NORGES BANK

2|20

JUNE

# 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 12 June 2020 and was published on 18 June 2020, the day after the Committee's monetary policy meeting.
The *Report* 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 10.

### IMPLEMENTATION

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

### DECISION PROCESS

The policy rate is set by Norges Bank's Monetary Policy and Financial Stability Committee. Policy rate decisions are normally taken at the Committee's monetary policy meetings. The Committee holds eight monetary policy meetings per year. The *Monetary Policy Report* is published four times a year in connection with four of the monetary policy meetings. Prior to publication, several seminars and meetings are held at which analyses are presented to the Committee and economic developments, the balance of risks and the monetary policy stance are deliberated. On the basis of the analyses and deliberations, the Committee assesses future interest rate developments. The final policy rate decision is made on the day prior to the publication of the *Report*. The Committee's assessment of the economic outlook and monetary policy is presented in "Monetary policy assessment" in the *Monetary Policy Report*.

### REPORTING

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

## Countercyclical capital buffer

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

## Decision-making process for *Monetary Policy Report* 2/20

At its meetings on 29 May and 8 June, the Committee discussed the economic outlook, the monetary policy stance and the buffer rate. On the basis of the deliberations and a recommendation from Norges Bank staff, the Committee made its decision on the policy rate on 17 June. The Committee also approved its advice to the Ministry of Finance on the buffer rate.

# Monetary policy assessment

**The Covid-19 pandemic has led to a sharp downturn in the Norwegian economy. Low interest rates are helping to dampen the downturn, mitigating the risk of a more prolonged impact on output and employment. Since the monetary policy meeting in May, activity has picked up faster than expected, but there is still substantial uncertainty about developments ahead.**

**Norges Bank's Monetary Policy and Financial Stability Committee reduced the policy rate from 1.5% to 0.25% in March, followed by a further reduction to 0% in May. At the monetary policy meeting on 17 June, the Committee decided to keep the policy rate unchanged. There are prospects that the policy rate will remain at the current level for some time ahead.**

### Sharp global downturn

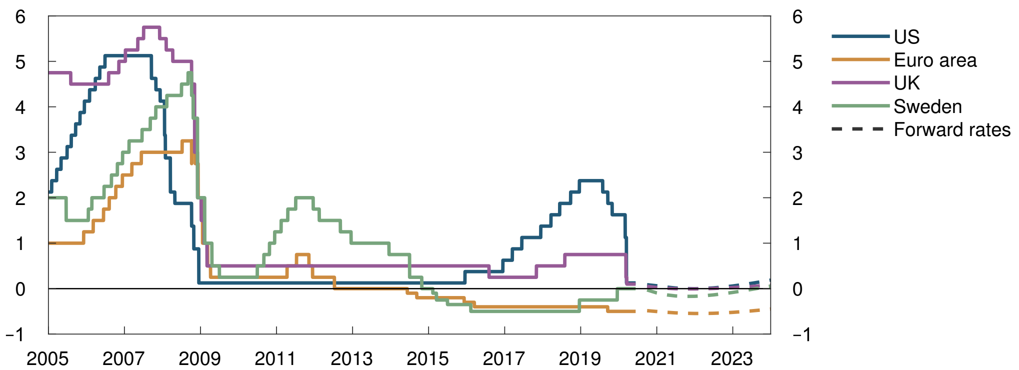
The spread of Covid-19 and the extensive measures to contain it have thrown the global economy into a severe economic downturn. Unemployment has increased markedly. Most countries have implemented forceful fiscal measures and central banks have cut policy rates and provided liquidity to ameliorate the economic situation. Market-implied rates indicate very low interest rates among Norway's trading partners for a long time ahead.

In recent weeks, many countries have embarked on a gradual reopening of society. Activity indicators have risen slightly from the very low levels observed in March and April, but the speed of the recovery is highly uncertain. There are prospects for low inflation in the years ahead.

Oil prices have risen since the sharp fall earlier this spring and are now around USD 40 per barrel. Oil futures prices have increased less, but still indicate somewhat higher oil prices in the coming years.

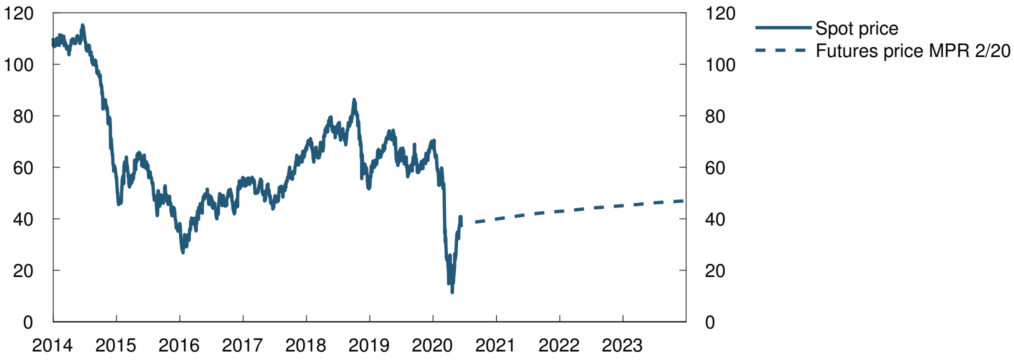
**Chart A Long period of low global interest rates**

Policy rates and estimated forward rates in selected countries. Percent




Sources: Bloomberg, Refinitiv Datastream and Norges Bank

**Chart B Oil prices have moved up from very low levels**
USD per barrel




Source: Refinitiv Datastream

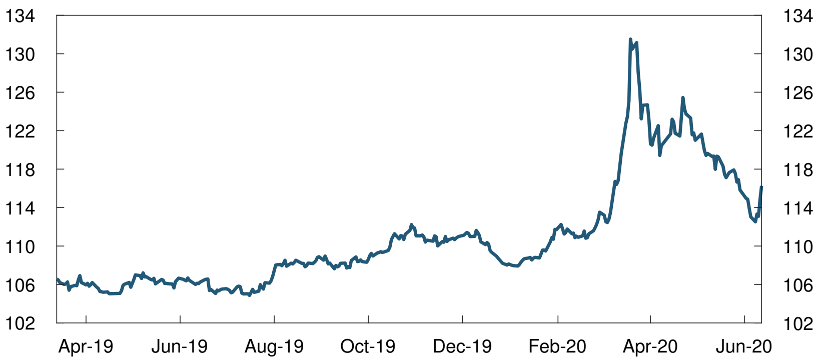
In the wake of the Covid-19 outbreak, there was considerable financial market turbulence, with a decline in equity indexes and an increase in risk premiums in money and bond markets. Like other central banks, Norges Bank has responded with a range of measures to improve market liquidity. Later in spring, financial market volatility abated. Equity indexes have advanced and money and bond market premiums have fallen. Since the monetary policy meeting in May, the money market premium has shown little change. Residential mortgage rates were reduced after the policy rate was lowered to 0%.

The krone exchange rate, as measured by the import-weighted index I-44, reached record-weak levels during the financial market turbulence in March. The krone has since appreciated and is now stronger than at the time of the monetary policy meeting in May, likely reflecting higher oil prices and reduced uncertainty in global financial markets.

**Activity in the Norwegian economy on the rebound**

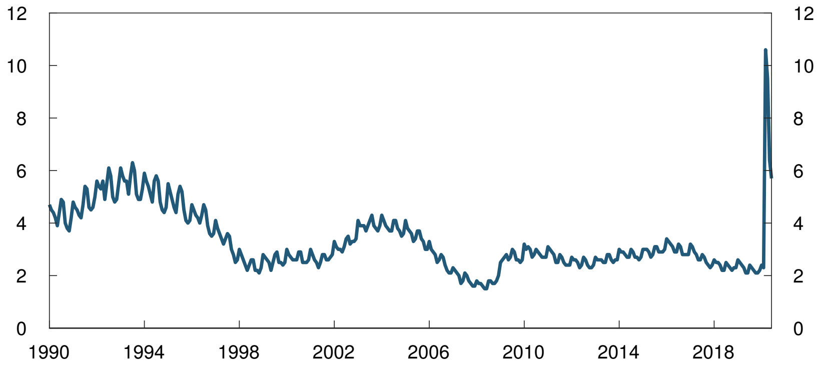
After several years of solid growth, growth in the Norwegian economy passed a cyclical peak at the start of the year. Growth was already turning down when the Government introduced extensive measures to contain the spread of Covid-19 on 12 March. The measures led to production halts and lower activity across a range of businesses. Many employees were furloughed or made redundant.

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




Source: Norges Bank

**Chart D Unemployment down from high levels**
Registered fully unemployed as a share of the labour force. Percent




Source: Norwegian Labour and Welfare Administration (NAV)

The authorities have deployed forceful measures to dampen the economic fallout of Covid-19. The financial support measures are aimed at businesses and households that have suffered a loss of income, and at boosting activity as society is gradually reopened. Petroleum revenue spending now appears to be somewhat higher than assumed in the *Monetary Policy Update* published in May.

In the coming years, a decline in petroleum investment will put a drag on growth in the Norwegian economy. Oil companies have scaled back their investment plans in response to lower oil prices, but the latest investment intentions survey indicates that investment cuts may be smaller than envisaged in May. The sharp downturn among trading partners has led to a significant drop in demand oriented towards Norwegian export firms.

GDP for mainland Norway fell by 11.3% between February and April. The enterprises in Norges Bank's Regional Network confirm the picture of a steep fall in production in recent months.

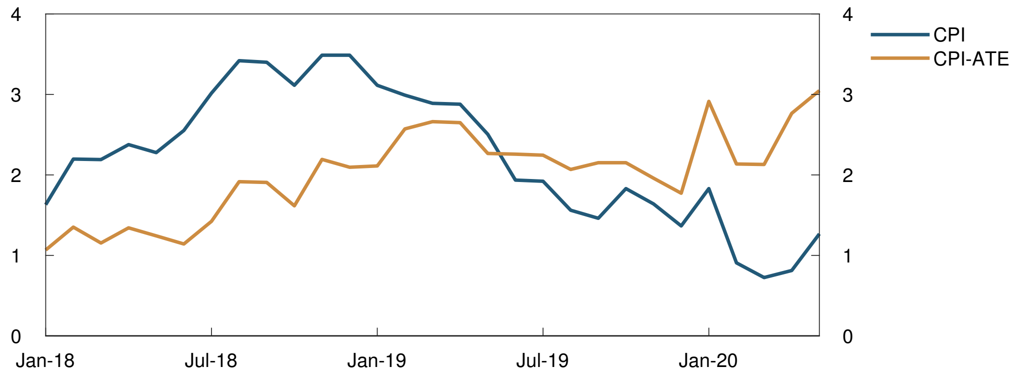
As the infection rate has declined and the authorities have eased the containment measures, economic activity has started to rebound. The upturn has been stronger than projected in May, particularly for household demand. The rise in house prices has been higher than expected and turnover in the housing market has increased again. Unemployment has moved down from the very high levels recorded in March and April. Mainland GDP is now projected to contract by 3.5% in 2020, less so than projected in May.

**Temporary rise in price inflation**
Lower energy prices have contributed to a markedly slower rise in the consumer price index (CPI) over the past year. At the same time, the underlying rise in prices measured by the CPI adjusted for tax changes and excluding energy products (CPI-ATE) has moved up. Twelve-month CPI inflation and CPI-ATE inflation stood at 1.3% and 3.0%, respectively, in May.

Twelve-month CPI-ATE inflation has shown a marked rise in spring, and has been higher than projected in May. The rise is primarily ascribable to a faster rise in prices for imported goods, which in turn reflects the krone depreciation through winter and spring.

Higher costs and lower productivity owing to Covid-19 may also push up prices for some goods and services ahead. In addition, disruptions in global supply chains may result in reduced supply of some goods and episodes of price increases.

**Chart E Marked increase in underlying inflation**
CPI and CPI-ATE. Twelve-month change. Percent




Source: Statistics Norway

Many businesses are facing lower profitability as a result of the containment measures. Combined with high unemployment and weaker prospects for oil-related business, pay increases are expected to be very modest in 2020. Government support measures are alleviating the situation for the business sector, but the capacity to pay wages appears to have decreased since the pandemic began. This year's wage settlement has been postponed until August.

**Low policy rate ahead**

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

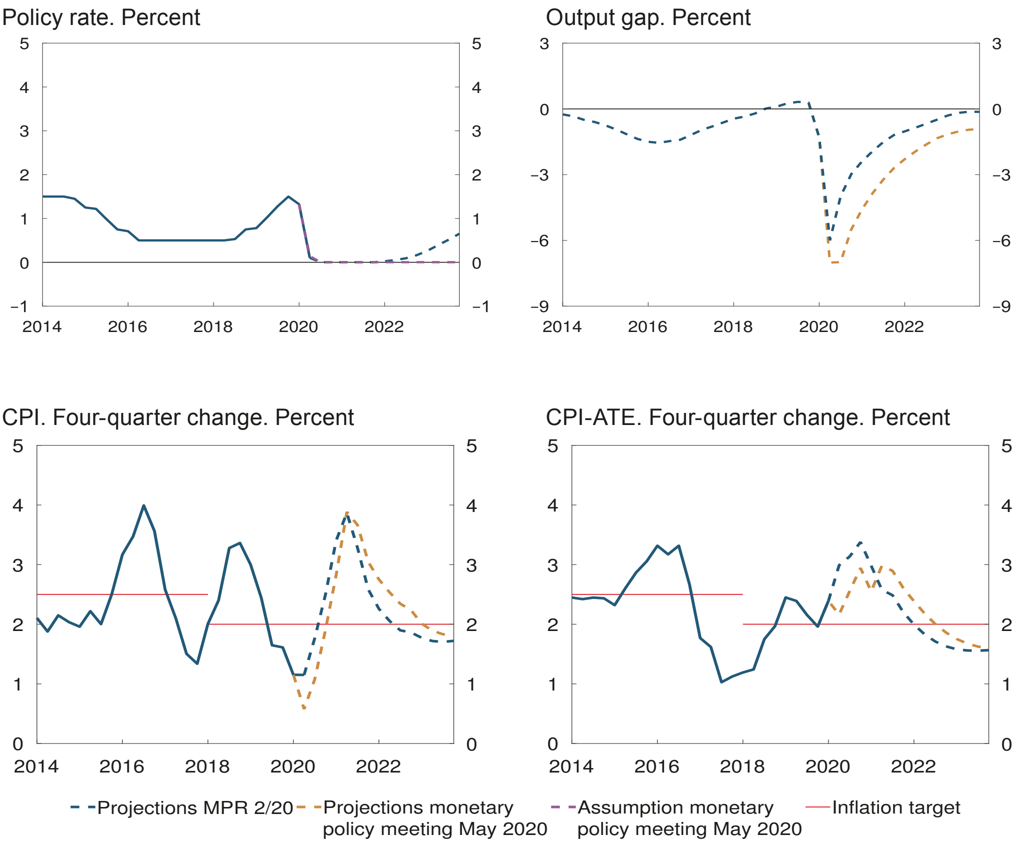
The Norwegian economy is now in the midst of a deep downturn. Since May, activity has rebounded faster than anticipated, and unemployment has fallen more than expected. Activity is nevertheless substantially lower than at the start of the year, and there is considerable uncertainty surrounding the path to recovery. Developments will depend on both the evolution of Covid-19 and how households and businesses respond. Activity will likely pick up slightly faster than envisaged earlier, but it will take time for production and employment to return to pre-pandemic levels.

In discussing the trade-offs facing monetary policy, the Committee placed weight on the contribution of low interest rates to speeding up the return to more normal output and employment levels. This reduces the risk of unemployment becoming entrenched at a high level and of inflation becoming too low further out. On the other hand, a long period of low interest rates could increase the risk of a build-up of financial imbalances.

In the Committee's assessment, the overall outlook and the balance of risks imply a very expansionary monetary policy stance. The policy rate was reduced by 1.25 percentage points in March, and by a further 0.25 percentage point to 0% in May. The Committee does not envisage making further policy rate cuts.

The policy rate forecast implies a rate at the current level over the next couple of years, followed by a gradual rise as economic conditions normalise. With such a policy rate path, there are prospects that capacity utilisation will gradually increase and approach a normal level towards the end of the projection period. Unemployment is projected to

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




Sources: Statistics Norway and Norges Bank

edge lower, but to remain somewhat higher than prior to the pandemic. Underlying inflation is projected to lie above the inflation target over the next year, before gradually moving down to somewhat below 2%.

There is considerable uncertainty about developments ahead. If output and employment increase faster than projected, or there are signs of accumulating financial imbalances, a policy rate rise may occur earlier than indicated. If the downturn lasts longer than projected, for example, owing to a resurgence in infections, the policy rate may remain at the current level longer than implied by the rate path.

The Committee decided unanimously to keep the policy rate unchanged at 0%. In the Committee's current assessment of the outlook and balance of risks, the policy rate will most likely remain at today's level for some time ahead.

Øystein Olsen
Ida Wolden Bache
Jon Nicolaisen
Ingvild Almås
Jeanette Fjære-Lindkjenn

17 June 2020

## 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.

# 1 The global economy

**Covid-19 has spread throughout the world, and containment measures have been extensive in many countries. The level of activity among Norway's main trading partners has fallen substantially so far in 2020. Unemployment has risen markedly. Market-implied rates indicate very low interest rates among Norway's trading partners for a long time ahead.**

**It is assumed that the gradual relaxation of containment measures will continue and that global activity will pick up as from summer 2020. The projections are uncertain.**

### An abrupt and deep fall in global GDP in 2020

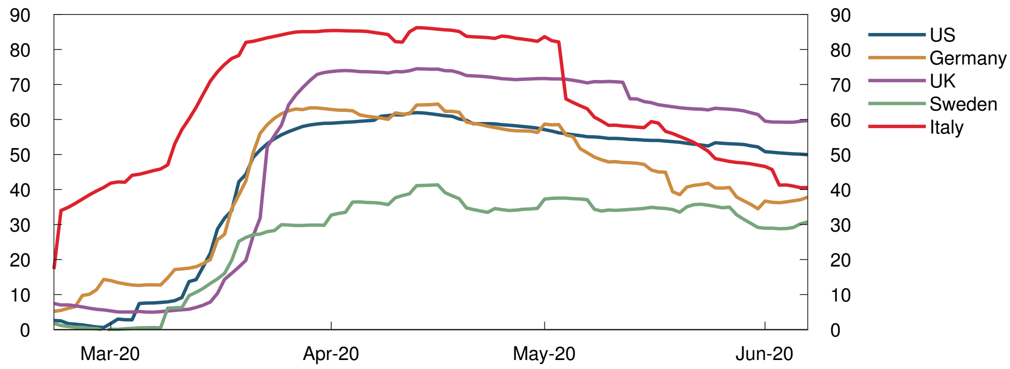
Many countries implemented extensive containment measures when the Covid-19 outbreak in China evolved into a global pandemic. Restrictions were imposed on both domestic and cross-border travel. Schools and daycare centres were closed in a number of countries, and some countries introduced curfews. Since the beginning of May, many countries have started to reopen gradually (Chart 1.1), but it will probably take a long time for all the measures to be phased out.

So far in 2020, economic activity among trading partners has declined markedly, with GDP for Norway's main trading partners falling by 3.2% between 2019 Q4 and 2020 Q1. The service sector in particular is severely affected, especially the transport, restaurant and tourist industries. A substantial number of businesses risk bankruptcy. Activity indicators continued to fall in April but rose again in May, although levels are still very low. In the US, the unemployment rate increased by more than 10 percentage points between March and April and is now at over 13% of the labour force (Chart 1.2).

In many countries, the authorities have introduced fiscal stimulus packages in an attempt to alleviate the difficult economic situation. In addition, a number of central banks have lowered their policy rates to very low levels. Many central banks have also introduced extensive measures to improve the functioning of financial markets. The measures include the provision of liquidity in the form of loans to the banking system and purchases

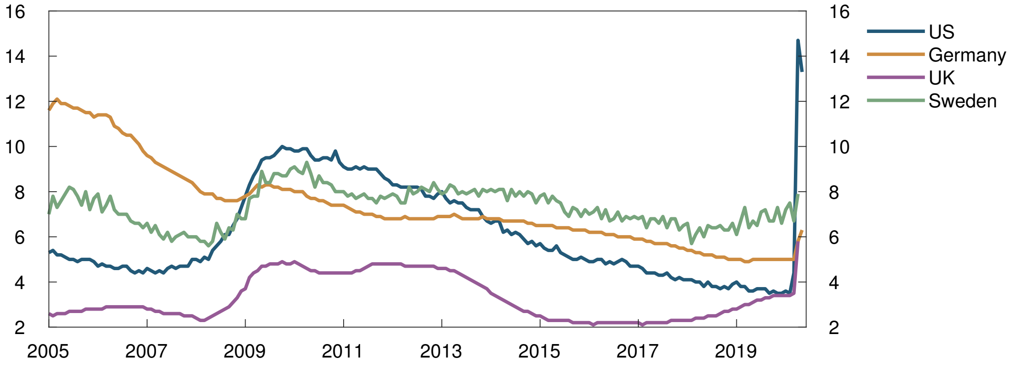
**Chart 1.1 Gradual easing of containment measures**

Index of containment measures and mobility




Sources: Google, Hale et al. (2020) and Norges Bank

**Chart 1.2 Unemployment has increased markedly**
Unemployment in selected countries. Percent



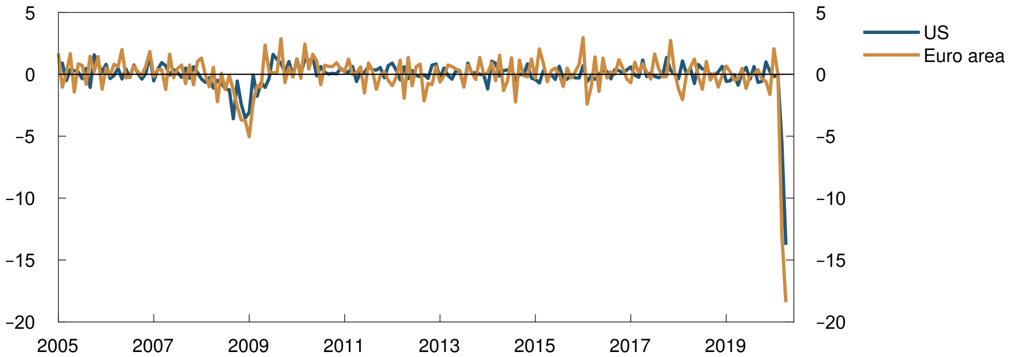

Source: Refinitiv Datastream

of government and corporate bonds. In many countries, the measures deployed are on a far larger scale than during the financial crisis in 2008.

As a result of the Covid-19 outbreak, financial conditions tightened sharply from the end of February, particularly owing to a marked fall in global equity indexes and a substantial rise in credit premiums, especially for high-yield bonds. Financial market volatility has gradually eased since end-March. Global equity indexes have risen markedly since the monetary policy meeting in May. Long-term interest rates have edged up in the same period, while corporate risk premiums have continued to fall, particularly for firms with low credit ratings. Market-implied rates indicate that policy rates among Norway's main trading partners will be very low for a long time ahead.

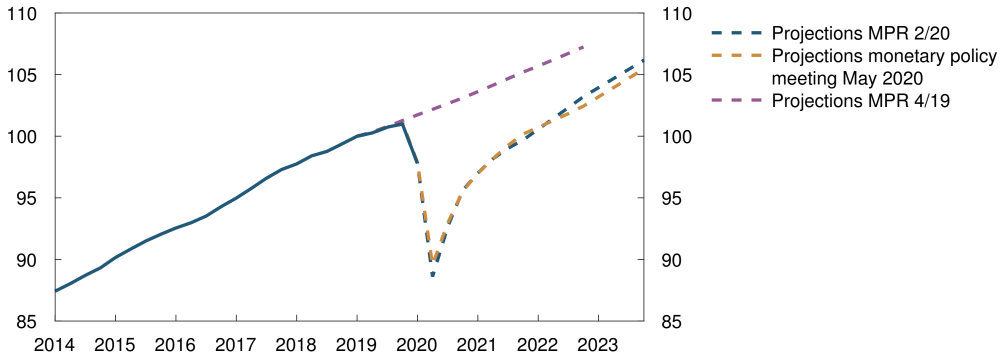
It is very difficult to estimate how far the activity level will fall as a result of the pandemic and how quickly the economy will recover. Developments will depend on factors such as the scale of the outbreak, the duration of the containment measures, the impact of the authorities' support measures and the longer-term effect on household and business behaviour.

**Chart 1.3 Sharp fall in manufacturing output**
Monthly change. Percent




Source: Refinitiv Datastream

**Chart 1.4 An abrupt and deep decline in the global economy**
GDP for trading partners. Index. 2019 Q1 = 100




Sources: Refinitiv Datastream and Norges Bank

Manufacturing output and retail trade saw a sharp fall in April (Chart 1.3), a far larger fall than during the financial crisis. GDP for the US and Norway's main European trading partners is projected to decline by more than 10% between 2020 Q1 and Q2.

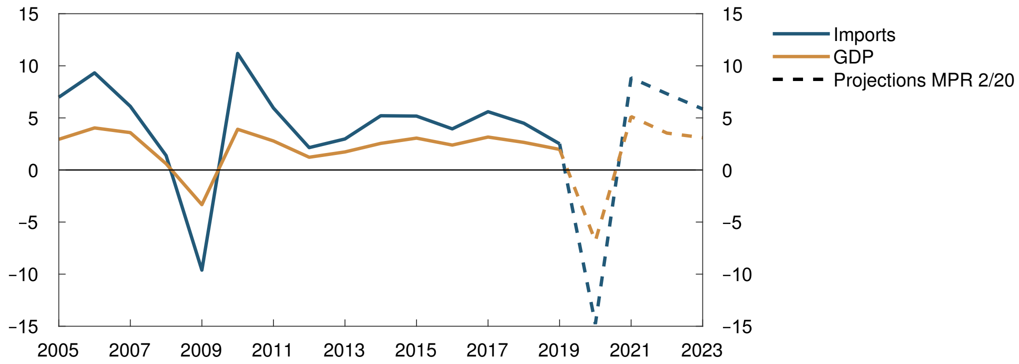
It is assumed that the gradual relaxation of containment measures will continue and that economies will function more normally through autumn, resulting in a rebound in global activity. Overall, GDP among trading partners is projected to fall by close to 7% in 2020 (Annex Table 1). The projection is little changed from the *Monetary Policy Update* published in May. The downward revision from the December 2019 *Monetary Policy Report*, published before the Covid-19 outbreak, is more than 8.5 percentage points for 2020. In the Bank's projections, GDP falls considerably more in 2020 than during the financial crisis. Expansionary monetary and fiscal policies and low energy prices are dampening the decline in most countries. GDP growth for trading partners is projected at about 5% in 2021 and 3.5% in 2022. Under these projections, GDP for trading partners will return to pre-Covid levels in mid-2022 (Chart 1.4), but capacity utilisation will be lower than normal throughout the projection period.

During the financial crisis, import growth among trading partners fell almost three times more than GDP growth (Chart 1.5). Relative to GDP, the fall will probably be less pronounced now, partly because the Covid-19 outbreak has particularly affected the service sector. During the financial crisis, investment showed the steepest decline. The import share of investment is higher than that of services consumption. Unlike during the financial crisis, access to financing has not been abruptly curtailed, so that the provision of trade credit has not come to a halt. Trading-partner imports are projected to fall by around 15% in 2020, a little more than double the fall in GDP.

The projections are highly uncertain. Developments may be weaker than projected if the spread of Covid-19 and the measures to contain it persist for longer than currently envisaged or escalate, or households delay spending on goods and services. Activity may pick up faster than expected if Covid-19 is contained quickly and the various restrictions are lifted earlier than assumed.

Other uncertainties may also contribute to a different path for GDP growth than currently projected. Little progress has been made in the negotiations between the UK and the EU on a trade agreement. If no agreement is reached, growth in Europe may be lower than projected. In addition, uncertainty surrounding the future relationship between the US and China may weigh on GDP growth ahead.

**Chart 1.5 Substantial impact on GDP and trading partner imports**
Annual change. Percent




Sources: Refinitiv Datastream and Norges Bank

The sharp contraction in demand and the rise in unemployment will probably have a dampening effect on price and wage inflation in the short and medium term. Changes in household behaviour may also reduce demand for some services, thereby restraining inflation. On the other hand, there are signs of a rise in prices for some goods and services owing to supply problems. Containment measures, such as social distancing rules, will lead to a fall in production capacity in some sectors, such as the restaurant and transport sectors, which may increase price pressures ahead. Overall, negative demand effects are expected to dominate, so that inflation will remain low ahead. The projections for underlying inflation among trading partners in the years ahead have been revised down slightly from the May *Monetary Policy Update*.

The rise in prices for consumer goods imported to Norway, measured in foreign currency terms, has slowed across most sub-indexes since summer 2019. The rise in prices for food and cars has picked up in the same period. In March, the rise was slightly higher than projected, particularly for food prices. The projections for 2020 and 2021 have been revised up slightly (Annex Table 1).

**Low oil and gas prices**

Oil prices are now just below USD 40 per barrel, a rise of close to USD 20 since the beginning of May. Futures prices indicate a further increase to about USD 50 per barrel at the end of 2023, somewhat higher than assumed in the May *Monetary Policy Update* (Chart 3.B). European gas prices have continued to fall and are now at record-low levels. However, gas prices are also expected to pick up in the years ahead, as assumed in May. For more details on oil and gas prices, see box on page 34.

# 2 Financial conditions

**Three-month Nibor fell following the reduction in the policy rate in May, while the money market premium has shown little change. Residential mortgage rates have also fallen and are expected to edge down further in the coming years. The krone exchange rate has on the whole been somewhat stronger than projected in May.**

## 2.1 Interest rates

### Fall in money market rates

The three-month money market rate Nibor, which expresses market expectations of the policy rate in the next three months and a risk premium, has fallen since the May monetary policy meeting. As the 0.25 percentage point reduction in the policy rate was largely unexpected by market participants, money market rates fell. Forward money market rates and swap rates at longer maturities also fell following the May monetary policy meeting, but have picked up again in recent weeks. Market-implied rates indicate a policy rate hike towards the end of 2021.

The money market premium was highly volatile in March and April, but has shown little change since the May monetary policy meeting (Chart 2.1). The premium, as calculated by Norges Bank, has recently been about 0.30 percentage point and is assumed to remain close to this level in the coming years.

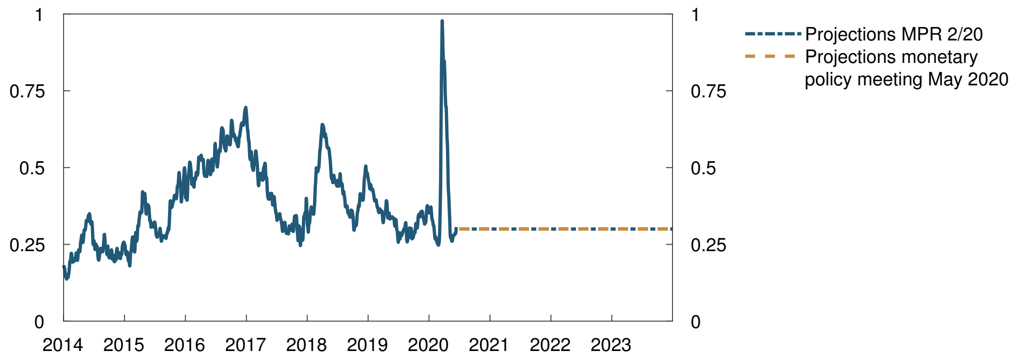
Banks must pay a risk premium above Nibor for wholesale funding. In March, credit premiums rose markedly, edging down thereafter. Since the May monetary policy meeting, credit premiums for both senior bank bonds and covered bonds have continued to fall (Chart 2.2).

### Lower residential mortgage lending rates

Banks' offered floating-rate mortgages indicate that the average residential mortgage lending rate has decreased by 1.23 percentage points to 1.91% since the beginning of March. The announced reduction in residential mortgage rates in March was smaller

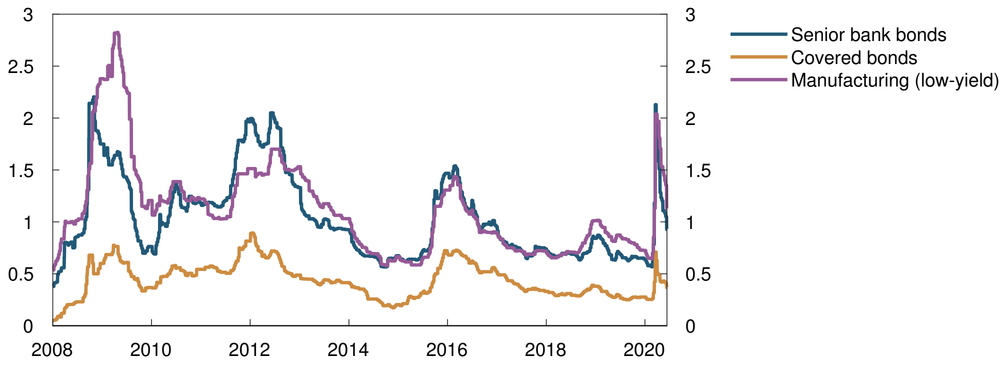
**Chart 2.1 Unchanged Nibor premium**

Percentage points




Sources: Refinitiv Datastream and Norges Bank

**Chart 2.2 Slightly lower credit premiums**
Five-year maturity in NOK. Percentage points over three-month Nibor



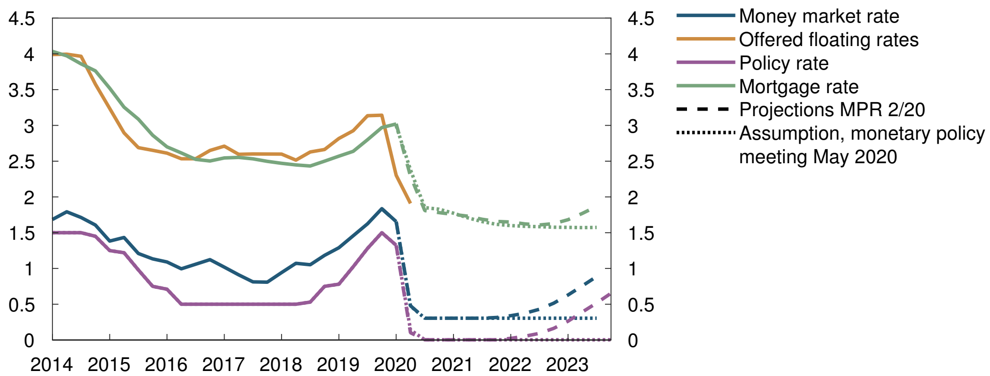

Source: DNB Markets

than the reductions in the policy rate, but after the policy rate was lowered by 0.25 percentage point in May, banks announced a reduction in mortgage rates of up to 0.40 percentage point. The strong pass-through of the rate cut in May likely reflects a sharp fall in the money market premium through April. Lower premiums on bank bonds have also pushed down banks' funding costs. In the coming years, the spread between the money market rate and residential mortgage rates is assumed to approach the levels prevailing before the policy rate was lowered in March and residential mortgage rates are projected to be close to 1¾% before rising somewhat in 2023 (Chart 2.3).

Fixed rates in the market for 5- and 10-year interest rate swaps are also lower than at the time of the May monetary policy meeting, which may influence households that want fixed-rate mortgages. Nevertheless, the proportion of households with fixed-rate mortgages is low so that changes in the rate on fixed-rate mortgages have little impact on overall mortgage rates.

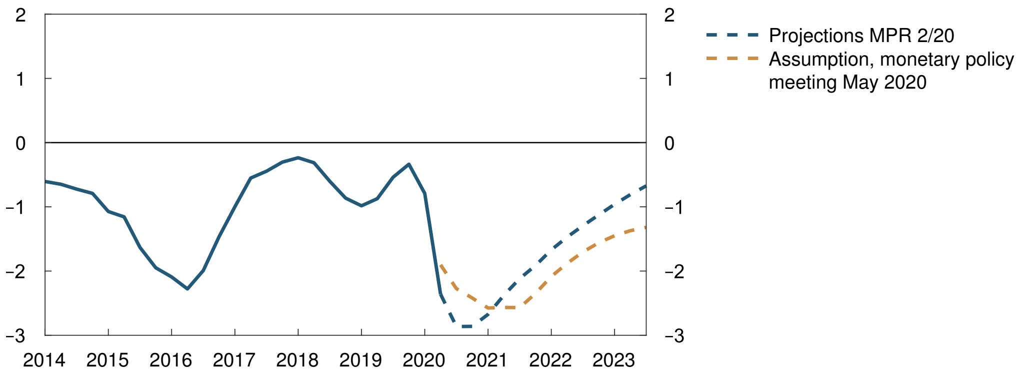
Banks' corporate lending rates are largely directly linked to Nibor. The fall in the money market rate will, in isolation, entail a decline in corporate lending rates. In addition, large enterprises can raise capital directly in the bond market. Risk premiums on corporate bonds increased markedly in March, but have since fallen back somewhat. Since the May monetary policy meeting, risk premiums on corporate bonds in the low-yield segment

**Chart 2.3 Bank lending rates have fallen**
Percent




Sources: Finansportalen, Statistics Norway and Norges Bank

**Chart 2.4 Lower real interest rate in 2020**
Real interest rate. Percent




Sources: Statistics Norway and Norges Bank.

have continued to fall, but are still higher than before the market turbulence began in March (Chart 2.2).

Both nominal and real interest rates can influence how monetary policy affects the Norwegian economy. In the analysis, the money market rate is assumed to track the policy rate throughout the projection period. In the projections, the real interest rate falls in the coming period owing to a temporary increase in inflation (Chart 2.4). As of next year, the real interest rate is projected to rise gradually as inflation falls back. Towards the end of the period, the increase in the nominal interest rate also pushes up the real interest rate.

The neutral real interest rate is the rate that is neither expansionary nor contractionary. It cannot be observed and the estimates are highly uncertain. The neutral real interest rate in Norway, measured as the three-month money market rate less inflation, is estimated to be close to zero. A negative real interest rate throughout the projection period thus indicates that monetary policy will have an expansionary effect on the Norwegian economy in the coming years.

## 2.2 Krone exchange rate

**Stronger krone**

The krone exchange rate, as measured by the import-weighted exchange rate index I-44, reached record-weak levels during the financial market volatility in March. Since then, the krone has appreciated and is now stronger than assumed in May (Chart 2.5), likely owing in part to higher oil prices and less uncertainty in global financial markets.

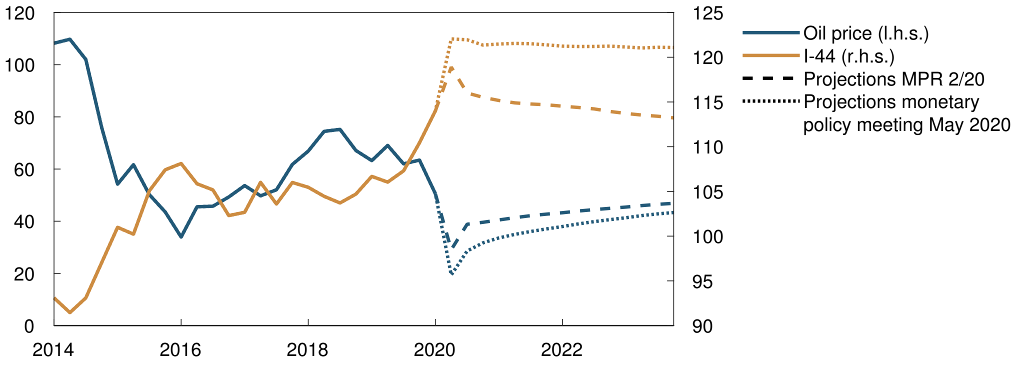
The krone is projected to continue to appreciate somewhat in the period ahead in the light of a somewhat higher oil price in the coming years as indicated by oil futures prices. Moreover, there are prospects of a slight increase in the interest rate differential against trading partners towards the end of the period. In addition, the uncertainty in global financial markets is assumed to dissipate in the coming years and lead to higher demand for NOK. Compared with May, the krone is projected to be stronger throughout the projection period.

**EXTRAORDINARY LIQUIDITY MEASURES**

Norges Bank announced on 7 May an extension of the period that extraordinary liquidity would be offered to end-August 2020. At end-May, some changes were made to F-loan maturities. F-loans with maturities of one and six months would no longer be offered, while F-loans with a maturity of one week, three months and one year would continue to be offered and loan conditions would remain unchanged. See box in *Monetary Policy Update* May 2020 for more information on the measures introduced by Norges Bank to improve market liquidity.

**Chart 2.5 Stronger krone and higher oil prices**

Import-weighted exchange rate index (I-44). USD per barrel




Sources: Refinitiv Datastream and Norges Bank

**The projections for the krone are uncertain**

Movements in the krone exchange rate ahead are highly uncertain. If uncertainty in global financial markets dissipates faster than expected and oil prices rise more than assumed, the krone may appreciate more than projected. On the other hand, the krone may appreciate less than projected in the event of new periods of uncertainty and lower oil prices. If the impact of Covid-19 on the economy is more prolonged than envisaged, this may also lead to a weaker krone exchange rate.

# 3 Norwegian economy

**The Norwegian economy is in the midst of a deep cyclical downturn. Extensive containment measures, a fall in oil prices and economic contraction among trading partners have led to a marked decline in mainland economic activity. Unemployment reached historically high levels in March and April but has since fallen considerably.**

**Uncertainty surrounding the economic outlook is unusually high, and is particularly linked to the evolution of the Covid-19 pandemic and how households and businesses respond. The projections are based on the assumption that the easing of containment measures will continue, without a resurgence in infections.**

**For the years ahead, extensive fiscal policy measures, a low policy rate and improved cost-competitiveness are expected to lift economic activity. The upswing appears to be coming faster than projected earlier, but it will still likely take several years before unemployment is back to pre-pandemic levels. Inflation is expected to pick up in the coming year, owing to rising energy prices and the recent krone depreciation, but is projected to moderate to somewhat below 2% towards the end of the projection period.**

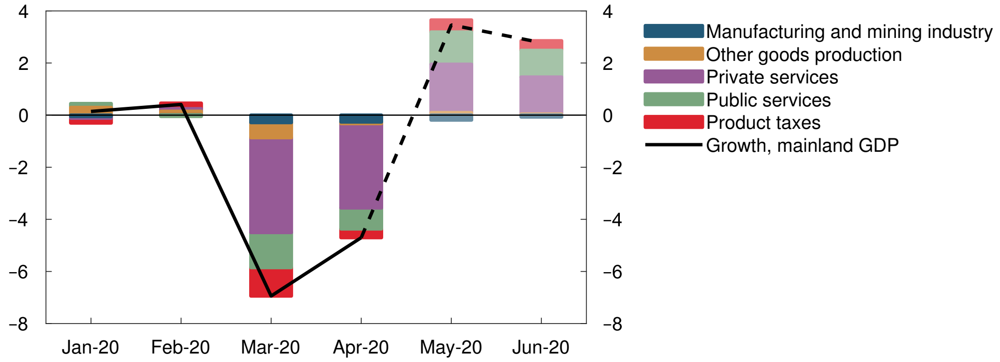
## 3.1 Output and demand

**Sharp decline in the Norwegian economy**

During the first two months of 2020, activity in the mainland economy was close to a normal level. This picture changed drastically when Covid-19 spread through the population and the authorities introduced extensive containment measures on 12 March. The strong measures led to production halts and reduced activity across a range of businesses. The spillovers from the lockdown in Norway, economic contraction among trading partners and the oil price fall have affected large parts of the economy.

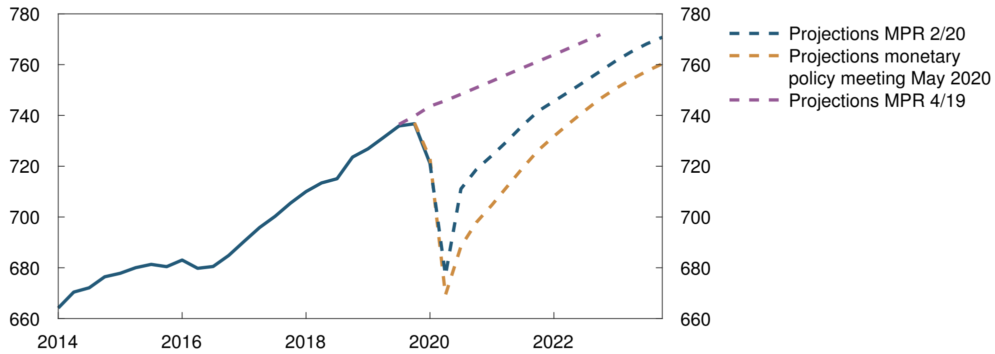
**Chart 3.1 Sharp fall in the Norwegian economy**

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




Sources: Statistics Norway and Norges Bank

**Chart 3.2 It will take time before the decline reverses**
Quarterly mainland GDP. Seasonally adjusted. In billions of NOK




Sources: Statistics Norway and Norges Bank

Mainland GDP fell by 2.1% between 2019 Q4 and 2020 Q1, declining by 6.9% between February and March. The fall was broadly based, but most pronounced in private services (Chart 3.1). In April, activity fell by a further 4.7%.

Norges Bank's Regional Network contacts confirm that there has been a marked drop in output in recent months. The decline appears to be steepest in services. In addition, oil service and retail trade enterprises report a sharp fall in output. Nevertheless, reported values do not capture the extent of the decline. This is because of the index used for Regional Network response alternatives, where the lowest value for output corresponds to a quarterly fall of 2.5% or more. A number of contacts have noted a decline in output owing to the lockdown that far exceeds the lowest index value. In the coming months, household-oriented enterprises expect an increase in output, while in particular enterprises in oil-related industries anticipate a further fall in activity.

This *Report* is conditioned on the assumption that the easing of containment measures will continue, without a resurgence in infections. Some restrictions on international travel will likely be maintained through autumn. In the period ahead, the reopening of society, low interest rates and extensive fiscal policy measures will help lift activity in the Norwegian economy.

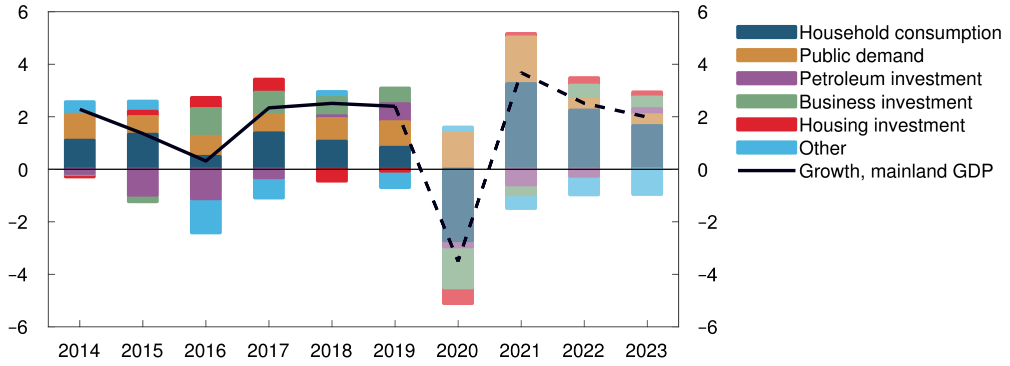
Overall, mainland GDP is expected to fall by around 6% in Q2. Activity in the Norwegian economy is projected to have picked up from May (Chart 3.1). After a further upswing in the second half of the year, mainland GDP is projected to be 3.5% lower than in 2019.

Growth in the mainland economy is expected to pick up notably ahead, but it will probably take time before the decline reverses (Chart 3.2). Activity is projected to be back at its pre-pandemic level at the end of 2021, with growth slowing gradually thereafter.

Household consumption in particular is expected to contribute to the upswing in the coming years (Chart 3.3). In addition, public demand is expected to pick up in 2020 and 2021. Mainland exports will also likely pull up growth in overall output as external demand picks up. Weak developments in petroleum investment are expected to weigh on the economic recovery.

The economic activity projections are higher than in May. The upward revisions reflect in part a faster pick-up in household consumption and a more pronounced decline in unemployment than projected. Moreover, petroleum investment is expected to fall less

**Chart 3.3 Household consumption will support growth ahead**
Mainland GDP. Contribution to annual growth. Percent




Sources: Statistics Norway and Norges Bank

in 2020 and 2021 than projected earlier. So far, the reopening of society has not led to an increase in the infection rate. The low infection rate has likely helped to boost consumer confidence and demand in the Norwegian economy.

**Considerable uncertainty surrounding the outlook**

Uncertainty surrounding economic developments is unusually high. See box on page 40 for a further discussion of forecast uncertainty. The outlook depends in part on the spread of Covid-19 and the need for containment measures both in Norway and abroad. There is also considerable uncertainty about when a vaccine or an antiviral drug will be available. These factors will influence how households and firms respond to the reopening of society. If the risk of contagion persists, it is conceivable that many will tend to avoid areas where large numbers of people gather, and holidays may be spent in Norway rather than abroad.

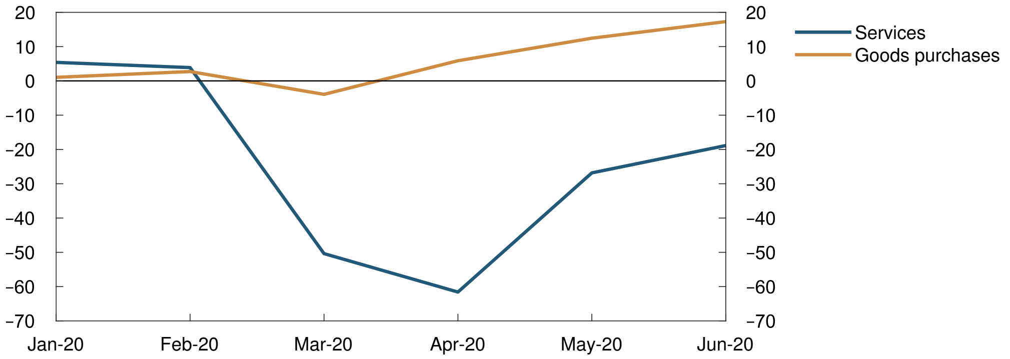
Covid-19 may have ushered in permanent changes. There is reason to believe that remote work and video conferences rather than air travel and hotel stays will continue to be used on a certain scale in the coming years. The uncertainty created by Covid-19 may also result in increased household saving and postponement of business investments. On the other hand, the situation may normalise faster than envisaged, owing to a low infection rate and extensive support measures.

**Pick-up in private consumption**

When the containment measures were implemented, household consumption fell markedly and saving rose sharply. Indicators suggest that consumer confidence rose in May and has moved up considerably since the lockdown began in March. Increased bank card use via BankAxept confirms this impression (Chart 3.4). In April and May, retail sales rose markedly, and the average for May was higher than one year earlier. Service purchases via BankAxept have also peaked up, but at the end of May were still considerably lower than in May 2019. So far in June, purchases of goods and services have continued to rise.

Consumption is projected to pick up in the period ahead. A low real interest rate will likely give a boost to consumption growth, while prospects for continued high unemployment and low wage growth pull in the opposite direction. Public support schemes will partially compensate for loss of income for those without jobs and increase real disposable income. In addition, less travel abroad will likely contribute to a shift towards consumption in Norway.

**Chart 3.4 Pick-up in household consumption**
Value of card transactions via BankAxept in 2020 relative to 2019. Percent




Sources: BankAxept and Vipps AS

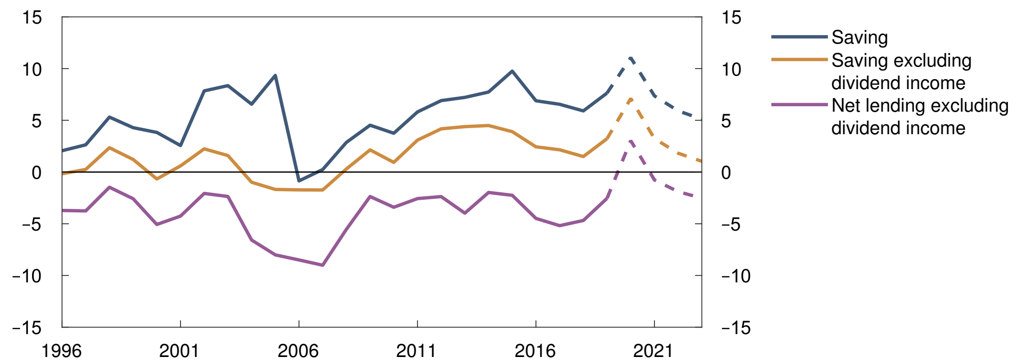
The projections for growth in private consumption for 2020 and 2021 are somewhat higher than in May. The projections imply a marked rise in saving in 2020, declining thereafter as society reopens more and fears of contagion diminish (Chart 3.5).

**Increased housing market activity**
When containment measures were introduced, housing market activity also slowed, and house prices fell. However, the housing market quickly turned around, and house prices were higher than expected in April and May. The strong rise in prices in May largely offset the price decline in March and April.

Low interest rates and reduced supply push up house price inflation. Continued high unemployment and lower population growth has the opposite effect.

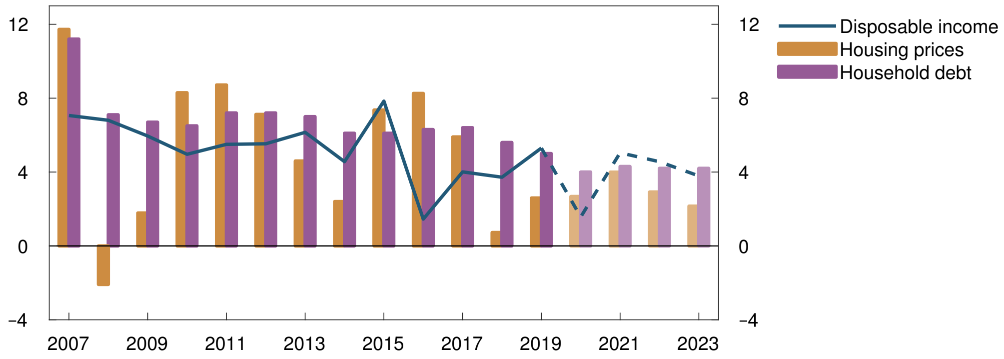
House prices are projected to increase by just under 3% in 2020, and somewhat more in 2021. There are prospects that house prices will rise less than disposable income in the coming years and that household debt growth will remain relatively stable through the period (Chart 3.6). Compared with May, the projections for house price inflation have been revised up, reflecting far stronger house price inflation than expected and what appears to be a faster decline in unemployment than projected earlier. However, there is still considerable uncertainty about housing market developments. If unemployment proves to be higher than assumed and uncertainty increases, house price inflation may

**Chart 3.5 Prospects for high saving in 2020**
Household saving and net lending. Share of disposable income. Percent




Sources: Statistics Norway and Norges Bank

**Chart 3.6 Prospects for moderate house price inflation**
Annual change. Percent




Sources: Statistics Norway and Norges Bank

be lower than expected. On the other hand, activity in the Norwegian economy may pick up faster than envisaged. Historically low lending rates may increase the risk of an acceleration in house price inflation and debt growth. Financial imbalances are discussed further in Section 4.1.

Housing investment has fallen over the past two years, and there were signs that it would fall further also prior to the Covid-19 outbreak, with a marked fall recorded in 2020 Q1. Housing starts slowed in April, and in the light of weaker new home sales in spring, a further reduction in housing starts is expected in the coming months. Housing investment is therefore projected to fall further. In the coming years, higher house prices are set to contribute to a rebound in housing investment. The projections for the next two years have been revised up to reflect expectations of higher house price inflation than previously and signs that new home sales have picked up somewhat in May.

## Weaker investment prospects

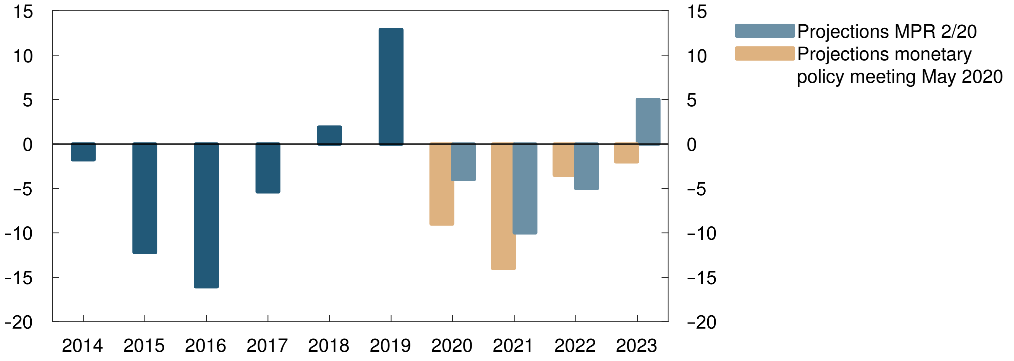
Prior to the Covid-19 outbreak, petroleum investment was expected to show a moderate rise in 2020, falling thereafter in the years ahead. The outbreak has led to a sharp fall in oil and gas prices and heightened uncertainty regarding futures prices. Oil companies have therefore cut back on their investment plans, but changes in petroleum taxation are dampening the cutbacks (see box on page 34 on the oil and gas market and the petroleum industry).

Petroleum investment is expected to fall substantially in the period to 2022, edging up thereafter (Chart 3.7). The projections are higher than in May, reflecting a rise in oil futures prices, Statistics Norway's investment intentions survey indicating higher investment in 2020 and 2021 than projected earlier, and that investment may be more positively affected by changes in petroleum taxation than anticipated in May.

Information from Regional Network contacts points to a decline in private investment in all sectors in the coming year (Chart 3.8), on the back of prospects for low capacity utilisation, weak global demand and persistently high uncertainty.

Mainland business investment is projected to fall in 2020 and 2021, rising thereafter towards the end of the projection period. Compared with the May projections, the projections for business investment have been revised up for both 2020 and 2021.

**Chart 3.7 Fall in petroleum investment**
Petroleum investment. Annual change. Percent



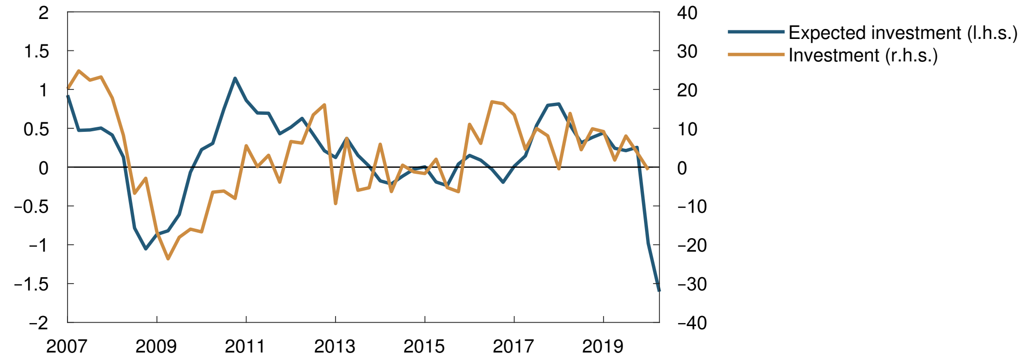

Sources: Statistics Norway and Norges Bank

## Lower exports and imports in 2020

A sharp fall in mainland exports is expected in 2020 (Chart 3.9). The economies of many of Norway's trading partners have been in lockdown, and demand for Norwegian export goods has fallen. In addition, the downturn in the global petroleum industry is reducing demand for goods and services from Norwegian oil service companies. Owing to travel restrictions, foreign visitors' consumption in Norway will also fall markedly in 2020. Further ahead, exports will likely rise as growth picks up among trading partners. The projection for 2020 has been revised up slightly in the light of higher-than-expected export growth in Q1, while the projections for the coming years are lower than at the time of the May monetary policy meeting. A stronger krone has contributed to the downward adjustment, while higher oil futures prices pull in the opposite direction.

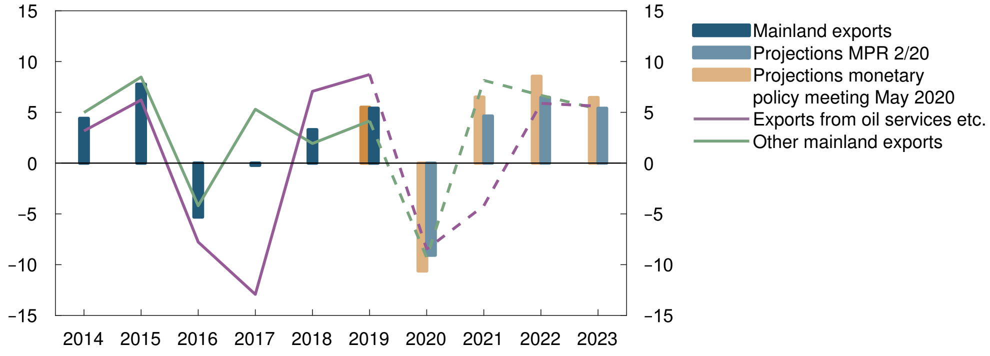
Closed borders, the krone depreciation over the past year and lower activity owing to containment measures also suggest a marked fall in imports in 2020. As activity in the Norwegian economy increases, import growth is expected to pick up. The projections for import growth have been revised up compared with the May projections, primarily because activity in the Norwegian economy appears to be picking up faster than anticipated earlier.

**Chart 3.8 Mainland enterprises are planning lower investment**
Expected change in business investment over the next 12 months. Index.
Business investment. Four-quarter change. Seasonally adjusted. Percent




Sources: Statistics Norway and Norges Bank

**Chart 3.9 Sharp fall in exports in 2020**
Exports from mainland Norway. Annual growth. Percent




Sources: Statistics Norway and Norges Bank

## 3.2 Unemployment and capacity utilisation

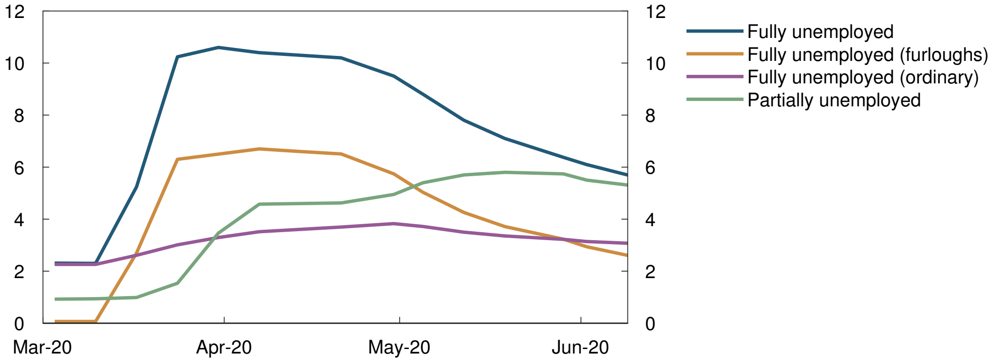
### High unemployment

At the beginning of 2020, unemployment was low and employment close to potential. In the weeks following the Covid-19 outbreak and the lockdown of the economy, a very large number of employees were furloughed. Some firms also had to resort to redundancies. The number of unemployment benefit applications to the Norwegian Labour and Welfare Administration (NAV) rose sharply, and registered unemployment rose to above 10% in the course of a few weeks (Chart 3.10).

Since April, the easing of containment measures has allowed many furloughed employees to return to work. Unemployment has fallen fairly quickly in recent weeks and is now lower than assumed at the time of the May monetary policy meeting. The fall is primarily due to a further fall in the number of furloughed workers, but the number of ordinary unemployed has also declined. Unemployment has declined in all sectors, but the biggest decline has been in retail and sales, travel and transport and in other services occupations. By age cohort, the rise in unemployment since the outbreak has been most pronounced among workers aged between 20 and 30.

In March, firms faced an unclear and uncertain situation. Favourable furlough arrangements likely made it easier to furlough employees. The rapid fall in the number of fur-

**Chart 3.10 Large movements in unemployment**
Registered unemployed as a share of the labour force by category. Percent




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

loughed workers may suggest that demand has declined less than enterprises had originally expected. At the same time, several Regional Network contacts note an increase in demand owing to changes in consumption patterns in the wake of Covid-19. This may have also contributed to the recent fall in the number of ordinary unemployed. Overall, the decline in employment appears to be smaller than envisaged at the time of the May monetary policy meeting, but unemployment is still high and higher than pre-pandemic levels in all sectors. The fall in the labour force participation rate may also be more pronounced than currently assumed. For oil-related industries, it will probably take some time before the effects of lower oil prices are fully felt.

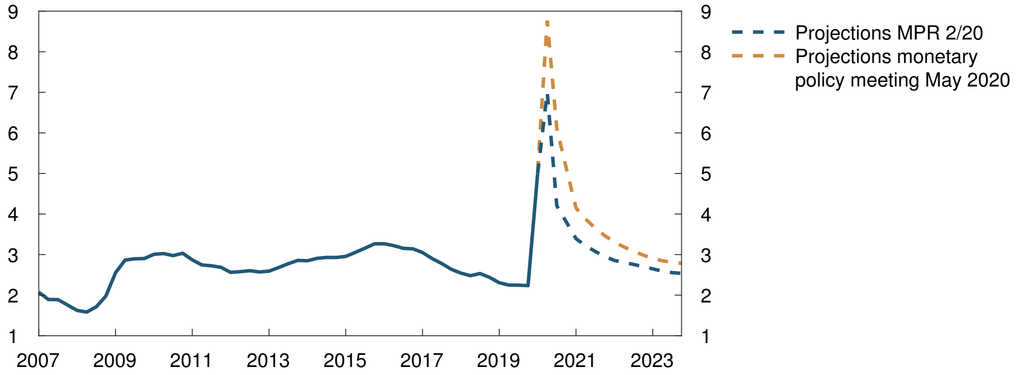
On Tuesday, 9 June, approximately 160 000 persons were registered as fully unemployed, or 5.7% of the labour force. If furloughed workers are excluded, the share of fully unemployed was 3.1%. In addition, 5.3% were registered as partially unemployed. In May, Regional Network enterprises reported plans to increase employment somewhat through summer, primarily owing to furlough recalls in services and retail trade. Of the other sectors, construction, manufacturing and hospitals and local governments reported prospects for broadly unchanged employment, while oil services planned further downsizing.

Government measures to support workers and firms have helped to dampen the impact of Covid-19 and the containment measures on the Norwegian economy. The wage support scheme for businesses that recall furloughed workers will likely contribute to a slightly faster decline in the number of furloughed workers than expected earlier.

Overall, registered unemployment is expected to move down in the coming months, to just below 4% towards the end of 2020 (Chart 3.11). This is lower than projected at the time of the May monetary policy meeting, but still high from a historical perspective (Chart D). Even though the reopening of society is well under way, there is reason to expect that several sectors will experience weak demand also in the period ahead. While many are returning to work, a number of businesses will have to close or reduce staffing on a more permanent basis. Changes in consumption patterns may push up demand for some goods and services, although experience shows that it will take time to shift resources to new industries. Along with prospects for continued low oil prices and weak external demand, this suggests a fairly moderate decline in unemployment in the years ahead. Unemployment is projected to remain higher than pre-pandemic levels throughout the projection period.

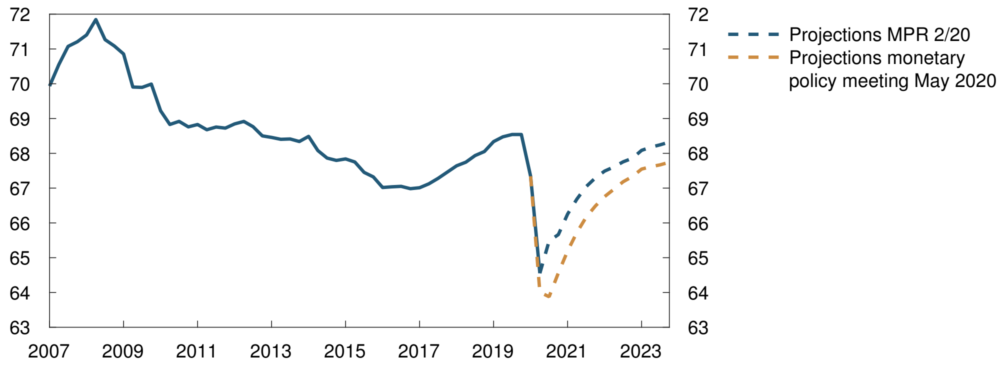
**Chart 3.11 Considerable slack in the labour market**

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




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

**Chart 3.12 Lower employment than prior to the Covid-19 outbreak**
Labour force as a share of the population aged 15–74. Percent




Sources: Statistics Norway and Norges Bank

**Marked fall in employment**

The increase in unemployment will be reflected in a marked fall in employment in 2020. Nevertheless, it will take some time before the decline shows up in Statistics Norway's employment statistics. While furloughed workers receiving unemployment benefits are counted as unemployed from the first day they register with NAV, they are counted as employed in the employment statistics in the first three months of furlough. That is, workers furloughed in March and April who are now back at work will be registered as employed for the entire period.

Monthly statistics from the Labour Force Survey show that the number of employed who were present at work fell by over 7% between February and April, while the number of employed declined only a little.

For the years ahead, employment is assumed to increase gradually as activity in the economy picks up (Chart 3.12). Measured as a share of the population, employment will likely remain lower than prior to the Covid-19 outbreak throughout the projection period.

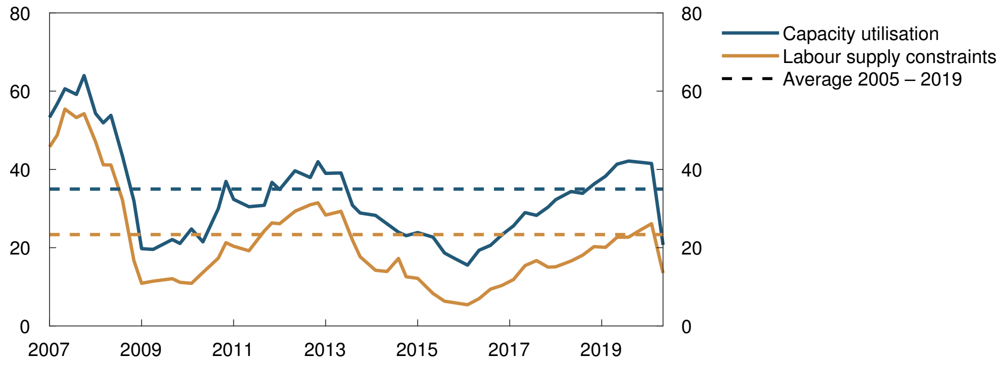
The labour supply in Norway has historically been cyclically sensitive. In cyclical downturns, many people have chosen to pursue an education or have exited the labour force for other reasons. There is also a risk that the unusually sharp downturn and high unemployment that we are now facing will have a long-lasting negative impact on employment and labour force participation (see box on page 37). Overall, labour force participation is expected to decline markedly in 2020, before picking up gradually again.

**Low capacity utilisation**

At the beginning of 2020, capacity utilisation in the Norwegian economy was assessed by Norges Bank to be close to a normal level. The Covid-19 outbreak and containment measures have led to a shutdown of large parts of the Norwegian economy. Even though the reopening of society is under way and many have now returned to work, the high level of unemployment suggests that there is still considerable spare capacity in the economy.

Also according to Regional Network contacts, lower economic activity has resulted in a marked decline in capacity utilisation (Chart 3.13). Some of the enterprises still experiencing capacity constraints report that these constraints primarily relate to delivery problems for foreign intermediate goods and difficulties recruiting foreign labour. Both may indicate that domestic resource utilisation has fallen more than suggested by the

**Chart 3.13 Lower capacity utilisation according to the Regional Network**
Capacity utilisation and labour supply constraints according to the Regional Network. Percent




Source: Norges Bank

Regional Network capacity utilisation indicator. Broken down by sector, capacity utilisation is particularly low in services and retail trade.

Regional Network contacts confirm that there is an ample availability of labour from domestic sources. In May, there was a clear decline in the share of enterprises reporting that labour supply is a production constraint. The indicator fell for all sectors.

It is difficult to project capacity utilisation in the face of abrupt shifts in the economy. Large parts of the economy have been shut down for containment purposes, and there is considerable uncertainty as to how quickly activity will pick up again. At the May monetary policy meeting, the assessment was that capacity utilisation had fallen abruptly to a very low level towards the end of 2020 Q1. This assessment was supported in particular by the historically sharp rise in unemployment. Since then, unemployment developments suggest that resource utilisation has increased. The high number of furloughed workers and partially unemployed makes it unusually difficult to use unemployment to draw conclusions about total resource utilisation in the economy. A large share of those on furlough probably expect to return to work in the course of a short time and will not be as active in seeking work as other unemployed. This suggests that the relationship between capacity utilisation and unemployment has changed temporarily.[1] Overall, it is our assessment that the degree of slack in the economy remains high.

Capacity utilisation is expected to rise further over summer and autumn. Compared with the May projections, the decline is now assessed as having been less pronounced and the recovery as having started somewhat earlier (Chart F). The slightly shallower decline reflects the large number of furloughed staff who are already back at work. Nevertheless, both the level of unemployment and Regional Network contacts' assessment of capacity utilisation suggest that we are in a deep cyclical downturn. For the years ahead, capacity utilisation is expected to pick up gradually and approach a normal level towards the end of the projection period.

**Lower growth potential than prior to the Covid-19 outbreak**

The sharp decline we are now experiencing will likely weigh on growth in the economy's potential output in the coming years. Among other things, business closures and bankruptcies can result in loss or dilapidation of production equipment. Along with lower

1 See Special Feature in *Monetary Policy Report* 2/17 for a discussion of the relationship between capacity utilisation and unemployment.

investment, this may result in lower productivity growth. Persistently high unemployment may also have a prolonged negative impact on employment.

Overall, the economy's potential output is projected to rise by around 1.2% annually during the projection period. The projection is based on average growth in productivity and employment of 0.8% and 0.4%, respectively. This is somewhat lower than envisaged prior to the Covid-19 outbreak, but a little higher than assumed at the time of the May monetary policy meeting. If the economic decline proves to be deeper than currently envisaged and the rise in unemployment more persistent, the long-term effects on productivity and employment may prove more pronounced.

## 3.3 Costs and prices

**Prospects for low wage growth**

Owing to the Covid-19 outbreak, this year's wage settlement has been postponed to August. For many businesses, containment measures have raised costs and lowered productivity. Together with high unemployment and low oil prices, this points to very moderate pay increases in 2020. Government support schemes are providing some relief, but the capacity to pay wages has been reduced (Chart 3.14).

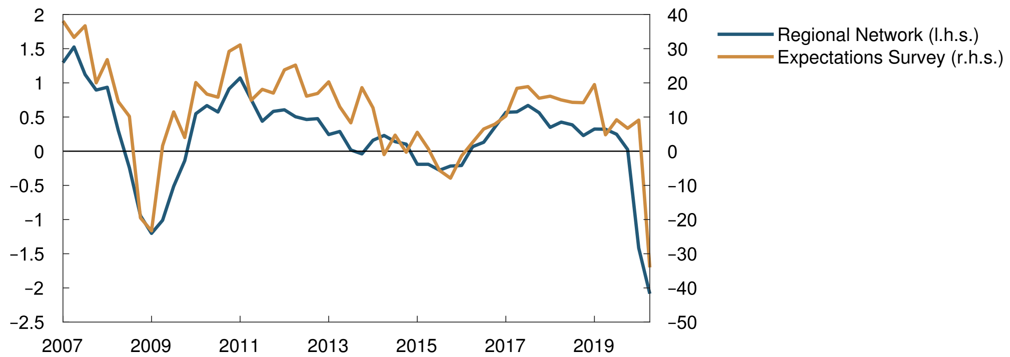
Nevertheless, the pay increases awarded in 2019 will contribute to a higher average wage level in 2020 than in 2019. The average wage level may also be pulled up by the substantial downsizing in low-wage sectors. Overall, annual wage growth in 2020 is expected to be just below 2%.

Low profitability and high unemployment will also have a dampening effect on wage growth in 2021. A partial reversal of compositional effects from 2020 pulls in the same direction. Overall, annual wage growth is expected to remain broadly unchanged between 2020 and 2021. The projections are closely in line with the results of Norges Bank's expectations survey and the expectations of Regional Network contacts (Chart 3.15).

Further ahead, wage growth rises a little, as activity in the economy picks up. However, continued spare capacity, low profitability and low productivity growth curbs the rise.

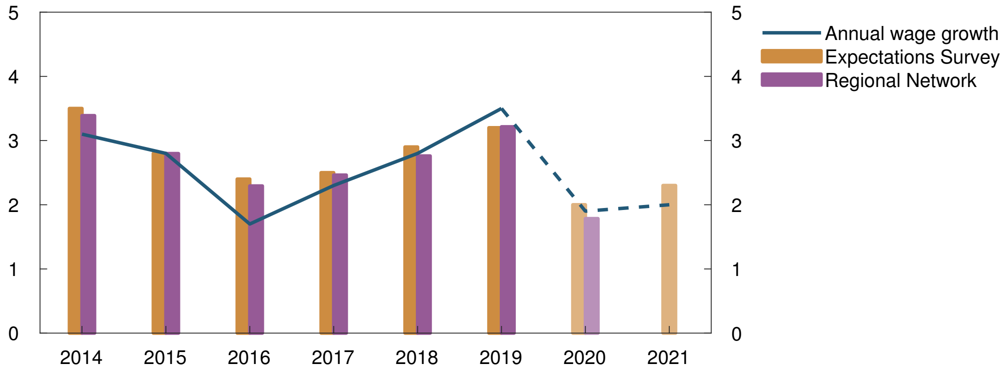
**Chart 3.14 Fall in profitability**

Businesses' assessment of operating margin. Norges Bank's Expectations Survey and Regional Network




Sources: Epinion and Norges Bank

**Chart 3.15 Low wage growth in 2020 and 2021**
Annual wage growth and wage expectations. Percent



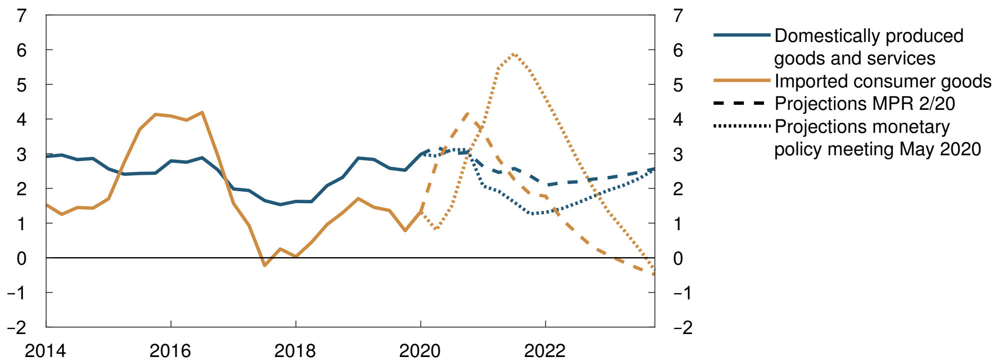

Sources: Epinion, Statistics Norway and Norges Bank

**Faster rise in import prices**
In 2019, consumer prices in Norway rose by 2.2%. So far in 2020, lower energy prices have contributed to a markedly slower rise in the consumer price index (CPI). At the same time, the rise in the CPI adjusted for tax changes and excluding energy products (CPI-ATE) has accelerated. In May, 12-month CPI inflation and 12-month CPI-ATE inflation stood at 1.3% and 3.0%, respectively. The measurement of consumer prices in 2020 will be affected by special conditions related to Covid-19 (see box).

Twelve-month CPI-ATE inflation showed a clear rise between March and May, primarily owing to higher imported goods inflation. Broken down by goods components, prices for cars, home interior products, household appliances and fruit and vegetables in particular showed the fastest rise. Higher imported inflation reflects the krone depreciation through winter and spring. In the projections from the time of the May monetary policy meeting, imported goods inflation was assumed to accelerate markedly. The rise appears to have started earlier than expected. The 12-month rise in prices for domestically produced goods and services increased slightly between March and May.

CPI-ATE inflation is projected to accelerate further in the coming quarters (Chart 3.16). Together with the past krone depreciation, higher costs and lower productivity owing to the Covid-19 outbreak could push up the rise in prices for some goods and services.

**Chart 3.16 Weak krone will push up inflation**
Domestically produced goods and services and imported goods in the CPI-ATE. Four-quarter change. Percent




Sources: Statistics Norway and Norges Bank

**MEASURING THE CPI DURING THE COVID-19 OUTBREAK**

The CPI comprises a basket of goods and services weighted to reflect the goods and services consumed by households. The weights are updated in January of each year and remain unchanged through December. The Covid-19 outbreak and extensive containment measures have had an impact on household consumption, and there was no turnover for some service components in April. Even though a number of services were available again in May and thus were included in the CPI as usual, the rise in prices for a number of services was extrapolated using the change in the total CPI. In May, this pertained to fitness centres, amusement parks, sports events and domestic air transport. For international air transport and package holidays, the rise in prices was extrapolated using seasonal factors.[1]

Changes in tax rates also affected the CPI-ATE in April and May. The low VAT rate has been reduced from 12% to 6% for the period 1 April – 31 October 2020. The low VAT rate applies, for example, to personal transport and hotel stays and to cinema admission, sports events, amusement parks and experience centres. If businesses lower their selling prices by less than implied by the reduction in the VAT rate, the tax-adjusted price level will rise, all else equal. Extrapolated prices have not been subject to tax adjustment by Statistics Norway, only measured prices.

1 See https://www.ssb.no/en/priser-og-prisindekser/artikler-og-publikasjoner/cpi-up-1.3-per-cent-last-12-months

At the same time, delays and disruptions in global supply chains may result in reduced supply of some goods and episodes of price increases. On the other hand, low wage growth, weak demand and high unemployment will restrain the rise in prices for domestic goods and services.

Compared with the May projections, a stronger krone suggests that the rise in import prices will be less pronounced than expected. On the other hand, prospects for lower unemployment and higher wage growth than previously assumed imply that domestic inflation will be higher than projected in May. Overall, the CPI-ATE projections have been revised up for 2020 and revised down for the years ahead.

Energy prices are expected to increase in pace with futures prices for electricity and fuel. Together with higher CPI-ATE inflation, this will contribute to a rise in CPI inflation. Inflation in 2021 is projected to be higher than the inflation target, but will moderate thereafter to somewhat below 2% towards the end of the projection period.

With the current path for CPI inflation and wage growth, real wages in 2023 should be at about the same level as in 2019. The projection for real wages has been revised up somewhat from May, reflecting prospects for lower unemployment, slightly higher productivity growth and slightly stronger terms of trade than assumed earlier.

Price developments are shrouded in uncertainty. There have been considerable movements in the krone exchange rate in 2020. A markedly weaker or stronger krone than currently envisaged will affect the outlook for inflation. Furthermore, there is a risk that shortages of some goods or services may drive up prices as demand picks up further. In addition, the price-driving effect of lower productivity and higher costs owing to firms' containment measures may be greater than currently assumed. On the other hand, if the downturn proves more prolonged than assumed, price and wage inflation may turn out lower.

## GOVERNMENT BUDGET DEFICIT

With the implementation of extensive economic measures, lower oil and gas prices and oil production cuts, government spending in 2020 is expected to be appreciably higher than total revenues. The last time the central government budget showed a deficit was in the first half of the 1990s.

When the central government budget for 2020 was adopted before Christmas 2019, there were prospects for a total surplus of NOK 255bn in 2020. Now the outlook has reversed to a deficit of more than NOK 110bn or almost 4% of mainland GDP (Chart 3.A).

Some of the deficit is because weak economic growth is in itself reducing government revenues from the mainland economy. At the same time, government spending on unemployment benefit is increasing. In the most recent budget proposition, these factors are projected to increase the deficit by NOK 83bn in 2020.

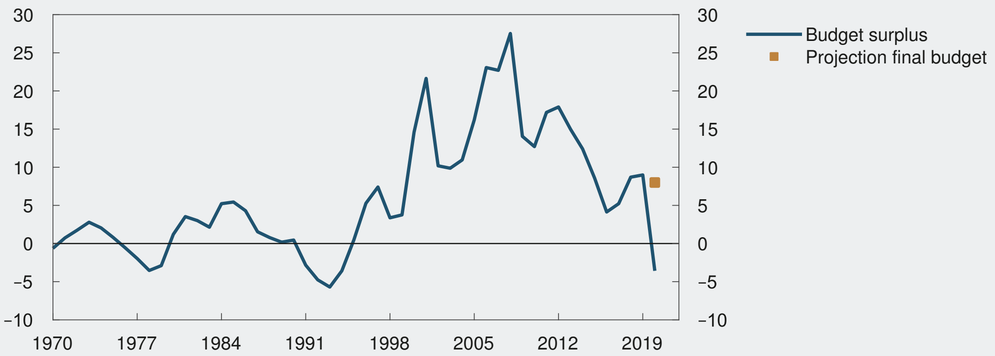
Second, lower oil revenues are contributing to the deficit. The projection for the government's net cash flow from petroleum activity has been revised down by around NOK 130bn since 2019, on the back of lower oil and gas prices, but also due to the decision to cut oil production and the changes in petroleum taxation.

In addition, economic measures have been launched that are projected to weaken the budget balance in 2020 by NOK 166bn. It is only these latter measures that affect the structural non-oil deficit, which is a widely used fiscal policy indicator.

### NOK 98bn in support for businesses

NOK 98bn of the NOK 166bn has been provided to compensate for reduced income for businesses. The largest expenditure item is the scheme where the government covers some of the fixed costs for firms with a large fall in turnover. This is estimated to increase the government's expenditure by NOK 30bn by the time the scheme is wound down at the end of August. So far, just over NOK 2bn has been disbursed through the scheme.

**Chart 3.A Budget deficit in 2020**
Total surplus, central government budget and the Government Pension Fund. Percent of trend mainland GDP




Source: Ministry of Finance and Norges Bank

Support measures totalling NOK 14bn specifically for the airline industry have been introduced in 2020, including a guarantee scheme for airlines, temporary tax relief, higher allocations to Avinor and support to maintain domestic flight routes.

The NOK 98bn also includes a loss provision of NOK 10bn on the government loan guarantee scheme via banks, which has an overall limit of NOK 50bn.

Other business support measures include reduced employer contributions in May and June, a reduction in the lower VAT rate from 12% to 6% from April up to end-October and a reduction in the period for which employers are required to pay wages for employees on furlough, childcare leave and coronavirus-related sickness leave. A scheme has also been launched where firms that retain furloughed workers will receive wage subsidies in July and August 2020.

Income support schemes have also been expanded as a result of the Covid-19 outbreak. In addition to covering a large part of the bill for furloughed employees and coronavirus-related sickness absence, it has been decided that the government will pay employees full wages (up to 6 times the National Insurance Basic Amount, which is currently about EUR 10 000 per year) instead of unemployment benefits for up to 20 days of the furlough period. The number of days of parental childcare leave have been increased, unemployment benefit rates for workers on low incomes or with insufficient benefit entitlements have been raised, and new support schemes have been established for the self-employed and freelancers, apprentices and students. In sum, this is estimated to increase government expenditure by NOK 27bn in 2020.

The economic measures include higher budgetary limits for public sector agencies with a particular responsibility for managing the Covid-19 outbreak. Allocations to the health sector, the Norwegian Labour and Welfare Administration (NAV), the police and local governments have been increased by around NOK 25bn. Local government subsidies earmarked for maintenance and rehabilitation are included in this amount.

A number of other support measures do not affect the budget deficit in 2020 to any great extent. These include government loan and guarantee schemes amounting to close to NOK 130bn (only loss provisions affect the budget balance) and deferment of a number of direct and indirect tax payments.

**Lower petroleum revenue spending ahead**

In sum, with the measures implemented, the structural non-oil deficit is estimated to be NOK 429bn in 2020, or 13.4% of trend GDP for mainland Norway, an increase of 5.4 percentage points from 2019.

The structural deficit is equivalent to 4.3% of the value of the Government Pension Fund Global (GPFG) at the beginning of 2020. As at the May monetary policy meeting, the structural deficit is assumed to decrease as a share of the value of the GPFG ahead. Expenditure on the support measures will fall as economic activity picks up. At the same time, growth in demand from the public sector is assumed to rise as the containment measures are wound down. In sum, these conditions will contribute to a structural deficit above the 3% path throughout the projection period (Table 3 on page 53).

## HIGHER OIL PRICES AND TAX CHANGES DAMPEN THE FALL IN PETROLEUM INVESTMENT

The Covid-19 pandemic and the measures taken to contain it have led to a substantial fall in global oil consumption. Oil spot prices fell from over USD 65 per barrel in December 2019 to below USD 10 at their lowest in the second half of April. Prices have subsequently picked up and have recently been around USD 40 per barrel. The upswing reflects expectations that oil consumption will pick up as containment measures are relaxed. At the same time, the OPEC+ countries have cut oil production considerably and non-OPEC+ production has fallen markedly. Thus, the risk of oil exceeding storage capacity has been reduced.

High oil inventories after oversupply in the first half of 2020 may restrain a further increase in prices. The rise in prices may also be dampened when some non-OPEC+ oil production facilities, temporarily closed down owing to very low oil prices, again become profitable.

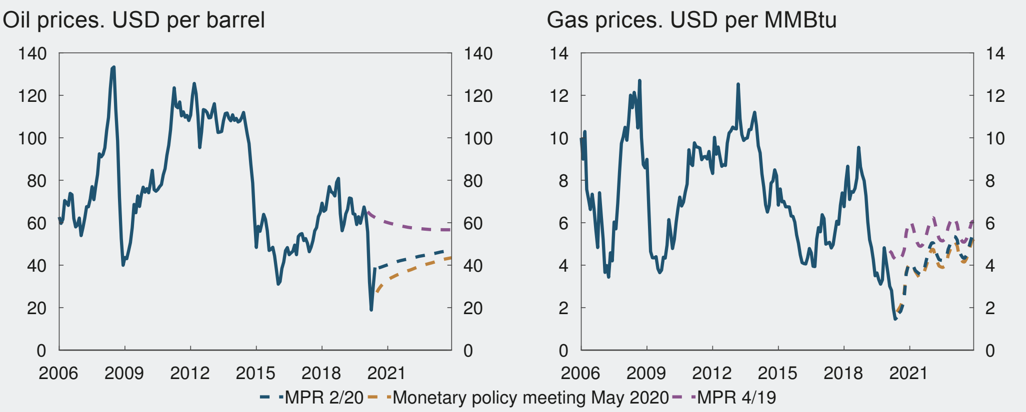
Oil futures prices indicate that oil prices will rise to USD 50 per barrel at the end of 2023. This is higher than assumed at the time of the *Monetary Policy Update* published in May, but lower than assumed in the December 2019 *Monetary Policy Report* (Chart 3.B).

European gas prices have continued to fall, reaching their lowest level in 20 years. Gas consumption in Europe has decreased because of the Covid-19 pandemic and mild weather over the past winter. At the same time, a continued high supply of gas to Europe has led to very high gas inventories. Fears that gas storage could reach maximum capacity may contribute to keeping gas prices down in the short term.

Gas futures prices indicate that gas prices could rebound from autumn 2020. Gas consumption could increase again as containment measures are relaxed. The supply of liquefied natural gas (LNG) to Europe may also decrease when, as expected, gas consumption in Asia picks up and growth in LNG exports from leading producer countries likely slows. Futures prices indicate that European gas prices could be higher from 2021 than just before the Covid-19 outbreak, but somewhat lower than in the preceding years (Chart 3.B).

Norges Bank assumes that oil and gas prices will move in line with futures prices and that oil companies will operate under the same assumption. Futures prices indicate that oil companies' cash flows will be markedly weaker in the years ahead than expected

**Chart 3.B Oil and natural gas prices**



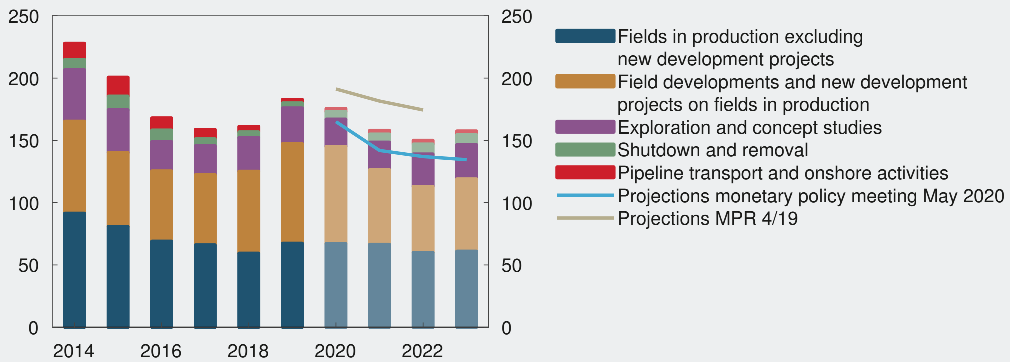

Sources: Norsk Petroleum, Refinitiv Datastream and Norges Bank before the Covid-19 pandemic. Futures prices also indicate that oil prices will be slightly lower in the longer term than previously expected, which indicates that expected investment profitability is also lower than previously. At the same time, uncertainty about future oil and gas prices has increased as a result of the pandemic. Oil companies have therefore increased their required rate of return on new projects. This means in isolation that fewer projects will be considered profitable. With heightened uncertainty, weakened cash flows and lower price expectations, oil companies announced substantial cuts in their investment plans in March-April.

To limit the decline in the oil production and oil service industries, the Storting (Norwegian parliament) recently adopted temporary changes to the petroleum tax system. In 2020 and 2021, oil companies will be able to immediately depreciate production equipment and pipelines in the taxable basis for the special tax that oil companies pay in addition to standard corporation tax. The companies thereby pay less tax in 2020 and 2021 than they would have done under the ordinary petroleum tax system, where investments must be depreciated linearly over six years. The deduction in the special tax base has also been increased from 20.8% to 24%. Investments in new projects receive special treatment in that costs can be written off immediately in the special tax up to the start of production if the plan for development and operation (PDO) is submitted before the end of 2022.

With the changes in tax deductions and depreciation rules, oil companies' cash flows will be higher in the short term and new projects will be more profitable after tax. The timeframe further spurs investment as it provides oil companies with incentives to launch projects now on hold and bring forward investment projects that were planned to start up in a few years' time. Norges Bank expects that the tax changes – in combination with the expected path of petroleum prices – will fuel investment in fields in production in 2020 and 2021 and encourage oil companies to launch a number of development projects ahead.

Investment on the Norwegian shelf has picked up appreciably over the past couple of years after falling markedly between 2013 and 2017 (Chart 3.C), reflecting several new development projects launched by oil companies since autumn 2017. Investment in these projects will fall somewhat in 2020 and then markedly in 2021 and 2022 as the projects reach completion. This decline will to some extent be offset by increased investment in

**Chart 3.C Prospects for lower investment in the petroleum industry**
Petroleum investment. At constant 2020 prices. In billions of NOK




Sources: Statistics Norway and Norges Bank

new development projects. However, most of the new projects will not start up until 2022, implying a sharp drop in project investment over the next two years (Chart 3.C). New development projects, such as Wisting and Noaka, will thereafter contribute to an appreciable rise in project investment towards the end of the period (Chart 3.D).

Norges Bank expects investment in drilling and operation in fields in production to remain at about the same level in 2020 and 2021 as in 2019. The fall in oil and gas prices is leading in isolation to lower investment in fields in production, but this will be offset by temporary changes in petroleum taxation. Investment in fields in production is projected to fall when the tax changes are reversed in 2022, edging up again in 2023.

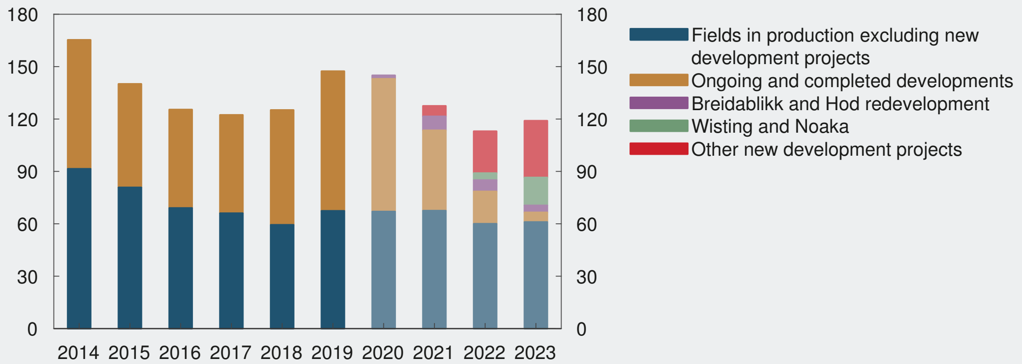
Oil companies have made substantial cuts in seismic and exploration costs as a result of the fall in oil and gas prices since the beginning of 2020. While in December 2019 exploration costs were projected to increase ahead, exploration investment is now projected to fall by over 20% in 2020 and remain stable in 2021. Exploration activity is expected to pick up somewhat again thereafter as a result of a projected increase in oil and gas prices.

Overall, investment in oil and gas activities is projected to fall by 4% between 2019 and 2020, entailing a sharp fall through 2020, and a further fall of 15% between 2020 and 2022. Mainly as a result of increased investment in development projects, Norges Bank expects investment to rise by 5% in 2023. Projected investment is lower than before the Covid-19 pandemic (Chart 3.C), but higher than expected in May. The projections have been revised up in the light of the investment intentions survey for Q2, the rise in oil prices since May and because it appears that the effect of tax changes on investment will be more pronounced going forward than assumed in May.

The decline in petroleum investment will lead to lower activity in the oil service industry. Oil service companies also provide substantial operating and maintenance services on the Norwegian shelf. Containment measures and the fall in oil and gas prices have also led oil companies on the Norwegian shelf to cut operating and maintenance costs. These costs are expected to fall by around 10% in 2020. Export markets for Norwegian oil services will probably fall markedly in 2020, with a further fall in 2021.

**Chart 3.D New development projects will boost investment further out**

Investment in field development and fields in production. At constant 2020 prices. In billions of NOK



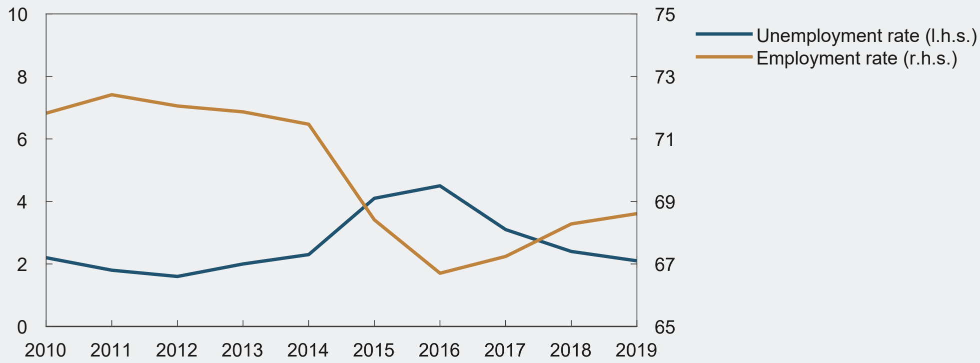

Sources: Statistics Norway and Norges Bank

## LONG-TERM CONSEQUENCES FOR EMPLOYMENT?

The Covid-19 pandemic has led to a sharp downturn in the Norwegian economy. Activity in many sectors was severely restricted or came to a complete halt owing to the Covid-19 outbreak and the extensive measures implemented to contain it. The pandemic and the containment measures are most likely temporary, and it is assumed that the business cycle has passed its trough and will normalise by the end of the projection horizon. There is nonetheless a risk of a more prolonged negative impact on output and employment. A new analysis conducted by Norges Bank shows that there was a prolonged impact on the labour market in Western Norway following the oil price fall in 2014, even though the economy had recovered, as measured by various other indicators.

There may be several reasons why employment becomes entrenched at a lower level after a negative shock. One of the classic explanations in the economic literature is that the power balance in wage formation changes when unemployment is high.[1] If the unemployed, particularly the long-term unemployed, have little influence over wage formation, wages can reach levels that are too high. If wages are excessively high, firms may hire fewer people, resulting in employment that is too low. Another explanation frequently put forward is that workers' skills depreciate after a long period of unemployment.[2] Others suggest that job seekers can become discouraged and exit the labour force when jobs become difficult to find.[3] There are also several studies showing that unemployment at a young age is particularly damaging in terms of future job prospects.[4] This may mean that persons that are unemployed, particularly for an extended period, are less likely to find a job again when labour demand normalises.[5] Another reason may be that sharp downturns lead to extensive economic restructuring, with ensuing bankruptcies or downscaling. It takes time to establish new jobs. New jobs may require different experience or qualifications, or may be in a different geographical location. A person

**Chart 3.E Registered employment and unemployment in Rogaland**
Unemployment rate and employment as a percentage of the population aged 15–74. Percent




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

1 Blanchard, Olivier J. and Summers, Lawrence H. "Hysteresis and European Unemployment". I Stanley Fischer (ed.), NBER Macroeconomics Annual. MIT Press, September, 1986.
2 Edin, Per-Anders and Gustavsson, Magnus "Time out of Work and Skill Depreciation". ILR Review, Vol 61, Issue 2, 2008.
3 Benati, Luca "Some empirical evidence on the 'discouraged worker' effect". Economic Letters, Volume 70, Issue 3, March 2001.
4 See, eg, Gregg, Paul and Tominey, Emma "The wage scar from male youth unemployment". Labor Economics, Volume 12, Issue 4, August 2005.
5 See, eg, Huttunen, Kristiina, Møen, Jarle and Salvanes, Kjell G. "How Destructive is Creative Destruction? Effects of Job Loss on Job Mobility, Withdrawal and Income". Journal of the European Economic Association, Vol 9, Issue 5, October 2011 for results based on Norwegian data.

that loses a job may therefore spend a long time finding a new employer, and employment may take time to return to the pre-crisis level.

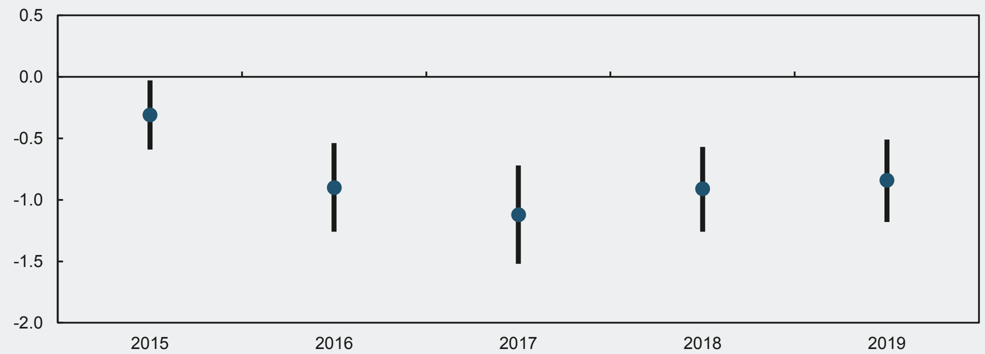
Severe economic contractions can affect employment for a long time. Yagan[6] estimates that about half of the decline in the employment level in the US between 2007 and 2015 can be attributed to the financial crisis. The study is based on individual-level tax data and shows that persons living in areas in the US severely affected by the 2007–2008 financial crisis were still less likely to be employed seven years later.

The same applies to employment in Norway, which has not recovered in the areas most severely affected by the fall in oil prices in 2014. Chart 3.E shows unemployment and the employment ratio in Rogaland between 2010 and 2019. Unemployment rose sharply after 2014 and peaked at 4.5% in 2016. The employment rate fell sharply from about 71% to 67% in the same period. In 2019, unemployment had fallen back to about 2%, while employment was still below the level prevailing before the oil price fall.

In order to explore whether the oil crisis had a long-term effect on employment, a study was conducted based on individual-level data.[7] The analysis was applied to the core group, aged 30–54, focusing on wage earners (not self-employed) resident in Norway throughout the period. The core group was divided into an exposed and less exposed group. The exposed group consisted of persons resident in municipalities with a strong rise in unemployment between 2014 and 2015 and comprised 15% of the population. Then developments in employment levels[8] in the two groups were compared. Employment fell significantly more between 2013 and 2019 for persons in the exposed group than in the less exposed group. Chart 3.F shows the relative change in employment ratios for the two groups compared with the average for the years before the oil price fall. The negative figures show that the persons exposed to the largest increase in unemployment during the oil price fall experienced a larger decrease in employment in

**Chart 3.F Relative change in employment ratios after the oil price fall**

Difference in employment growth between the exposed and the less exposed group. Percentage points




Source: Norges Bank

6 Yagan, Danny "Employment Hysteresis from the Great Recession" Journal of Political Economy, Vol 127, no. 5, October 2019.
7 Documentation of the analysis will be included in a forthcoming *Staff Memo* by Sigurd Mølster Galaasen and Nicolai Ellingsen.
8 Persons with an annual income above the National Insurance Basic Amount (currently about EUR 10 000 per year) are considered employed.

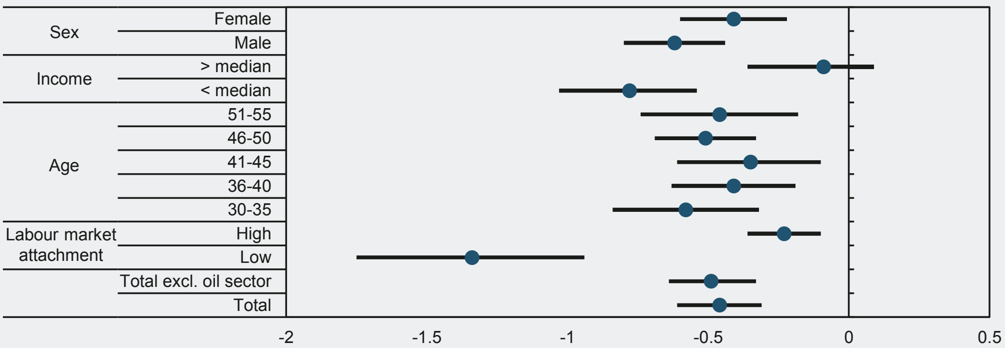
the following years.[9] The difference is statistically significant for all the years and the effect is approximately the same as Yagan (2019) finds for the US.

We also find that among those exposed to an increase in unemployment between 2014 and 2015, there is a clear relationship between the size of the increase in unemployment and the size of the fall in employment between 2014 and 2019. The results are most pronounced for persons with incomes below the median income and those with low labour market attachment in 2013 (Chart 3.G). We also find that the relationship is not weakened when persons working in oil-related industries in 2013 are excluded.

There is considerable uncertainty surrounding the potential long-term effects of the Covid-19 pandemic on the labour market. In this *Report*, it is assumed that the employment rate will be about ½% lower at the end of the projection period than assumed in the March *Report*, although capacity utilisation is close to a normal level. Today's unemployment level in Norway is far higher than the levels seen in Rogaland in 2015 and 2016 and may in isolation suggest that the long-term consequences for employment may be more negative than assumed. The sharp rise in youth unemployment also increases the risk of long-term consequences for employment. On the other hand, a large share of the unemployed are furloughed workers and probably have closer ties to a workplace than other unemployed persons. Many furloughed employees have already returned to work in pace with the pick-up in economic activity. A rapid normalisation of unemployment may contribute to reducing the likelihood that employees lose skills or the motivation to seek work.

The risk that the current economic contraction will have long-term consequences for employment is probably greater the deeper and more prolonged the downturn proves to be. When the duration of the economic downturn becomes clearer, we will have a better basis for estimating the long-term consequences for the labour market.

**Chart 3.G Estimates for selected subgroups**
Relationship between the magnitude of the unemployment shock and the employment ratio. Regression coefficient




Source: Norges Bank

9 Controlled for age, income group and industry at the beginning of 2014. The results are robust to additional control variables and are not driven by pre-trends in the exposed group.

## UNUSUALLY HIGH FORECAST UNCERTAINTY

The Norwegian economy was thrown into a deep downturn as a result of the Covid-19 pandemic. The situation in the Norwegian economy has improved since the monetary policy meeting in May, but uncertainty about developments ahead remains unusually high, making it more demanding than usual to make forecasts. This was part of the background for including two alternative scenarios for the future path of the Norwegian economy in the *Monetary Policy Update* published in May.

Norges Bank generally uses a broad set of data and short-term models to gauge the current situation in the economy. The macroeconomic model NEMO is used to make forecasts of the policy rate, inflation and other key variables for the Norwegian economy for the coming years. When the economy is being driven by shocks without historical parallels, it is uncertain whether the existing model apparatus is suited to shedding light on the current situation and to analysing developments ahead. Since models are always simplifications and are based on a number of more or less realistic assumptions, judgement-based assessments are important, particularly in periods of unusually high uncertainty.

In the first phase of the Covid-19 pandemic, with extensive containment measures and an economic lockdown, there was substantial uncertainty about the current economic situation and the magnitude of the decline in economic activity. Key data tend to be published with a substantial lag and are therefore poorly suited to providing a timely picture of the economy in periods of abrupt shifts. Information from enterprises in Norges Bank's Regional Network is particularly valuable in these circumstances. In addition, we drew on new data sources that are updated frequently. Daily data for the use of bank cards via BankAxept were particularly useful, as they provided an early indication of the impact of containment measures on private consumption. Weekly unemployment furlough data by sector from NAV have been crucial in gauging labour market developments. Financial variables and various text-based indicators that can be observed on a daily basis have given us a better understanding of the uncertainty we face. On the basis of the expanded information base, we have developed new short-term models for GDP that better capture changes in the activity level. Overall, new data sources and models enabled us to gain a fairly clear picture of the downturn in the Norwegian economy. The same data sources and models now indicate that the decline has reversed in part and that activity has rebounded faster than expected.

Chart 3.H shows model-based forecasts for mainland GDP for 2020 Q2. The orange line shows a projection based on the Bank's System for Averaging short-term Models (SAM). The blue line, with accompanying bands representing uncertainty, shows a projection based on a set of newly developed short-term models that use high-frequency information. The new models capture the sharp fall in GDP well, but it is uncertain how well they would perform under more normal cyclical conditions.

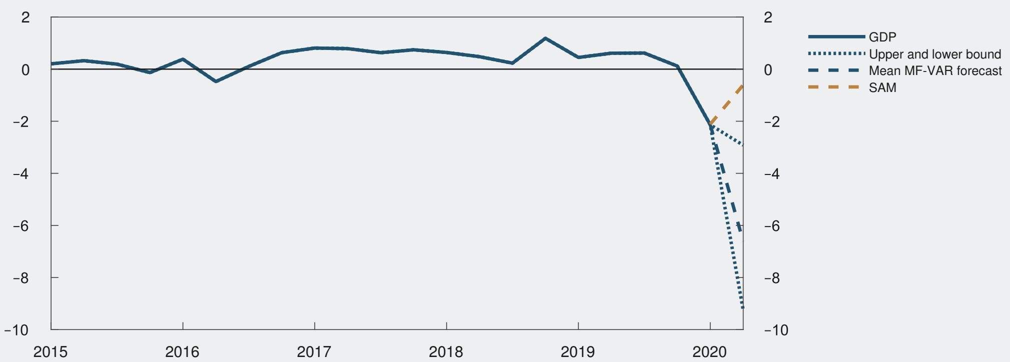
The Norwegian economy is now in a phase where government containment measures are being eased, with some degree of normalisation. In this phase, a good understanding of the underlying driving forces is particularly important in terms of forecasting economic developments. Because it is generally not possible to observe the underlying driving forces, they must be estimated indirectly based on observable variables and assumed economic relationships. Such forecasts are shrouded in uncertainty.

In macroeconomic models, economic developments are driven by a large number of different shocks. The shocks related to the pandemic can roughly be divided into either supply or demand shocks. On the one hand, the Covid-19 situation affects the labour supply because people fall ill or are at home in quarantine. The labour supply may also contract, out of fears of increased exposure to contagion at work. Productivity may fall because of large numbers working from home. Businesses are ordered to close and supply chains may be disrupted. On the other hand, households may reduce spending on goods and services associated with the risk of contagion, either because they choose to do so or because of mandatory containment measures. Moreover, the sharp decline in activity among trading partners will lead to lower demand for Norwegian export goods and services.

Since NEMO does not incorporate interactions between Covid-19 and economic activity, the pandemic is translated into shocks included in the model. Therefore, it becomes important to determine to what extent the pandemic should be interpreted as a supply or demand shock. In practice it is not easy to make a clear distinction. Developments now indicate that the Covid-19 pandemic mainly can be interpreted as a negative demand shock.

The uncertainty surrounding economy developments ahead is considerably higher than normal. There are two reasons for this. First, there is a tendency for uncertainty to increase when the economy is exposed to large negative shocks. Second, the evolution of the pandemic is on its own associated with substantial uncertainty of both a medical and economic nature. Normally, we illustrate the uncertainty surrounding the projections with the aid of fan charts based on historical forecast errors or estimated shock in NEMO. The probability bands summarise the uncertainty around more normal economic cycles. In the current situation, we have less of a basis for quantifying the uncertainty. We have therefore chosen to present a baseline scenario without probability bands for the time being.

**Chart 3.H Projections from new, provisional system for short-term models and SAM**
GDP for mainland Norway. Quarterly growth. Seasonally adjusted. Percent




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

## MODEL-BASED INTERPRETATION OF NEW INFORMATION

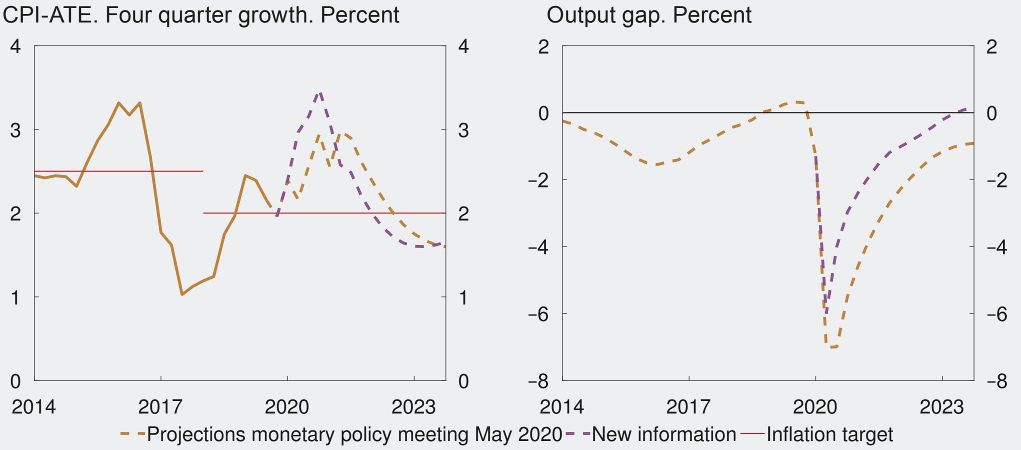
In assessing the effects of new information and new assessments on the outlook for inflation and the output gap, a model-based exercise is performed where the policy rate is held constant at zero, as in the *Monetary Policy Update* in May. Norges Bank's macro-economic model NEMO[1] is used in this exercise, where updated projections for the current and next quarter are applied. For exogenous variables, updated projections for the entire projection period are used and comprise the following variables: foreign import growth, external inflation, foreign interest rates, oil prices, domestic money market premiums, domestic public demand and domestic petroleum investment.

The model-based exercise suggests that CPI-ATE inflation will be higher in the short term and little changed further ahead, compared with May (Chart 3.I). The rise in the short term can be primarily explained by higher imported goods inflation. This partly reflects the krone depreciation through winter and spring, with a faster pass-through than envisaged in May. A stronger-than-expected krone will contribute to lower inflation further ahead. Higher oil prices and less uncertainty in global financial markets have probably contributed to strengthening the krone. Prospects for higher wage growth contribute to a stronger rise in prices towards the end of the forecast horizon.

Activity in the Norwegian economy has picked up again over spring. Capacity utilisation is assessed to be higher than assumed earlier (Chart 3.I). This primarily reflects an upward revision of the short-term projections. The infection rate has dropped, and the authorities have gradually eased containment measures. Unemployment has fallen from the very high levels in March and April. Household consumption and house prices have picked up faster than expected. Higher petroleum investment and increased public demand contribute in isolation to a faster recovery.

The new information suggests on balance a higher policy rate path.

**Chart 3.I Projections conditioned on new information on economic developments and the technical assumption of the policy rate from the monetary policy meeting in May 2020**




Sources: Statistics Norway and Norges Bank

1 NEMO is described in Kravik, E.M and Y. Mimir (2019) "Navigating with NEMO". *Staff Memo* 5/2019. Norges Bank.

# 4 Financial stability assessment
## – decision basis for the countercyclical capital buffer

**Norges Bank's Monetary Policy and Financial Stability Committee has advised the Ministry of Finance to keep the countercyclical capital buffer requirement unchanged at 1.0%. On the advice of Norges Bank, the countercyclical capital buffer was reduced from 2.5% to 1.0% as from 13 March. This was related to the outbreak of Covid-19 and the measures to contain it, which have led to a sharp fall in activity in the Norwegian economy. A lower buffer rate reduces the risk of tighter lending standards, which could amplify the downturn.**

**Norwegian banks are solid. Banks' credit losses increased in 2020 Q1. Looking ahead, there is considerable uncertainty surrounding developments in bank losses, although the Bank's calculations indicate that banks can cope with losses while maintaining credit supply. Households and businesses appear to have ample access to credit. Should higher bank losses lead to clearly reduced access to credit, a further reduction in the countercyclical capital buffer may be appropriate. In the event of a renewed build-up of financial imbalances partly owing to persistently low interest rates, increasing the buffer may be appropriate. The Committee does not expect to advise the Ministry to increase the buffer again until 2021 Q1 at the earliest.**

### 4.1 Financial imbalances and access to credit

The Covid-19 pandemic has led to a sharp downturn in the Norwegian economy. Prior to the reduction, the buffer was set at 2.5% against the background of a build-up of financial imbalances over a long period, primarily in credit and real estate markets. In recent years, debt growth has slowed and house price inflation has been moderate. Towards the end of 2019, the assessment was that financial imbalances were no longer building up and that there were some signs that they were receding. So far in 2020, developments in credit and property prices have not changed this assessment.[1]

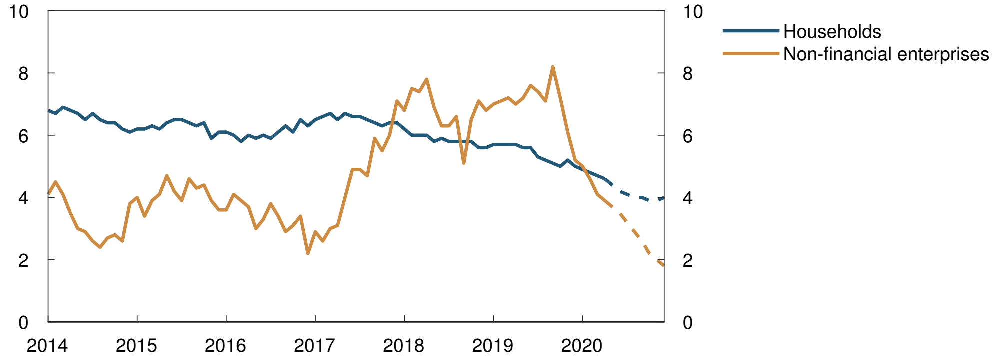
#### Households and businesses appear to have ample access to credit

Mainland corporate credit grew markedly faster than GDP in the years prior to the banking crisis and financial crisis, but has risen more in pace with GDP over the past ten years. The level of Norwegian corporate sector debt does not stand out in relation to debt levels in other European countries.[2]

1 Some of the indicators that are normally assessed by the Bank are now rising, owing to lower GDP growth. Part of this rise will be temporary. When GDP normalises, the indicators will fall back. Short-term, temporary changes in the indicators provide little basis for changing the assessment of financial imbalances. A complete overview with updated indicators is available on Norges Bank's website.

2 See Hjelseth, I. and H. Solheim (2020) "Har norske foretak høy gjeld sammenliknet med nivået i andre land?" [Do Norwegian companies have high debt compared with other countries?] Published on the Bankplassen blog on 6 March 2020 (Norwegian only).

**Chart 4.1 Credit growth is slowing**
Mainland Norway. Twelve-month change in transactions. Percent



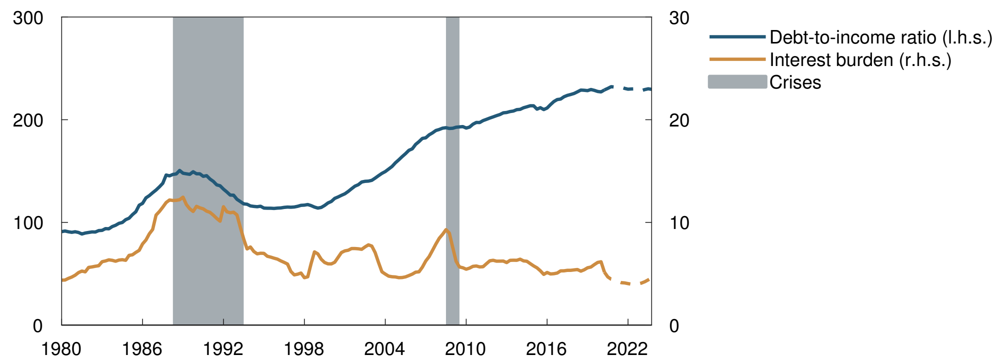

Sources: Statistics Norway and Norges Bank

Growth in corporate debt from domestic sources rose through 2017 in pace with strong growth in business investment, but has fallen markedly over the past six months (Chart 4.1). In April, 12-month growth fell somewhat further to 3.9%, down from 4.1% in March, as projected at the time of the May monetary policy meeting. Government measures are supporting both the supply of and demand for credit. In March, bond market risk premiums increased markedly and issuance was low. However, issuance volumes have picked up since April. Risk premiums have fallen since March, but remain at fairly high levels (see also Section 2).

Growth in corporate credit is expected to slow further in the coming period, partly reflecting lower borrowing needs owing to lower business investment.[3] The decline in credit growth is being dampened by an increase in liquidity needs of many businesses, which is also increasing the use of principal payment deferrals and government lending schemes.

Household debt-to-income ratios are at a high level (Chart 4.2). The downturn will increase debt-to-income ratios owing to weaker growth in disposable income in 2020, which makes households more vulnerable. Many households have the option of deferring

**Chart 4.2 Household debt-to-income ratios are expected to level off at a high level**
Percent




Sources: Statistics Norway and Norges Bank

3 See Section 3.1 for a detailed discussion of business investment.

principal payments, drawing on financial buffers or tightening consumption. The use of interest-only periods has recently increased. Lending rates have been reduced markedly, which has eased interest burdens. This has alleviated the situation for households. This also reduces the risk of a large number of households tightening consumption at the same time.

Since 2017, household credit growth has slowed (Chart 4.1), reflecting the preceding interest rate increases and the introduction of a number of measures in recent years by the authorities to restrain borrowing by vulnerable households. In April, 12-month growth in credit was 4.6%, down from 4.7% in March, as projected in May, which is the lowest rate of growth in almost 25 years.

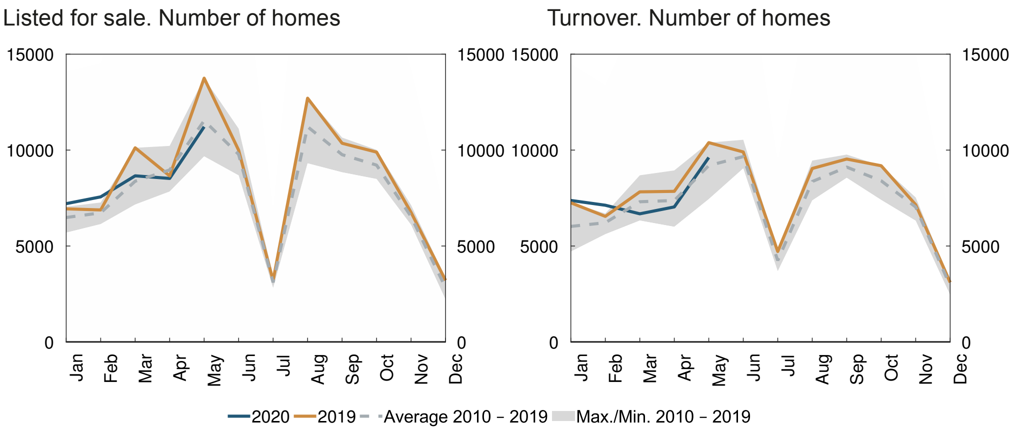
Credit growth is expected to edge down further in the coming period owing to reduced housing market turnover and a drop in consumption. The decline is dampened by increased use of interest-only periods. Somewhat further out, credit growth is expected to remain fairly stable (Chart 3.6 in Section 3.1). Household income growth is expected to pick up so that debt ratios level off ahead (Chart 4.2).

As a whole, creditworthy households and businesses appear to have ample access to credit. This is supported by the fact that banks have the capital and liquidity to maintain credit supply (see Section 4.2). In Norges Bank's lending survey for 2020 Q1, banks announced that they expect to tighten their credit standards somewhat in Q2, but the degree of tightening is relatively small compared with previous downturns.

**The housing market appears robust and commercial property prices are decreasing**
Well-functioning real estate markets are important for households' and businesses' access to credit. This is because household debt is mortgage-dominated and the commercial real estate (CRE) sector represents the largest single-sector share of banks' corporate exposures.

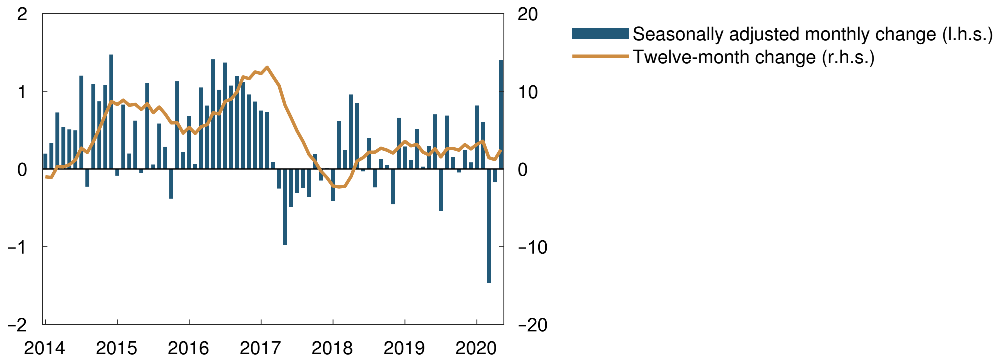
House prices remain at high levels after having risen faster than household income over a long period, entailing a financial system vulnerability. Since autumn 2017, house price inflation has been moderate and lower than household income growth, which has led to reduced vulnerability.

**Chart 4.3 Somewhat lower activity in the market for existing homes**




Sources: Eiendomsverdi, Finn.no and Real Estate Norway

**Chart 4.4 House prices fell in March, but the fall was offset in May**
Percent




Sources: Eiendomsverdi, Finn.no and Real Estate Norway

Since containment measures were implemented, housing market activity has slowed. After 12 March, housing market turnover fell markedly, but rebounded in April (Chart 4.3). The number of homes listed for sale declined less in the same period. In May, significantly fewer units were listed for sale than at the same time in 2019, while turnover was fairly similar. As a result, the number of unsold existing homes was lower in May than one year earlier, after having increased over the past year.

New home sales have fallen substantially more than existing home sales. At the same time, the number of new homes listed for sale has fallen more, so that the stock of unsold new homes has declined somewhat. In recent weeks, new home sales appear to have picked up again towards more normal levels. However, the decline in new home sales is expected to weigh on residential construction ahead (see Section 3.1).

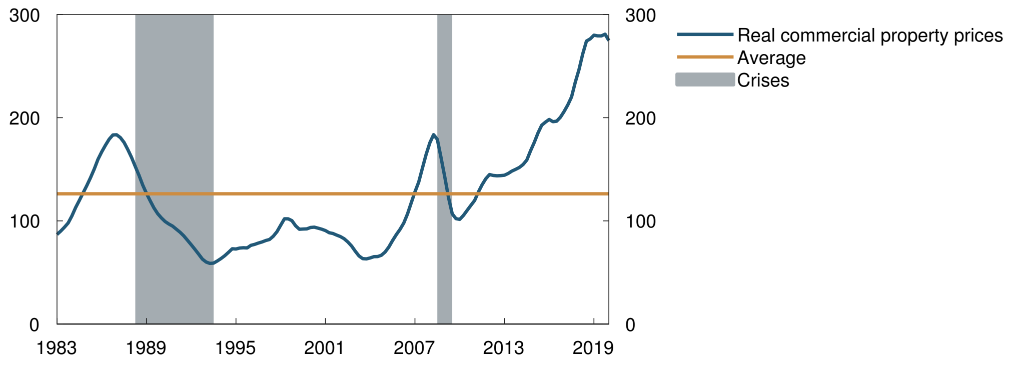
Housing market developments do not indicate a fall in prices ahead that will result in a further tightening of household consumption and higher bank losses. House prices fell considerably in March and slightly in April, but most of the fall was offset in May (Chart 4.4). The rapid improvement in the housing market indicates that markedly lower lending rates have had an effect and the market appears fairly well-balanced despite the extraordinary situation. Moderate house price inflation is expected ahead (see further discussion in Section 3.1).

High commercial property prices are one of the key financial system vulnerabilities. In the commercial real estate (CRE) sector, the impact of the downturn on owners of retail property and hotels is particularly severe. The office segment is especially important for financial stability since banks have substantial exposures to this segment. A relatively large share of the stock of office buildings is located in Oslo. Selling prices for prime real estate in Oslo rose for a long period and have reached a high level. Over the past year and a half, the rise has gradually slowed (Chart 4.5). In 2020 Q1, prices fell markedly. Selling prices are calculated as the ratio of rents to yields. Rents fell by almost 5% in Q1. At the same time, yields increased somewhat.

Rents in Oslo as a whole are little changed so far. The Bank's analyses indicate that office rents in Oslo as a whole are moving in line with developments in the real economy,[4] which implies that rents will decline somewhat ahead.

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

**Chart 4.5 Commercial property prices are falling**
Index. 1998 = 100



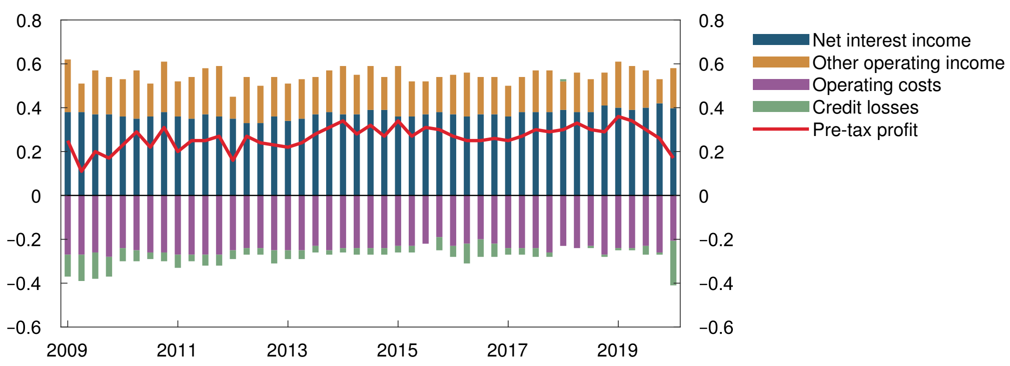

Sources: CBRE, Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

## 4.2 Banks

The financial market volatility triggered by Covid-19 has diminished further since the monetary policy meeting in May. Risk premiums on banks' wholesale funding are still somewhat higher than before the turbulence began (see Section 2). Funding conditions have an impact on the supply of credit to households and businesses. Since the turbulence began, there has been little senior bond issuance by banks and the bonds that have been issued have primarily been covered bonds for banks' own liquidity portfolios. Banks have ample liquidity and ample access to wholesale funding.

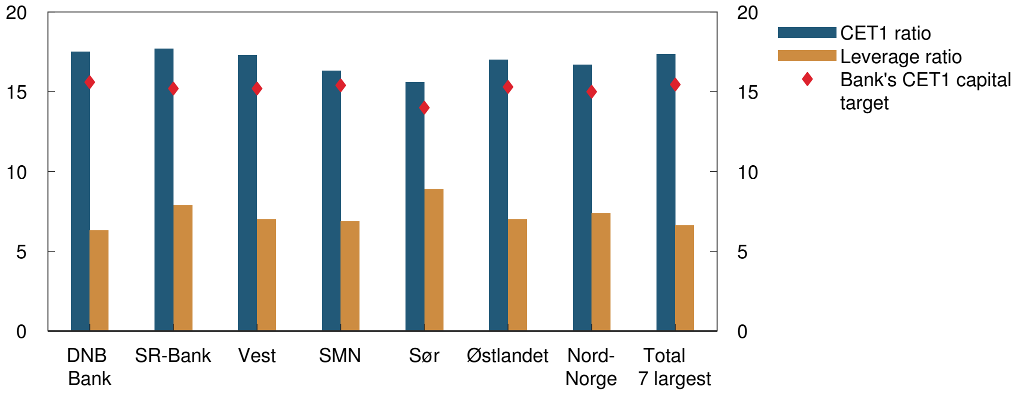
Banks' profitability has decreased. Low earnings may lead to a tightening of bank lending to ensure compliance with the capital adequacy requirement. In 2020 Q1, profitability fell considerably, particularly as a result of increased credit losses (Chart 4.6). Annualised credit losses corresponded to approximately 1% of lending, or around five times higher than the average for the past 20 years. Increased provisions for expected losses on lending to industries affected by the pandemic and the fall in oil prices pulled up the losses, with higher losses on exposures to oil service enterprises in particular. Lending to industries directly affected by containment measures accounts for a small share of total bank lending. Lower bank operating costs cushioned the decline in profitability in 2020 Q1.

**Chart 4.6 Higher bank credit losses, but the sharp fall in income has been cushioned by low operating costs**
Largest Norwegian-owned banking groups. Percent of average total assets




Sources: Banking groups' quarterly reports and Norges Bank

**Chart 4.7 Banks' capital adequacy is above banks' capital targets**
Largest Norwegian-owned banking groups. Percent




Sources: Banking groups' quarterly reports and Norges Bank

Large Norwegian banks are solid.[5] Their capital ratios remain above the capital targets and well above the capital requirements (Chart 4.7), owing in part to the reduction of the countercyclical capital buffer. During 2020 Q1, the large banks' Common Equity Tier 1 (CET1) capital ratios were reduced by about a half percentage point, owing to reduced profitability, continued lending growth, higher counterparty risk resulting from increased market volatility and a weaker krone. A number of authorities and European institutions have recommended that banks should not pay dividend in the current situation.[6] This has resulted in reduced and deferred dividend payouts by banks.

The leverage ratios of large Norwegian banks declined by 0.7 percentage point during 2020 Q1. This decline is relatively more pronounced than for the CET1 ratio and reduces banks' margins on the leverage ratio requirement, which is 6% for DNB and 5% for other banks (Chart 4.7). The decline in leverage ratios is partly the result of central banks supplying the banking system with a large volume of liquidity during the ongoing downturn. This means that banks have increased loans from and deposits with central banks. Increased central bank deposits reduce leverage ratios, but this reduction in itself is not an indication that banks have become less solid.

Norges Bank's estimations indicate that the reduction of the countercyclical capital buffer to 1% has contributed to the ability of banks to absorb losses of more than 2% of lending in 2020 while also maintaining credit supply, even in the event of a sharp fall in income.[7] Banks' credit losses in 2020 are expected to be below this level. Credit loss ratios of some banks in the Norwegian market were particularly high in Q1. If this continues, it could affect their credit provision capacity.

The evolution of credit losses is highly uncertain. A weaker economic outlook may result in higher credit losses than expected. Banks' credit losses are influenced by changes in expected developments in the household and corporate sectors. Of particular importance

5 See Section 4 of *Monetary Policy Update* May 2020 for a further discussion of banks.
6 In Norway, the Ministry of Finance, Finanstilsynet and Norges Bank have urged banks to defer dividend payouts and take account of the extraordinary situation facing the country. In the EU, the European Banking Authority and the European Central Bank, among others, have recommended that dividend payouts be deferred. On 8 June, the European Systemic Risk Board (ESRB) published a *Recommendation* that called for a number of financial institutions, including banks, to refrain from making dividend payouts (see ESRB Recommendation 2020/7).
7 In the calculation, Norges Bank assumes a decline in pre-tax operating profit before losses of 30% compared with 2019 and an increase of 5% in risk-weighted assets (the denominator of the capital adequacy ratio), ie Norwegian banks' credit growth is about 5% provided that the risk weights remain constant. Based on these projections, all of the seven largest Norwegian banks have a margin against expected total capital requirements above 0.5 percentage point. An implicit consequence of these assumptions is that an increase in risk-weighted assets in 2020 Q1 resulting from market turbulence, including heightened counterparty risk and currency depreciation, is considered to be temporary.

are the persistence of the pandemic and oil price developments. In the near term, the oil service industry in particular, where banks recorded increased credit losses in 2020 Q1, is facing substantial challenges. A number of oil service companies are struggling with high debt and weak earnings, which has been exacerbated by the fall in oil prices.[8]

If the downturn persists, the risk of losses is primarily linked to CRE exposures. CRE loans account for around 40% of banks' Norwegian corporate exposures and have historically been the main source of bank losses during crises. As a result of a rise in rents in the office market in Oslo in recent years, rents in contracts are generally lower than current market rents. This limits the risk of credit losses even if rents were to fall. In addition, the equity ratios of CRE companies have increased in recent years. Banks are therefore not expected to face substantial losses on CRE exposures in 2020 and 2021 (see box on page 50 for a further discussion).

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

## HOW SEVERELY WILL THE DOWNTURN AFFECT BANKS' CRE LOANS?

CRE loans account for approximately 40% of banks' Norwegian corporate exposures. In good times, losses on such loans are usually very low. The loans are secured on collateral and the companies generally have fixed revenue streams from long-term leases. However, in the event of severe downturns the CRE sector has often been vulnerable. In the Norwegian banking crisis in the early 1990s and in a number of countries following the financial crisis, CRE loans were an important source of losses.

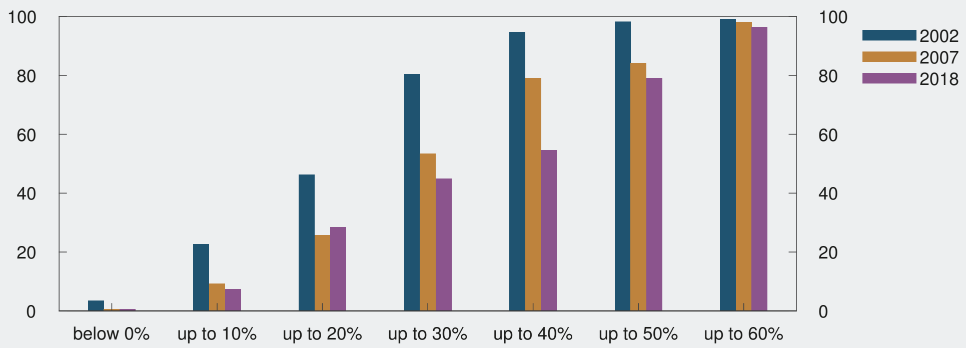
In recent years, a number of authorities have argued for strict CRE lending requirements for banks. Finanstilsynet (Financial Supervisory Authority of Norway) has pointed out the risk of having a large share of CRE exposures in their lending portfolios and has set Pillar 2 capital requirements when the share is high. In *Financial Stability Report* 2018, Norges Bank emphasised that banks should give considerable weight to loss experience from crises when calculating risk weights for commercial property loans. The Ministry of Finance has announced a temporary minimum requirement for average risk weights for commercial property loans effective from end-2020. Earlier in 2020, the Swedish financial supervisory authority (Finansinspektionen) tightened the capital requirement for CRE lending, which also applied to loans from branches of Swedish banks in the Norwegian market.

A significant share of Norwegian banks' CRE loans are in the office market, which has so far not been severely affected by the downturn. A relatively large share of the stock of office buildings is located in Oslo. As office rents in Oslo have risen in recent years, rents in existing contracts are lower than current market rents. Rents could therefore fall somewhat before CRE companies' cash flows weaken, which limits the risk of credit losses.

According to the Union Gruppen bank survey, over the past ten years, banks have tightened the equity capital requirement for loans secured on office buildings in central Oslo. The most recent available accounting data for 2018 show that CRE companies have strengthened their equity ratios in the same period. A smaller share of the debt is now held by companies that have lower equity ratios (Chart 4.A).

There is considerable uncertainty related to how the downturn will affect commercial property prices over time. If the downturn persists for longer than expected, the fall in prices could become substantial and entail large bank losses. Large CRE companies that recognise properties at fair value in their balance sheets may face a particularly high risk of writing down their equity capital if commercial property prices fall. At the start of 2020, most of these companies had high equity ratios and many will be able to cope with a fall in market value of over 30% before their equity capital becomes negative. With economic developments in line with the assumptions in this *Report*, developments in rents and equity ratios indicate that banks will not face substantial losses on CRE exposures in 2020 and 2021.

**Chart 4.A A smaller share of the debt is held by CRE companies with low equity ratios**
Share of bank and bond debt held by CRE companies with equity ratios shown on the horizontal scale. Percent




Source: Norges Bank

# Annex

## Detailed tables of projections

**Table 1 International projections**

| Change from projections in *Monetary Policy Update* May 2020 in brackets | Percentage change from previous year | | | | |
|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 | 2023 |
| **GDP** | | | | | |
| US | 2.3 (0) | -5.6 (0.4) | 4.1 (-0.5) | 3 (0.2) | 2.6 (0.5) |
| Euro area | 1.2 (0) | -8.9 (0) | 5.1 (0.3) | 3.3 (0.4) | 2.6 (0.6) |
| UK | 1.4 (0) | -10.2 (-3.2) | 6.2 (1.7) | 3.5 (1.1) | 3 (1.1) |
| Sweden | 1.2 (-0.1) | -4.7 (1.3) | 4.1 (-0.7) | 3.1 (0.4) | 2.4 (0.5) |
| China | 6.1 (-0.2) | 1 (0) | 6.6 (0) | 5.8 (0.6) | 6.8 (-1.3) |
| Trading partners[1] | 1.9 (-0.1) | -6.8 (-0.1) | 5.1 (0.2) | 3.5 (0.5) | 3.1 (0.4) |
| **Prices** | | | | | |
| Underlying inflation[2] | 1.4 (0) | 1 (-0.2) | 0.9 (-0.1) | 1.2 (-0.3) | 1.7 (0) |
| Prices for consumer goods imported to Norway[3] | 1.7 (0) | 0.9 (0.2) | 0.3 (0.1) | 0.6 (0) | 0.7 (0) |

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

Sources: Refinitiv Datastream and Norges Bank

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

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mar | Apr | May | Jun | Jul | Aug | Sep |
| **Consumer price index (CPI)** | | | | | | | |
| Actual | 0.7 | 0.8 | 1.3 | | | | |
| Projections in MPR 2/20 | | | | 1.4 | 1.4 | 1.9 | 2.1 |
| | | | | | | | |
| **CPI-ATE** | | | | | | | |
| Actual | 2.1 | 2.8 | 3.0 | | | | |
| Projections in MPR 2/20 | | | | 3.2 | 3.2 | 3.2 | 3.0 |
| | | | | | | | |
| **Imported consumer goods in the CPI-ATE** | | | | | | | |
| Actual | 0.7 | 2.2 | 2.8 | | | | |
| Projections in MPR 2/20 | | | | 3.1 | 3.2 | 3.8 | 3.5 |
| | | | | | | | |
| **Domestically produced goods and services in the CPI-ATE** | | | | | | | |
| Actual | 2.9 | 3.0 | 3.3 | | | | |
| Projections in MPR 2/20 | | | | 3.3 | 3.3 | 3.0 | 2.7 |

Sources: Statistics Norway and Norges Bank

## Table2b GDP for mainland Norway. Quarterly change. Seasonally adjusted. Percent

| | 2019 | 2020 | | |
|---|---|---|---|---|
| | Q4 | Q1 | Q2 | Q3 |
| Actual | 0.1 | -2.1 | | |
| Projections *Monetary Policy Update* May 2020 | | -1.9 | -7.4 | |
| Projections in MPR 2/20 | | | -6.1 | 5.0 |

Sources: Statistics Norway and Norges Bank

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

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Actual | -6.9 | -4.7 | | | | | |
| Projections in MPR 2/20 | | | 3.5 | 2.8 | 1.0 | 1.0 | 0.9 |

Sources: Statistics Norway and Norges Bank

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

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Actual | 10.6 | 9.5 | 6.4 | | | | |
| Projections in MPR 2/20 | | | | 5.0 | 4.6 | 4.2 | 4.0 |

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

**Table 3 Projections for main economic aggregates**

| Change from projections in *Monetary Policy Update* May 2020 in brackets | In billions of NOK 2019 | Percentage change from previous year (unless otherwise stated) 2019 | Projections 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| **Prices and wages** | | | | | | |
| CPI | | 2.2 | 1.6 (0.4) | 3.3 (-0.1) | 2.0 (-0.5) | 1.7 (-0.2) |
| CPI-ATE | | 2.2 | 3.0 (0.5) | 2.6 (-0.2) | 1.8 (-0.3) | 1.6 (-0.1) |
| Annual wages | | 3.5 | 1.9 (0.1) | 2.0 (0.7) | 2.3 (0.6) | 2.8 (0.5) |
| **Real economy** | | | | | | |
| Gross domestic product (GDP) | 3549 | 1.2 | -1.7 | 3.8 | 2.8 | 2.0 |
| GDP, mainland Norway | 3039 | 2.4 | -3.5 (1.7) | 3.7 (0.7) | 2.5 (-0.8) | 2.0 (-0.2) |
| Output gap, mainland Norway (level) | | 0.2 | -3.6 (1.6) | -1.8 (1.8) | -0.8 (1.0) | -0.2 (0.8) |
| Employment, persons, QNA | | 1.6 | -1.8 (1.3) | 0.1 (0.1) | 1.9 (-0.5) | 1.3 (0.0) |
| Registered unemployment rate (level) | | 2.3 | 5.0 (-1.3) | 3.2 (-0.6) | 2.8 (-0.3) | 2.6 (-0.2) |
| **Demand** | | | | | | |
| Mainland demand | 3209 | 2.2 | -3.3 (1.9) | 4.6 (1.2) | 3.3 (0.0) | 2.5 (0.0) |
| – Household consumption | 1598 | 1.6 | -5.2 (2.5) | 6.3 (1.4) | 4.3 (-0.1) | 3.1 (0.2) |
| – Business investment | 335 | 5.6 | -14.3 (1.5) | -3.9 (1.9) | 6.0 (0.4) | 4.7 (-0.2) |
| – Housing investment | 196 | -0.9 | -9.4 (0.8) | 2.2 (4.5) | 4.8 (0.7) | 3.2 (-1.1) |
| – Public demand | 1079 | 2.8 | 4.0 (1.0) | 4.7 (0.1) | 1.1 (-0.2) | 1.1 (0.0) |
| Petroleum investment | 178 | 12.9 | -4.0 (5.0) | -10.0 (4.0) | -5.0 (-1.5) | 5.0 (7.0) |
| Mainland exports | 707 | 5.4 | -9.1 (1.5) | 4.6 (-1.9) | 6.5 (-2.0) | 5.4 (-1.1) |
| Imports | 1252 | 5.2 | -9.1 (1.8) | 5.5 (3.2) | 6.3 (1.0) | 4.8 (0.7) |
| **House prices and debt** | | | | | | |
| House prices | | 2.6 | 2.7 (4.5) | 4.0 (5.0) | 2.9 (-1.0) | 2.2 (-1.7) |
| Credit to households (C2) | | 5.0 | 4.0 (0.5) | 4.3 (-0.5) | 4.2 (0.1) | 4.2 (0.4) |
| **Interest rate, exchange rate and oil price** | | | | | | |
| Policy rate (level) | | 1.1 | 0.4 (0.0) | 0.0 (0.0) | 0.1 (0.1) | 0.5 (0.5) |
| Import-weighted exchange rate (I-44) (level) | | 107.6 | 116.1 (-3.7) | 114.9 (-6.6) | 114.3 (-6.9) | 113.5 (-7.6) |
| Money market rates, trading partners (level) | | 0.5 | 0.0 (-0.1) | -0.1 (0.1) | -0.1 (0.0) | 0.0 (0.0) |
| Oil price, Brent Blend. USD per barrel | | 64.4 | 39.5 (6.9) | 41.7 (6.3) | 44.1 (4.7) | 46.2 (3.8) |
| **Household income and saving** | | | | | | |
| Real disposable income | | 2.8 | 0.0 | 2.0 | 2.6 | 2.1 |
| Saving ratio | | 7.6 | 11.1 | 7.4 | 5.9 | 5.1 |
| Saving ratio excl. dividend income | | 3.2 | 7.1 | 3.2 | 1.8 | 1.0 |
| **Fiscal policy** | | | | | | |
| Structural non-oil deficit as percentage of GPFG | | 3.0 | 4.3 | 3.8 | 3.7 | 3.5 |

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

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NORGES BANK
Bankplassen 2, P.O. Box 1179 Sentrum, N-0107 Oslo, Norway
Phone: +47 22316000
www.norges-bank.no

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