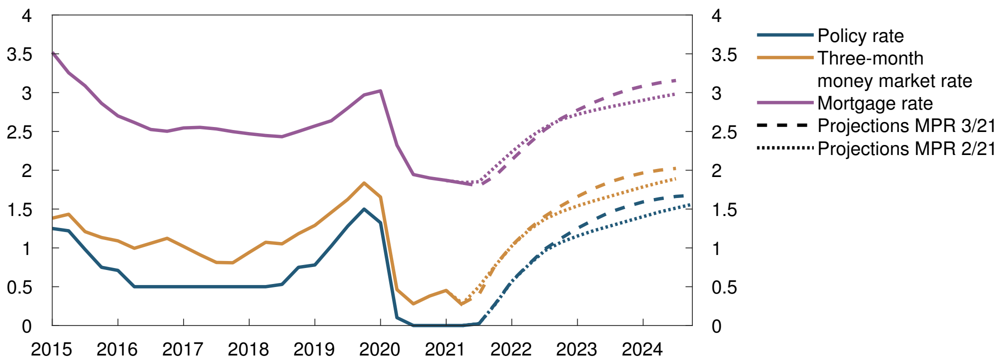
Prospects for higher residential mortgage rates

Residential mortgage rates are still at historically low levels after they were lowered in spring 2020 (Chart 2.1). At the end of July, the average rate was 1.8%, approximately unchanged on the level prevailing in the preceding months. Quoted interest rates on floating-rate mortgages have overall shown little change since the June *Report*. At the same time, quoted interest rates on longer fixed-rate mortgages have edged down.

An increase in residential mortgage rates is expected in the course of autumn, followed by a gradual upward drift into the projection period as the policy rate rises. Mortgage rates are projected to drift up towards 3.1% in 2024, ending slightly higher than in the June *Report*.

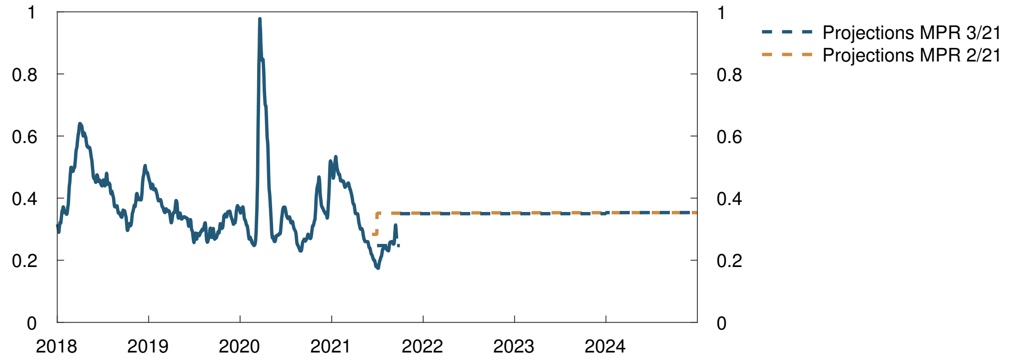
The rise in the policy rate is not expected to feed through fully to banks' mortgage rates. The reason is that the lending spread, ie the difference between the residential mortgage lending rate and the money market rate, has widened since the policy rate was lowered in March 2020 because banks' mortgage rates were reduced by less than the reduction

Chart 2.1 Prospects for higher lending rates
Percent



Sources: Statistics Norway and Norges Bank

Chart 2.2 Higher money market premiums ahead
Percentage points



Sources: Refinitiv Datastream and Norges Bank

in the policy rate. Lending spreads are expected to approach pre-pandemic levels as the policy rate rises.

Higher money market rates
The money market rate, Nibor, reflects market-implied policy rate expectations over the next three months plus a risk premium, often referred to as the money market premium. Since the June *Report*, three-month Nibor has increased primarily because the time to the first expected rate hike has come closer. In addition, the money market premium has risen slightly, likely due to prospects for lower structural liquidity through the remainder of the year.[1] So far in Q3, the premium has nevertheless been somewhat lower compared with the June *Report* projection and is now 0.25 percentage point. The premium is expected to move up in Q4 and average 0.35 percentage point to the end of the projection period (Chart 2.2).

Market-implied policy rate expectations in the coming year have increased somewhat since the publication of the June *Report*. Forward rates indicate a further rate hike in December. At the end of the projection period, the expected policy rate is little changed. Short-term interest rates have risen more than longer rates, entailing some flattening of the yield curve since June.

Banks' corporate lending rates are normally linked to three-month Nibor. As the money market rate has risen, the price of corporate borrowing from both banks and the bond market has also edged up since the June *Report*.

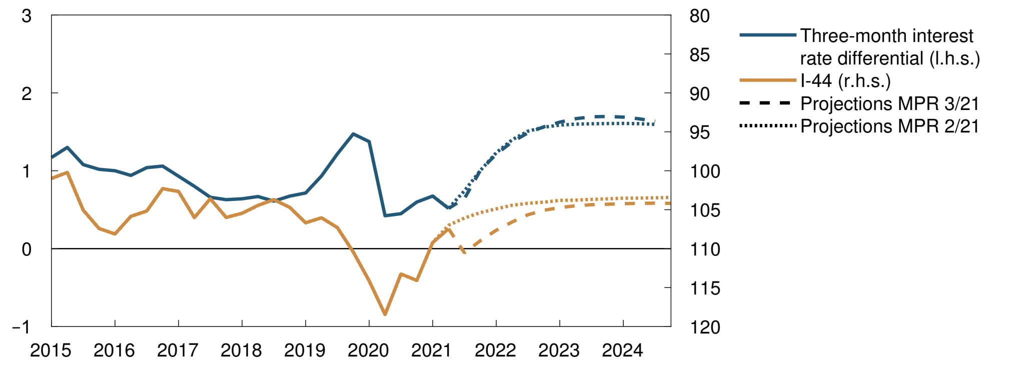
2.2 Krone exchange rate

Slightly weaker krone
The krone exchange rate, as measured by the import-weighted exchange rate index I-44, is slightly weaker than in June and weaker than the June *Report* projection. Unease about infection rates during summer and uncertainty about global growth prospects may have contributed to the weakening of the krone, despite some increase in the interest rate differential against trading partners since the June *Report*. Oil prices have shown little change since June (Chart 3.D).

1 For further details, see box "Structural liquidity" on page 20 in *Monetary Policy Report* 2/21.

Chart 2.3 Stronger krone ahead

Import-weighted exchange rate index (I-44). Difference between three-month money market rate in Norway and among trading partners. Percentage points



Sources: Refinitiv Datastream and Norges Bank

The krone is expected to strengthen ahead (Chart 2.3), in an expected context of reduced pandemic-related uncertainty and a wider interest rate differential against trading partners. Oil futures prices indicate somewhat lower oil prices ahead, implying a weaker krone in isolation.

The path of the krone exchange rate remains highly uncertain and will also depend on the future evolution of the pandemic. If pandemic-related uncertainty recedes faster than expected, the krone may prove stronger than projected. Conversely, a rise in uncertainty, for example due to new virus variants and uncertain vaccine effectiveness, may lead to a weaker krone. There is also uncertainty as to how strong the effect of a wider interest rate differential will be ahead.

3 Norwegian economy

Conditions in the Norwegian economy are starting to normalise after a historically deep downturn. Mainland GDP has risen markedly and is now higher than before the pandemic. The number of employed has increased and unemployment has fallen. Capacity utilisation appears to be close to a normal level.

Activity is expected to rise further through autumn. There are prospects that unemployment will continue to fall in 2022 and remain low in subsequent years.

Underlying inflation has declined through 2021 and is now below the inflation target. Higher wage growth and increased capacity utilisation suggest that inflation will pick up again further out. Inflation is projected to be close to 2% at the end of 2024.

3.1 Economic developments

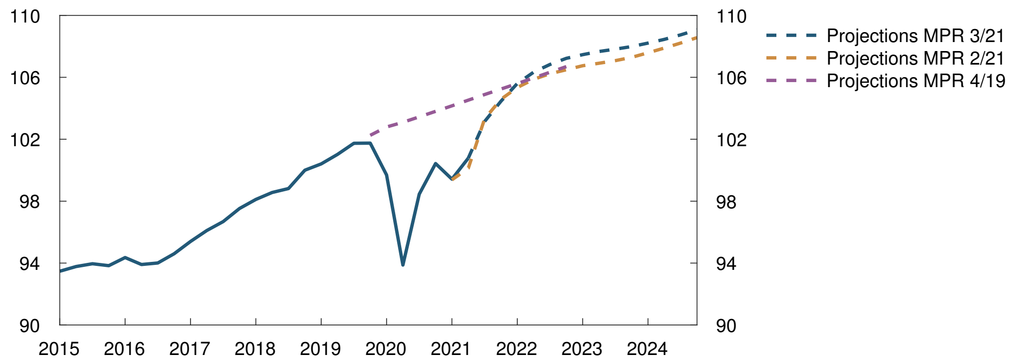
Economic conditions are normalising

Activity in the Norwegian economy fell sharply when the Covid pandemic hit in spring 2020 (Chart 3.1). When society was locked down, a very high number of workers were made redundant or furloughed and unemployment rose to around 10% of the labour force. As the spread of Covid was brought under control and Covid-related restrictions were eased in the period to summer 2020, economic activity also started to recover and unemployment declined. Through autumn and into 2021, economic activity has fluctuated in step with changes in infection rates and the scale of restrictions.

In April 2021, the authorities started a gradual reopening of society, with a stepwise easing of Covid-related restrictions. This led to a brisk upswing in economic activity, and mainland GDP rose by 1.4% in 2021 Q2. In June, activity returned to its pre-pandemic level. Growth continued the following month, and mainland GDP in July was as projected in the June 2021 *Monetary Policy Report*. The upswing in recent months has been particularly strong in the sectors hardest hit by the pandemic (Chart 3.2).

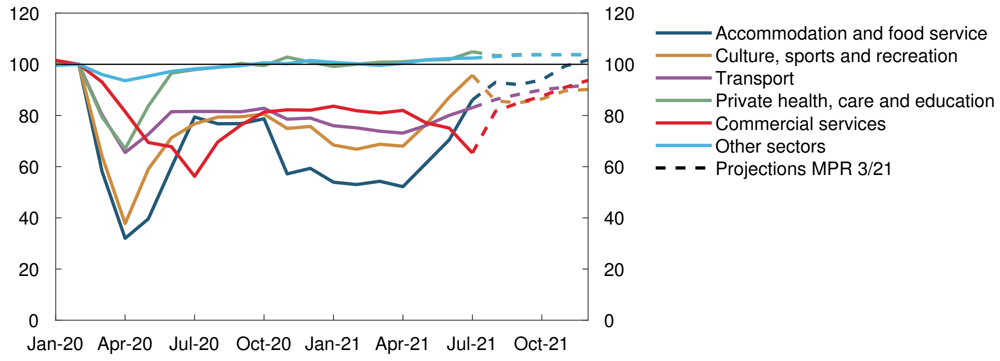
Chart 3.1 Marked increase in mainland GDP

GDP for mainland Norway. Seasonally adjusted. Index. 2018 Q4 = 100



Sources: Statistics Norway and Norges Bank

Chart 3.2 Strong upswing in a number of sectors
Seasonally adjusted GDP for mainland Norway. Gross product by sector. Index. February 2020 = 100



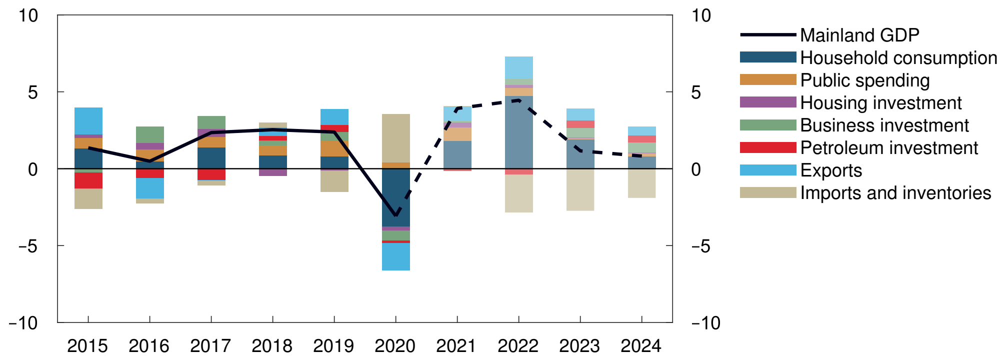
Sources: Statistics Norway and Norges Bank

Infection rates in Norway have increased since summer. The number of hospitalisations has also risen, but considerably less than in previous waves of the pandemic. Much of the adult population has now been vaccinated. A high vaccination rate has reduced the need for Covid-related restrictions, and the economic impact of higher infection rates is therefore milder than earlier.

The sharp rise in activity is expected to continue through autumn, even though higher infection rates will likely have some dampening impact on growth. See box on page 17 for a discussion of assumptions about pandemic developments ahead. Growth will be strongest in services. This is in line with information from contacts in Norges Bank's Regional Network.

Annual mainland GDP growth is projected at 3.9% in 2021, after falling by 3.1% in 2020. High GDP growth is also expected in 2022, before decelerating to about 1% in 2023 and 2024 (Chart 3.3). After a long period of limited consumption opportunities, increased household consumption is expected to provide a substantial boost to domestic growth. Business investment is also projected to recover after falling sharply during the pandemic. Towards the end of the projection period, a rise in climate-related investment is expected to support GDP growth. With the unwinding of government support measures, fiscal policy will no longer underpin GDP growth from 2022. A gradual increase in the policy rate will dampen the upturn further out.

Chart 3.3 Household consumption will boost growth in the coming years
GDP for mainland Norway. Percent. Contribution to annual growth. Percentage points



Sources: Statistics Norway and Norges Bank

The pandemic is still not over, and there is considerable uncertainty surrounding the economic outlook. It cannot be ruled out that new virus variants will necessitate a tightening of Covid-related restrictions. In that case, economic developments may prove weaker than projected. On the other hand, economic growth may pick up faster than envisaged if household consumption rises faster than expected. Firms have built up financial buffers during the pandemic, and if capacity utilisation in the economy is higher than projected, business investment may rise more than projected.

Strong growth in household demand

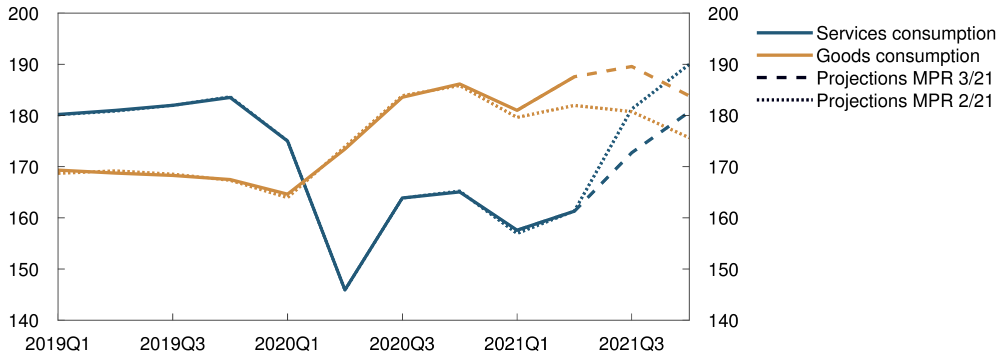
The pandemic has severely limited household consumption opportunities, and infection rates and Covid-related restrictions have in particular limited spending on services, such as travel, restaurant dining and cultural events. The restrictions have entailed an increase in the household saving ratio. Moreover, there has been a shift in household spending away from services towards goods (Chart 3.4).

At the end of April and the beginning of May, shops opened in a number of municipalities after having been closed for several weeks. The national ban on serving alcohol was lifted in mid-April, while pubs and restaurants in Oslo opened at the end of May. This led to a marked revival in both goods and services consumption in 2021 Q2. The rise in goods consumption was considerably stronger than expected, while services consumption was approximately in line with the projections in the June *Report*. The rise in goods consumption was also particularly strong in July when it was 14% higher than before the pandemic. Services consumption also increased further in July, and credit card transaction data indicate a continued high level in August. It is assumed that households will now shift more of their spending back to services, and goods consumption is projected to slow somewhat ahead. Despite a recent rise, Norwegians' spending abroad is at a very low level. An easing of travel restrictions is expected to boost household spending abroad through autumn.

High saving through the pandemic (Chart 3.5) gives households room to increase consumption considerably in the years ahead. Higher electricity prices, the unwinding of support measures and a rising policy rate will in isolation pull down real household disposable income ahead. See discussion in the box on page 41 on the effect of higher electricity prices on consumption. However, higher employment and wage growth are expected to contribute to an overall increase in real household disposable income in the coming years. This also suggests higher consumption ahead. Household consumption is projected to show strong growth in 2022, before gradually slowing further out in the projection period.

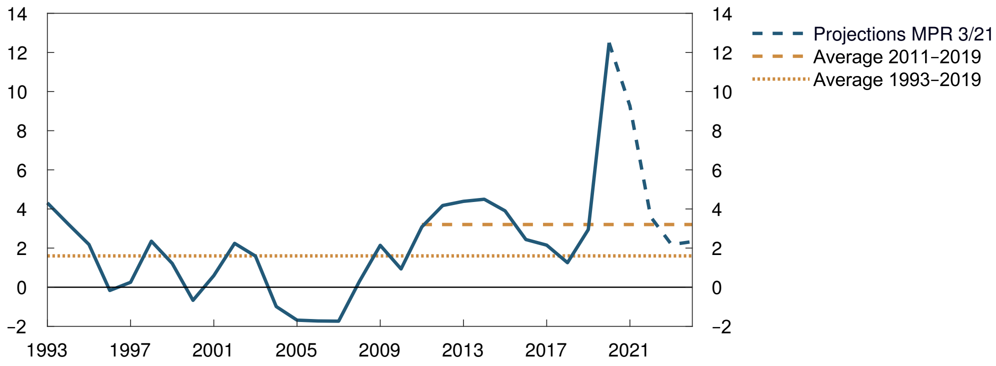
Chart 3.4 Sharp rise in services consumption ahead

Household consumption of goods and services. Constant prices. Seasonally adjusted. In billions of NOK



Sources: Statistics Norway and Norges Bank

Chart 3.5 High savings provide room for consumption growth
Household saving ratio excluding dividends. Percent



Sources: Statistics Norway and Norges Bank

Higher housing investment ahead

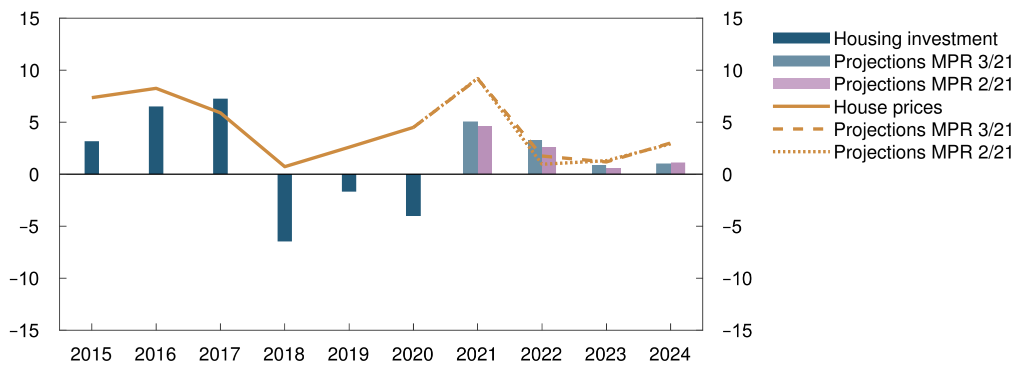
Housing market activity has been strong since May 2020, with increased new home sales and high existing home sales. House prices rose sharply in the period to March 2021. Low interest rates are stimulating the housing market, and increased remote working and limited consumption opportunities have likely also pushed up housing demand and the willingness to pay for housing. Since April, house price inflation has slowed, and since the June *Report,* house prices have been slightly lower than projected. Against the background of higher interest rates, a normalisation of household consumption patterns and an increase in residential construction, house price inflation is expected to remain moderate in the period ahead. See Section 5 for more information on housing market developments.

Housing investment increased in 2021 Q2, and the increase was somewhat stronger than projected. A high level of new home sales since autumn 2020 and high house prices are expected to contribute to a further increase in housing investment ahead (Chart 3.6).

Higher business investment

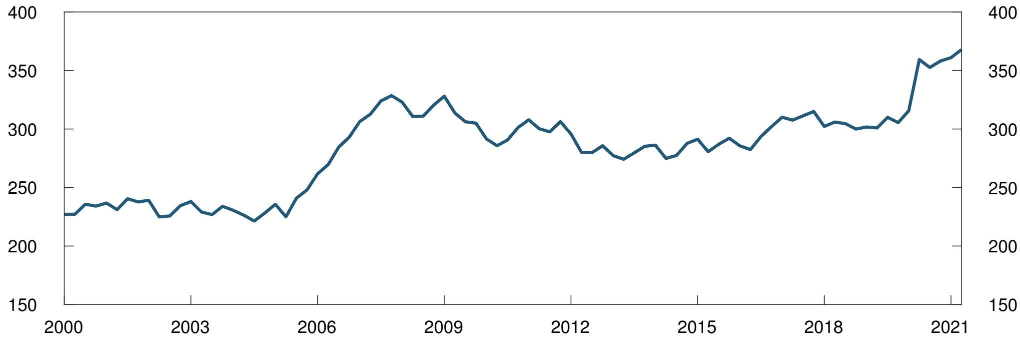
Mainland business investment fell sharply in the first half of 2020, but recovered somewhat in the latter half of the year. Overall business investment has shown little change so far in 2021. Regional Network contacts reported improved profitability and are planning to increase investment over the next 12 months. Firms' bank deposits increased

Chart 3.6 Growth in housing investment ahead
Housing investment and nominal house prices. Annual change. Percent



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

Chart 3.7 Firms have accumulated substantial bank deposits
Total bank deposits relative to GDP for mainland Norway. Non-financial corporations. Percent



Sources: Statistics Norway and Norges Bank

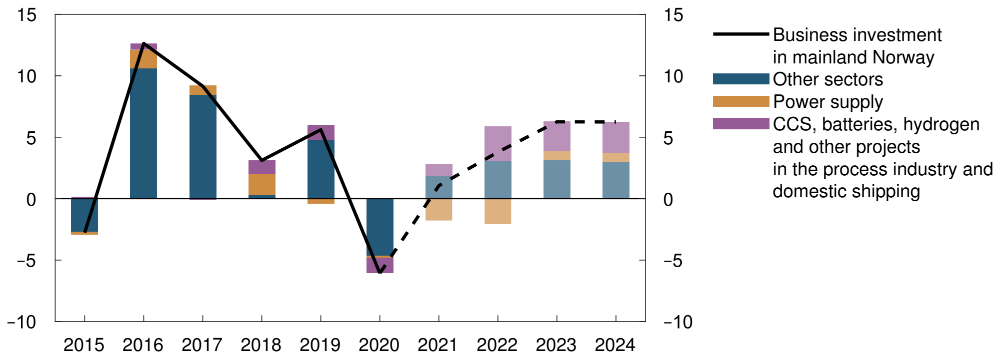
substantially during the pandemic (Chart 3.7). Preliminary accounts data for 2020 suggest that the increase in bank deposits is the case for many firms, and it appears that the pandemic has not significantly weakened the corporate sector's financial position, which indicates room for increasing investment ahead.

The unwinding of government support measures is expected to have limited impact on firms' investment plans. In August 2021, Norges Bank asked the Bank's Regional Network contacts how the pandemic has affected them. Among those contacts that have made use of the support schemes, the vast majority report that they will cope well without further support. With a normalisation of economic conditions, many firms are expected to spend a share of the increase in their liquid assets on investment ahead.

Moderate growth in business investment is expected in 2021, picking up in the years ahead owing to higher capacity utilisation and improved corporate profitability. In isolation, higher interest rates have a dampening impact on the rise in business investment. Services investment is expected to be a key driver of investment growth, while lower investment in the power sector will act as a drag. Substantial investment in batteries, hydrogen and carbon capture and storage boosts investment growth (Chart 3.8).

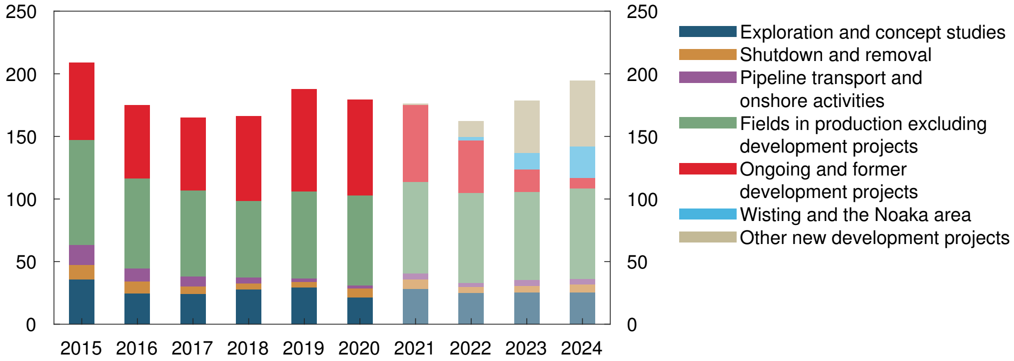
Investment in the oil and gas sector fell by 4% in 2020, primarily reflecting the coronavirus outbreak and the sharp fall in oil and gas prices. The fall was dampened by tempo-

Chart 3.8 Higher mainland business investment
Business investment in mainland Norway. Percent. Contribution to annual growth. Percentage points



Sources: Statistics Norway and Norges Bank

Chart 3.9 Petroleum investment picks up after 2022
Petroleum investment. Constant 2021 prices. In billions of NOK



Sources: Statistics Norway and Norges Bank

rary tax changes for oil companies in June 2020. Investment is projected to continue to fall in 2021 and 2022 despite the fact that in isolation the tax changes result in higher investment and that oil and gas prices have shown a substantial rise over the past year. The fall in investment primarily reflects the completion of a number of large development projects in the coming years, while relatively few projects will be started this year and the first half of next year. The temporary tax changes give oil companies strong incentives to launch new development projects before 2023, and they have announced that they will be starting a number of new development projects in the latter half of 2022. Against this background, petroleum investment is projected to increase markedly in 2023 and 2024 (Chart 3.9).

The projections assume that the Government's proposed changes to petroleum taxation will be implemented. The new rules will apply from next year for all investment, excluding the development projects that are encompassed by the oil tax package adopted in June 2020. The new regime will in isolation lead to a sharp rise in oil companies' cash flow in the near term, increase oil companies' assessed profitability of new projects and a small decrease in the exploration cost tax refund for affected companies.

The new tax rules have contributed to an upward revision of the projections for investment in new and existing fields, as has the sharp rise in gas prices (see box on page 41). The projections for development investment have nevertheless been revised down somewhat since some of the planned development projects have been postponed. The change in the tax refund rules is likely to have little effect on exploration investment. Projected exploration investment for the period between 2022 and 2024 is nonetheless 10% lower than in the June *Report*. This is because oil companies have reduced their exploration projections for 2022 and signalled a reduction in exploration activity in immature areas ahead. The projections for oil and gas investment are overall a little lower for the period between 2022 and 2024 than in the June *Report*.

Increased travel will boost exports and imports
After falling sharply in the first half of 2020, mainland exports have picked up considerably over the past year (Chart 3.9). Nevertheless, exports are still somewhat lower than prior to the pandemic, primarily reflecting a substantial decline in the flow of tourists to Norway, but also a decline in oil service exports.

Travel activity is expected to pick up through the second half of 2021 and rise further in the years ahead. Oil service exports are assumed to be approximately unchanged between

2020 and 2021 and then pick up rapidly in pace with the rise in global petroleum investment. Other mainland exports are also projected to rise on the back of increased activity among Norway's trading partners. Owing to a weaker-than-expected krone, export growth is now projected to be a little higher over the next two years than the June *Report* projection.

Imports also fell sharply in the first half of 2020, followed by an appreciable rise despite low foreign travel due to Covid-related restrictions. Imports are expected to pick up further ahead as domestic demand rises and travel activity resumes.

Unwinding of support measures entails lower public spending in 2022

Through the pandemic, extensive fiscal policy measures have been used to mitigate the economic fallout of the coronavirus outbreak and strict Covid-related restrictions. The measures have supported household income and improved business profitability. Public spending has increased sharply owing to the measures, especially in the form of increased transfers to households and firms. As a share of the Government Pension Fund Global (GPFG), the structural non-oil budget deficit rose from 2.9% in 2019 to 3.7% in 2020 and was projected in the Revised National Budget to remain at the same level in 2021.

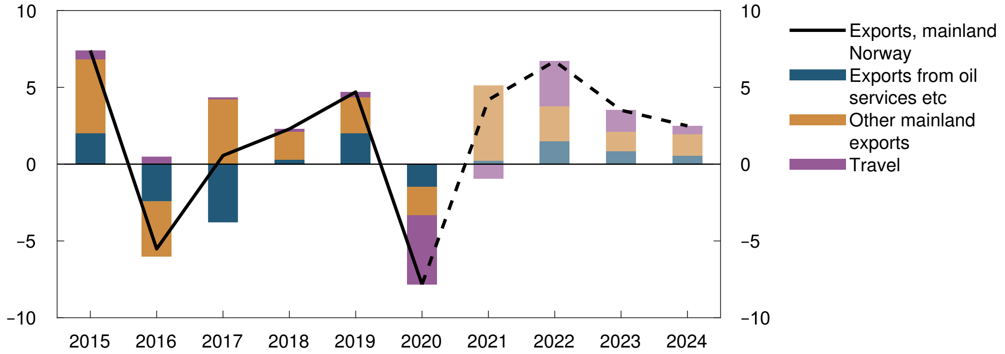
Additional support to local authorities and hospitals through the pandemic has in isolation boosted public sector activity. At the same time, a number of public services have had to reduce the scale of services owing to several rounds of lockdowns. Growth in public demand was low in 2020, but has picked up since spring in pace with the reopening of society.

The Government has signalled that most of the support measures will be phased out during autumn. In this *Report*, it is assumed that all the support schemes will be phased out during 2021, which entails a substantial reduction in transfers from the GPFG. This will likely result in a budget deficit below 3% of the GPFG in 2023.

With the upturn in the Norwegian economy in the years ahead, we expect cautious growth in public spending and lower growth in public demand than seen in recent years (Chart 3.10). In line with the fiscal rule for petroleum revenue spending, the deficit, as a proportion of the GPFG, is assumed to remain just below 3% to the end of the projection period.

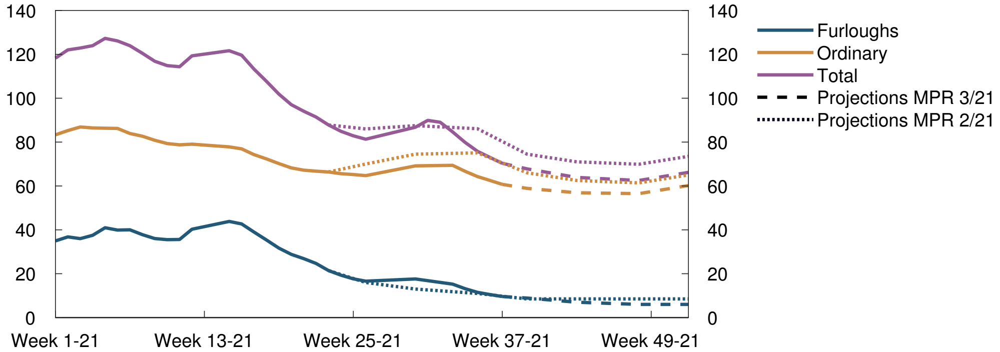
Chart 3.10 Exports pick up ahead

Exports from mainland Norway. Percent. Contribution to annual growth. Percentage points



Sources: Statistics Norway and Norges Bank

Chart 3.11 Fewer unemployed
Registered fully unemployed. In thousands



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

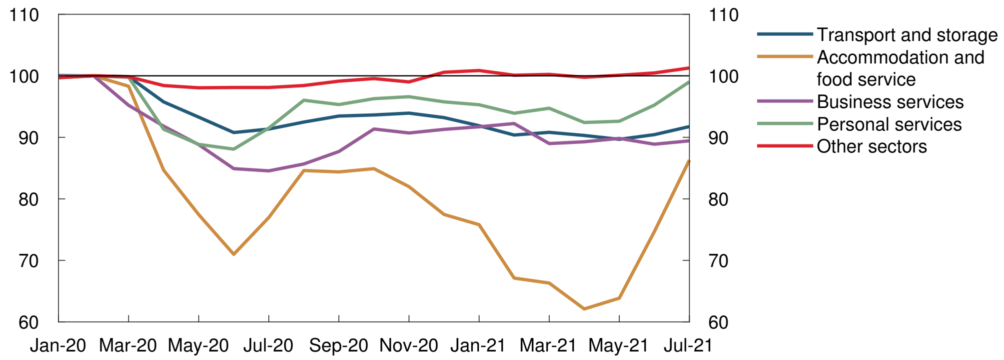
Substantial fall in unemployment

After the easing of Covid-related restrictions in spring, the number of employed has increased and unemployment has declined substantially. In the period between the end of March 2021 and the end of August 2021, the number of fully unemployed decreased by around 33 000. Both the number of furloughed workers and the number of ordinary unemployed have fallen (Chart 3.11).

At the end of August 2021, 2.7% of the labour force were registered as fully unemployed adjusted for seasonal variations. The decline has continued in September. Unemployment has fallen more than projected in the June *Report*, and employment has been slightly higher than expected. Unemployment has declined most in the sectors that have been most affected by the pandemic and Covid-related restrictions. Nevertheless, in a number of these sectors, employment is still considerably lower than prior to the pandemic (Chart 3.12). The prospects for an upturn in the Norwegian economy suggest that employment will increase and unemployment will decline further.

In August 2021, Norges Bank's Regional Network contacts expected a clear rise in employment in the following three months. Employment is projected to increase substantially towards the end of the year, with employment growth slowing thereafter in pace with more moderate economic growth. Overall employment is expected to return to its pre-pandemic level in the coming months. New analyses indicate that demographic trends

Chart 3.12 Continued low employment in a number of sectors
Number of workers. Index. February 2020 = 100



Sources: Statistics Norway and Norges Bank

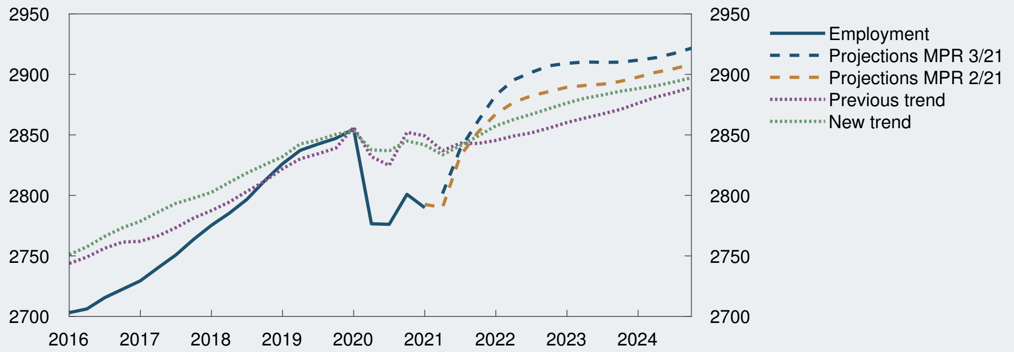
Demographic changes influence employment trend

The Bank's assessment of the trend in employment is important for our employment projections. The gap between actual employment and the trend level is also part of the basis for our assessment of capacity utilisation. This trend depends on population growth, but is also influenced by other demographic factors and conditions relating to wage formation and the tax and benefit system. The pandemic may also have an influence on the employment trend in the years ahead.[1]

The main component of the employment trend is the underlying trend in the employment share of residents. In recent years, population ageing has contributed to a slight downward trend in the employment share from an assumed normal year in 2013 (see box in *Monetary Policy Report* 2/19). In this *Report*, the analysis has been extended to include a broader set of demographic variables. By incorporating new and more detailed data, we now adjust for age, gender and educational attainment in estimating the employment trend. At the same time, we now estimate the level of employment shares in the various groups rather than using the level from 2013 as a baseline, and the analysis allows for a gradual trend change over time for the different groups.[2]

The analysis suggests that the trend in the employment share of residents is somewhat higher than previously assumed (Chart 3.A), primarily because older workers are working more. The trend level has been revised up by around ¼% towards the end of the projection period. As a result, employment growth is now projected to be slightly higher at the end of 2021 and beginning of 2022 than envisaged earlier.

Chart 3.A The new trend shows a slight rise in employment growth
In thousands

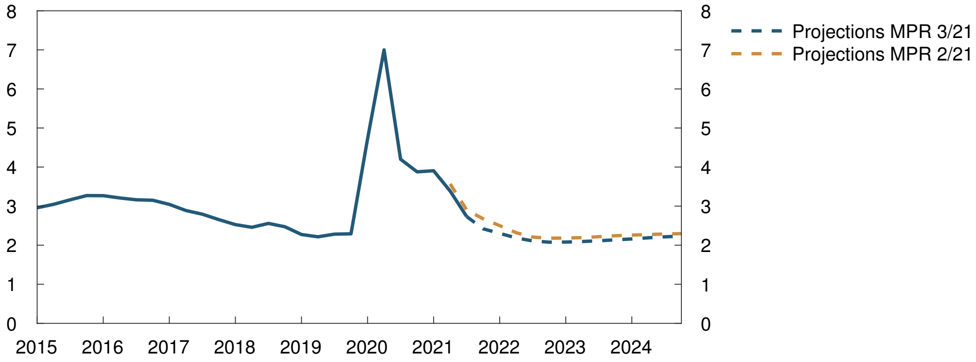


Sources: Statistics Norway and Norges Bank

1 See, eg, discussion in box "Long-term consequences for employment?" in *Monetary Policy Report* 2/20.
2 The analysis will be documented in an upcoming *Staff Memo* by Luca Fosso, Sigurd Mølster Galaasen and Nicolai Ellingsen.

lift employment somewhat more than previously assumed, and the projection for trend employment has been revised up (see box on page 30). Employment is expected to be slightly higher than this trend level during the projection period, in line with the projection that capacity utilisation will exceed a normal level. Unemployment is projected to decline further in the coming year, remaining close to its pre-pandemic level thereafter (Chart 3.13).

Chart 3.13 Prospects for lower unemployment
Registered fully unemployed as a share of the labour force. Seasonally adjusted. Percent



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

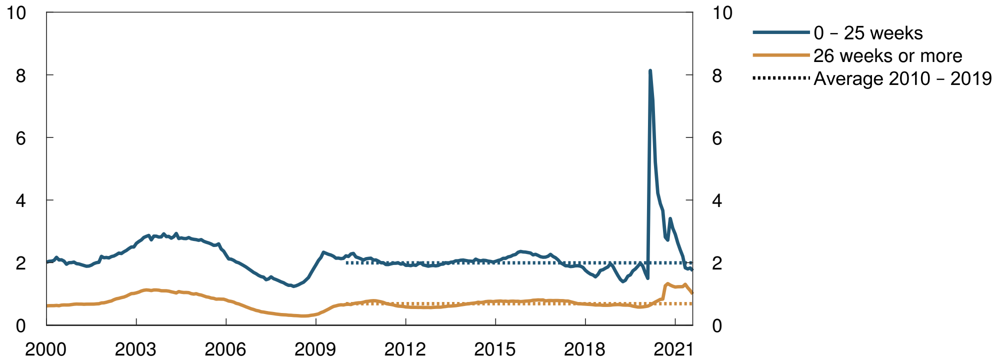
Owing to travel restrictions and lower labour demand during the pandemic, fewer workers have come to Norway on short-term contracts, and the decline in foreign workers on short-term contracts continued in 2021 Q2. Since summer, it has become easier for foreign workers to enter Norway. Nevertheless, Regional Network contacts report that it is more difficult than before to recruit foreign workers, partly owing to improved economic conditions in their home countries. It is also possible that the pandemic has reduced the willingness to commute across national borders. These effects are expected to gradually dissipate ahead, resulting in an increase in the number of workers on short-term contracts and a return to pre-pandemic levels within a couple of years.

The pandemic may have long-term consequences

The pandemic and the sharp economic downturn may have long-lasting consequences on the labour market. Long-term unemployment can reduce the possibility of returning to work. Skills erosion, discouraged job seekers and employer reluctance to hire the long-term unemployed may lead to labour market withdrawal.

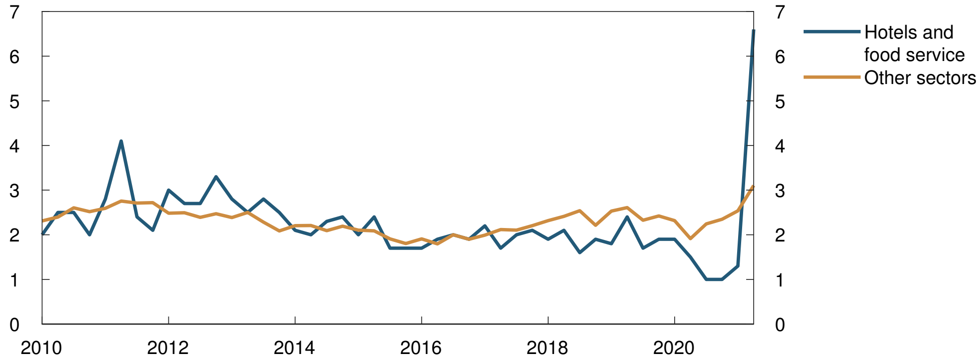
The number of job-seekers who had been fully unemployed for more than six months increased substantially in the period to autumn 2020 and remained at a high level (Chart 3.14). In recent months, the number of long-term unemployed has fallen. Nevertheless, there are still far more long-term unemployed now than before the pandemic. Short-term

Chart 3.14 Long-term unemployment remains high
Unemployment by duration. Unemployed as a share of the labour force. Seasonally adjusted. Percent



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

Chart 3.15 Sharp increase in number of job vacancies
Vacancies as a proportion of the total number of positions. Percent



Sources: Statistics Norway and Norges Bank

unemployment, ie the number of workers who have been fully unemployed for less than six months, is now close to its pre-pandemic level.

As in the June *Report*, it is assumed that the pandemic has led to a slight increase in the long-term level of unemployment and a slight decrease in the long-term level of the labour force. This is because the effects of the pandemic are expected to persist even after the Covid-related restrictions that are weighing on economic activity have been unwound.

It is uncertain how strong and long-lasting such effects will be. Recently, the number of job vacancies has risen substantially (Chart 3.15) across most sectors, but is particularly pronounced in hotels and food service. The projections assume that this will result in a strong increase in employment and a decline in unemployment in the period ahead. However, if the situation with higher unemployment than normal and a large number of vacancies persists over time, this may be a sign of a mismatch between the skills of the unemployed and the skills sought by employers (see box on page 38). If so, unemployment may become entrenched at a higher level than assumed. On the other hand, the substantial decline in unemployment recently may be a sign that the labour market is normalising more quickly and with less persistent effects than assumed.

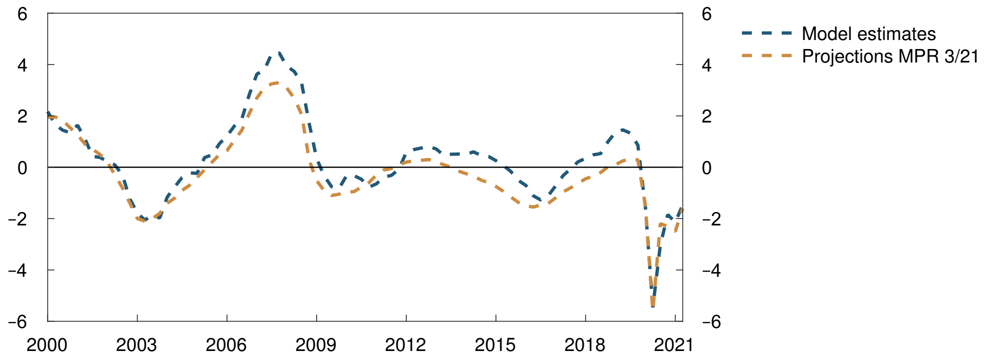
Close to normal capacity utilisation
Through the pandemic, there has been ample spare capacity in the economy. The recent rise in activity and decline in unemployment suggest that capacity utilisation has increased since the June *Report*.

Empirical model estimates indicate that capacity utilisation increased between 2021 Q1 and Q2 (Chart 3.16). The estimates nonetheless suggest that spare capacity in the economy is still slightly above normal. Unemployment also indicates that there is still some slack in the economy.

According to the Bank's Regional Network contacts, capacity utilisation has risen sharply recently and is now at its highest level since 2008 (Chart 3.17). A large number of contacts report that labour shortages are a production constraint.

On balance, capacity utilisation is now judged to be close to a normal level. Capacity utilisation in 2021 Q3 is assessed to be slightly higher than in the June *Report,* which is in line with the larger-than-expected decline in unemployment. Capacity utilisation is

Chart 3.16 Model estimates indicate higher capacity utilisation
Output gap. Percent

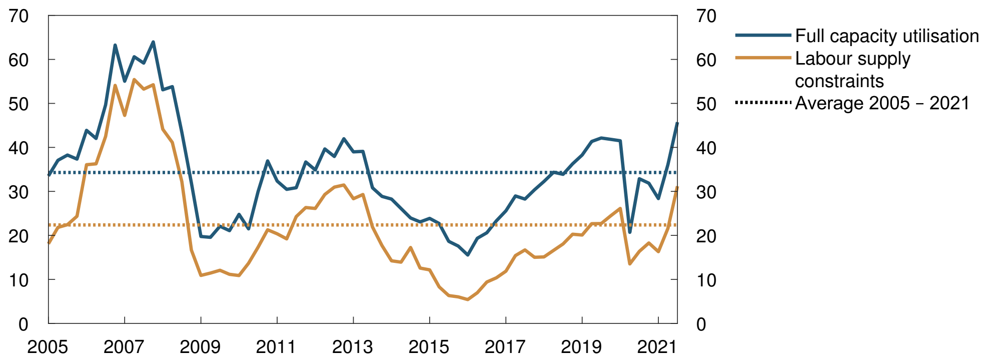


Source: Norges Bank

projected to be above a normal level in autumn and rise further in pace with a pick-up in economic activity. With high growth in the mainland economy in 2022 and a continued rise in activity in 2023 and 2024, there are prospects that capacity utilisation will continue to increase in 2022, then level off somewhat above a normal level, declining slightly towards the end of the projection period (Chart F on page 9). Potential output is projected to rise sharply in 2021 owing to an easing of Covid-related restrictions. A somewhat higher projected employment trend also contributes to slightly higher potential output growth in 2021 and 2022. Looking ahead, as in the June *Report*, productivity is projected to rise by around ¾% annually (Chart 3.18), while potential employment is projected to rise by around ½%. Potential output is thus projected to rise by about 1¼% annually from 2023.

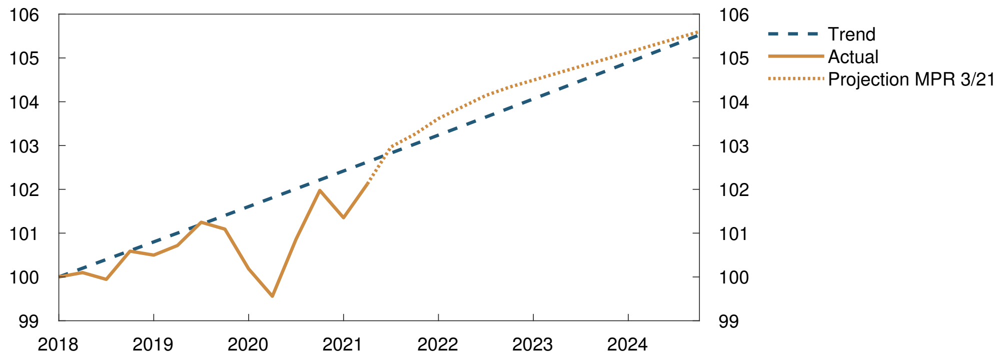
It is still difficult to project the degree of spare capacity under pandemic conditions. Rising wage growth and a large number of job vacancies may mean that the shortage of high-skilled workers is higher than assumed, and capacity utilisation higher than projected. On the other hand, capacity constraints now reported by Regional Network contacts may be short-run effects of an economy that is normalising, resulting in more spare capacity ahead than assumed.

Chart 3.17 Businesses report high capacity utilisation
Capacity utilisation and labour supply constraints according to Regional Network contacts. Percent



Source: Norges Bank

Chart 3.18 More normal productivity growth ahead
GDP for mainland Norway per employed. Index. March 2018 = 100



Sources: Statistics Norway and Norges Bank

3.2 Costs and prices

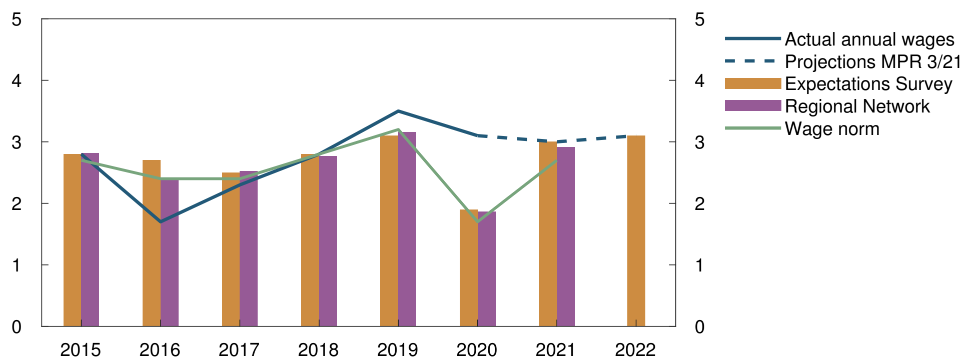
Wage growth appears to be rising

In the June *Report*, wage growth in 2021 was projected at 2.8%. Quarterly wage statistics indicate that wage growth in the first half-year has been a little higher than implied by the projection. At the same time, wage expectations have risen. Regional Network contacts now expect wage growth of 2.9% in 2021 (Chart 3.19), higher than they expected in May. Norges Bank's Expectations Survey shows that the social partners have also revised up their expectations, with overall wage growth put at 3.0% in 2021. The norm for this year's wage settlement was 2.7%. It would thus appear that wage growth will likely be somewhat higher than assumed in June, which may reflect reported labour shortages.

Employment in the sectors hardest hit by the pandemic is still considerably lower than prior to the pandemic (Chart 3.12), and as in the June *Report*, compositional effects are assumed to pull down measured wage growth somewhat in the second half of 2021 (see box). The projection for annual wage growth in 2021 has been revised up to 3.0%.

Recruitment difficulties may push up wage growth in 2022 as well. The Expectations Survey shows that the social partners anticipate higher wage growth in 2022 than in 2021. At the same time, there is reason to believe that the return to work of more low-wage employees may pull down measured wage growth somewhat in 2022 as well.

Chart 3.19 Expectations of higher wage growth
Annual wage growth. Percent



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

Compositional effects on wage growth

Many of those who lost their jobs on account of the coronavirus outbreak in 2020 earned lower-than-average wages. The result was a higher average wage level. Owing to such compositional effects, overall measured wage growth between 2019 and 2020 turned out higher than the rise in pay of an individual employee who was in work all year. As a rising number of unemployed return to work, the converse occurs. A greater number of low-wage employees in work will push down the average wage level through 2021 and 2022.

Higher business profitability and a positive output gap suggest higher wage growth ahead. On the other hand, we assume moderate productivity growth, which in isolation weighs on wage growth. Wage growth is projected to rise to 3.1% in 2022 and further to 3.4% in 2023 before drifting down again in 2024 (Chart 3.20).

Wage developments will depend on the evolution of the pandemic going forward and on how quickly activity picks up. We have little experience with the rapid pace of growth in demand for labour that is projected for the coming year. Moreover, it is uncertain how the pandemic may have affected the relationship between unemployment and wage growth. If shortages of qualified labour are greater than assumed, wage growth may pick up faster than envisaged. Should the supply of foreign labour pick up faster than assumed, wage growth may be lower than expected. There is also considerable uncertainty regarding the degree to which compositional effects will curb measured wage growth in both 2021 and 2022.

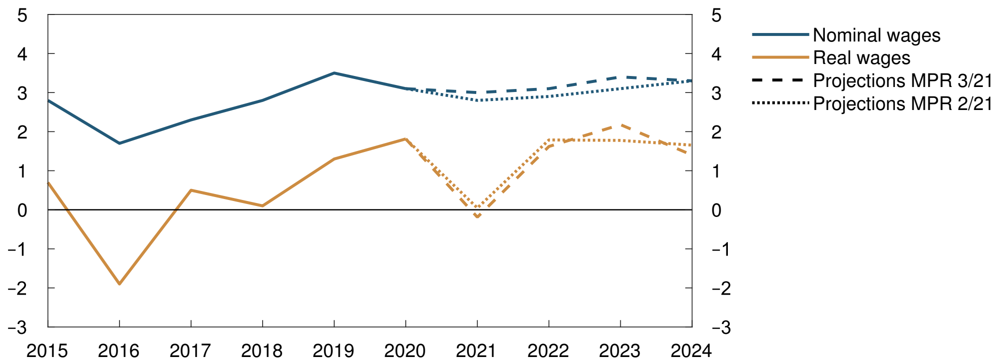
Underlying inflation below the target

Underlying inflation has been slowing since autumn 2020 after rising markedly through the previous spring and summer (Chart 3.21). Developments reflect considerable swings in imported goods inflation owing to krone exchange rate volatility through the pandemic. The rise in prices for domestically produced goods and services has been slowing since autumn 2020 and has also contributed to the decline in underlying inflation.

The 12-month rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) has drifted down from 1.5% in May to 1.0% in August, as

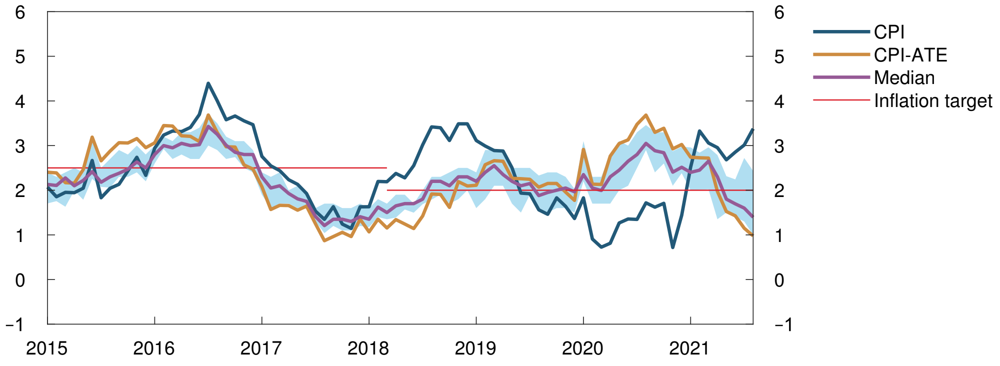
Chart 3.20 Higher wage growth ahead

Wages. Annual growth. Percent



Sources: Statistics Norway and Norges Bank

Chart 3.21 Underlying inflation has slowed
CPI and indicators of underlying inflation. Twelve-month change. Percent



Sources: Statistics Norway and Norges Bank

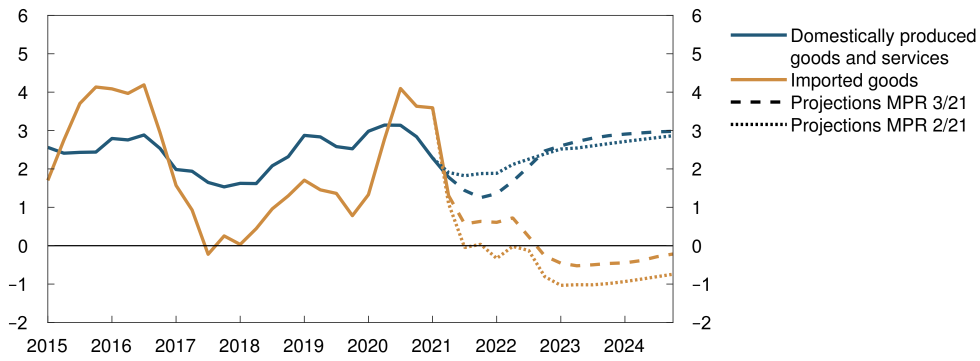
projected in the June *Report*. The rise in prices for both domestically produced goods and services and imported consumer goods has slowed since May. The rise in prices for domestically produced goods and services has been lower than expected, while imported consumer goods inflation has been higher than expected (Chart 3.22).

During the pandemic, both changes in indirect taxes and substantial energy price volatility have caused the consumer price index (CPI) and the CPI-ATE to diverge. Higher energy prices led to a marked rise in 12-month CPI inflation towards the end of 2020 and into 2021. Inflation declined through spring, but a resurgence in energy prices has led to a renewed rise in CPI inflation in recent months. The 12-month rise in CPI inflation in August was 3.4%, higher than projected in the June *Report*.

Futures prices indicate that 12-month energy price inflation will remain high until the end of the year, moderating thereafter (see box on page 41). Underlying inflation is expected to hover around 1% in the period to the beginning of 2022. Overall CPI inflation is expected to remain elevated to the end of 2021, declining thereafter.

Higher wage growth and capacity utilisation in the Norwegian economy will push up underlying inflation further out, as will higher imported goods inflation in foreign cur-

Chart 3.22 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

Measuring prices during the Covid pandemic

Through the pandemic, some services have been virtually unavailable owing to Covid-related restrictions. Statistics Norway has therefore had to estimate the rise in prices for these services. In August, this involved around 1.5% of the basis for weighting the consumer price index (CPI). Prices are extrapolated based on either seasonal variation or total CPI.

As an economic support measure, the lowest rate of value added tax (VAT) on goods and services was temporarily reduced from 12% to 6% from 1 April 2020. This applied 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. The reduced VAT rate applies until 30 September 2021.

It is assumed that businesses will not raise their prices as much as the VAT increase from 1 October. Since the entire VAT increase is subtracted when calculating the tax-adjusted price level, the VAT increase will in isolation pull down CPI-ATE inflation in our projections.

rency terms. A gradually stronger krone, in line with the projection, will in isolation restrain inflation. Underlying inflation is projected at 1.9% at the end of 2024. This is higher than in the June *Report* and reflects an upward revision of the projections for wage growth, capacity utilisation and imported consumer goods inflation, at the same time as the krone is projected to be weaker than in June.

In the longer term, average inflation expectations, as measured by Norges Bank's Expectations Survey, lie somewhat above 2%. The survey indicates that the social partners have recently revised up their long-term inflation expectations, and they now expect inflation to be just below 3%. Expectations among economists lie close to 2%.

Extraordinary pandemic-related conditions are a source of uncertainty regarding inflation ahead. In a number of countries, the pandemic has led to sharp price increases for some consumer goods and services. There is a risk that delays and increased costs in global production chains may lead to higher-than-projected imported inflation in the coming period. In Norway, supply-side restrictions in some sectors owing to Covid-related measures and high demand for goods and services may result in a period of higher inflation than implied by the projections. On the other hand, the economic recovery may be weaker than assumed, with inflation likely turning out lower than projected. Temporary changes in value added tax affect the measurement of tax-adjusted prices and will dampen measured domestic inflation in autumn (see box).

Real wage growth picks up

Real wage growth turned out relatively high in 2020, but a slight decline in real wages is expected in 2021. This reflects compositional effects, which led to considerable fluctuations in measured nominal wage growth in 2020 and 2021, and the wide swings in CPI inflation in those two years. Real wage growth is expected to rise to 2.2% in 2023 before declining in 2024.

INCREASED MISMATCH BETWEEN LABOUR SUPPLY AND LABOUR DEMAND

Labour demand has increased substantially in pace with the reopening of the economy. The number of job vacancies has risen to a high level in the course of 2021, according to statistics produced by the Norwegian Labour and Welfare Administration (NAV). Statistics Norway's job vacancy survey also shows a sharp increase in vacancies, and in 2021 Q2 the number of vacancies reached the highest level recorded since the survey was launched in 2010.

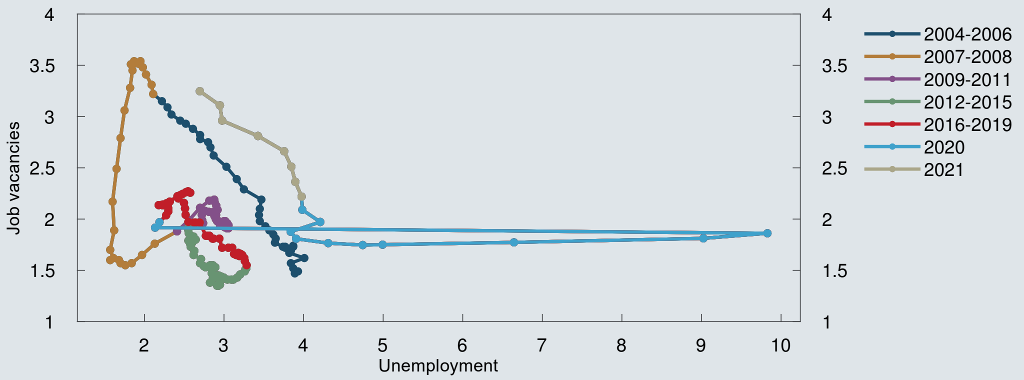
Unemployment has fallen sharply, but the number of fully unemployed was still around 16 000 higher in August than before the pandemic[1]. Labour shortages have nonetheless become a constraint for an increasing number of enterprises. In August, the share of Regional Network contacts reporting labour supply constraints was at its highest since 2012. This may indicate that the mismatch between labour supply and labour demand has increased compared with the past decade.

Matching jobs with skills is challenging
A common measure of labour demand is the job vacancy rate, ie job vacancies as a share of the labour force. This rate is now, by our calculations, at its highest level since before the financial crisis.

The Beveridge curve shows how the relationship between the vacancy rate and unemployment develops through the business cycle. In periods when capacity utilisation is high, the number of job vacancies will be high and unemployment low, while the opposite will be the case in bad times. A measure of labour market efficiency is how close to the origin[2] the Beveridge curve is. A curve close to the origin means that relatively few job vacancies are needed for unemployment to be low.

When both the job vacancy rate and unemployment are high, this can be the result of a mismatch between the demand and supply of skills, or that vacancies and job seekers are located in different parts of the country. A Beveridge curve that has shifted outward can indicate an increasing mismatch between labour supply and labour demand and

Chart 3.B High demand for labour
Job vacancies as a share of all jobs. Unemployed as a share of the labour force. Percent



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

1 Adjusted for seasonal variations.
2 The point where the y and x axes intersect.

thus that the level of unemployment consistent with normal capacity utilisation has risen.

In the years leading up to the pandemic, the Beveridge curve shifted inward (Chart 3.B). Labour market matching thus appeared to have become more efficient than in the early 2000s. Increased use of online search services may have made it easier to match employers with relevant job seekers.[3] In addition, increased labour immigration may have pulled in the same direction.[4] Better labour market matching is one of the reasons why we over time have revised down our projections for the level of unemployment that is consistent with normal capacity utilisation and stable inflation.

Special conditions during the pandemic

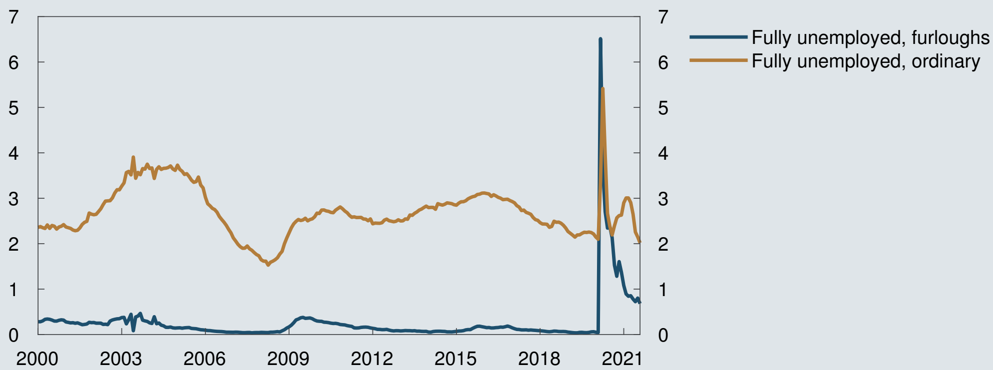
Since the outbreak of the pandemic, the Beveridge curve appears to have shifted outward, and in 2021 it has been further out than was the case in the period 2004–2006. This outward shift reflects a number of special conditions that arose during the pandemic.

Some of the increased labour market mismatch problems can be attributed to the restrictions on entry into Norway. According to Norges Bank's Regional Network, it is still more difficult to obtain foreign labour than before the lockdown, despite more open borders.

At the same time, the number of furloughed workers is still higher than before the pandemic, even though it has decreased considerably since 2020 (Chart 3.C). Furloughed workers are likely to be less active job seekers than ordinary unemployed as they expect to be able to return to their previous workplace. If furloughed workers were excluded, the Beveridge curve would have been further to the left, indicating higher labour market efficiency.

Chart 3.C Many still forloughed

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



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

3 See Bhuller, Kostøl and Vigtel (2020) "How broadband internet affects labor market matching". *Working Paper* 1/20. Norges Bank.
4 See Furlanetto and Robstad (2019) "Immigration and the macroeconomy: some new empirical evidence". *Review of Economic Dynamics*, Elsevier for the Society for Economic Dynamics, Vol. 34, October, pp. 1–19.

A substantial share of furloughed workers are employed in tourism and transport, which have been hard hit by Covid-related restrictions. Unemployment is still highest in these industries, at over 5% in August. Vacancy rates for these groups have at the same time risen to a very high level. There are similar signs of increased labour market mismatch in other industries with a large number of furloughed workers, indicating that some of the reason why the match between unemployed workers and job vacancies has become less efficient is the high number of furloughed workers.

The pandemic and Covid-related restrictions have led to a marked increase in long-term unemployment. About four in ten of the fully unemployed have been out of work for more than six months. Persistent unemployment can result in the erosion of skills and lower motivation to seek employment and can contribute to prolonging the time it normally takes to match unemployed workers with vacant jobs.

Wage pressures will likely intensify

Owing to all the factors mentioned above, the matching process between unemployed workers and employers is now likely more sluggish than before the pandemic. These conditions are expected to largely normalise as we enter a period of high labour demand and the labour market gradually begins to function as it did before the pandemic.

In the short term, however, the mismatch between the unemployed and job vacancies is assumed to lead to wage pressures at a higher level of unemployment than before the pandemic. A number of studies show that the long-term unemployed influence wage developments to a lesser extent than the short-term unemployed. This suggests that wage growth may rise to a higher level than today's unemployment rate would normally imply.

Furthermore, it cannot be excluded that the developments in the Beveridge curve reflect more persistent labour market trends. It is not a given that the supply of foreign labour will improve appreciably ahead. A more permanent change in the supply of native workers may also have occurred since the coronavirus outbreak, with some workers switching to a different industry, becoming students or dropping out of the labour force. The pandemic may also have led to a more permanent shift in labour demand. Some of the labour market mismatch may therefore also persist for some time after economic conditions have normalised. This may mean that the level of unemployment consistent with normal capacity utilisation has risen and that wage pressures are also higher at a given level of unemployment somewhat further ahead.

Since the coronavirus outbreak, it has been assumed that the downturn would have some persistent effects of this kind. The projection for the level of unemployment consistent with normal capacity utilisation was therefore revised up somewhat during the pandemic, to about 2½%. Because of the extraordinary conditions during the pandemic, the projection is uncertain, and the level will be reassessed when the labour market functions more normally.

RECORD-HIGH GAS AND ELECTRICITY PRICES

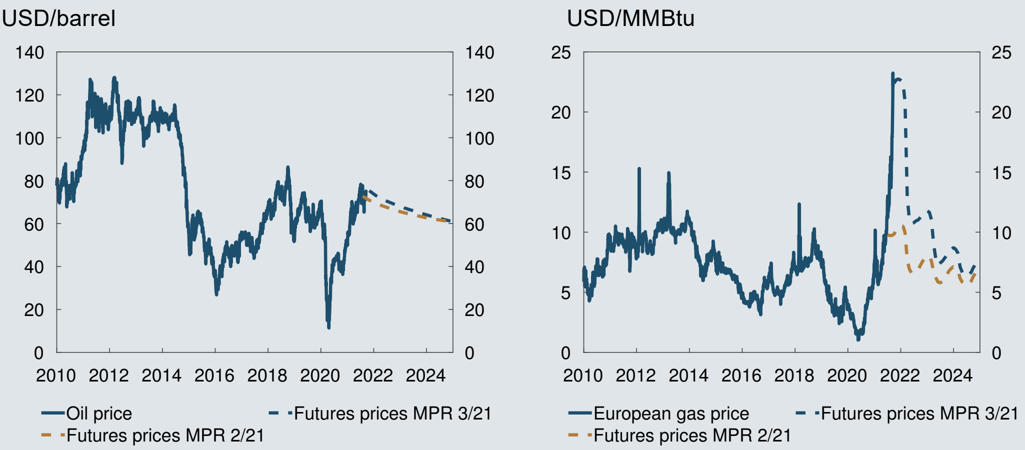
Gas and electricity prices have risen sharply since the June *Report* and are now at record-high levels (Charts 3.D and 3.E). Oil prices, on the other hand, are little changed since June (Chart 3.D). It is assumed that oil, gas and electricity prices will track futures prices, which indicates that gas prices and Norwegian electricity prices will fall to more normal levels in the next one to two years, but be somewhat higher further ahead than expected in June. As a result of the price increase, oil and power sector investment is expected to increase somewhat, but the process industry is expected to reduce investment somewhat. Higher electricity prices are projected to reduce real household disposable income and pull down private consumption somewhat in 2021 and 2022.

Sharp increase in energy prices
The rise in gas and electricity prices is the result of both supply and demand conditions. A cold winter and spring in 2021 and a hot summer have contributed to higher demand for both gas and electricity. The increase in economic activity has also lifted demand. Prices have also been driven up by a reduced supply of gas and electricity. Gas imports to Europe from Russia have been limited owing to production problems and conflict over the new gas pipeline between Russia and Germany. In addition, the price of liquefied natural gas (LNG) imports has risen owing to higher demand in Asia. Poor winds and dry weather in southern Norway and on the continent have resulted in lower electricity production.

There is at the same time a close relationship between gas and electricity prices. This is because gas-fired as well as coal-fired power plants often balance the European energy market, and more so when renewable energy production is low. Gas prices have recently had an even stronger impact on energy prices as coal and nuclear power are scaled back in Europe. In addition, the sharp rise in global coal prices and emission allowance prices have pushed up gas prices further, which has in turn driven up electricity prices.

With subsea electricity cables between Norway and the Netherlands and between Norway and Germany, electricity prices in Norway, especially in the south, are affected by prices on the continent. There are also wide price variations across regions owing to transmission capacity constraints within Norway and the Nordic region. Electricity prices in southern Norway have risen far more than prices in northern Norway over the past

Chart 3.D Oil prices are little changed, but gas prices have risen sharply



Sources: Refinitiv Datastream and Norges Bank

six months (Chart 3.E). Futures prices for Nordic electricity indicate that electricity prices in Norway will remain high through winter 2021/2022 (Chart 3.E), owing to a combination of high electricity consumption in winter, low reservoir levels and limited gas and coal inventories in Europe. Futures prices indicate that electricity prices will fall thereafter, but remain higher in the coming years than assumed in the June *Report*. Several years of high investment in new production has created a large surplus of electricity in Norway and the Nordic region. Together with possible transmission capacity constraints abroad, this is probably an important reason why futures prices for Nordic electricity are lower than futures prices in Europe (Chart 3.E). On the other hand, the new electricity cable connecting Norway to Germany earlier this year and to the UK this autumn will strengthen Norway's ties to the European energy market. These factors are pulling in different directions and contribute to uncertainty surrounding electricity prices ahead.

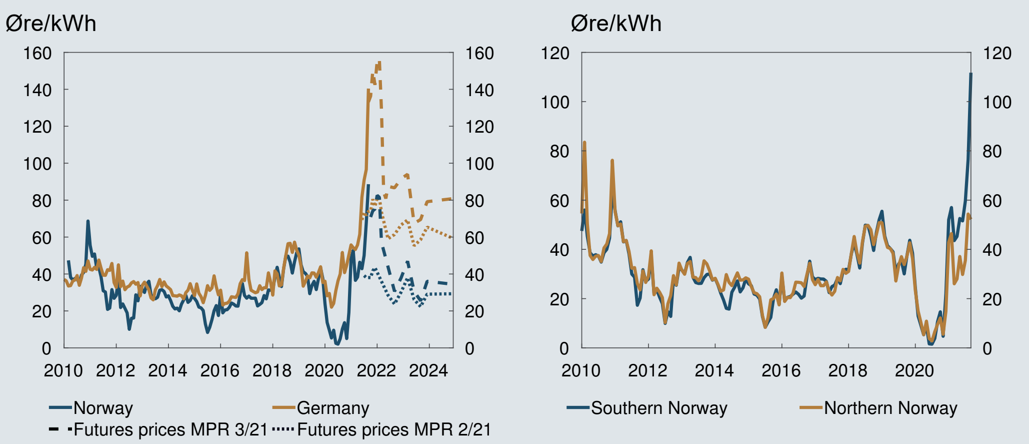
Somewhat higher oil and power sector investment

The rise in gas prices will primarily affect the Norwegian economy by boosting Norwegian and foreign petroleum activity. The expected profitability of gas projects has likely increased somewhat as a result of higher futures prices. In addition, gas futures prices indicate that oil companies' cash flows will be appreciably higher over the next three years than assumed in June. The rise in gas prices in isolation is therefore expected to lead to higher investment in Norwegian and foreign petroleum activity and thereby to increased sales for Norway's oil service industry. The effect is projected to be stronger abroad than in Norway since much of the potential for higher investment in Norway has already been realised as a consequence of the temporary petroleum tax package introduced in June 2020.

Higher gas prices will also push up government revenues, which will in turn increase allocations to the Government Pension Fund Global. Petroleum revenue spending over the central government budget is regulated by the fiscal rule. Higher government revenues from the sale of gas are not expected to have a material impact on public demand in the projection period.

The increase in Norwegian electricity prices partly reflects an expected decline in production, which is projected to fall by 8% in 2021 Q3 and by 4% in Q4 (seasonally adjusted).

Chart 3.E Sharp rise in electricity prices, but regional differences



Sources: Refinitiv Datastream and Norges Bank

In isolation, this pulls down projected GDP growth for mainland Norway by 0.2 and 0.1 percentage point in these two quarters.

The rise in electricity prices will weaken profitability for non-energy firms. However, the effect on overall production is projected to be weak since electricity prices are expected to fall to more normal levels in the course of 2022. Furthermore, electricity costs constitute a small share of total costs for most firms. Electricity prices play a very important role for process industry firms, but these firms have entered into long-term price contracts for all or much of their electricity consumption to hedge temporary price fluctuations in the spot market. In addition, prices for aluminium and a number of other process industry products are at high levels. Profitability for firms without long-term contracts for all of their electricity consumption may, however, be severely weakened, which could in turn lead to production shutdowns.

The process industry is planning for substantial investment over the coming years, in projects such as battery factories and hydrogen solutions. Even though most of the rise in Norwegian electricity prices in autumn 2021 can be assumed to be temporary, the longest futures prices are around 15% higher than projected in the June *Report*. This implies that electricity prices in new long-term contracts will be higher than previously expected, leading in isolation to somewhat lower process industry investment ahead. The effect will be dampened by electricity prices in Europe, which appear to be rising more than prices in Norway. In addition, much of process industry investment ahead will primarily be located in northern Norway, where electricity prices have remained relatively low and are affected to a lesser extent by prices on the continent than prices in southern Norway. Investment may, however, be affected to a greater extent if electricity prices should be higher ahead than indicated by Norwegian futures prices.

Power sector investment is also influenced by electricity price expectations. The increase in electricity prices is expected to lead to somewhat higher investment in existing hydropower plants in 2023–2024 than projected in the June *Report*.

Higher electricity prices dampen household consumption

Since most households have spot-price electricity contracts, higher electricity prices will have a direct impact on their purchasing power. The increase in spot and futures prices since the June *Report* has in isolation lifted the projections for consumer price inflation (CPI) by 0.5 percentage point in 2021 and 0.3 percentage point in 2022. Higher electricity prices may also result in higher prices for other goods and services since firms' costs will increase. However, there appears to be little evidence of covariation between developments in energy prices and developments in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) in the short and medium term. In view of the recent very sharp increase in electricity prices, it nonetheless cannot be excluded that CPI-ATE inflation will be affected more than historical covariation would imply.

Higher CPI inflation slows the rise in real household disposable income and will therefore dampen consumption. The increase in electricity prices since the June *Report* will in isolation reduce real household disposable income in both 2021 and 2022. The Bank's empirical models indicate that the total decline in income will in isolation reduce household consumption by 0.7% in 2022. On the other hand, the high household saving ratio will likely dampen the effect of higher electricity prices on consumption. The projections therefore assume somewhat weaker covariation between developments in electricity prices and consumption in the coming years than has historically been the case.

4 Monetary policy analysis

The policy rate was raised from 0% to 0.25% at the Committee meeting on 22 September. The Committee expects that another rate hike will most likely take place in December. The policy rate forecast indicates a gradual rate rise to 1.7% towards the end of 2024.

Close to normal capacity utilisation and solid economic growth, as well as signs of accelerating wage growth, suggest a further increase in the policy rate ahead.

The policy rate forecast has been revised up since the June 2021 *Monetary Policy Report* as from the second half of 2022. The Committee points to higher capacity utilisation and somewhat higher inflation prospects than projected earlier as factors contributing to a higher rate path. The main drivers behind this are a weaker krone and new information indicating somewhat higher wage growth than projected in June. Prospects for somewhat weaker growth abroad in the near term pull in the opposite direction.

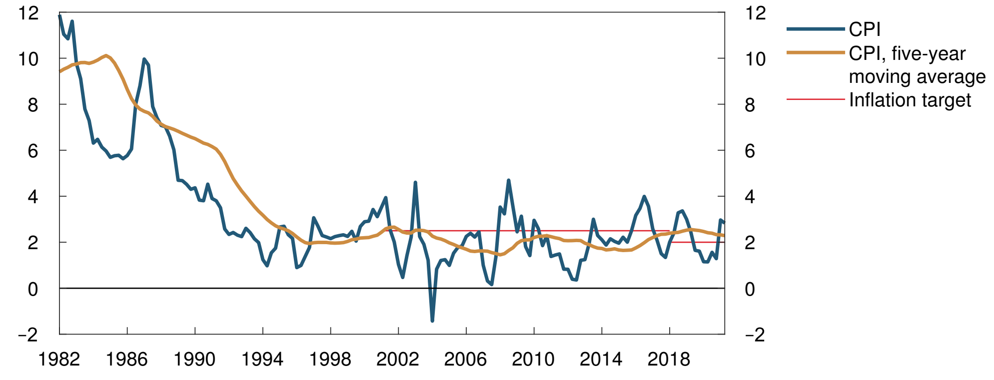
4.1 Objectives and recent developments

Low and stable inflation

The primary objective of monetary policy is low and stable inflation. The operational target is annual consumer price inflation of 2%. Between the introduction of the inflation target in 2001 and March 2018, the target was 2.5%. 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 close to the target.

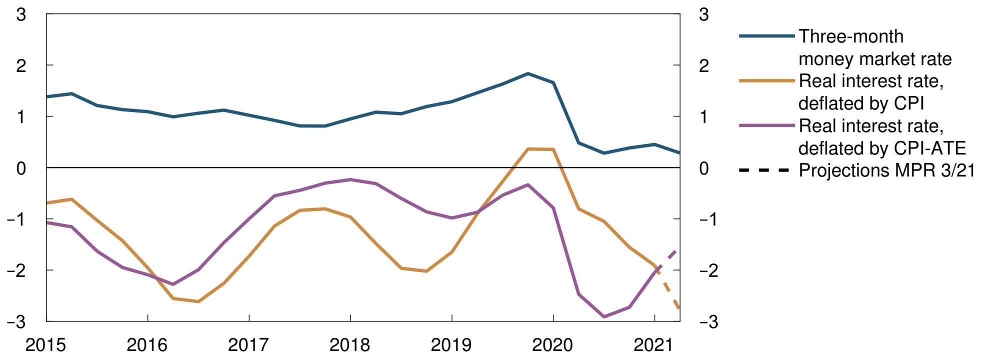
In addition to ensuring low and stable inflation, inflation targeting shall be forward-looking and flexible so that it can contribute to high and stable output and employment and to countering the build-up of financial imbalances. Monetary policy objectives and trade-offs are discussed further in a box on page 49.

Chart 4.1 Average inflation close to the 2% 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

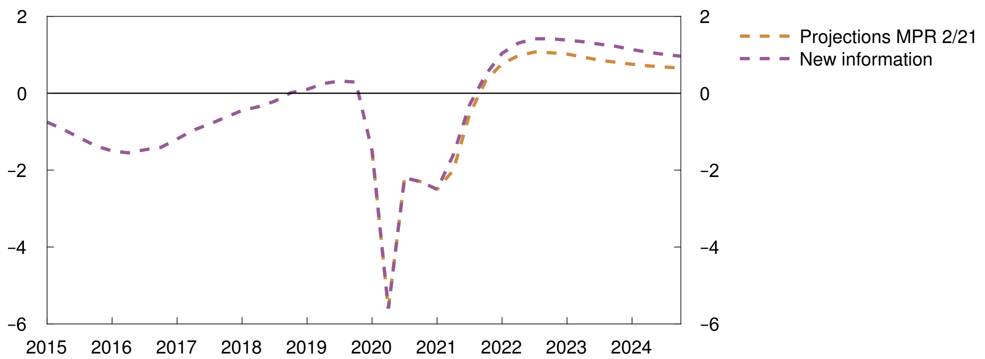
The policy rate has stood at 0% since spring 2020. This has resulted in a very low money market rate, both in nominal and real terms (Chart 4.2). The real money market rate, ie the inflation-adjusted rate, is now lower than a neutral level which is estimated to be close to 0% (see box in *Monetary Policy Report* 2/21). The neutral real interest rate is the rate that is consistent with balanced developments in the economy in the medium term. The monetary policy stance is assumed to be expansionary as long as the real interest rate is below its neutral level. Combined with fiscal support, an expansionary monetary stance has helped dampen the economic downturn caused by the pandemic.

4.2 New information and assessments

Model-based interpretation of new information

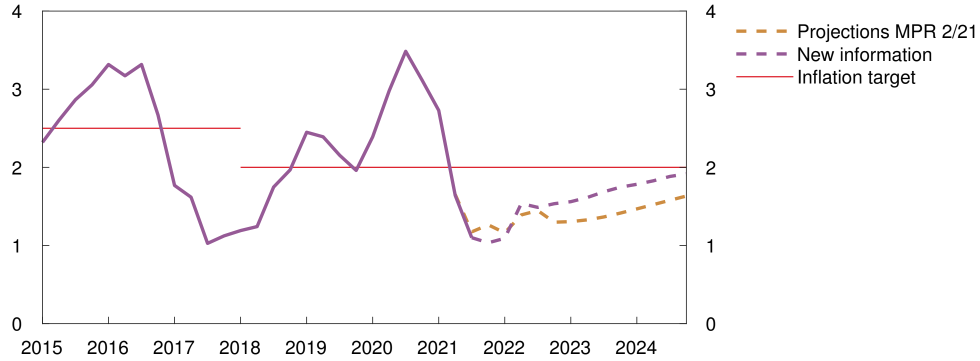
To shed light on how new information influences the economic outlook, new information and assessments are incorporated into the modelling system, while conditioning on the policy rate path in the June *Report*. We use these projections to show how new information and assessments affect the outlook for capacity utilisation and inflation. These are two of various considerations the Committee must weigh against each other in the conduct of monetary policy.

Chart 4.3 Higher capacity utilisation with unchanged policy rate path
Estimated output gap. Conditioned on new information concerning economic developments and the policy rate forecast in MPR 2/21. Percent



Source: Norges Bank

Chart 4.4 Higher inflation prospects further out
CPI-ATE. Projections conditioned on new information concerning economic developments and the policy rate forecast in MPR 2/21. Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank

Owing to higher economic growth and more favourable labour market developments than expected, the output gap projection is now somewhat higher than in the June *Report*. Conditioned on an unchanged policy rate path, the output gap projection remains somewhat higher than projected in June throughout the projection period (Chart 4.3), primarily reflecting higher net exports ahead, due to a weaker krone, and increased investment.

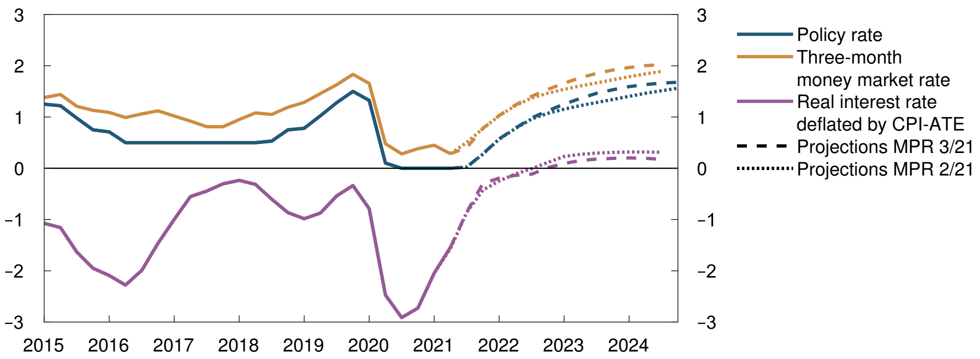
Underlying inflation measured by the CPI-ATE has slowed since autumn 2020, and overall developments have been broadly as expected. Domestic inflation has been somewhat lower than projected, while imported inflation has been higher. Conditioned on an unchanged policy rate path, projected inflation is first lower and then higher than the June *Report* projection (Chart 4.4). The downward revision in the near term reflects lower-than-expected domestic inflation. Further out, domestic inflation is expected to be slightly higher than projected earlier, primarily owing to rising wage growth. In the period ahead, imported goods inflation remains higher than anticipated in June, on the back of a weaker-than-expected krone exchange rate and higher external price impulses.

Overall, the projections from the model exercise imply a somewhat higher policy rate path. This primarily reflects somewhat higher inflation in the exercise with an unchanged rate path than projected earlier.

Policy rate to rise further
At the Committee meeting on 22 September, the policy rate was raised from 0% to 0.25%. Moreover, the Committee expects that the policy rate will most likely be raised further in December. In line with the Committee's assessment, the policy rate path implies a further rise in the coming years. Towards the end of 2024, the policy rate is projected at 1.7% (Chart 4.5). The path implies that the policy rate will rise slightly faster and end at a slightly higher level than projected in the June *Report*.

Towards the end of the projection period, the policy rate will be close to what we assume to be a normal level. Both nominal and real interest rates have implications for how monetary policy affects the economy. For the coming quarters, the projection for the real interest rate is little changed since the June *Report*. Further out in the projection period, the real interest rate is slightly lower, given that the inflation projections have been revised up to a further extent than the policy rate path. The projections for the real interest rate imply that the monetary policy stance will turn close to neutral in the course of 2022.

Chart 4.5 Gradually less expansionary monetary policy
Percent



Sources: Statistics Norway and Norges Bank

The rising policy rate path reflects our assessment of capacity utilisation as being close to a normal level and our expectation that it will continue to increase ahead. Higher capacity utilisation is expected to push up price and wage inflation ahead. The projections for underlying inflation have been revised up, and there are prospects that inflation will approach the target towards the end of the projection period. A positive output gap and inflation approaching the target reduce the need for an expansionary monetary stance.

The rise in the policy rate ahead will counter the build-up of financial imbalances by curbing house price inflation and credit growth (see discussion of financial imbalances in Section 5).

The policy rate path is our forecast of the policy rate for the coming years and expresses the Committee's trade-off between monetary policy objectives. If the economic outlook, balance of risks or the assessment of the functioning of the economy changes, the policy rate may prove to be different from the one indicated by the rate path.

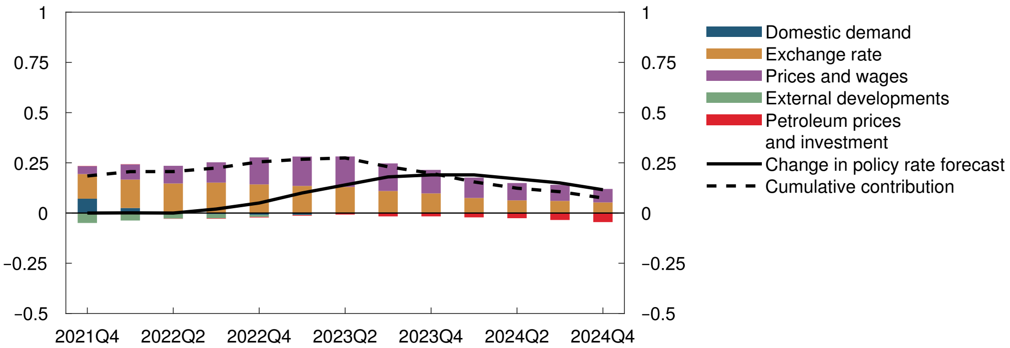
4.3 Decomposition of changes in the rate path

The decomposition shown in Chart 4.6 compares the change in the policy rate path with the main drivers behind a change in the rate path according to our main model NEMO. The change in the rate path since the June *Report* is shown by the solid line, while the bars show the contribution from different factors. The broken line is the sum of those contributions, and thus shows the change resulting from updated short-term projections and new assessments that are incorporated in the model-based analysis.

Activity in the Norwegian economy has been approximately as expected, but labour market developments have been more favourable than assumed in June. Overall capacity utilisation in the economy is judged to be a little higher than projected earlier, contributing to a slightly higher rate path at the beginning of the projection period. Further out in the projection period, the contribution from *domestic demand* turns broadly neutral (dark blue bars).

The *krone exchange rate* has depreciated since the June *Report* and is weaker than projected. The depreciation cannot be explained by movements in oil prices or the interest rate differential against other countries. A weaker krone contributes to higher imported inflation and an improvement in net exports. This pulls up the rate path (orange bars).

Chart 4.6 A weaker krone and higher wages pull up the rate path
Cumulative contribution. Percentage points



Source: Norges Bank

Underlying inflation has been broadly in line with the June *Report* projections. On the one hand, imported inflation has been higher than projected, but this is partly explained by the weaker krone and higher external price impulses. On the other hand, domestic inflation has been lower than projected. New information suggests that wage growth in 2021 will be higher than expected in the June *Report*, and the wage projections have been revised up more than that explained by the model using higher capacity utilisation projections. Higher wage growth increases production costs and will contribute to higher domestic inflation further out. Overall, *prices and wages* pull up the rate path throughout the projection period (purple bars).

Oil spot and futures prices are little changed since the June *Report*, but spot gas prices in Europe have risen sharply. Higher oil and gas prices in isolation fuel activity in petroleum-related industries, but owing to other information, investment on the Norwegian shelf is nevertheless projected to be slightly lower than in the June *Report* (see discussion on petroleum investment in Section 3.1). Therefore, the bars for *petroleum prices and investment* are on the downside in 2023 and 2024 (red bars). The feed-through from prices to petroleum investment is assumed to be less pronounced than usual, because much of the potential for higher investment has already been realised as a consequence of the petroleum tax package from 2020.

Growth among Norway's trading partners is expected to be a little lower at the beginning of the projection period, owing in part to higher infection rates. On the other hand, inflation has risen more than projected in a number of countries. On balance, factors relating to *external developments* pull down the rate path a little (green bars).

For the coming year, the policy rate path has been revised up less than indicated by the model-based analysis. This is shown by the difference between the sum of the factors in the decomposition chart and the actual changes in the rate path. The reason the rate path deviates somewhat from the model-based analysis is that the Committee also seeks, in its overall assessment of the monetary policy stance, to take into account considerations that are not fully represented in the model-based analysis. Among other things, the Committee judges that the uncertain impact of higher interest rates warrants a gradual policy rate rise. The upward revision of the rate path is thus smaller at the start of the projection period than implied by the model-based analysis. Further out, the upward revision is slightly larger, because a lower rate path in the preceding period results in slightly higher inflation and capacity utilisation further ahead.

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 Decision basis for the countercyclical capital buffer

In June, the decision was made to raise the countercyclical capital buffer rate to 1.5%, effective from 30 June 2022. At its meeting on 22 September, Norges Bank's Monetary Policy and Financial Stability Committee decided to maintain this requirement.

Creditworthy businesses and households appear to have ample access to credit. Norwegian banks are profitable. Losses are expected to be low in the period ahead, and Norwegian banks are well equipped to meet a higher countercyclical capital buffer requirement while maintaining credit supply.

Prior to the reduction in March 2020, the countercyclical capital buffer rate was set at 2.5% against the background of a build-up of financial imbalances over a long period. During the Covid pandemic, residential and commercial property prices have increased substantially, and household credit growth has accelerated . Recently, property price inflation has been more moderate. The consideration of financial imbalances suggests a higher buffer rate.

Based on the Committee's current assessment of economic developments and the prospects for bank losses and lending capacity, the buffer rate will be raised to 2.0% in December, effective from 31 December 2022. The Committee expects the buffer to return to 2.5% somewhat further out.

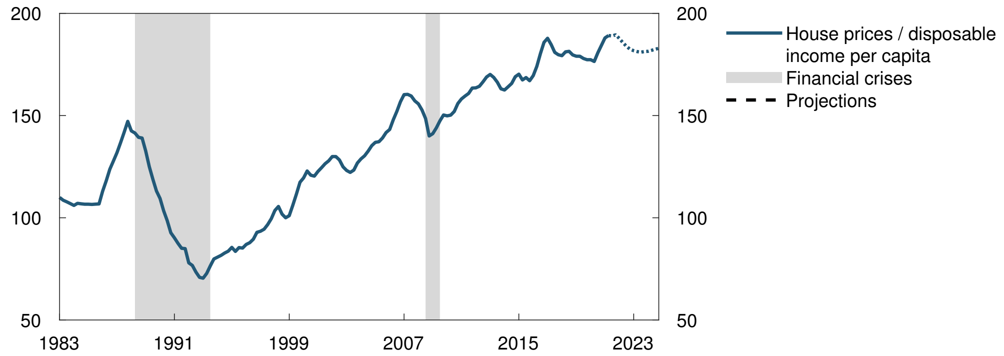
5.1 Access to credit

Banks have sufficient capacity to meet credit demand. The banks included in Norges Bank's Survey of Bank Lending reported unchanged credit standards for households and businesses in 2021 Q2, and no changes are expected ahead.

Framework for decisions on the countercyclical capital buffer

Decisions on the level of the countercyclical capital buffer are 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. Updated charts with all the indicators included in the framework can be found on Norges Bank's website.

Chart 5.1 House prices have risen 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

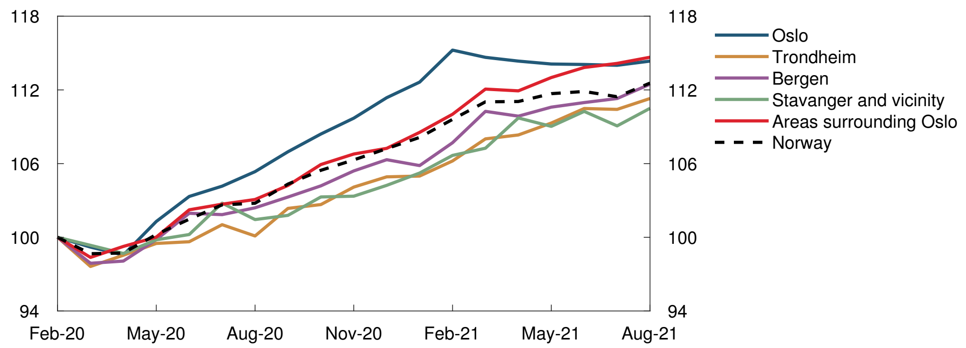
Issuance volumes in the corporate bond market have been high since the turn of the year, and risk premiums for most industries are now close to pre-pandemic levels. Growth in corporate lending by banks and mortgage companies has picked up in recent months. Overall, creditworthy households and businesses appear to have ample access to credit.

5.2 Financial imbalances

Prospects for more moderate house price inflation

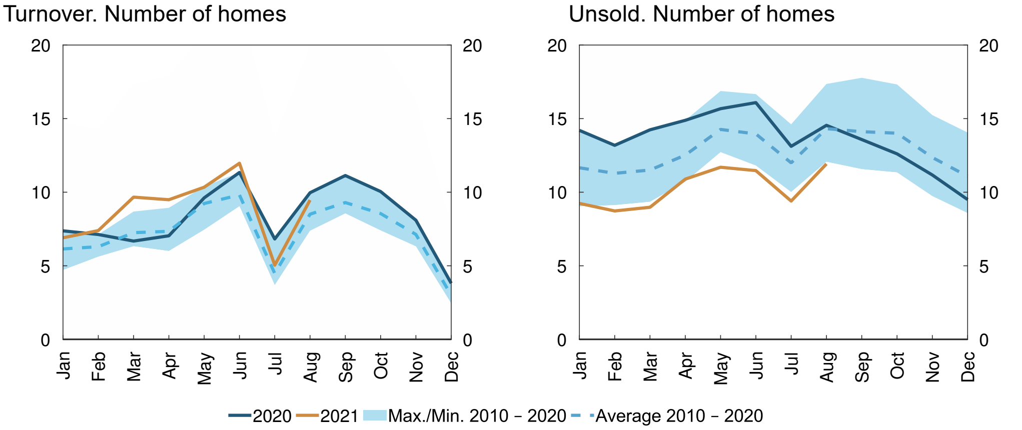
After a number of years of rapid house price inflation, with prices rising faster than household income, house price inflation over the two years preceding the pandemic was at a stable and moderate level. The lockdown in 2020 resulted in a brief decline in turnover and house prices. However, turnover in the market for existing homes picked up quickly and gradually reached historically high levels. New home sales rose from summer 2020 to very high levels through autumn and into 2021. High demand and limited supply contributed to a substantial rise in prices, and in the period between May 2020 and March 2021, house price inflation was high and markedly higher than income growth (Chart 5.1). This has increased housing market vulnerabilities. The rapid rise reflects low residential mortgage rates and homebuyers' preference for spending a higher share of income on

Chart 5.2 The sharp rise in house prices has slowed
House prices. Seasonally adjusted. Index. February 2020 = 100



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

Chart 5.3 High activity in the market for existing homes
In thousands

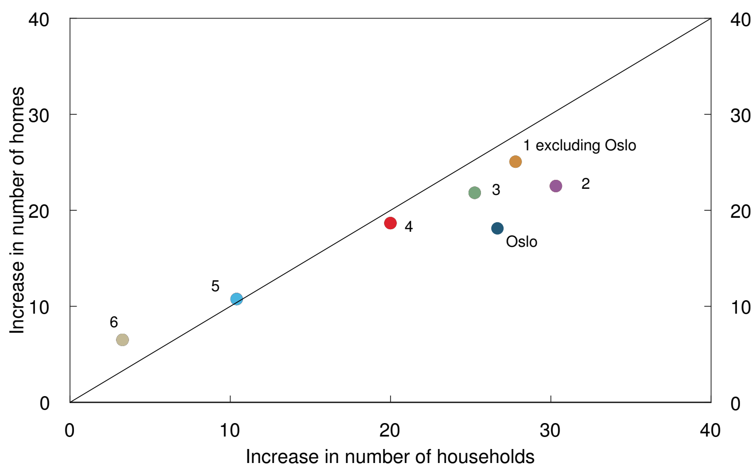


Sources: Eiendomsverdi, Finn.no and Real Estate Norway

housing, in part because remote working has increased and consumption opportunities have otherwise been limited.

Since April 2021, house prices have risen at a slower pace, and overall house price inflation has been somewhat weaker over summer than projected. The slowdown in house price inflation is most pronounced in Oslo, where the rise in prices was highest in 2020 (Chart 5.2). However, house price inflation remains high in the areas surrounding Oslo, where during the pandemic, prices have risen faster than in the large Norwegian cities. In recent years, net migration to the areas surrounding Oslo has been substantial, and the Bank's analyses suggest that it has increased during the Covid pandemic[1].

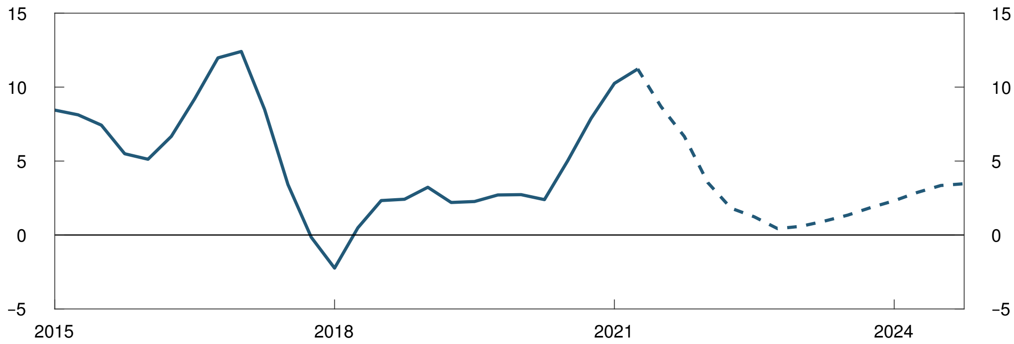
Chart 5.4 Balance between residential construction and household formation
Increase in the number of households and homes by degree of urbanisation (where 1 denotes the most urbanised). Percent. Past 15 years (2005 – 2020)



Sources: Statistics Norway and Norges Bank

1 See Lindquist, K.-G., S. Mæhlum, B.H. Vatne and E.G. Wold (2021) "The housing market in the pandemic year 2020". *Staff Memo* 6/2021. Norges Bank. One of the main findings of the analysis is that the pandemic appears to have increased the attractiveness of living in larger dwellings farther from central Oslo.

Chart 5.5 House price inflation expected to be moderate ahead
House prices. Four-quarter change. Percent



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

Even though house price inflation has recently slowed, high housing market activity has continued through summer. Turnover in markets for both new and existing homes remains high and the stock of unsold existing homes is at a low level (Chart 5.3).

High house prices and strong new home sales over the past year are expected to boost residential construction further out in the projection period. Residential construction at a national level is projected to be higher than household formation in the coming years. In the past 15 years, the increase in the number of dwellings has remained at a lower level than household formation, particularly in urban areas where household formation has been high[2] (Chart 5.4). Residential construction has nevertheless primarily taken place in urban areas with high population inflows. During the pandemic, the number of households residing in the areas around Oslo has increased markedly. Construction activity has also been particularly high in the areas surrounding Oslo, which has helped maintain the balance between household formation and residential construction in these areas.

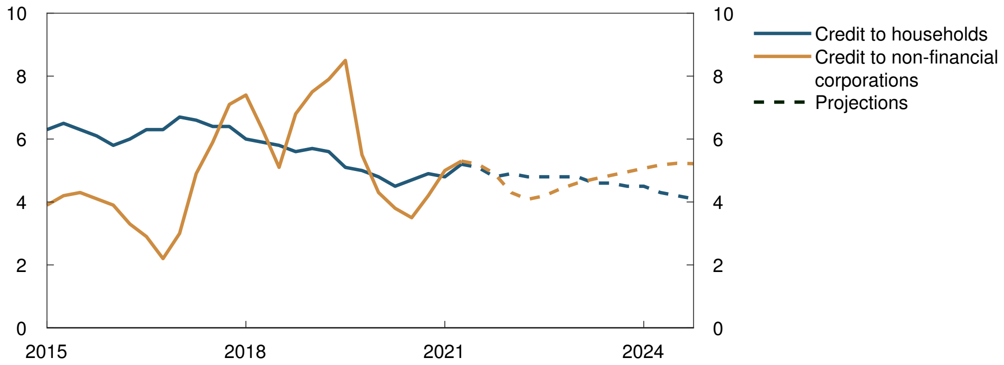
2 See Mæhlum, S., P.M. Pettersen and H. Xu (2018) "Residential construction and household formation". *Staff Memo* 12/2018. Norges Bank.

Household sector vulnerabilities

High debt and high house prices are key household sector vulnerabilities (see discussion in *Financial Stability Report* 2020). Household debt is dominated by residential mortgage loans, and debt developments are closely associated with house price developments. Sharp and abrupt falls in house prices can therefore markedly reduce housing wealth for many.

Periods of persistently high house price inflation and credit growth increase household sector vulnerabilities. If house prices rise faster than incomes, households become more vulnerable to income loss and higher interest rates. Without financial buffers in such a situation, these households will need to tighten consumption. Such a tightening may contribute to amplifying a downturn in the Norwegian economy. This may reduce firms' earnings and debt servicing capacity and then result in higher losses on banks' corporate exposures.

Chart 5.6 Credit growth expected to be lower
Credit. Four-quarter change. Percent



Sources: Statistics Norway and Norges Bank

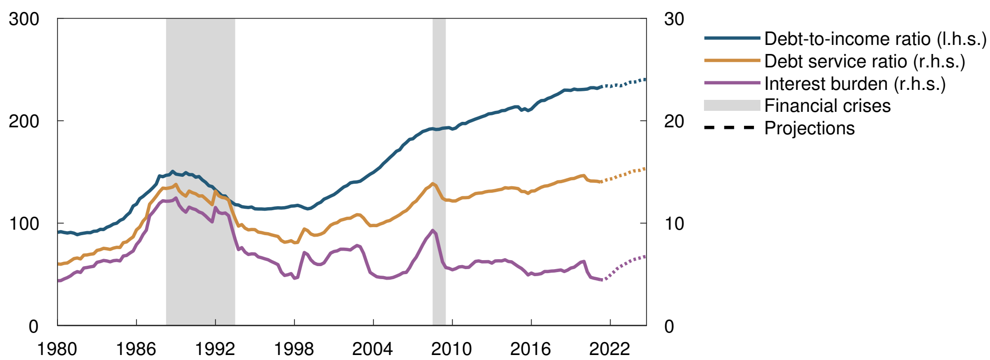
House price inflation is expected to be moderate ahead (Chart 5.5 and Annex Table 3). Higher lending rates, further normalisation of household consumption patterns and increased residential construction in areas with high household formation rates will dampen house price inflation. Continued high housing market activity, prospects for higher disposable income and lower unemployment pull the projections in the opposite direction. In the near term, the projections have been revised down somewhat owing to slightly weaker-than-expected housing market developments.

Household debt ratios edge up ahead

In July, 12-month growth in household credit was 5.2%. Credit growth has recently levelled off somewhat, and there are signs that the effect on borrowing of rapid rises in prices and turnover in the housing market has largely faded. Growth in credit to households is expected to decline ahead, in parallel with the cooling-off of the housing market and higher lending rates (Chart 5.6 and Annex Table 3).

Household debt-to-income ratios are at high levels after rising over a long period (Chart 5.7). The policy rate hikes in the period between 2018 and 2019 and the authorities' measures to restrain borrowing by vulnerable households through the residential mortgage and consumer credit regulations contributed to a gradual slowdown in household credit growth before the pandemic, with debt-to-income ratios levelling off in 2019. Debt-to-income ratios have remained flat over the course of the pandemic. Credit growth

Chart 5.7 Household leverage expected to be somewhat higher
Percent



Sources: Statistics Norway and Norges Bank

is expected to be higher than income growth in the coming years, leading to somewhat higher debt-to-income ratios (Chart 5.7). With the high level of debt and a gradual rise in lending rates, interest and principal payments will account for a larger share of household income ahead.

Limited consumption opportunities and heightened uncertainty about the future have contributed to increased saving by many households during the pandemic. Furthermore, high house price inflation has increased housing wealth for many. Norges Bank's lending surveys for 2021 Q1 and Q2 indicate that savings have not been used to make additional mortgage payments over the past year. However, banks have also reported that their customers have not used additional savings as equity capital to increase borrowing, either. Data from pre-completed tax returns to which Norges Bank has access show that the increase in savings in the form of bank deposits has been broadly based across the population. Younger age groups, which typically have more debt and smaller financial buffers, also increased their bank deposits by more than normal in 2020 (see box on page 60).

Mainland corporate debt has risen in pace with GDP over the past ten years. Growth in corporate credit from domestic sources fell from autumn 2019 and through much of 2020 (Chart 5.6). Since 2020 Q4, growth has nevertheless picked up, and 12-month growth in corporate credit was 5.3% in July, approximately in line with the June *Report* projections. Low bond market premiums have contributed to high bond issuance over the past year, and bond issuances have been an important driver of the increase in credit growth.

Developments in corporate credit growth are closely tied to developments in business investment. Growth in corporate credit is expected to slow somewhat in the coming year (Chart 5.6), picking up again thereafter, in line with an increase in investment associated with the climate and energy transition.

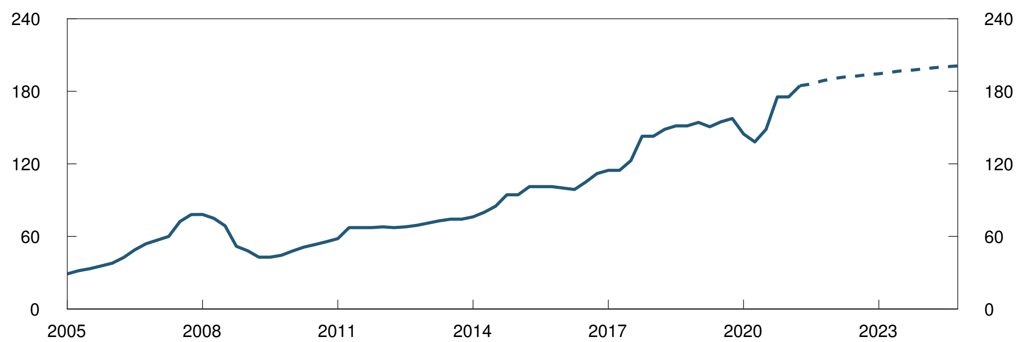
Prospects for moderate commercial property price inflation

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. Rents and selling prices rose in 2021 Q2.

Commercial property selling prices are estimated as rental prices divided by a yield . The Bank's analyses show that developments in employment can explain most of the rise in

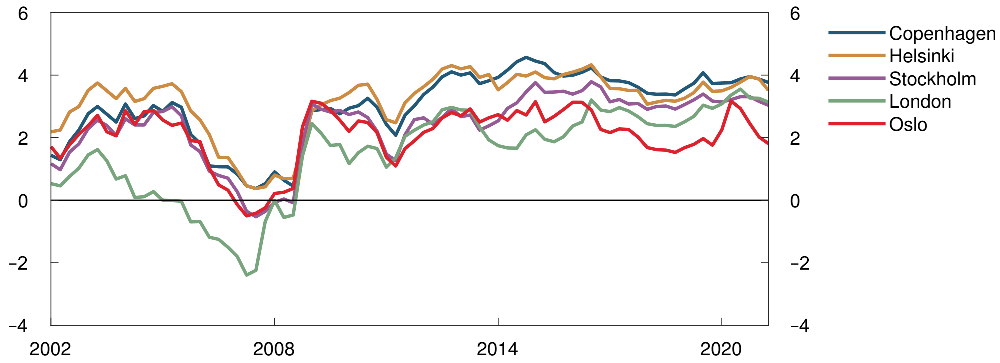
Chart 5.8 Moderate commercial property price inflation

Selling prices for commercial property. In thousands of NOK per square metre



Sources: CBRE and Norges Bank

Chart 5.9 Risk premium is low in Oslo
Yield less five-year swap rate. Percentage points



Sources: CBRE and Datastream

rents over time.[3] The pandemic has had little impact on employment in sectors that typically rent prime office space, such as law, consulting and finance. This has helped sustain rents and selling prices.

The yield depends on the risk-free interest rate and a risk premium. In line with an improved macroeconomic outlook and reduced uncertainty, the risk premium fell considerably over the past four quarters. Since 2020 Q4, the yield has remained at a record-low level. The risk premium, measured as the yield less the five-year swap rate, is now close to its pre-pandemic level (Chart 5.9), and it is low compared with other European cities. Market participants point to various reasons for the low risk premium in Oslo, including the fact that Norwegian investors have substantial funds to invest and the government's large fiscal buffers. Since investors seek real returns, the risk premium can be measured more precisely by taking account of long-term inflation expectations. By adjusting for differences in long-term inflation expectations across countries, the differences in risk premiums are reduced somewhat, particularly in the years before Norges Bank's inflation target was changed to 2%.[4]

In line with a normalisation of economic conditions, a moderate rise in rents and a slight increase in the yield are expected in the years ahead. The projections suggest moderate commercial property price inflation ahead (Chart 5.8). Banks' losses on commercial real estate (CRE) exposures are expected to be limited. The rapid rise in prices in recent years has not been matched by corresponding borrowing among CRE companies, which has increased businesses' equity ratios, thus enabling them to better weather a fall in prices.

3 See Bjørland, C. and M. Hagen (2019) "What drives office rents?". *Staff Memo* 12/2019. Norges Bank.
4 The inflation target was changed from 2.5% to 2.0% in March 2018.

CRE sector vulnerabilities

High commercial property prices are a key financial system vulnerability (see discussion in *Financial Stability Report* 2020). Within the CRE market, 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 CRE sector vulnerabilities.

Uncertainty surrounding future price developments in the CRE market is higher than usual. Since the yield is at a low level, selling prices are sensitive to increases in risk premiums or long-term interest rates. There is also uncertainty related to potential structural changes within the different CRE segments. For example, persistently low travel activity and increased online shopping can adversely impact hotels and retail trade. However, the trend towards increased online shopping has boosted demand for logistics premises, and during the pandemic, investment activity in this segment has been high. Furthermore, there are signs that the use of remote working will also be extensive after the pandemic, which may reduce demand for office space. Office solutions chosen by businesses and the distribution of remote working across weekdays will influence the effect of remote working on office vacancy rates. For the time being, no signs have been observed t hat structural changes have led to a marked reduction in demand for office space.

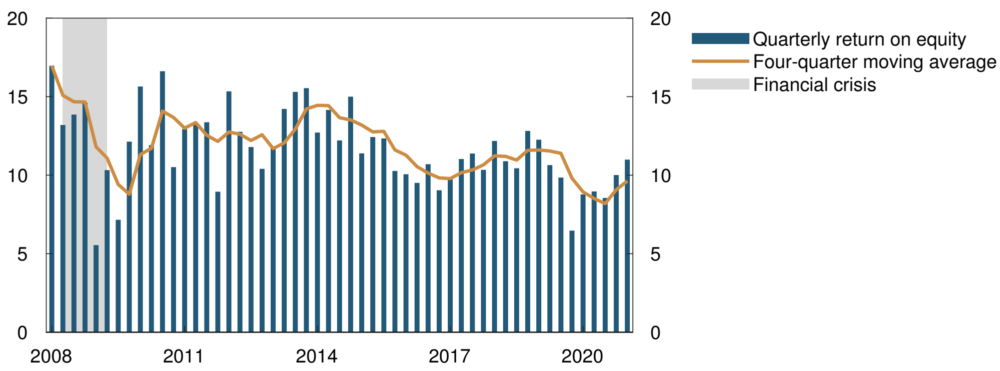
5.3 Banks

Norwegian banks' profitability is solid. The return on equity for the largest Norwegian banks was 11% in 2021 Q2, up from 10% in Q1 (Chart 5.10). This is higher than the levels observed prior to the pandemic and most banks now exceed their long-term return targets.[5] Profitability gains are primarily the result of reduced credit losses. High returns also reflect the fact that Norwegian banks' are cost efficient and have maintained solid earnings through the pandemic. The authorities' support measures have had a dampening effect on banks' risk of losses.[6] Banks expect that higher net interest income resulting from higher interest rates and lower losses over the next year will boost profitability.

During the pandemic, dividend restrictions have led to a rise in equity capital, with an associated decline in return on equity. In January 2021, the Ministry of Finance recommended that Norwegian banks limit dividend payouts until the end of September 2021, in line with the recommendations of the European Systemic Risk Board (ESRB). The Ministry of Finance recently announced that Norwegian banks may resume normal dividend distribution after the end of September.[7]

Chart 5.10 Banks are profitable

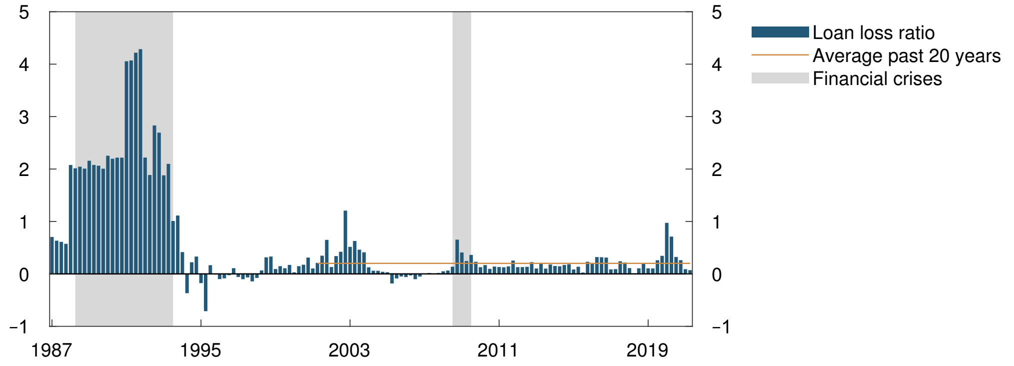
Return on equity. Annualised. Percent



Sources: SNL / S&P MI and Norges Bank

5 Only DNB is below its own return target.
6 See Hjelseth, I.N., H. Solheim and B.H. Vatne (2021) "Government support schemes during the Covid-19 pandemic have had a dampening effect on corporate credit risk". *Staff Memo* 3/2021. Norges Bank
7 See Ministry of Finance press release of 7 September 2021.

Chart 5.11 Credit losses are low and low losses are expected ahead
Credit losses as a share of lending. Annualised. Percent



Source: Norges Bank

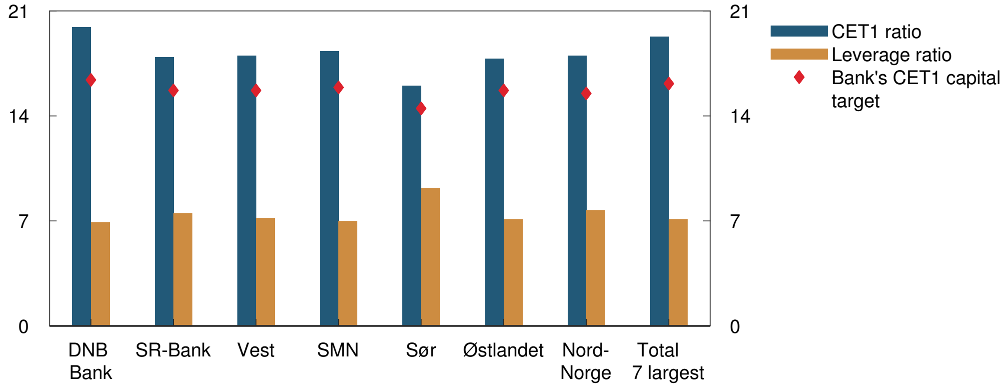
Banks' credit losses were at a low level in the first half of 2021 (Chart 5.11). Credit losses for all Norwegian banks were just below 0.1% of gross lending in Q2, which is approximately half of the average for the past 20 years. Following large loss provisions in the first half of 2020, a majority of large banks have reversed parts of earlier loan loss provisions so far in 2021. DNB in particular reversed large loss provisions in Q2, which were widely distributed across sectors in the bank's commercial portfolio. Developments in credit losses reflect better-than-expected economic developments and reduced uncertainty surrounding the outlook for the Norwegian economy. The Bank's analyses of non-financial enterprises' financial reporting data for 2020 indicate that businesses have overall drawn little on financial buffers. In addition, banks have modest exposures to businesses that have been hit hard by the pandemic and to businesses liable to pay deferred direct and indirect taxes. The number of bankruptcies has recently edged up, but this is to be expected after a long period when the number of bankruptcies has been historically low. We do not believe that the phasing-out of support measures will result in a large number of bankruptcies ahead. The Bank's analyses show that discontinuation of the VAT refund scheme will not lead to a higher number of bankruptcies than the historical average.[8] Moreover, the businesses that have utilised this scheme account for a small share of banks' loans.

Low losses are expected in the period ahead. Owing to uncertainty about the evolution of the pandemic, losses prospects are somewhat more uncertain than normal.

Finanstilsynet's circular on requirements for IRB models[9] provides IRB banks with guidance for the use of risk parameters in calculating risk weights. Applying this guidance may increase banks' risk-weighted assets and thereby reduce capital ratios. At the end of 2021 Q2, only Sparebanken Vest had taken account of the circular in calculating its Common Equity Tier 1 (CET1) capital ratio. In isolation, this resulted in a reduction in the bank's CET1 capital ratio of 0.8 percentage point. It is difficult to assess how much banks' capital ratios will fall owing to stricter capital requirements. DNB judges that its capital ratio will be little affected by the circular. Furthermore, the introduction of the SME and infrastructure discount will pull banks' capital ratios in the opposite direction.[10]

8 See Hjelseth, I.N. og H. Solheim (2021) "Inndriving av utsatt merverdiavgift vil neppe utløse en konkursbølge" [Collection of deferred VAT will hardly trigger a wave of bankruptcies]. Blog post published on the *Bankplassen blog*, 17 June 2021. Norges Bank (Norwegian only).
9 See Finanstilsynet's Circular of 9 June 2021 "Krav til IRB-modeller i banker, kredittforetak og finansieringsforetak" [Requirements for IRB-models for banks, mortgage companies and finance companies] (Norwegian only).
10 See further discussion on banks in Section 5 of *Monetary Policy Report* 2/21.

Chart 5.12 Banks are well equipped to meet a higher buffer requirement
Largest Norwegian-owned banking groups. Percent



Sources: Banking groups' quarterly reports and Norges Bank

Banks' capital ratios are well above the capital requirements (Chart 5.12). In the period between 2021 Q1 and Q2, CET1 capital ratios fell by 0.2 percentage point for the largest banks overall. The decline is the result of a higher increase in risk weighted assets than in CET1 capital, driven primarily by higher lending growth. Banks are well equipped to meet the higher countercyclical buffer requirement while maintaining credit supply.

ALL AGE GROUPS INCREASED THEIR BANK DEPOSITS IN 2020

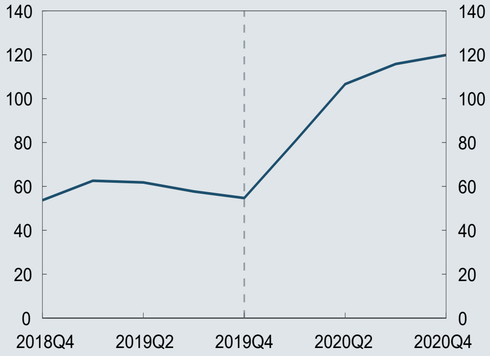
Bank deposits are unevenly distributed across household groups. Bank deposits are relatively high among the wealthy and those with high incomes, with older age groups holding more deposits than younger age groups. Bank deposits are liquid buffers that can easily be used for consumption or moved into other forms of saving such as debt repayment. At the same time, both consumption and debt vary over the lifecycle. How bank deposits are distributed across households is therefore relevant for both the consumption outlook and vulnerabilities related to household debt.

Bank deposits increased substantially during the Covid year 2020 and by considerably more than in the two preceding years (Chart 5A). All age groups contributed, but young households and older households accounted for the largest contributions.[1] Examined at the individual level, savings in the form of bank bank deposits among the oldest age groups are found to have increased the most in NOK terms, but the percentage change was largest among the youngest age groups.

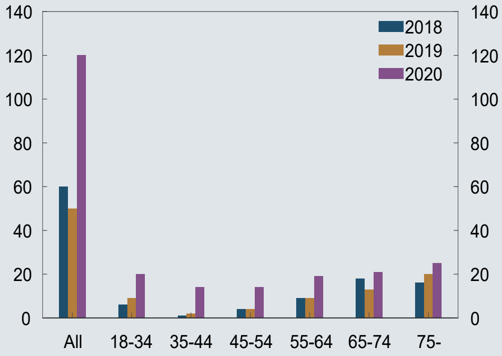
Increased bank deposits strengthen the flexibility of households and reduce vulnerabilities. Households with both relatively high and low debt-to-income (DTI) ratios increased their bank deposits substantially in 2020 (Chart 5.b). At the median, savings in the form of bank deposits were approximately NOK 5 000 to NOK 6 000 higher in 2020 than in 2019.[2,3]

Chart 5.A Bank deposits increased among all age groups in 2020

Net bank deposit transactions in the past four quarters. In billions of NOK



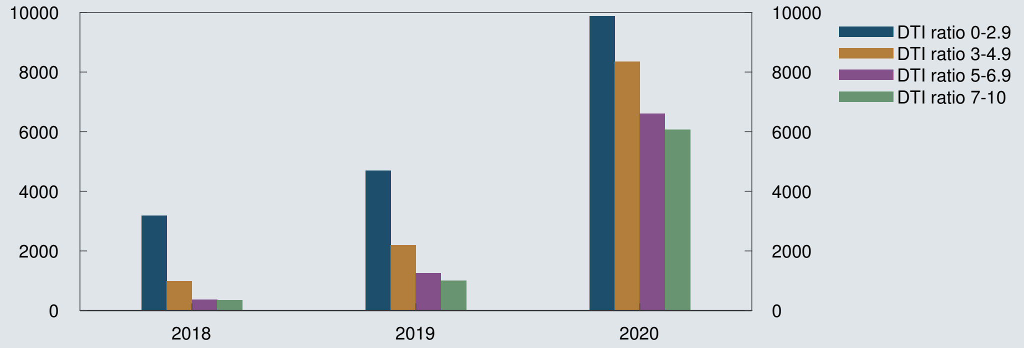
Change in bank deposits on the previous year. By age group. In billions of NOK



Sources: The Norwegian Tax Administration, Statistics Norway and Norges Bank

1 To follow developments at the individual level and according to age groups, data from pre-completed tax returns are used. Individual taxpayers receive this form for review in March each year. The dataset includes all pre-completed tax returns for individuals with registered incomes above the social security base amount, which is close to NOK 100,000.
2 The average increase in bank saving was considerably higher in all groups. In the group with the highest DTI ratio, also the group with the largest increase, the increase was NOK 26 000.
3 Among those with debt-to-income ratios above 10, savings in bank deposits were close to zero both at the median and on average. This group consists of very different persons with high DTI ratios such as students with part-time jobs, new graduates with low annual incomes and those with low income but substantial wealth as collateral for debt.

Chart 5.B The most highly indebted also increased their bank deposits substantially
Change in bank deposits by debt-to-income (DTI) ratio group. Per person. Median. In NOK



Sources: The Norwegian Tax Administration and Norges Bank

Annex

Detailed tables of projections

Table 1 International projections

Change from projections in *Monetary Policy Report* 2/21 in brackets	Weights[1] Percent	Percentage change from previous year				
		2020	2021	2022	2023	2024
GDP						
US	10	-3.4 (0.1)	5.7 (-0.7)	3.9 (0)	1.7 (0.3)	1.4 (0.1)
Euro area	35	-6.5 (0.2)	5.1 (0.1)	3.9 (-0.2)	2 (0.3)	1.7 (0.2)
UK	11	-9.8 (0.1)	6.3 (-0.5)	5.7 (0.5)	2.2 (0)	1.2 (0)
Sweden	13	-2.9 (0)	3.7 (-0.3)	3.1 (0)	2.1 (0.1)	1.7 (-0.1)
China	7	2.3 (-0.1)	8.1 (-0.5)	5.4 (0)	5.5 (-0.1)	5.4 (-0.2)
13 trading partners[1]	100	-4.5 (0.2)	5.2 (-0.1)	4 (0)	2.5 (0.2)	2.1 (0.1)
5 trading partners[2]		-4.9 (0.1)	5.5 (-0.2)	4.2 (0)	2.4 (0.1)	2 (0)
Prices						
Underlying inflation[3]		1.1 (0)	1.9 (0.2)	2 (0.4)	1.8 (0.1)	1.8 (0)
Wage growth[4]		0.7 (0)	3.2 (0.1)	2.8 (0.1)	2.8 (0.1)	2.7 (0.1)
Prices for consumer goods imported to Norway[5]		0.5 (0)	1.6 (0.3)	1.3 (0.5)	0.7 (0)	0.8 (0)

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 Projections for compensation per employee in the total economy. The aggregate includes: Euro area, Sweden, UK and US. Import weights.
5 In foreign currency terms. Including compositional effects.

Sources: IMF, Refinitiv Datastream and Norges Bank

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

	2021						
	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Consumer price index (CPI)							
Actual	2.9	3.0	3.4				
Projections MPR 2/21	3.0	2.9	2.6	2.7			
Projections MPR 3/21				3.9	3.3	3.9	3.4
CPI-ATE							
Actual	1.4	1.1	1.0				
Projections MPR 2/21	1.5	1.2	1.0	1.3			
Projections MPR 3/21				1.2	0.9	1.1	1.1
Imported consumer goods in the CPI-ATE							
Actual	1.0	1.0	0.2				
Projections MPR 2/21	0.4	0.0	-0.4	0.0			
Projections MPR 3/21				0.5	0.3	1.0	0.6
Domestically produced goods and services in the CPI-ATE							
Actual	1.6	1.4	1.5				
Projections MPR 2/21	2.0	1.9	1.8	1.8			
Projections MPR 3/21				1.5	1.2	1.3	1.3

Sources: Statistics Norway and Norges Bank

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

	2021			
	Q1	Q2	Q3	Q4
Actual	-1.0	1.4		
Projections MPR 2/21		0.8	3.2	
Projections MPR 3/21			2.3	1.3

Sources: Quarterly National Accounts from Statistics Norway and Norges Bank

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

	2021						
	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	0.8	0.4					
Projections MPR 2/21	0.9	1.3	1.2	0.7			
Projections MPR 3/21			1.0	0.6	0.3	0.3	0.2

Sources: Statistics Norway and Norges Bank

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

	2021						
	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	3.0	2.9	2.7				
Projections MPR 2/21	3.2	3.0	2.9	2.8			
Projections MPR 3/21				2.6	2.5	2.4	2.4

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

Table 3 Projections for main economic aggregates

Change from projections in *Monetary Policy Report* 2/21 in brackets	Percentage change from previous year (unless otherwise stated)					
	In billions of NOK		Projections			
	2020	2020	2021	2022	2023	2024
Prices and wages						
CPI		1.3	3.2 (0.4)	1.5 (0.4)	1.2 (-0.1)	1.9 (0.3)
CPI-ATE		3.0	1.6 (-0.1)	1.4 (0.1)	1.6 (0.2)	1.8 (0.2)
Annual wages		3.1	3.0 (0.2)	3.1 (0.2)	3.4 (0.3)	3.3 (0.0)
Real economy[1]						
Gross domestic product (GDP)	3402	-1.3	3.0 (0.1)	3.8 (0.2)	1.3 (0.1)	0.9 (-0.1)
GDP, mainland Norway	3035	-3.1	3.9 (0.1)	4.5 (0.4)	1.2 (0.2)	0.8 (-0.2)
Output gap, mainland Norway (level)		-2.9	-1.0 (0.2)	1.3 (0.3)	1.3 (0.4)	0.9 (0.2)
Employment, persons, QNA		-1.3	0.7 (0.2)	2.6 (0.4)	0.5 (0.0)	0.2 (-0.2)
Registered unemployment (rate, level)		4.9	3.1 (-0.2)	2.2 (-0.1)	2.1 (-0.1)	2.2 (-0.1)
Demand[1]						
Mainland demand	3124	-4.1	3.0 (0.0)	5.8 (0.3)	2.6 (0.4)	0.5 (0.0)
– Household consumption	1497	-7.3	3.6 (0.4)	9.6 (-0.5)	3.6 (0.4)	1.5 (-0.6)
– Business investment	313	-6.1	1.1 (0.9)	3.8 (1.2)	6.3 (0.5)	6.2 (-0.3)
– Housing investment	191	-4.0	5.1 (0.5)	3.3 (0.7)	0.9 (0.3)	1.0 (-0.1)
– Public demand	1122	1.2	2.4 (-0.9)	1.5 (0.9)	0.2 (0.2)	0.5 (-0.1)
Petroleum investment	181	-4.1	-2.0 (0.0)	-8.0 (-2.0)	10.0 (0.0)	9.0 (1.0)
Mainland exports	640	-7.8	4.2 (-0.3)	6.7 (0.5)	3.5 (0.6)	2.5 (-0.1)
Imports	1127	-12	0.6 (-0.3)	10.2 (-0.5)	6.2 (0.6)	4.8 (0.0)
House prices and debt						
House prices		4.5	9.2 (0.0)	1.7 (0.7)	1.2 (-0.1)	3.0 (0.1)
Household credit (C2)		4.9	4.8 (-0.1)	4.8 (0.1)	4.5 (0.2)	4.1 (0.1)
Interest rate, exchange rate and oil price						
Policy rate (level)		0.4	0.1 (0.0)	0.9 (0.1)	1.4 (0.1)	1.6 (0.1)
Import-weighted exchange rate (I-44) (level)		115	109.0 (2.1)	106.2 (1.8)	104.5 (0.8)	104.2 (0.7)
Money market rates, trading partners (level)		0.0	-0.2 (0.0)	-0.1 (0.1)	0.1 (0.1)	0.4 (0.1)
Oil price, Brent Blend. USD per barrel		41.8	69.4 (1.4)	70.8 (3.0)	66.2 (2.0)	62.6 (0.8)
Household income and saving[1]						
Real disposable income excl. dividend income		3.3	0.3 (-0.5)	2.8 (0.4)	1.8 (0.2)	1.4 (-1.3)
Saving ratio (rate, level)		15.5	12.3 (-0.8)	7.1 (-0.1)	5.6 (-0.3)	5.5 (-0.8)
Saving ratio excl. dividend income (rate, level)		12.5	9.3 (-0.8)	3.6 (0.0)	2.2 (-0.2)	2.3 (-0.9)
Net lending excl. dividend income (rate, level)		7.1	4.2 (-1.0)	-1.8 (0.0)	-3.6 (-0.2)	-4.2 (-0.9)
Fiscal policy						
Structural non-oil deficit as a percentage of GPFG[2]		3.7	3.7 (0.0)	2.9 (-0.2)	2.9 (-0.1)	2.9 (-0.1)

1 All figures are working-day adjusted.
2 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

Design: Brandlab
Layout: 07 Media AS
The text is set in 9.5 pt Azo Sans Regular
ISSN: 1894-0250 (online)

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Monetary Policy Report 3|21 – September