Economic Developments and Outlook

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Summary

As in the case of the projection issued six months ago, the outlook for the Dutch economy in the 2020-2022 period is dominated by the COVID-19 pandemic. Gross domestic product (GDP) suffered severe damage in the first two quarters of 2020, most of which was reversed by the strong rebound in the third quarter. As a result of the second wave of infections and the associated containment measures, as well as the continuing uncertainty among households and businesses, GDP will contract again in the fourth quarter.However, as economic developments in the first three quarters of this year were more favourable than anticipated, the economic downturn for 2020 is limited to 4.3%. Although this contraction is of historic proportions, it is less deep than previously feared. A gradual recovery will begin after 2020, with GDP growing by 2.9% per annum in both 2021 and 2022. By the end of the projection horizon (the third quarter of 2022), real GDP per capita will return to the same level as at the end of 2019.

Employment is expected to be hit hard in 2020 and particularly in 2021. Unemployment will climb this year to 4.0% of the labour force, peaking at an average of 6.5% in 2021 and falling to 6.0% in 2022. HICP inflation, which has been above the euro area average for some time in the Netherlands, will edge higher from 1.2% in 2020 to 1.5% in the subsequent two years. Due to the economic downturn and the high level of government support, public finances will see a major reversal in 2020, from a comfortable surplus to a deficit of 6.3% of GDP. The government will remain in deficit in 2021 and 2022. Following a sharp increase of 10.5 percentage points in 2020, the debt-to-GDP ratio will then rise steadily, reaching more than 61% at the end of 2022. The deterioration of public finances is therefore substantial, but not insurmountable.

As was the case six months ago, the uncertainty surrounding the projection is greater than usual due to the uncertain course of the pandemic. Scenarios can be helpful in such a situation. Accordingly, it has been decided within the European Central Bank (ECB) to prepare two alternative scenarios in addition to the projection, setting out possible effects of the COVID-19 pandemic on the economy. These show GDP growth in 2021 ranging from 4.9% in the mild scenario to 0.2% in the severe scenario. Rather than defining the upper and lower limits to potential outcomes, the scenarios illustrate the current high degree of uncertainty around the baseline projection. The range has nevertheless narrowed compared to the results of six months ago.

Finally, for the severe scenario and an additional very severe scenario, the impact on the banking sector has been calculated. This shows that in the severe scenario the average capital position of the six largest Dutch banks decreases by around 2 percentage points at the end of 2022. In the very severe scenario, the decrease is almost 4 percentage points. This is a substantial impact, but one that appears to be manageable for the banks, with no serious implications for lending.

Box 1 Policy recommendations related to the projection

Relaxing containment measures is not a solution for the economy if the virus then spreads further

There is no trade-off between the economy and health. When the infection rate rises, people become more cautious and the self-imposed contact restrictions also lead to an economic downturn. In the run-up to vaccination, it is important to focus on sufficient testing capacity and source and contact tracing and not to relax containment measures too quickly.

Support measures remain important in the short term

The current support measures work in tandem with the economy and provide support where it is most needed. It is important that the pace at which the measures are phased out continues to take account of the ongoing major uncertainty surrounding economic and medical developments. The government's decisions to slow the phase-out of support measures are understandable in this light. If vaccination becomes available in the near future and the infection rate and pressure on the health system eases, there will be additional scope to scale back the support measures.

Labour market imbalances must be reduced

The crisis has once again exposed the major dichotomy in the Dutch labour market. It is therefore important to narrow the gap further between "fixed" and "flexible" in line with the Borstlap Commission's recommendations. The Commission's main recommendation is that the type of employment relationship should reflect the job content and not be determined solely by cost factors due to differences in tax treatment and social protection.

Reducing government debt is undesirable in the short term

In the short term, the growth of government debt is justified because it is important to support households and businesses at this particular time to stave off long-term damage to the economy. Only the government can act as a de facto insurer against events like a pandemic. Any short-term consolidation of government debt would therefore be undesirable. The restoration of a buffer will return to the agenda once the economic crisis has passed.

Exploit opportunities for a green recovery

The coronavirus crisis threatens to delay the implementation of climate policies worldwide. Postponing necessary greening measures increases the risk of an abrupt transition to a climate-neutral economy, damaging both the economy and the financial sector. The current situation of low interest rates provides opportunities for a green economic recovery. The best way to promote a green recovery is through a combination of emissions pricing (including at European level) and boosting investment. The taxation of carbon emissions could be improved, for example, by strengthening and expanding the ETS, taxing aviation fuel and reducing energy tax rebates for large consumers. Governments can also ensure that any investments required for an efficient climate transition are part of a targeted stimulus agenda.

1. The Dutch economy in 2020-2022

2. A closer look at expenditure and public finances

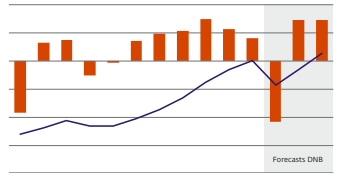
3. Alternative scenarios for the Dutch economy

4. Resilience of the Dutch banking sector

1 The Dutch economy in 2020-2022

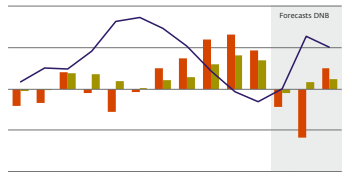
1.1 Economic growth

- Historic contraction due to pandemic
- Economic recovery in 2021 and 2022



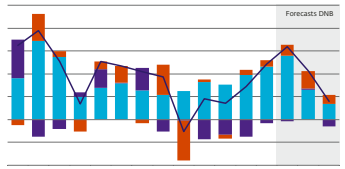
1.2 Labour market

- Employment hit hard
- Unemployment peaks in 2021



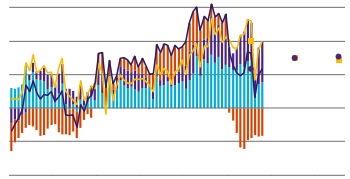
1.3 Wages

- High negotiated wage growth in 2020
- Wage growth falls sharply



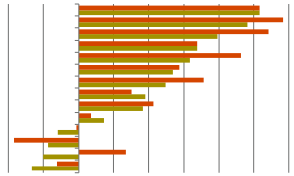
1.4 Prices

- Higher inflation in the Netherlands than in the euro area
- Price rises gather pace



1.5 Housing market

- House prices continue to rise
- Housing market cools down



Box 2 The impact of the pandemic on inflation

Box 3 Delayed housing market response to pandemic

1.1 Pandemic grips the economy[1]

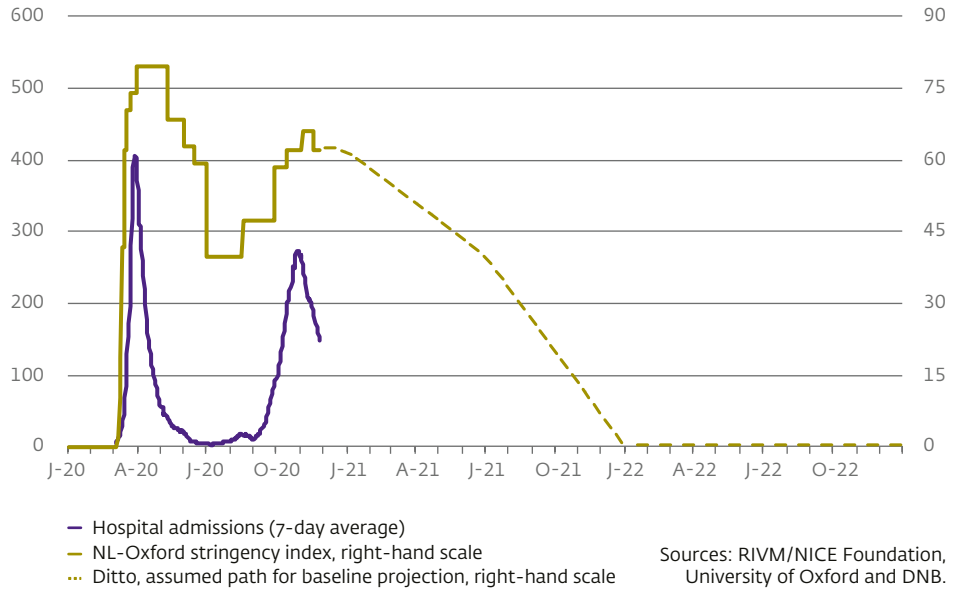
As in the previous DNB projection, the outlook for the Dutch economy in the 2020-2022 period is dominated by the COVID-19 pandemic. The number of coronavirus-related hospitalisations rose sharply again after the summer, forcing the government to take fresh measures to control the virus (Figure 1).

Economic developments are largely being driven by the course of the pandemic. The major uncertainty in this regard means that economic projections are more uncertain than usual. Consequently, in line with the projection issued last June and the practice adopted by the ECB, DNB has again decided to present two alternative scenarios, mild and severe, in addition to the baseline projection. Chapters 1 and 2 focus on the baseline projection. The two alternative scenarios are discussed in Chapter 3. Finally, Chapter 4 examines the implications of the severe scenario for the Dutch banking sector. That chapter also examines the impact of an even more severe stress scenario on the capital position of the banking sector. This provides an update on a pandemic stress test previously conducted and published in June (Financial Stability Report, June 2020).

The starting point for the projection is March 2020, when much of the world was confronted with the COVID-19 pandemic and governments around the world introduced containment measures. This led to a historic contraction of gross domestic product (GDP). The GDP of the euro area as a whole fell by 15.1% in the first half of 2020 compared to the last quarter of 2019. Recent research by the IMF and DNB shows that the downturn was not only caused by the containment measures. Out of fear of the virus, consumers adapted their behaviour, practising what the IMF calls voluntary *social distancing*. This is found to have played a similar role in causing economic damage.[2] Hence there is no trade-off between health and economy: the pandemic causes economic damage with or without containment measures. A sustainable economic recovery is only possible if the pandemic is under control.

Figure 1 Number of coronavirus-related hospital admissions and containment measures in the Netherlands

Number of admissions and Oxford stringency index



Sources: RIVM/NICE Foundation, University of Oxford and DNB.

Note: Data for the Oxford stringency index are based on the Coronavirus Government Response Tracker of the University of Oxford.

1 The assumptions concerning the course of the COVID-19 pandemic, government policy, relevant world trade, exchange rates, international commodity prices and interest rates are based on data available on 24 November 2020.
2 IMF (2020), World Economic Outlook and DNB (2020), DNBulletin, Supply and demand shocks due to the coronavirus pandemic contribute equally to contraction in production.

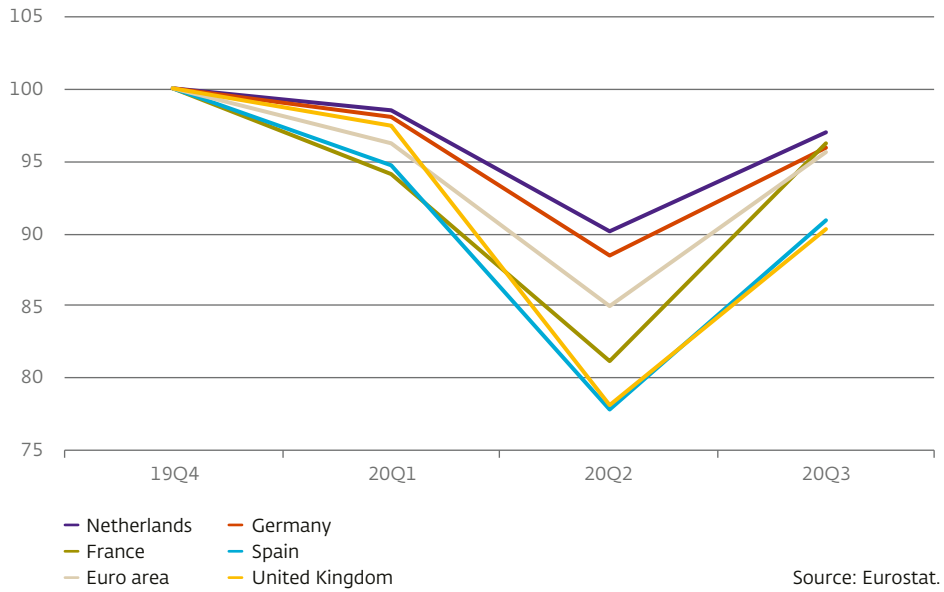
The Dutch economy also contracted sharply in the first half of 2020, with GDP falling 9.9% compared to the fourth quarter of 2019. In particular, the 8.5% contraction in the second quarter compared to the previous quarter was of historic proportions. It was the biggest post-war quarterly contraction, far exceeding anything seen in the previous crisis, when GDP contracted by 3.6% in the first quarter of 2009. Even so, the contraction in the Netherlands was still mild by international standards (Figure 2). This is probably because the containment measures in the Netherlands were less stringent, the Dutch economy is less dependent on tourism and the Dutch government acted fairly quickly by introducing emergency measures for businesses and working people. The economic damage may also have been less severe than expected because the Netherlands has an above-average level of digitisation and was already at the forefront of teleworking and online shopping before the pandemic.

The contraction of the Dutch economy in the first half of 2020 was less severe than previously anticipated. DNB's June projection, for example, assumed an 11.4% contraction compared to the final quarter of last year. This is largely because the containment measures were eased earlier than had been assumed at that time. House prices also fared better than expected.

In the third quarter the economy rebounded sharply, partly due to the easing of containment measures. Record GDP growth of 7.7% compared to the previous quarter pointed to a V-shaped recovery, more than half of which was due to the sharp rise in household consumption. There were also increases in public consumption, the trade balance and business investment. In the case of public consumption, this was mainly due to the rise in healthcare services. The pandemic led to many treatments being postponed this spring and dentists and paramedics could only provide emergency care.

Figure 2 GDP developments in selected countries since the pandemic outbreak

2019Q4 = 100; volume



Source: Eurostat.

Growth was recorded across almost all sectors. The recovery was strongest in the sectors that were hit hardest in the spring, such as culture & recreation, hospitality and transport.

Compared to the fourth quarter of 2019, GDP volume contracted by a net 3% in the first three quarters of 2020. From this perspective the Dutch economy outperformed most other countries (Figure 2). For example, GDP fell slightly further in Germany (-4.0%), Belgium (-5.7%), France (-3.7%) and the euro area as a whole (-4.4%), while the contraction in Spain (-9.1%) and the United Kingdom (-9.7%) was substantially greater. In general, countries hit relatively hard in the first half of 2020 showed the strongest recovery in the third quarter.

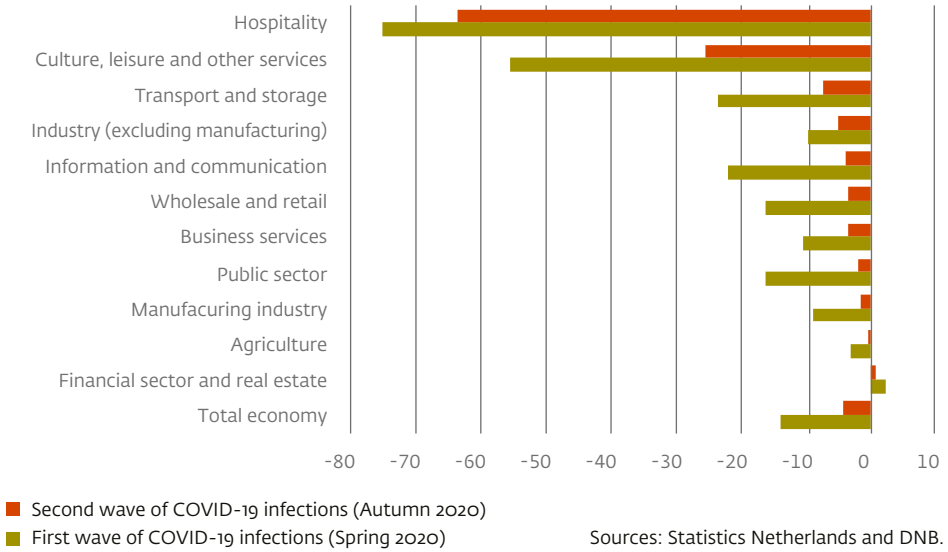
The recovery in the third quarter was significantly stronger than anticipated in the June projection. In addition to the faster-than-expected easing of containment measures, the scope and effectiveness of government support measures also play an important role.

For example, the support measures have so far helped to keep the number of bankruptcies and associated job losses fairly low. In the first ten months of this year, the number of bankruptcies was even 14% down on the same period last year. As a result of better-than-expected outturns in the first three quarters of this year, GDP in the third quarter was even slightly higher than DNB had anticipated in June for the mild scenario. In this alternative scenario, it had been assumed that the containment measures could be substantially relaxed after the first wave and that there would be no flare-ups of the virus after the first wave. This development also shows that the economy remains very resilient and can recover rapidly once the pandemic is under control, provided that the number of infections is contained and the crisis is not protracted.

After the summer, the number of new COVID-19 infections rose sharply again, however, and the containment measures were tightened. Due to the second coronavirus wave, the V-shaped recovery of the third quarter fizzled out and GDP is expected to contract again in the fourth quarter. The damage is much less severe than in the spring, however. Business sentiment data, debit card transactions and mobility data indicate that the economic damage in the second wave is about 30% of the damage seen in the first wave. This is partly because the containment measures are less stringent this time.

Figure 3 Initial loss of added value by sector during the first and second waves

Percentage changes relative to pre-pandemic situation



Sources: Statistics Netherlands and DNB.

Note: Data for the second wave are projected. They are based mainly on sentiment data from Statistics Netherlands' Business Cycle Survey for April and October.

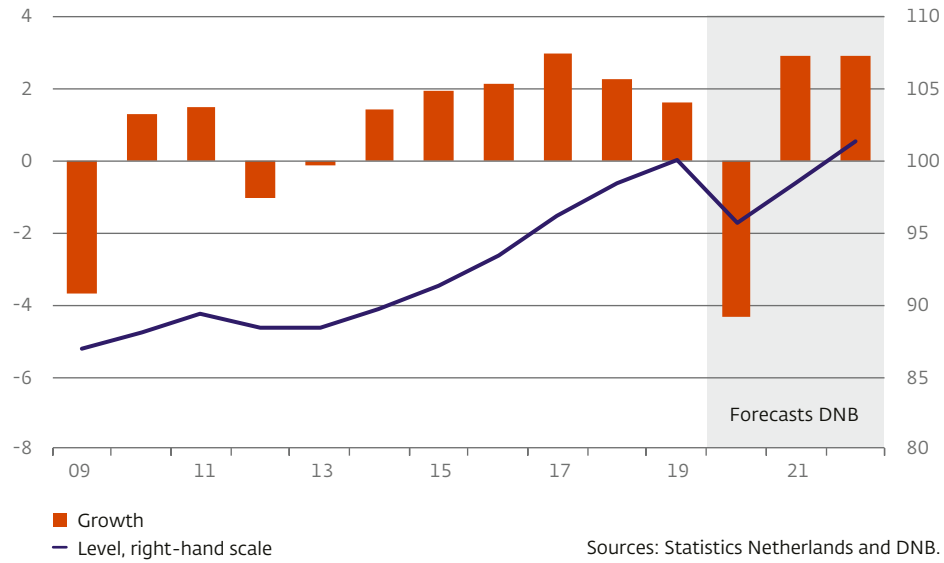
The impact on world trade is also less severe because other parts of the world are less affected by a second wave. The shock currently being experienced by export-oriented sectors, such as manufacturing and transport, is therefore expected to be less severe (Figure 3). Moreover, greater learning effects appear to be occurring this time, enabling the economy to adapt faster. For example, the added value of hospitality fell less sharply in the autumn than in the spring, even though hospitality outlets were closed in both cases. This is probably because this time hospitality businesses switched earlier to alternative sales channels, such as delivery and take-away.

Dutch GDP is projected to contract by 4.3% in 2020 (see Figure 4). This is a less severe contraction than the 6.4% estimated in June, despite the contraction in the fourth quarter. It remains a large contraction, however, in historical terms. The fall is sharper than in the 2009 credit crisis, when GDP contracted by 3.7%. A growth rate of 2.9% has been estimated for next year. It has been assumed that the containment measures will be partially relaxed from the beginning of 2021, but that the relaxation will be slower than after the first wave. For example, it will take until mid-2021 for the measures to be eased to last summer's level (Figure 1). Partly for this reason the economic upturn in the first quarter of 2021 will be less strong than in the third quarter of 2020. The recovery is also muted because the projection assumes that the United Kingdom and the European Union will fail to agree a trade deal.[3]

Despite recent reports on the availability of different vaccines, the projection assumes that some of the containment measures will remain necessary until the end of next year.

Figure 4 Gross domestic product

Volume; year-on-year percentage changes and 2019 = 100



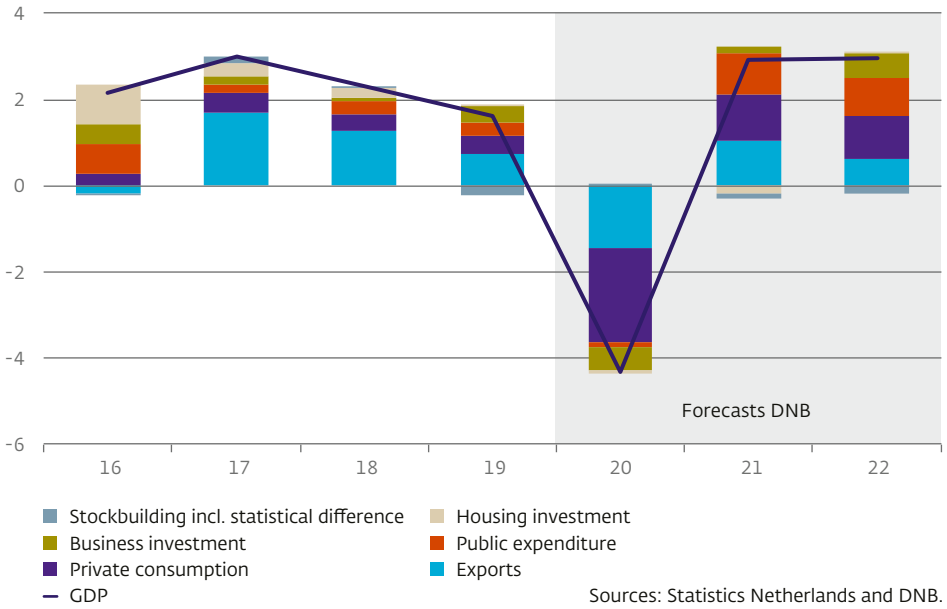
Sources: Statistics Netherlands and DNB.

In the projection, that is the time when enough people will have been vaccinated to prevent the virus spreading and containment measures are no longer necessary. This will boost the economy in 2022, with GDP growth expected to reach 2.9% in that year. In the fourth quarter of 2022, the economy is expected to be more than 1% larger than at the end of 2019. Per capita GDP would then be around 0.5% higher than in the fourth quarter of 2019.

3 There is an upside risk if the EU and the UK agreed a trade deal at the last minute. Based on an alternative scenario in the December 2019 Economic Developments and Outlook, this could result in around 0.7 percentage points of additional GDP growth in 2021.

Figure 5 Sources of GDP growth

Year-on-year percentage changes and contributions in percentage points



Sources: Statistics Netherlands and DNB.

Note: Net contributions to GDP growth. The final and cumulative intermediary imports have been deducted from the related expenditure categories.

The estimate for growth of GDP and the expenditure components can be found in the Key Data table. Private consumption contracts by 7.1% in 2020, business investment declines by 7.3% and exports decrease by 4.0%. Figure 5 shows the composition of GDP growth over the 2016-2022 period, with the concomitant parts of final and intermediate imports having being deducted from the contribution to GDP growth of each expenditure category. In 2020 the bulk of the contraction is due to the steep fall in private consumption. The upturn in 2021 and 2022 can also be attributed largely to consumption.

Government spending also makes an important contribution to the economic recovery. This is due in part to spending by the National Growth Fund and the government's intention to accelerate infrastructural projects, boosting public investment.

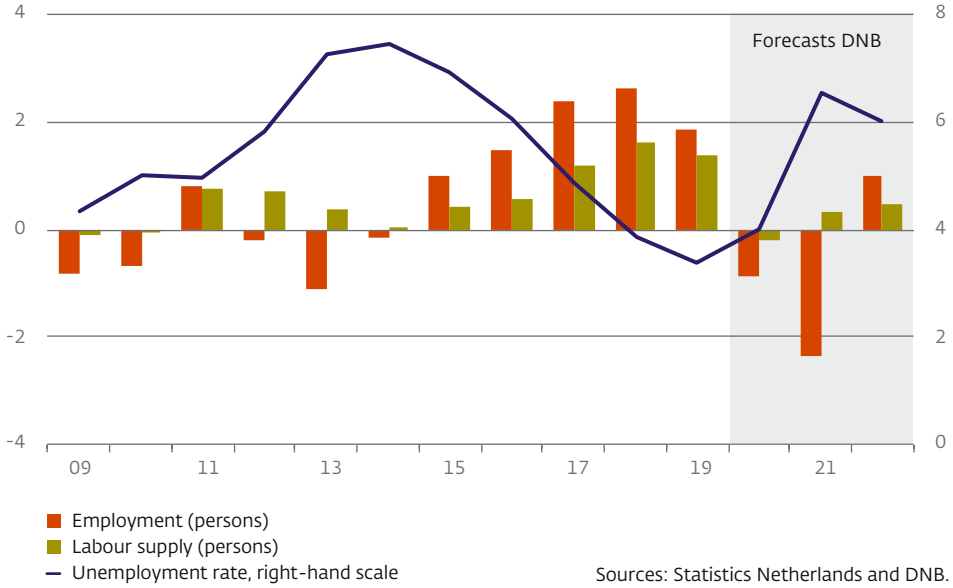
Investments by the National Growth Fund are aimed in part at promoting the energy transition. The government is thus committed to a green recovery. Better taxation of carbon emissions is desirable to exploit the opportunities for a green recovery more fully. That could be done, for example, by strengthening and expanding the ETS, taxing aviation fuel and reducing energy tax rebates for large consumers.

1.2 Unemployment peaks in 2021

Although the labour market is usually slow to respond to economic developments, the effects of the coronavirus crisis are already clearly visible in 2020. In the second quarter of this year, the number of people in employment decreased by 274,000 compared to the previous quarter, the largest contraction since records began. In the third quarter, employment rebounded with the working population growing by 146,000, another record. Total employment in persons is projected to fall by 'only' 0.9% in 2020 (Figure 6). This is almost equal to the contraction during the financial crisis in 2009 (-0.8%). Despite the drastic containment measures, such as the temporary closure of establishments in the hospitality, recreation and culture sectors, many jobs were saved as a result of government policy. The government rapidly introduced a generous package of support measures this year, including the NOW scheme that subsidises employers' wage costs (see also section 2.6). During the first round of NOW (March-May), almost 140,000 businesses benefited from the scheme for 2.6 million employees. During the second round of NOW (June-September) usage halved, with the scheme providing ongoing wage subsidies for around 1.3 million employees.

Figure 6 Labour market

Year-on-year percentage changes and percentage of labour force



Sources: Statistics Netherlands and DNB.

By comparison, during the 2009 financial crisis the special reduction in working hours scheme supported 37,000 employees and the subsequent part-time unemployment benefit supported up to 77,000 employees.

So far, temporary, agency and on-call workers have borne the brunt of the job cuts. In the third quarter of this year, the number of workers in the labour force with these types of flexible jobs was 200,000 lower than at the end of 2019 (Figure 7). There were increases, however, in the number of workers on permanent contracts and self-employed persons. The contraction of flexible jobs is not surprising.

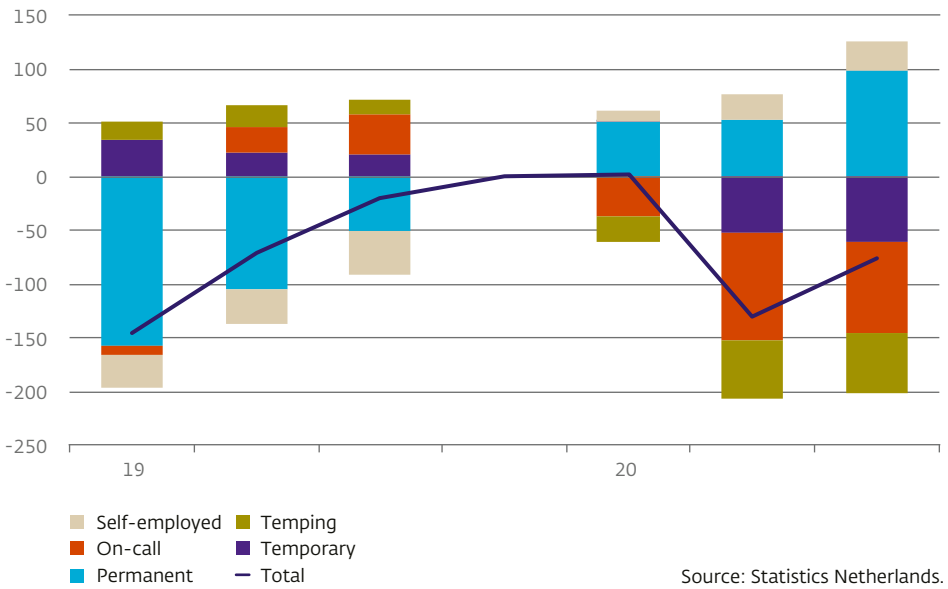
Employment protection for flex workers is lower than for permanent staff. And although employers can also receive support through NOW for flexible employees, it is easier and cheaper for them to terminate agency contracts and not to renew temporary contracts than to lay off permanent employees.
The crisis has once again exposed the major dichotomy in the Dutch labour market, and it is important to narrow the gap between "fixed" and "flexible", in line with the Borstlap Commission's recommendations.

Employment suffers the biggest blow in 2021, partly because the projection assumes that the support measures will be withdrawn in mid-2021. Moreover, businesses are reluctant to cut their workforce immediately when sales fall, particularly given the tight labour market in the recent past. Instead they try to reduce the number of hours worked and terminate flexible contracts before laying off permanent staff. This is also reflected in the data for the first quarters. The number of hours worked in the first three quarters decreased overall by 3.4%, while employment in persons in the third quarter was only 1.1% lower than at the end of 2019. Another factor is that for legal and procedural reasons it is not always possible to terminate permanent employment contracts in the short term. As a result of these factors employment (in persons) is projected to fall by 2.3% in 2021. In 2022, the number of persons employed increases again by 1.0%, in line with the continuing economic recovery.

Various mechanisms are at play in the development of the labour supply. First, the contraction of employment depresses the growth in supply. Redundant workers and other jobseekers become discouraged and see fewer chances of finding a job (discouraged worker effect). In addition, people who have not previously been active in the labour market will be less inclined to look for work. On the other hand, the crisis means that some households have a pressing need to look for work (added worker effect). If the breadwinner is made redundant or has to work fewer hours, the partner will also look for work to supplement their income.

Figure 7 Development in active working population by type of employment relationship

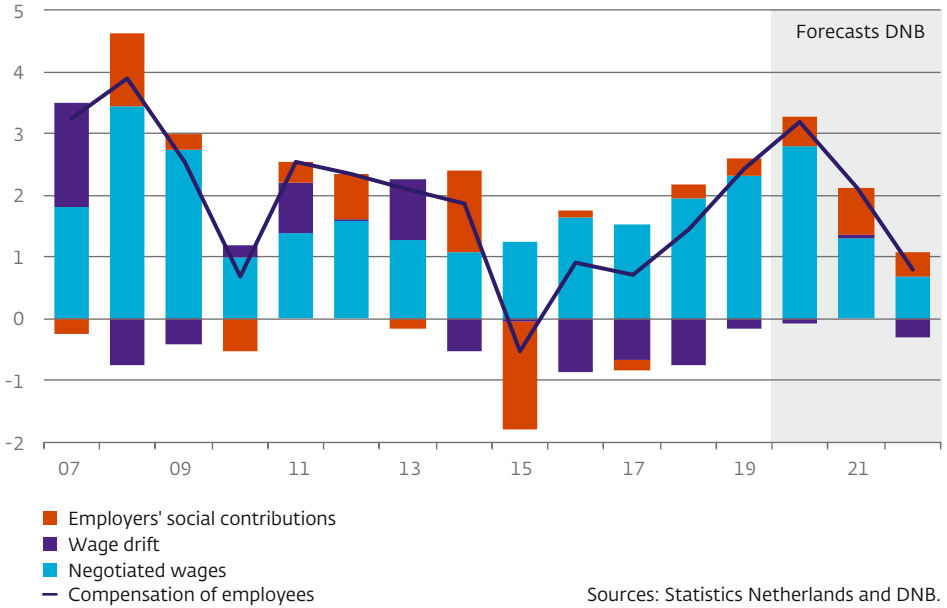
Thousands; change from 2019Q4



Source: Statistics Netherlands.

Figure 8 Compensation per employee (private sector)

Year-on-year percentage changes and contributions in percentage points, in FTEs



Sources: Statistics Netherlands and DNB.

Overall, the discouraged worker effect predominates in 2020 and the supply of labour decreases by 0.2%. Buoyed by the economic recovery, the number of discouraged workers will decrease from early 2021, with more people gradually returning to the labour market. The supply of labour grows by 0.3% in 2021 and 0.5% in 2022.

The contraction of employment exceeds that of the labour supply in 2020, causing unemployment to rise to an average of 4.0% of the labour force.

In the first quarter of this year, unemployment still stood at 3.0%, the lowest level for more than twenty years. It then rose steadily to 4.3% in October. The substantial contraction of employment in 2021 causes unemployment to rise to 6.5% next year. This means that an average of 634,000 people have no job but are actively looking for one. The recovery in employment in 2022 reduces the average unemployment rate in that year to 6.0%.

1.3 Wage growth falls sharply from a high level in 2020

Negotiated wage growth in the private sector this year is expected to average 2.8%, the highest rate since 2008 (Figure 8). That is striking given reports of difficult wage negotiations and waivers of pay. For around 80% of collective agreements, however, wage rises for 2020 were already fixed in February, i.e. before the coronavirus outbreak. Total growth in compensation (sum of negotiated wage growth and contributions of wage drift and social charges) is somewhat higher this year at 3.2%. That is mainly due to a positive contribution from higher social security contributions.

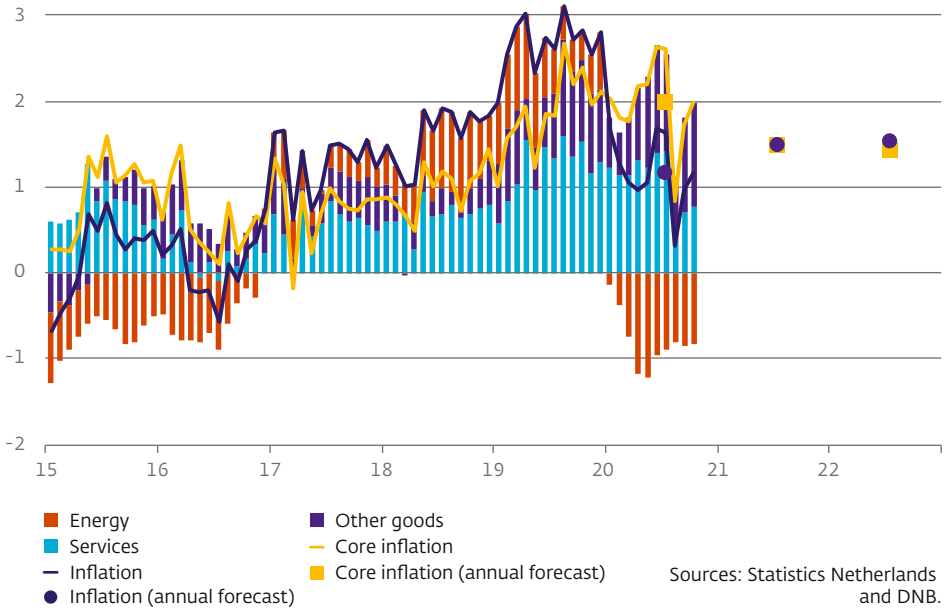
The picture will change next year. Employees' negotiating power diminishes due to the rapid easing of the labour market, which causes the growth in collectively agreed pay to fall to 1.3% in 2021 and 0.7% in 2022. That is low, but not exceptional. Wage growth of 0.7% was also recorded in 2005 and for several years in the 1980s the growth in collectively agreed pay was even slightly lower. Total growth in compensation is higher in both years, at 2.1% in 2021 and 0.8% in 2022.
Once again higher social security contributions make a positive contribution, while the contribution from wage drift is less negative than in past years. While employers are less generous with bonuses, promotions and other incidental pay, this is largely offset by a positive contribution from the composition effect in 2021 and 2022.
It is usual for low-paid jobs to be lost during a recession, particularly those held by young people and employees on flexible contracts. This shift results in a larger proportion of higher paid jobs, leading to a rise in the average wage level.

1.4 Higher inflation in the Netherlands than in the euro area

The pandemic not only affects the real side of the economy, but also has an impact on inflation. This is shown in greater depth in Box 2. Inflation (HICP) in 2020 is 1.2% and core inflation, i.e. excluding energy and food, is 2.0%.

Figure 9 Inflation (HICP) and core inflation

Year-on-year percentage changes and contributions in percentage points



Sources: Statistics Netherlands and DNB.

Note: Core inflation = total excluding food and energy.

The large difference between inflation and core inflation is due to the sharp fall in energy prices. These are on average more than 9% lower in 2020 than in 2019, due to a sharp fall in oil prices and lower energy taxes. Lower energy prices cut inflation in the Netherlands by an average of 0.8 percentage points in 2020 (Figure 9). Inflation is 1.5% in both 2021 and 2022. The rise in unemployment constrains wage growth in 2021 and 2022, reducing core inflation to 1.5% and 1.4% respectively.

The strongly negative contribution from energy inflation disappears after 2020, on the assumption that the price of oil (UK Brent) gradually rises to an average of around USD 46 a barrel in 2022.

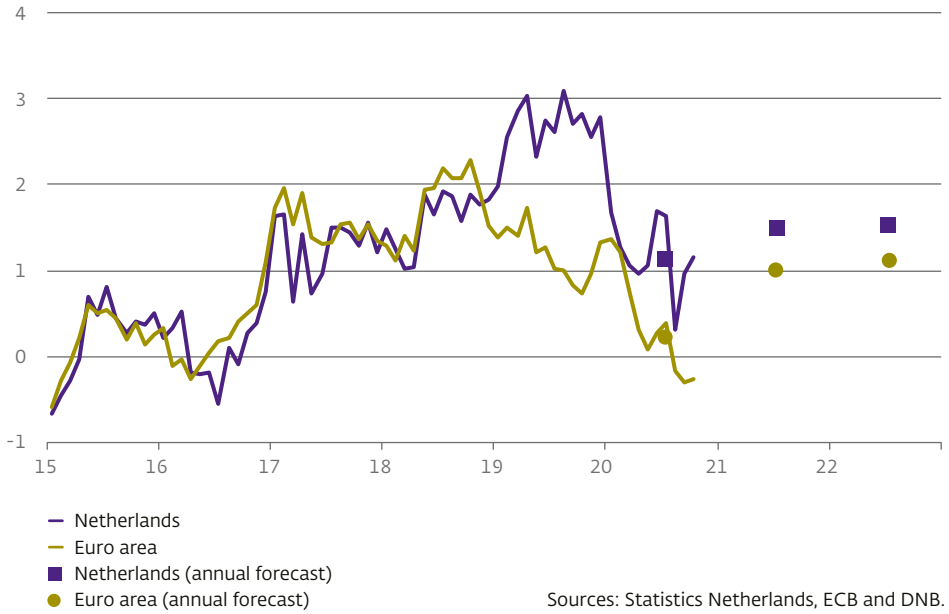
Inflation in the Netherlands has for some time been significantly higher than in the euro area, where it will stand at 0.2% in 2020 (Figure 10). This is partly due to taxation measures taken in different countries. In Germany, for example, VAT was temporarily cut in the second half of the year as part of a package of coronavirus measures. The standard and reduced VAT rates were cut by 3 and 2 percentage points respectively. Measures in Germany and other countries led to a reduction of up to 0.6 percentage points in euro area inflation in the second half of 2020. This maximum effect is based on the tax cut being passed on in full to consumers. Research by the Bundesbank shows that this is not always the case, especially in services, so the actual impact on inflation is lower.

The higher inflation in the Netherlands also has deeper causes. Service inflation (adjusted for taxes) is higher in the period from March 2019 to October 2020 in the Netherlands (2.2%) than the euro area average (1.4%). This is due to the stronger rise in negotiated wages and unit labour costs in the Netherlands.
Due to the tight labour market negotiated wages in the Netherlands rose by an average of 2.7% per annum over the period, while in the euro area the increase was only 1.9%. Service inflation in the Netherlands has also been relatively high in recent months. This is mainly due to transport services, package holidays and holiday accommodation, which is probably linked to the higher occupancy rate of Dutch accommodation.

In addition to service inflation, industrial consumer goods inflation has also risen sharply in the Netherlands. In the first ten months of 2020, the tax-adjusted rate was 1.4%, more than a percentage point higher than in 2019.

Figure 10 Inflation (HICP) in the Netherlands and the euro area

Year-on-year percentage changes



Sources: Statistics Netherlands, ECB and DNB.

In the case of durable goods, such as electronics, furniture and cars, inflation rose from -1.6% in 2019 to an average of +1.1% in the first ten months of 2020 (adjusted for taxation). A sharp increase can be seen particularly from April, presumably linked to the lockdown and homeworking. Prices of electronics, including computers, are significantly higher than last year.

Box 2 The impact of the pandemic on inflation

The pandemic has caused negative supply and demand shocks, which have translated into a sharp contraction of GDP volume.[1] The impact of the pandemic on inflation is less clear, as a negative supply shock generally leads to a rise in inflation, while a negative demand shock leads to a fall in inflation. It is also difficult to assess the short- and medium-term inflation trend, as the relative importance of supply and demand shocks may shift over time.

The pandemic may put upward pressure on inflation through the supply side. For example, if workplaces have to close to contain the spread of the virus, the production of goods and services comes to a partial halt. At constant demand this creates a market shortage, pushing prices higher. Output may also fall due to lower labour productivity, for example due to the absence of workers who contract the virus or who spend less time on site as a precaution. These supply effects may be amplified if entire (possibly cross-border) production chains are disrupted.
The pandemic may put downward pressure on inflation through the demand side, for example if households go out less often due to containment measures or infection risks, reducing consumption expenditure outside the home. At constant production, this creates a supply surplus, leading to a fall in prices.

In addition, the increased uncertainty may prompt households to save more on a precautionary basis and cause businesses to cut investment. Moreover, developments on the supply side, such as a fall in labour demand and rising unemployment, may reinforce these demand effects. Although most business sectors have to contend with a fall in demand during a pandemic, others, such as supermarkets, DIY stores and IT businesses, see increased demand for their product or service.

The short- and medium-term trend in inflation after a virus outbreak is difficult to predict due to the intertwining of supply and demand effects. To understand this more clearly, we use a stylised epidemiological model that is integrated into a macroeconomic model.[2] In this model, which has been calibrated for the Dutch economy, the probability of infection rises the more often households consume or work outside the home. Hence there is an important link between households' economic decisions and the spread of the virus.

We use the model to calculate the effect of a pandemic on a number of macroeconomic variables. Figure 11 (left) shows that in the real economy the pandemic causes negative supply and demand effects through the channels mentioned above. The effect of the pandemic on inflation is negative in the first year after the virus outbreak, suggesting that demand effects predominate in the short term (right-hand figure, 'Baseline').[3] The supply side plays an important role, however, because it reinforces the demand effect. The decrease in the number of hours worked therefore leads to a significant decrease in income (including from labour), which means that households consume and invest less.

The importance of this supply channel becomes clear if we assume in an alternative scenario that households continue to work during the pandemic, for example with the aid of wage subsidies paid by the government.

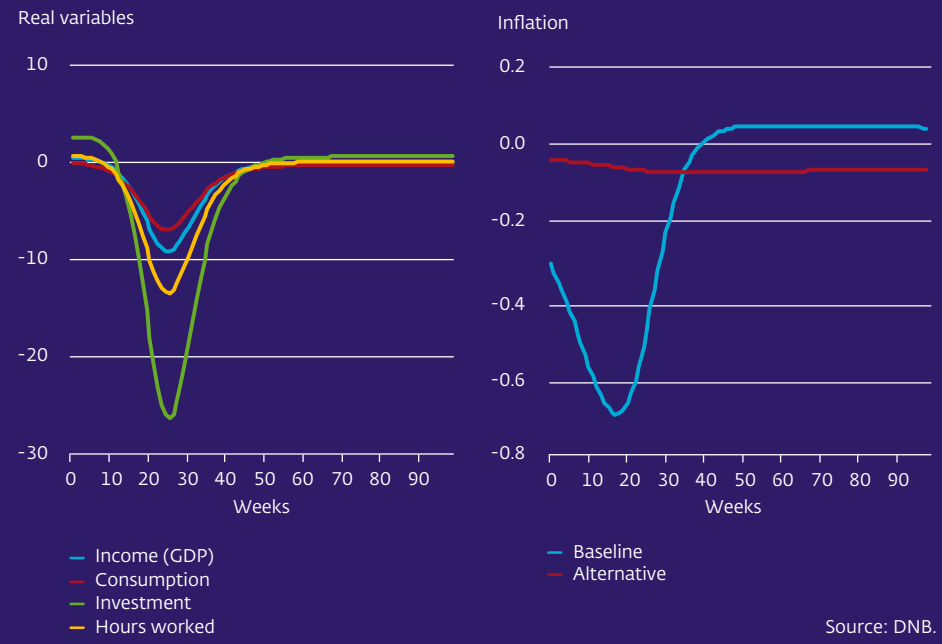
1 See DNBulletin, Supply and demand shocks due to the coronavirus pandemic contribute equally to contraction in production, 5 November 2020.
2 Eichenbaum, Rebelo, and Trabandt (2020), Epidemics in the Neoclassical and New Keynesian models. NBER Working Paper No. w27430.
3 As the infection risk diminishes, households venture out more to consume and work, so inflation recovers and rises slightly above pre-pandemic levels.

In this case, there is no contraction in the labour supply, the impact on labour income is much smaller and investment holds up. Figure 11 (right) shows that in this alternative scenario the negative impact of the pandemic on inflation is much more moderate.

In summary, this model illustrates that the pandemic puts both upward and downward pressure on inflation. In the short term, demand effects can be reinforced through the supply channel in the form of lower incomes, so the ultimate impact of the pandemic on inflation will be negative. With regard to these results it is important to note that the baseline version of the (stylised) model does not take into account the government's support measures and the central bank's unconventional monetary policy. These policies can mitigate the impact of the pandemic on, for example, demand for labour and credit restrictions, limiting the negative impact on inflation. In addition, lockdown measures can put stronger upward pressure on inflation. The results from the baseline model illustrate the role of supply and demand effects during a pandemic in the absence of these measures.

Figure 11 Macroeconomic impact of a pandemic

Percentage of pre-pandemic long-term average



Source: DNB.

1.5 Housing market cools, but remains robust

A delayed housing market reaction to economic developments is quite normal. Partly for this reason, in the June projection, DNB forecast that average existing home prices would not fall until 2021. During the past six months, the housing market has performed much better than previously anticipated.
In the third quarter, for example, the average house price rose by an annualised 8.1% and the increase in October (9.1%) was actually the highest since November 2018. The number of transactions in the third quarter was 5.6% higher than a year earlier. According to the Dutch Real Estate Agents Association (NVM), while the average selling time increased slightly in the third quarter, at 30 days it remains below the three-year (2017 Q3-2020 Q3) average of 41 days.

Over the past six months, two key basic demand factors have developed more favourably than DNB predicted at the time of the June projection: the labour market and interest rates. Although unemployment increased further in the first months after the start of the pandemic, the rise was more limited than expected, partly as a result of the support packages. Moreover, mortgage interest rates have not increased since the outbreak of the pandemic. In fact, they have fallen slightly. This means interest rates are not only lower than a year ago but also lower than expected at the time of the June projection.

There are currently no indications that the average house price in the Netherlands will fall in the short term. In addition to the usual causes of a delayed house price reaction to a negative shock, the relatively large housing shortage compared to the past is slowing the reaction even more in the current situation (see Box 3). The government support is also playing a significant role in absorbing the demand shock.

Box 3 Delayed housing market response to pandemic

When a negative shock occurs, such as the outbreak of a pandemic, homeowners react less quickly than prospective buyers. Homeowners are slower to change their perception of the market and the minimum price at which they are prepared to sell, i.e. their reserve price.
This normally reduces market liquidity in the first instance, reflecting the effort involved in finding a suitable buyer, and prices adjust later. During the financial crisis that began in the third quarter of 2008, it was only three quarters later that average house prices fell, whereas market liquidity fell almost immediately. The latest price developments and market liquidity data do not indicate a cooling of the housing market (FSR, Autumn 2020).

The major housing shortage slows the price reaction even further. The pent-up demand associated with a housing shortage means that, after an economic downturn, potential buyers with sufficient spending capacity sustain demand for a long time. If demand is sufficient, market liquidity remains intact and owners see no reason to lower their reserve price. The housing shortage at the start of the COVID-19 pandemic was much more severe than at the beginning of the financial crisis in 2008. The production of new homes has been lower than expected due to physical constraints on construction. The housing shortage will continue to exist for the time being, further mitigating negative impacts in demand factors. In the past, the existence of a housing shortage was no guarantee against price falls. Prices also fell in the 1980s and in the 2008 financial crisis, when homes were in short supply. From a historical perspective, changes in the housing shortage have only a limited impact on prices.

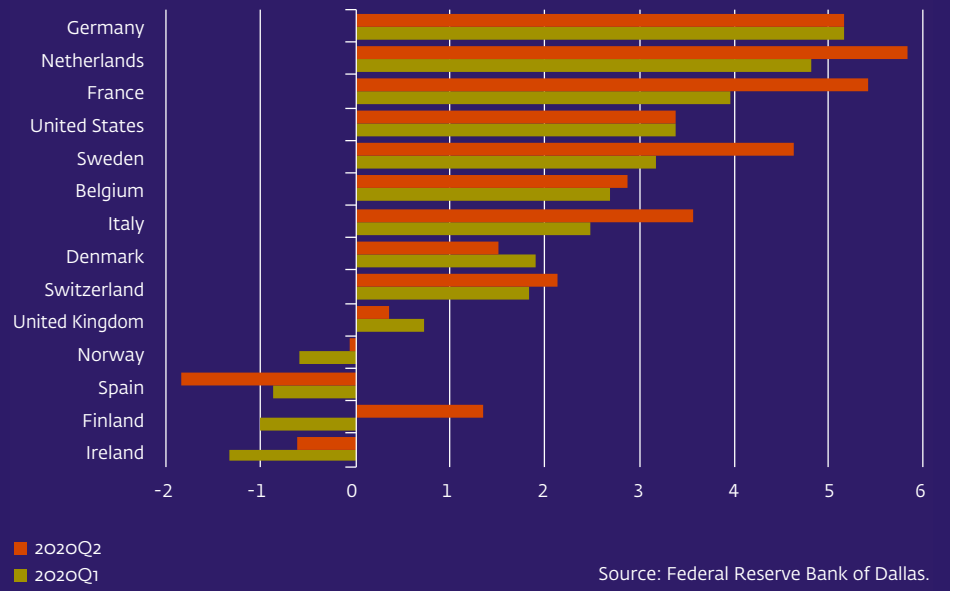
Estimates in a recently published DNB Bulletin suggest that a 1 percentage point rise (fall) in the housing shortage results in a 1-2% rise (fall) in prices.

The high level of home ownership combined with high mortgage debt makes the Dutch economy relatively vulnerable to fluctuations in the housing market. First-time buyers are also finding it increasingly difficult to buy their own home. These developments illustrate the need for a comprehensive reform of the housing market. The preferential tax treatment of buying over renting should first be addressed, for example by gradually moving house purchases to Box 3 of the tax return. The very low interest rates at the present time would make this easier. A further reduction in the LTV rule for mortgages would also be a logical step. It is also important to increase the supply of housing. This applies not only to owner-occupied homes, but particularly also to homes in the mid-segment of the rental market.

The Netherlands is not the only country where the housing market has so far appeared immune to the COVID-19 pandemic. Nearly all countries recorded strong rises in house prices in the second quarter of 2020 (Figure 12). The exceptions were Norway, Ireland, Japan and Spain. Growth in the second quarter was stronger than in the first quarter almost everywhere.

Figure 12 Real house prices in selected countries

Year-on-year percentage changes



Source: Federal Reserve Bank of Dallas.

Confidence, the job market, purchasing power and interest rates are important factors for the housing market in the medium term. It is therefore conceivable that the coronavirus pandemic will have a negative impact on house prices. That could happen if households' disposable income decreases due to a combination of higher unemployment, lower purchasing power and higher interest rates. This is not anticipated in the current projection. As long as the economic crisis does not turn into a financial crisis and banks can continue to provide mortgages, a scenario of rapidly rising mortgage interest rates seems unlikely (FSR, Autumn 2020).

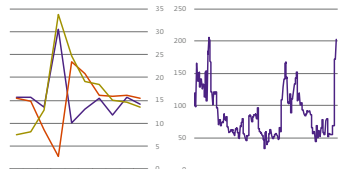
Consumer confidence also plays an important role, as negative or positive house price expectations can drive the market. Although consumer confidence as a whole has been hit hard, that is much less evident in the housing market indicator of Vereniging Eigen Huis, the Dutch homeowners' association. Moreover, the projection assumes that consumer confidence will recover gradually from the low point in the third quarter of 2020.

In 2020, the average price of an existing owner-occupied home rose more than 7%. The housing market is expected to cool in the years ahead, particularly as a result of the deterioration of the labour market in 2021. The rise in average house prices is expected to decrease to around 2% in 2021 and around 1% in 2022. House price projections usually involve a fairly high degree of uncertainty, and that is true especially in the current situation.

2 A closer look at expenditure and public finances

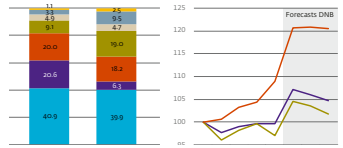
2.1 International

- Global economy recovers in 2021
- World trade shows V-shaped recovery



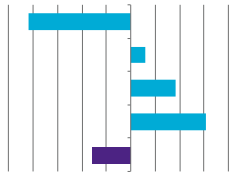
2.2 Exports

- Fairly mild impact on Dutch exports
- Dutch current account surplus gradually decreases



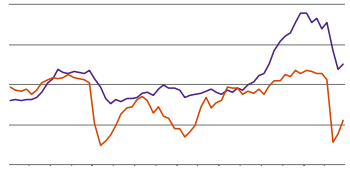
2.3 Households

- Households save record amount
- Spending capacity supported by government



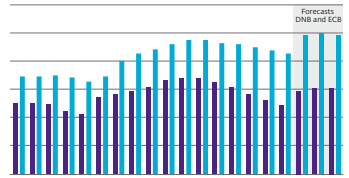
2.4 Businesses

- Pandemic impact varies greatly from sector to sector
- Firms scale back investment



2.5 Government

- Budget deficit of historic proportions
- Debt-to-GDP ratio rises to 61% of GDP



2.6 Support packages

- Government support limits economic damage
- Phase-out of support measures requires flexibility

2.1 Incomplete and uneven recovery of international activity

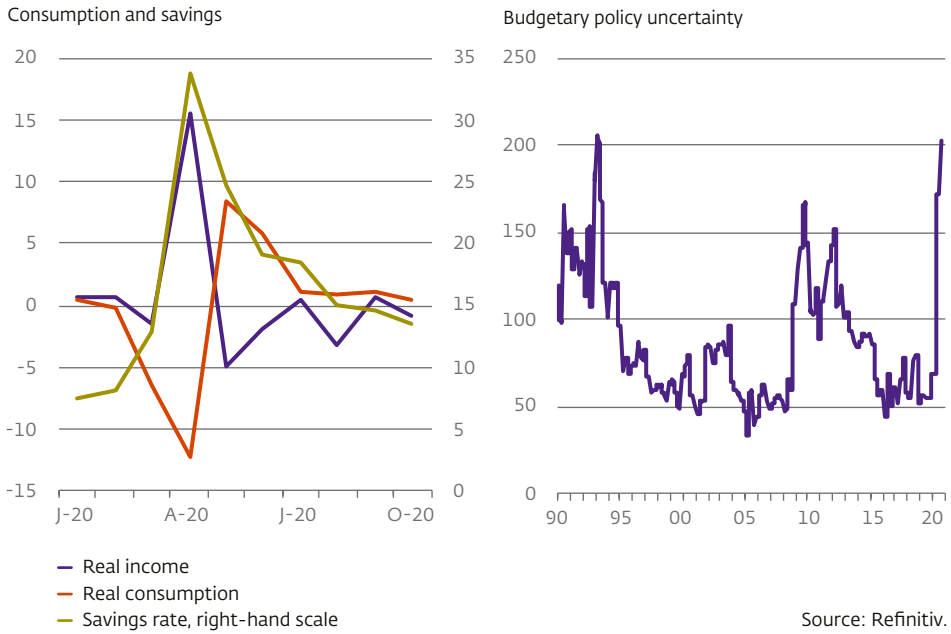
Partly due to the strong recovery of the US economy, global growth (excluding the euro area) rebounded sharply by 6.7% in the third quarter of 2020 compared to the previous quarter. Nevertheless, global GDP (excluding the euro area) at the end of the third quarter was still 2.5% below the level at the end of 2019. Underlying economic developments vary from country to country. China, for example, was able to repair the crisis damage as early as the second quarter of 2020 and is the only G20 economy to record positive growth this year (1.8%). On the other hand, the level of GDP at the end of 2020 in many emerging countries, particularly in Latin America and India, was still far below the pre-crisis level. That is not only due to these countries' limited success in containing the virus, but also because they have relatively limited fiscal space to support their economies.

In the projection, the global economy (excluding the euro area) grows by 5.8% in 2021,after which the growth rate in 2022 returns to the long-term average of 3.9%. The resurgence of coronavirus in large parts of the world at the end of 2020 limits the recovery of global economic growth in 2021. The first signs of a loss of momentum were already visible at the end of the third quarter of 2020, when many countries tightened their preventive measures against the spread of coronavirus. A key assumption of the projection is that these stricter measures in the fourth quarter of 2020 and the first quarter of 2021 will remain in force or be reintroduced, after which they will gradually be relaxed.

After contracting by 9% in the second quarter of 2020 compared to the previous quarter, the US economy grew by 7.4% in the third quarter. The third-quarter recovery was thus exceptionally robust and stronger than anticipated in June, so the GDP contraction in the United States in 2020 is limited to 3.6%. The strong growth in the third quarter was largely supported by private consumption. Households were able to maintain their consumption initially thanks to the comprehensive income support provided by the US government and – after it expired at the end of July – by drawing on their savings (Figure 13, left).

Figure 13 Consumption, savings and budgetary policy uncertainty in the United States

Month-on-month percentage changes, percentage of disposable income and index (long-term average = 100)

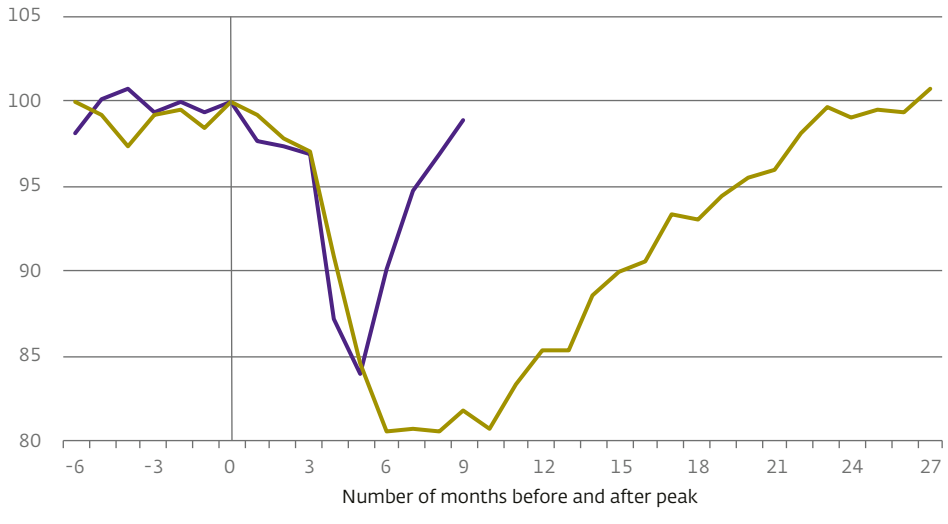


Source: Refinitiv.

Note: Budgetary policy uncertainty, Economic Policy Uncertainty subindex (Baker, Bloom, Davis).

Figure 14 World trade during the financial and the COVID-19 crises

Index, average imports and exports, excluding euro area



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Compared to the spring, consumers therefore have fewer means at their disposal now to support their consumption, while uncertainty about a new support package remains extremely high (Figure 13, right). The epidemiological situation in the United States also remains concerning. For 2021, the ECB expects US growth to pick up to 3.8% before falling back to 2.2% in 2022.

Compared to the financial crisis of 2008-2009, world trade declined less in the first half of this year and then rebounded earlier and more strongly (Figure 14). In the third quarter of 2020, world trade (excluding the euro area) increased by 11% compared to the previous quarter. The volume of world trade in September was consequently only 1.2% below the level at the end of 2019. In the financial crisis, it took more than two years for world trade to reach pre-crisis levels.

In November 2020, the oil price stood at USD 57.5 a barrel, still around 25% below the pre-coronavirus level of mid-February. The recovery of the oil price is being held back by persistently weak demand for energy in some sectors, such as aviation. Supply factors, such as an easing of supply constraints within OPEC+ and overcapacity in the refining sector, also prevent a stronger recovery in oil prices. The projection assumes that the oil price will average USD 44.0 a barrel in 2021 and rise to an average of USD 45.7 a barrel in 2022.

With regard to Brexit, it has been assumed that the UK and the EU will fail to agree a trade deal. Trade between the UK and the EU will consequently revert to the most favoured nation rules of the World Trade Organization (WTO) from 2021. Trading costs between the two parties under these rules will be higher than under a trade agreement, weighing on the growth of world trade relevant to the euro area in 2021. The projection does not take into account possible exchange rate effects and financial disruptions following a no-deal Brexit.

2.2 Dutch exports contract less than expected in 2020

The international assumptions in the projection imply a contraction of world trade relevant to the Netherlands of 10.8% in 2020. The epidemiological situation is weighing heavily on demand for Dutch goods and services. The European Union, the Netherlands' most important trading partner, is among the worst affected regions in the world, but so too are some other important trading partners outside the European Union, such as the United Kingdom and the United States. In line with the assumption that the preventive measures will be gradually eased in 2021, relevant world trade will rebound in 2021 with growth of 6.4%.

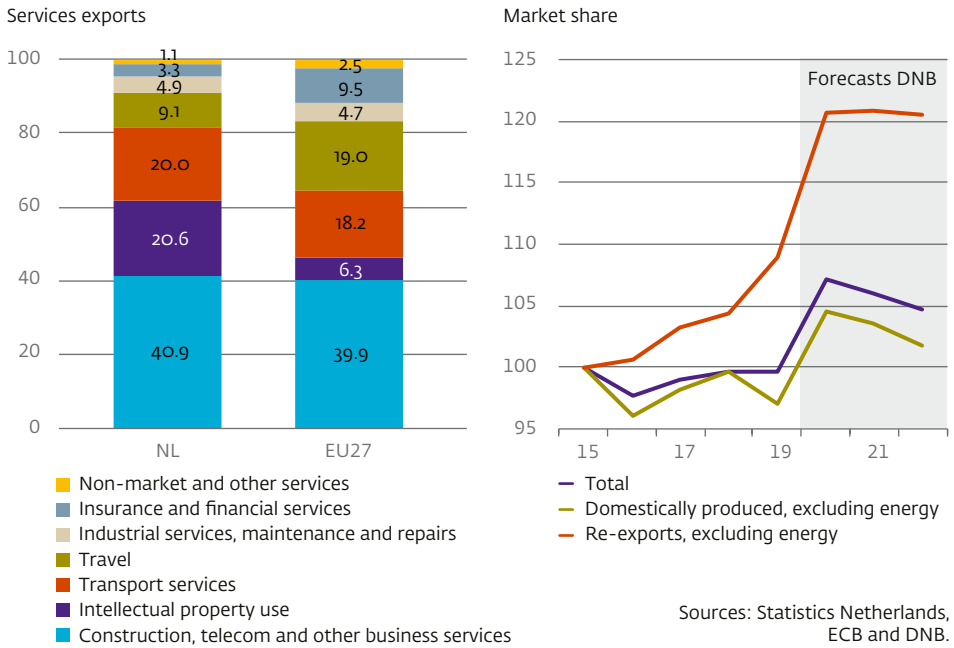
The assumed higher trade tariffs between the EU and the United Kingdom nevertheless limit the recovery of relevant world trade in 2021. In 2022, the growth of relevant world trade levels off at almost 5% (Table 1).

The contraction of Dutch goods and services exports is expected to be limited to 4% in 2020. The assumption of a no-deal Brexit causes a temporary lift in Dutch exports at the end of 2020 due to stockpiling by British firms in anticipation of higher trade tariffs and logistical problems. In addition, the specific package composition of Dutch exports this year has been beneficial for foreign sales. For example, income from travel services, such as spending by foreign travellers on accommodation and entertainment, has fallen very sharply as a result of the pandemic, but these services are only a small part of total Dutch services exports (Figure 15, left). The pandemic has also positively impacted international trade in some services, such as streaming of movies and TV series. The use of these streaming services is reflected in the use of intellectual property, the export value of which for the Netherlands rose by 18% in the second quarter of 2020 compared to a year earlier. The use of intellectual property rights thus represents a fairly high proportion of Dutch services exports. The market share of domestically produced exports consequently shows a strong rise in 2020 (Figure 15, right).

Total exports of goods and services increase by 5.2% in 2021, marking a strong recovery in Dutch exports from the downturn in 2020[4]. On an underlying basis, energy exports contract by 4.2% in 2021 due to weak energy demand and natural gas production restrictions. As a result of these production restrictions, the Netherlands has been a net importer of natural gas since 2018 to meet its domestic demand for natural gas.

Figure 15 Composition of services exports and market share in goods and services exports

Percentage shares; 2015 = 100, volume



Sources: Statistics Netherlands, ECB and DNB.

Note: Market share index is the category in question divided by relevant world trade.

Domestically produced exports (excluding energy) are expected to grow by 5.4% in 2021, as international activity picks up. The deterioration in the price competitiveness of domestically produced exports limits the recovery somewhat in 2021.

4 There is an upside risk to exports if the EU and the UK agree a trade deal at the last minute. See the results of an alternative Brexit scenario in the December 2019 Economic Developments and Outlook.

Table 1 Dutch exports and competitiveness

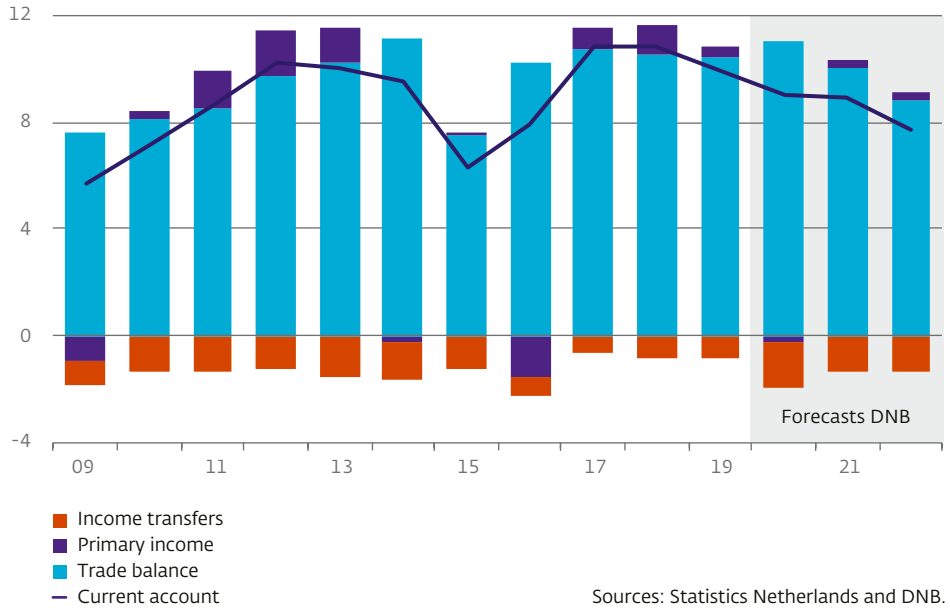
Percentage changes

	2019	2020	2021	2022
Volume				
Relevant world trade (1)	2.5	-10.8	6.4	5.1
Exports of goods and services (2)	2.6	-4.0	5.2	3.7
domestically produced	-0.2	-6.0	4.2	2.9
re-exports	7.0	-1.2	6.5	4.8
Trade performance (2-1)	0.1	7.6	-1.1	-1.3
Exports of goods and services excl. energy	2.6	-2.8	5.9	3.8
domestically produced (3)	-0.1	-3.9	5.4	3.2
re-exports	7.0	-1.2	6.5	4.8
Market performance (3-1)	-2.6	7.7	-0.9	-1.8
Price				
Competitor prices (4)	1.9	-3.4	0.5	1.7
Exports of goods and services	0.3	-2.5	1.3	1.6
domestically produced, excl. energy (5)	1.3	1.4	2.1	1.7
Price competitiveness (4-5)	0.6	-4.7	-1.6	0.0

Sources: DNB and ECB.

Figure 16 Current account surplus

Percentage of GDP



Sources: Statistics Netherlands and DNB.

Note: Income transfers include correction of changes in pension rights.

Growth of total exports falls to 3.7% in 2022. Before the coronavirus crisis, the market share of re-exports increased every year and this trend continues over the projection period. On the other hand, the growth of domestically produced exports (excluding energy) lags behind growth in relevant world trade, causing the Dutch market share to shrink somewhat (Figure 15, right). The market share of 'made in Holland' exports is still higher in 2022 than just before the coronavirus crisis, however.

Following a decrease in 2019, the current account balance continues to fall in the coming years (Figure 16). In 2020, the balance is expected to fall by almost 1 percentage point, to 9% of GDP. This is partly due to a one-off current transfer from a multinational based in the Netherlands to a foreign country, leading to a sharp fall in the balance of current transfers in the first quarter of 2020. The current account balance also decreases as a result of the pandemic.

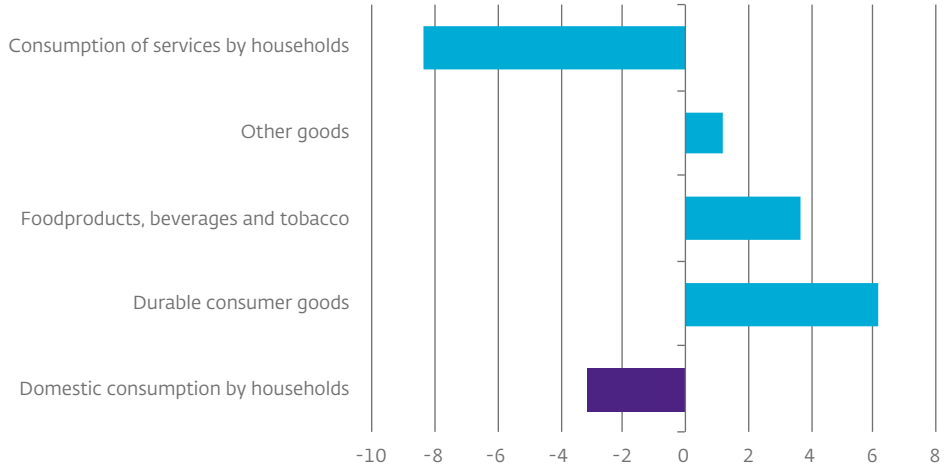
Almost all companies saw their foreign earnings fall in 2020, with the energy and aviation sectors hit particularly hard. It is true that supermarket chains saw their foreign earnings increase, but overall primary incomes from abroad decreased.
The goods balance fell in the second quarter of 2020 to 7.2% of GDP, the lowest level since 2010, and the services balance also decreased. The trade surplus is expected to decrease further in the projection period, as the growth of goods and services imports outpaces export growth. As a result, the current account balance gradually decreases to 7.7% of GDP in 2022.

2.3 Household savings rise to record high in 2020

Private consumption declines by 7.1% in 2020. This is mainly due to the contraction in the first half of the year, when consumption was 13.6% down on the fourth quarter of last year. This is mainly because the containment measures substantially reduced the consumption opportunities. Consumers also became more cautious in their spending behaviour due to heightened uncertainty about the economic outlook. Although there was a sharp recovery in consumption in the third quarter, with growth of 9.4% compared to the previous quarter, it was not sufficient to reverse the first-half decline. In particular, services consumption in the third quarter was still significantly lower than in the previous year (Figure 17). By contrast, goods consumption staged a strong recovery.
This matches the positive picture seen in the retail sector. The volume of retail sales increased by 7.2% in the third quarter compared to the previous year, marking the highest growth since the start of the series in 2005. Housing-related sectors and online retail in particular recorded strong increases in sales. In the fourth quarter, however, consumption was affected by the second wave of infections and the tightening of containment measures.

Figure 17 Domestic consumption by households in the third quarter of 2020

Year-on-year percentage changes; volume, adjusted for shopping days

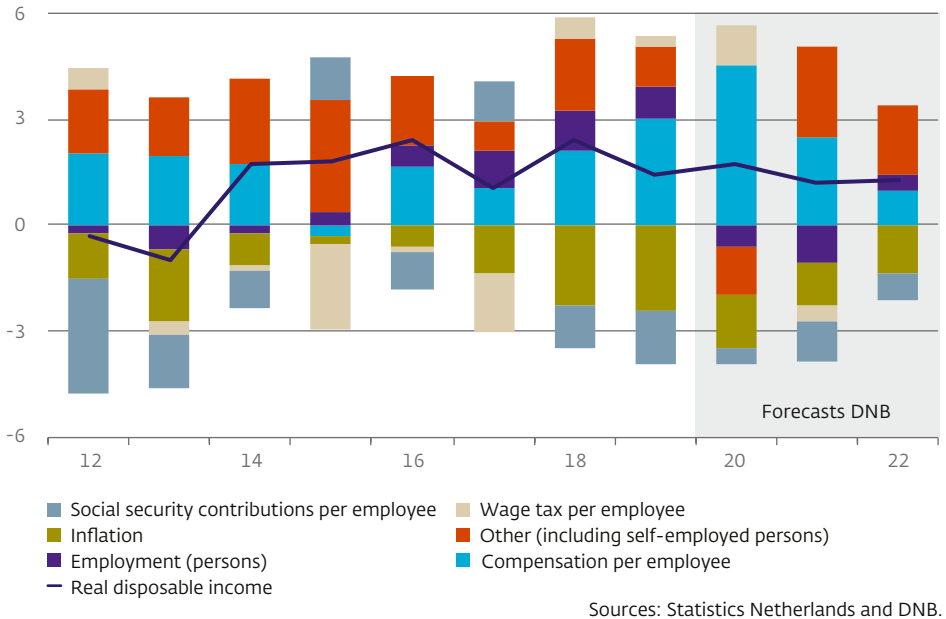


Source: Statistics Netherlands.

Private consumption is expected to recover with growth of 4.8% in 2021 and 4.5% in 2022. This is in line with the assumption in the projection that containment measures will be progressively eased in 2021 and will no longer be necessary from 2022. The recovery in consumption is supported by stable development of disposable household income. The projection assumes that households' spending capacity will grow by an average of 1.4% per year over the 2020-2022 period (Figure 18). Although this is lower than the average annual growth of 1.8% in the 2014-2019 period, it is significantly higher than during the previous economic downturn (2009-2013), when average income stagnated.

Figure 18 Real disposable household income

Year-on-year percentage changes and contributions in percentage points



Sources: Statistics Netherlands and DNB.

The government support measures play an important role here. For example, the fall in self-employed incomes in 2020 was cushioned by government income support and without wage subsidies the negative contribution from employment in 2020 and 2021 would have been significantly greater.

With household income remaining stable and consumption decreasing, households' free savings have risen substantially this year. Free savings in the second quarter were consequently more than EUR 12 billion higher than in the previous year. Around EUR 11 billion of this was held in savings and other accounts at Dutch banks. The remainder was used in part for transfers to investments debt repayments.

It is notable that voluntary mortgage repayments actually decreased. This suggests that at a time of great uncertainty households prefer more liquid forms of savings, in order to absorb a potential drop in income. In the projection the individual savings rate, or free savings as a percentage of disposable income, rises from 3.1% in 2019 to 11.1% in 2020. That is considerably higher than the maximum level seen in the last 20 years, i.e. 3.9% in 2016. In line with the recovery in consumption in 2021 and 2022, the individual savings rate gradually decreases to 5.5% in 2022.

2.4 Temporary dip in investment with moderate lending

The containment measures in the Netherlands and abroad have significantly reduced firms' sales at the macro level, although the impact differs considerably depending on the firm and the sector. Supermarkets and DIY stores, for example, have benefited from the pandemic, while businesses in the hospitality and travel sectors have seen their sales fall substantially.

The number of companies with declining sales due to the pandemic is high, however. The number of industrial firms claiming to have capacity overutilisation has fallen sharply within a short period. The same applies to the labour shortage reported by firms as a major obstacle to production (Figure 19). Capacity utilisation remains low despite the rise in the last two quarters of this year. This will put downward pressure on business investment in the coming period. Looking ahead, firms will still have to contend with great uncertainty about the course of the pandemic and its impact on their future sales. Last November's Business Survey shows business sentiment on investment turning negative overall for the first time since 2013. More than 20% of business owners expect to invest less next year than in 2020, while 15% expect to invest more. Net business confidence remains negative, although it has improved in the fourth quarter compared to the previous quarter. In the projection the rise in business investment in 2019 (6.7%) turns into a substantial -7.3% contraction in 2020. A moderate recovery is not seen until 2021, with growth of 2.6%, but once confidence is restored in the future, business investment picks up strongly in 2022 (8.5%).

The annual growth of bank lending to businesses has fallen steadily in recent months, with a wide gap between the trend in the Netherlands and the euro area average. Annual growth in the euro area increased from 3.2% in January to 6.8% in October. In the Netherlands, by contrast, the contraction at the beginning of this year turned into growth of around 2% (y-o-y) in March to July, which gradually fell to 0.4% in October. This divergent trend can be explained in part by the much greater use of credit guarantee schemes in some quite severely affected euro area countries, such as Spain and France, while in the Netherlands support for businesses and consumers is mainly channelled through the government budget.

Lending to SMEs has decreased since the second quarter of 2019, with the contraction gradually reaching 3% in the second quarter of 2020. Meanwhile a majority of banks in the Bank Lending Survey (BLS) indicate that they have tightened their acceptance criteria for lending to large and small businesses since the second quarter of 2020 due to a deteriorating risk perception. Banks also expect acceptance criteria to be tightened further in the fourth quarter. This could put further pressure on credit growth in the forthcoming quarters. According to the banks (BLS), the demand for business loans increased in the third quarter of this year and they expect to see a continued rise in the fourth quarter. This reflects firms' increased need for liquidity to finance their stocks and working capital and to restructure their debts. On the other hand, the lower financing requirements for investments in fixed assets and mergers and acquisitions are weighing on demand for loans.

Figure 19 Production constraints and capacity utilisation rate in industrial firms

Standard scores

Source: European Commission.

Lending to SMEs is structurally lower in the Netherlands than in the rest of Europe. This is due in part to the financing structure of SMEs, which relies heavily on equity. Lending can be simplified and possibly increased by setting up a credit register enabling banks to assess the underlying financial position of small and medium-sized enterprises faster and more easily. In the projection, modest growth in total banking lending in 2020 turns into a 2% contraction in 2021 before a modest increase in 2022 (0.6%).

2.5 Deterioration of public finances remains manageable

Public finances have been hit hard by the coronavirus crisis, so it is just as well that they were in a good position at the outbreak of the pandemic. This crisis has once again highlighted the importance of buffers. The debt-to-GDP ratio fell further to 48.7% in 2019, while the budget balance that year was a surplus of 1.7% of GDP. As a result of the economic crisis and the support packages aimed at limiting economic damage, the budget balance this year turns into a deficit of 6.3% of GDP (Table 2). The government will remain in deficit in 2021 and 2022, as public spending decreases only gradually during those years. The structural balance also shows a deficit in 2020 and the remainder of the projection period, although this indicator should be interpreted with particular caution due to the specific circumstances.

The 2020 budget deficit is historic by Dutch standards. A deficit of 6.3% of GDP has not been seen since the Second World War. At the same time, the deficit has remained limited compared to other European countries. For example, the average euro area budget balance for 2020 is -8.0% of GDP. The fact that the Dutch deficit in 2020 is smaller than in a number of European countries is partly due to the relatively limited scale of the economic damage, but it is also due to a better starting position at the beginning of the year. This difference is not attributable to expenditure on economic support measures, because as a percentage of GDP this is no lower in the Netherlands than the EU average.

In the Netherlands, public spending increased substantially in 2020 mainly because of the support packages. The largest measure in the support packages is the provision of wage subsidies under the NOW scheme. Other important measures are self-employed income support (TOZO) and reimbursement of businesses' fixed costs (TVL). The government is expected to spend around EUR 27 billion on these three measures in 2020. In 2021 public expenditure as a percentage of GDP decreases slightly and the three main support measures are expected to cost a total of around EUR 7 billion. The assumption is that the support measures will be gradually phased out and withdrawn on 1 July 2021, in accordance with the letters to parliament of 28 August and 27 October of this year. This means that all the adjustments announced by the government on 9 December 2020 have not been included in this projection.

Table 2 Public sector key data

Percentage of GDP

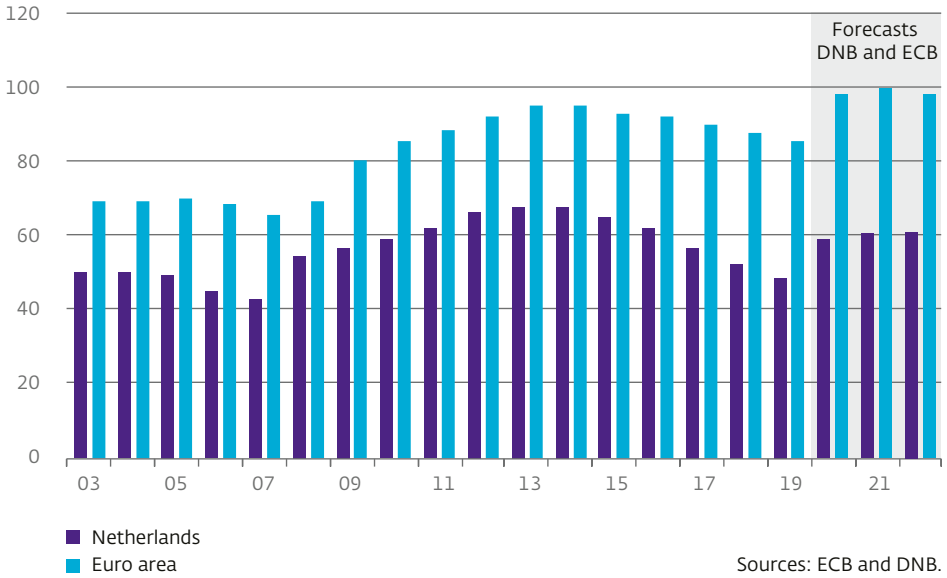
	2019	2020	2021	2022
Public expenditures	42.0	49.8	48.0	45.8
Taxes and social security contributions	39.3	38.9	38.7	38.3
Other income	4.4	4.6	4.5	4.3
Primary balance	2.5	-5.6	-4.1	-2.5
EMU balance	1.7	-6.3	-4.9	-3.3
Structural balance (EC method)	0.4	-4.2	-3.9	-3.5
EMU debt (based on end-of-period)	48.7	59.2	60.6	61.1

Source: DNB.

Although total public expenditure falls overall in 2021, that is not true of all components. Spending on unemployment benefit increases, for example, because of the rising jobless count, and spending on healthcare and old-age pension benefits continue to increase, which would also have occurred without the COVID-19 outbreak. Public investment will also increase in 2021, partly through the National Growth Fund. As a result of these developments, public expenditure as a percentage of GDP in 2022 is almost 4 percentage points higher than in 2019.

Figure 20 Public sector debt, Netherlands and euro area

Percentage of GDP



Sources: ECB and DNB.

The collective tax burden decreases gradually over the projection period due to the tax reductions already announced before the virus outbreak. As part of the support measures, the government may grant deferrals of tax payments. Businesses have made extensive use of such deferrals. The total amount of deferred taxes is expected to reach around EUR 13 billion in 2020. This amount does not cause a deterioration of the estimated EMU balance, but it is included in the calculation of public debt.

In order to limit the economic effects of the virus outbreak, it is important that the automatic stabilisers and the support measures can operate freely. This does however cause the debt-to-GDP ratio to rise by more than 12 percentage points in three years, reaching over 61% of GDP by the end of 2022. The Dutch government's debt-to-GDP ratio would nevertheless remain below the highest level seen after the financial crisis (68% of GDP). The sustainability of government debt would not be at risk. Figure 20 shows the average debt-to-GDP ratio in the euro area also rising sharply in 2020, so Dutch government debt should remain a relatively attractive investment. The rise in the debt-to-GDP ratio shows the importance of allowing the ratio to fall in good times so that there is a buffer to absorb unexpected setbacks.

2.6 Policy considerations on the support packages[5]

Governments and central banks around the world have intervened massively to limit the economic impact of the coronavirus outbreak on businesses and households. The Dutch government has also adopted a comprehensive package of measures, including meeting a large proportion of businesses' wage costs (Temporary Emergency Bridging Measure for Work Retention, NOW), granting tax deferrals and providing loan guarantees. The government is also allowing the automatic stabilisers in the government budget to operate freely. Tax revenues move in tandem with the economy and no cuts are being made to the other public spending.

The pandemic is a risk for which households and businesses are unable to obtain cover. In such circumstances the government is the only party that can intervene to limit the economic damage. In the first round of the NOW scheme, for example, the government helped pay the wages of around 2.6 million employees. Saving jobs and preventing large-scale bankruptcies reduces the risk of long-term unemployment and the loss of company-specific knowledge, thereby limiting long-term damage to

5 This section meets the request made by the Ministry of Finance to DNB, following the Palland/Bruins motion, to consider an optimum strategy to reduce the economic and social damage of the coronavirus crisis for the Netherlands.

the economy. The support measures also limit the risk of the crisis spreading to the financial sector.

They have proved effective in maintaining jobs and businesses. This is demonstrated, for example, by the fact that the number of bankruptcies in 2020 has so far been lower than in the previous year and by the fairly limited rise in unemployment. The economy is nevertheless still going through difficult times. Statistics Netherlands data show that the percentage of business owners expecting their business to fail in the next 12 months remained high in a number of sectors at the beginning of September (32% in hospitality and 22% in culture, recreation and sport).

Although the support measures were necessary and effective, leaving them in place for too long could prove costly if the structure of the economy changes as a result of the coronavirus crisis. For example, government support may mean that support is given to sectors or firms that will have a permanently smaller role after the crisis. The transition to this new economic structure will then be delayed. Moreover, the measures tie up a considerable volume of public finances.

The third support and recovery package is expected to run until 1 July 2021, providing long-term clarity for businesses and households at a time of great uncertainty. Since the support measures are linked to various turnover criteria, the package evolves in tandem with the economy. This means more support is granted as the economic situation deteriorates, and this support goes mainly to businesses and regions where it is most needed. The generic measures in the support package also have the advantage that the government does not have to assess the prospects of individual sectors and businesses. Furthermore, the third emergency package gives businesses more freedom to adapt their workforce to changing circumstances.

The government recently decided to postpone the partial phase-out of the support measures planned for the first quarter of 2021. Additional support has also been announced for specific sectors hit hard in the autumn as a result of the new containment measures. This decision is understandable given the resurgence of the virus in the autumn. On the other hand, recent news of the expected availability of a vaccine suggests that at a later stage the economy may recover faster than has been anticipated up until now. It is therefore important that the pace at which the support measures are phased out continues to take account of current economic and medical developments. If vaccination becomes available in the near future and the infection rate and pressure on the health system eases, there will be additional scope to scale back the support measures.

Support measures help to limit the economic damage caused by the virus outbreak, but the outbreak has not only economic but also far-reaching social consequences. These are felt first and foremost by people and their loved ones who are impacted by or fearful of the virus. Everyone has also faced increased restrictions on physical gatherings with family and friends since the second wave. In addition, job insecurity and working or studying from home have a major impact on people's daily lives and well-being. Social consequences such as increased loneliness and lower well-being therefore also require attention in this crisis.[6]

There is a belief that measures to contain the virus conflict with the need to prevent damage to the economy. Easing containment measures is not a solution for the economy, however, if the virus can then spread further. It was pointed out earlier that recent IMF research shows that a rising infection rate makes people more cautious, and these self-imposed contact restrictions also lead to an economic downturn.[7] It is therefore important to focus on sufficient capacity for testing

6 SCP(2020), Welbevinden ten tijde van corona. Initial findings based on a population survey in July 2020.
7 IMF (2020), World Economic Outlook.

and source and contact tracing and to roll out the vaccine rapidly, but safely, as soon as it becomes available. At the same time, to prevent a 'stop-go' policy, containment measures must not be relaxed too quickly, particularly when vaccines are clearly on the horizon.

Curbing the virus in this way minimises both the economic and social impact of the outbreak. The coronavirus crisis started as a medical crisis and the solution therefore lies primarily in the medical field.

3 Alternative scenarios for the Dutch economy

Much has been learned in recent months about the social and economic aspects of the coronavirus, but the macroeconomic effects of the COVID-19 pandemic are still shrouded in considerable uncertainty. A great deal will depend on the duration, stringency and compliance with the containment measures as well as the timing and successful implementation of a medical solution.[8] The duration and effectiveness of financial support measures and the degree to which households and businesses are able to adapt to the crisis and the measures ('learning effects') will also play an important role. A great deal of uncertainty still surrounds all these factors at present. This chapter provides two alternatives to the central projection presented in the previous chapters. The mild and severe scenario differ from the central projection mainly in terms of the further course and control of the pandemic, the strength of the economic rebound and the extent of the permanent economic damage. Rather than making a statement about the probability of these scenarios, this chapter aims to describe a range of outcomes. The actual outcome may still turn out differently, of course, in a positive or negative sense. The range has nevertheless narrowed compared to the results six months ago.

An accurate assessment of the economic recovery and the ultimate economic impact of the pandemic in these scenarios depends greatly on the stringency of the containment measures and their easing over time.

On the basis of the Oxford Stringency Index (OSI), Figure 21 shows the development of containment measures from the beginning of January 2020 and the assumed time profile up to the end of 2022 for the baseline and the two scenarios. The OSI measures the stringency of various control measures (such as keeping 1.5 metres apart, homeworking, bans on large-scale gatherings, closing businesses and schools etc.) and summarises the findings on a scale from 0 to 100. This gives an indication of the pandemic and the impact on the economy.

Mild scenario

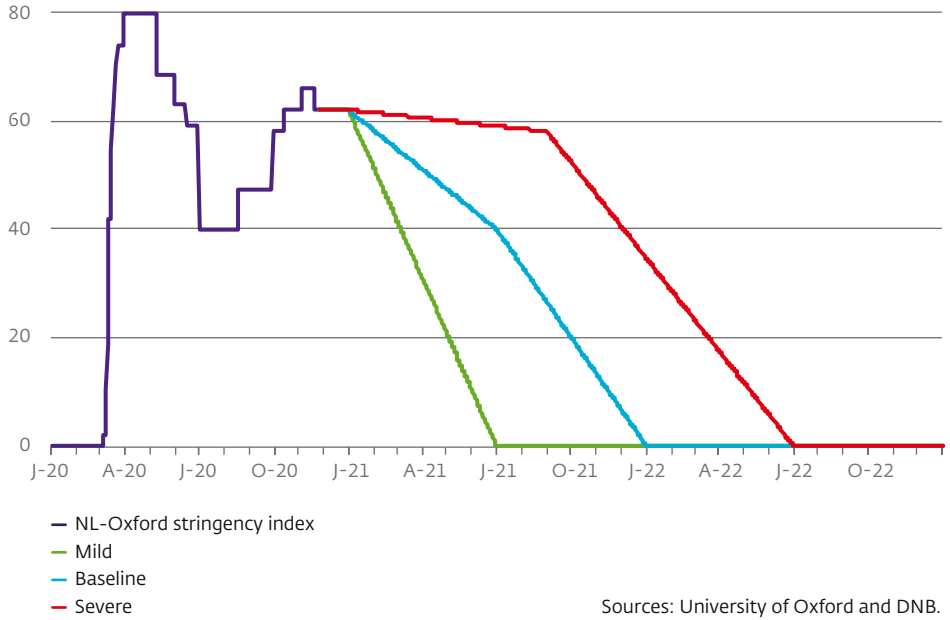
It is not inconceivable that the economy will recover faster than anticipated in the central projection. In this mild scenario it has been assumed that the virus outbreak will be brought under control earlier and that there will be stronger positive learning effects, so confidence among households and businesses rises and economic activity restarts faster. As reflected in Figure 21, the underlying idea is that the current level of containment measures is effective in curbing the second wave of infections and that from the beginning of 2021 the control measures can be eased fairly quickly to the level seen last summer. It is also assumed that an effective vaccine will become widely available in the spring and will then be rolled out successfully by the end of June 2021. Assuming that there are no further flare-ups of the virus, the measures can then all be lifted.

Since spending in this scenario grows faster in the first half of 2021, the economy rebounds strongly from the very low output level in the fourth quarter of 2020.

8 Successful implementation of an effective medical solution requires among other things certification of available vaccines or treatment methods by the competent health authorities as well as large-scale rollout and distribution, and public acceptance. Even after the largely successful implementation of a vaccine or treatment method, the full positive effects on the economy will likely materialise only with some delay.

Figure 21 Developments in social distancing measures

Oxford stringency index



Sources: University of Oxford and DNB.

Note: Data for the Oxford stringency index are based on the Coronavirus Government Response Tracker of the University of Oxford.

Economic growth then picks up strongly in the first two quarters of 2021, aided by the rapid easing of measures and the successful vaccine rollout. Quarterly growth rates then gradually return to the normal pace. As the economy recovers faster and more strongly in the mild scenario than in the baseline, GDP returns to the end-2019 pre-crisis level by mid-2021 (Figure 22).

Not only is the economic recovery faster in the Netherlands, but the international picture is also more favourable compared to the central projection. As world trade growth picks up faster in the mild scenario, especially in 2021, Dutch exports perform significantly better than anticipated in the baseline (Table 3). At 4.9%, GDP growth is significantly higher than in the central projection in 2021. Unemployment in 2021 peaks at an average at 6.2% of the labour force before falling steadily to 4.8% in 2022. In line with the economic downturn in 2020, the housing market cools down over time, but due to a more favourable trend in disposable income house prices continue to rise by an average of over 2% per year in 2021 and 2022. At the same time, the budget deficit is lower than in the baseline and the debt-to-GDP ratio rises less rapidly. The negative impact of the recession on potential growth and labour productivity remains minimal in the mild scenario. Figure 22 also suggests that, compared to the last pre-coronavirus projection in December 2019, the overall loss of output in the mild scenario stays within reasonable bounds.[9]

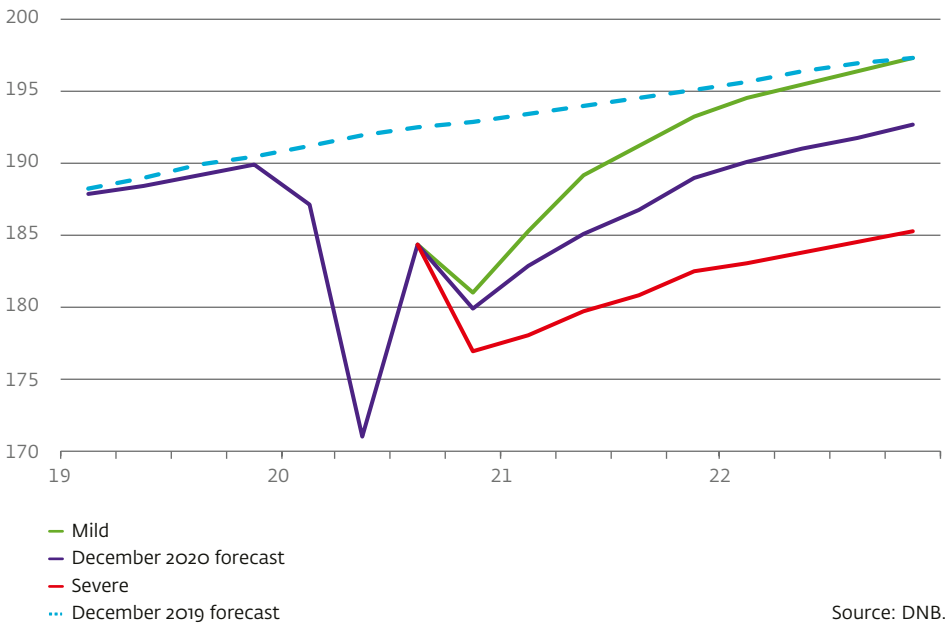
Severe scenario

The severe scenario assumes a protracted period of stringent containment measures, because it is not possible to halt the spread of the virus in the second wave. From January 2021 the measures begin to be eased very gradually back to the level at the end of September (Figure 21), while the virus continues to flare up from time to time. It is assumed that a vaccine will become available after the summer of 2021 and that its rollout will be significantly slower than in the central projection.

9 The 2019 projection has not been adjusted for other possible non-coronavirus-related 'shocks' on the economy, such as Brexit or the result of the US presidential election.

Figure 22 Output loss caused by COVID-19 pandemic

GDP volume; EUR billions, base year 2015



Source: DNB.

The virus is not brought under control until the third quarter of 2022, at which point the measures become unnecessary. Limited learning effects, persistent uncertainty, increased financial stress and negative confidence effects put a long-term brake on economic activity.

In the severe scenario the economic downturn is significantly greater than in the central projection, with GDP at the end of 2022 still around 2.5% below the level at the end of 2019. The impact on potential growth is stronger and more protracted in the severe scenario due to the lower level of business investment and the associated lower capital goods stock. The overall loss of output caused by the pandemic, measured by the difference compared to the level of output anticipated in the December 2019 projection, is not only much greater in the severe scenario than in the baseline, but the negative effects on economic growth are also more persistent (Figure 22).

The international outlook is much more negative in the severe scenario than in the baseline. World trade growth is almost 6 percentage points lower in 2021 (Table 3). This leads to a significantly lower volume of Dutch goods and services exports. With reduced foreign demand and lower growth of business investment and private consumption, GDP growth is a meagre 0.2% in 2021 and 2.2% in 2022. As usual, unemployment responds after a time lag and is around a full percentage point higher in 2022 than in the central projection. Although the impact on inflation initially remains limited, a further slump in demand and lower wage growth result in a more subdued inflation picture. Inflation remains stable at around 0.8% in 2021 and 2022. In the severe scenario, house prices fall further than in the central projection and a slight downward trend is anticipated in 2022. Consistent with the lower growth, longer-term support measures and higher unemployment cause a sharp deterioration in public finances. This leads to budget balances on average more than 2.5 percentage points per year lower than in the baseline projection in 2021 and 2022. The result is a budget deficit of 9% of GDP in 2021. Public debt in 2022 rises to almost 70% of GDP, around 8 percentage points higher than in the central projection.

Table 3 Outcome of COVID-19-scenarios

Percentage changes, unless stated otherwise

	Mild						Severe					
	2020	Deviation from projection	2021	Deviation from projection	2022	Deviation from projection	2020	Deviation from projection	2021	Deviation from projection	2022	Deviation from projection
Gross domestic product	-4.2	(0.1)	4.9	(2.0)	3.2	(0.3)	-4.7	(-0.4)	0.2	(-2.7)	2.2	(-0.7)
Private consumption	-6.9	(0.2)	7.4	(2.6)	3.9	(-0.6)	-8.0	(-0.9)	1.6	(-3.2)	4.0	(-0.5)
Business investment	-7.3	(0.0)	4.3	(1.7)	12.2	(3.7)	-7.3	(0.0)	-1.3	(-3.9)	7.3	(-1.2)
Exports of goods and services	-3.7	(0.3)	9.4	(4.2)	4.1	(0.4)	-4.5	(-0.5)	0.3	(-4.9)	2.2	(-1.5)
Imports of goods and services	-4.2	(0.3)	10.6	(4.0)	6.0	(0.4)	-5.0	(-0.5)	2.1	(-4.5)	4.5	(-1.1)
Consumer confidence (level)	-19.1	(0.6)	-12.1	(4.3)	-2.0	(6.5)	-20.1	(-0.4)	-24.3	(-7.9)	-18.5	(-10.0)
Negotiated wages, private sector	2.8	(0.0)	1.3	(0.0)	1.5	(0.8)	2.8	(0.0)	1.3	(0.0)	0.1	(-0.6)
Harmonised consumer price index	1.2	(0.0)	1.8	(0.3)	1.8	(0.3)	1.0	(-0.2)	0.7	(-0.8)	0.8	(-0.7)
House prices, existing own homes	7.1	(0.0)	2.3	(0.3)	2.3	(1.2)	7.1	(0.0)	1.8	(-0.2)	-0.5	(-1.6)
Unemployment (% of labour force)	4.0	(0.0)	6.2	(-0.3)	4.8	(-1.2)	4.0	(0.0)	6.9	(0.4)	7.4	(1.4)
EMU balance (% of GDP)	-6.1	(0.2)	-3.5	(1.4)	-2.1	(1.2)	-6.6	(-0.3)	-9.0	(-4.1)	-4.8	(-1.5)
EMU debt (% of GDP, based on end-of-period)	58.9	(-0.3)	57.6	(-3.0)	57.0	(-4.1)	59.7	(0.5)	66.5	(5.9)	69.0	(7.9)
International assumptions												
Volume of relevant world trade	-10.5	(0.3)	11.5	(5.1)	5.3	(0.2)	-11.3	(-0.5)	0.5	(-5.9)	3.5	(-1.6)
Competitor prices	-3.2	(0.2)	1.4	(0.9)	1.9	(0.2)	-3.5	(-0.1)	-1.1	(-1.6)	1.4	(-0.3)

Sources: DNB and ECB.

4 Resilience of the Dutch banking sector: an update of the pandemic stress test

4.1 Introduction

Dutch banks are well placed to absorb the impact of the coronavirus crisis, partly as a result of capital buffers built up in the years before the pandemic. The government and supervisory measures taken in the past year have also made a significant contribution. For example, DNB temporarily lowered the systemic buffers for the major banks to increase their shock-resistance and safeguard lending. The economic picture remains highly uncertain, however, despite the uptick in the economic outlook compared to this spring. Given these uncertainties, this chapter uses the methodology of the DNB pandemic stress test carried out this spring to assess[10] possible implications of two stress scenarios for the Dutch banking sector.

As in the spring, these scenarios posit unfavourable hypothetical situations in order to identify possible vulnerabilities in the financial system; they are not forecasts of likely outcomes. The analysis uses the same assumptions as the spring pandemic stress test. For example, it is based on a static balance sheet,[11] assumes that government loan guarantees will continue up to the end of the stressed period and that banks will not distribute any dividends for the duration of the scenario.

The change made by DNB in the buffer has also been taken into account as a modified capital requirement. The analysis looks only at the six Dutch banks that are supervised directly by the ECB because of their systemic importance (ING, Rabobank, ABN AMRO, Bank Nederlandse Gemeenten, Nederlandse Waterschapsbank and Volksbank). The calculations are made using the Cassandra top-down stress test model.[12]

The pandemic stress test emphasises the impact of macroeconomic developments on the balance sheet of Dutch banks. For example, rising bankruptcies lead to losses on outstanding loans, banks have to set aside more provisions if the economic outlook deteriorates and an economic downturn also weighs on the profitability of the banking sector. Such effects are quantified in this chapter by looking at the impact on the bank's capital position, i.e. its ability to absorb future losses. If the capital position is at risk of being eroded too much, banks may cut lending and their stability could be jeopardised.

4.2 A pandemic stress test with two scenarios

This stress test uses two scenarios. In addition to the severe scenario described in Chapter 3, a very severe scenario has been calculated with a particular focus on tail risks.

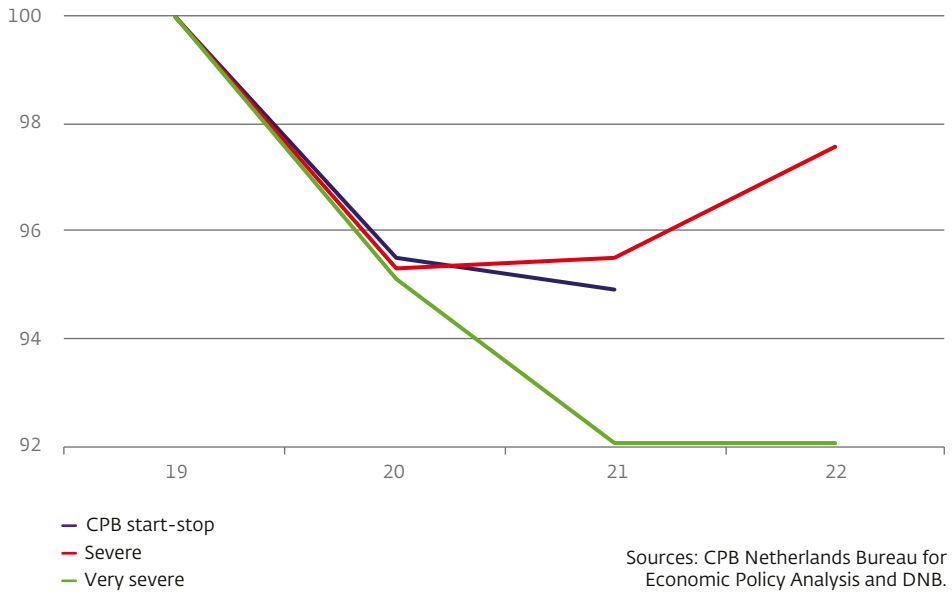
10 See DNB (2020), A pandemic stress test for the Dutch banking sector, Financial Stability Report, Spring 2020.
11 Loans maturing during the stress test are replaced by loans of the same maturity and quality: banks therefore do not respond to changing circumstances by adjusting their balance sheet under this assumption.
12 For details of the Cassandra model, see Daniëls, Duijm, Liedorp and Mokas (2017), A top-down stress testing framework for the Dutch banking sector, DNB Occasional Studies 2017 No. 3.

These result from uncertainty surrounding the vaccine and possible financial amplification, i.e. situations in which a worsening of conditions in the financial sector has an additional impact on the real economy. Compared to the severe scenario, this second stress scenario assumes an extremely slow and difficult vaccination process, with a fiercer resurgence of the virus in 2021 than in the severe scenario and substantial containment measures having to remain in place until 2022. This scenario also assumes that the virus will remain out of control not only in the Netherlands but also in the rest of the world, causing continued disruption to international trade. In this very severe scenario, this naturally places considerable strains on the Dutch economy in 2021, with bankruptcies rising, confidence remaining low and risk premiums reaching high levels. These increased risk premiums in turn lead to tighter financial conditions, with an additional negative impact on investments. In this very severe scenario the economy would not begin to recover until 2022, although the picture for that year remains fairly bleak. Consumer and producer confidence in 2022 remain low, growth in world trade remains weak and risk premiums are not expected to fall slowly until that year. The economic picture in the very severe stress scenario is much less favourable than in the severe scenario in Chapter 3 and CPB's start-stop scenario.[13] The very severe scenario thus provides a clear indication of potential vulnerabilities if the tail risks materialise.

Figure 23 shows the development of Dutch GDP in the two scenarios. The GDP trend in the CPB start-stop scenario is also shown for comparison purposes. As described in Chapter 3, the severe scenario assumes a recovery that starts cautiously in 2021 and continues in 2022. In this scenario, GDP in 2022 is still around 2% below the 2019 level.

Figure 23 GDP level in various scenarios

2019 = 100; volume



Sources: CPB Netherlands Bureau for Economic Policy Analysis and DNB.

In the very severe scenario, no significant recovery occurs before the end of the projection period and GDP in 2022 is still more than 8% below the 2019 level. This is an even more negative picture than in the severe scenario, as is appropriate for a detailed exploration of the tail risks. In this more prolonged contraction, unemployment rises more strongly than in the severe scenario (to nearly 10% in 2022) and financial markets are hit harder. The level of GDP in 2021 in CPB's start-stop scenario is between the severe and the very severe scenario.

13 CPB (2020), November projection: Economic outlook 2021, November 2020.

4.3 Deterioration of banks' capital position is substantial but manageable[14]

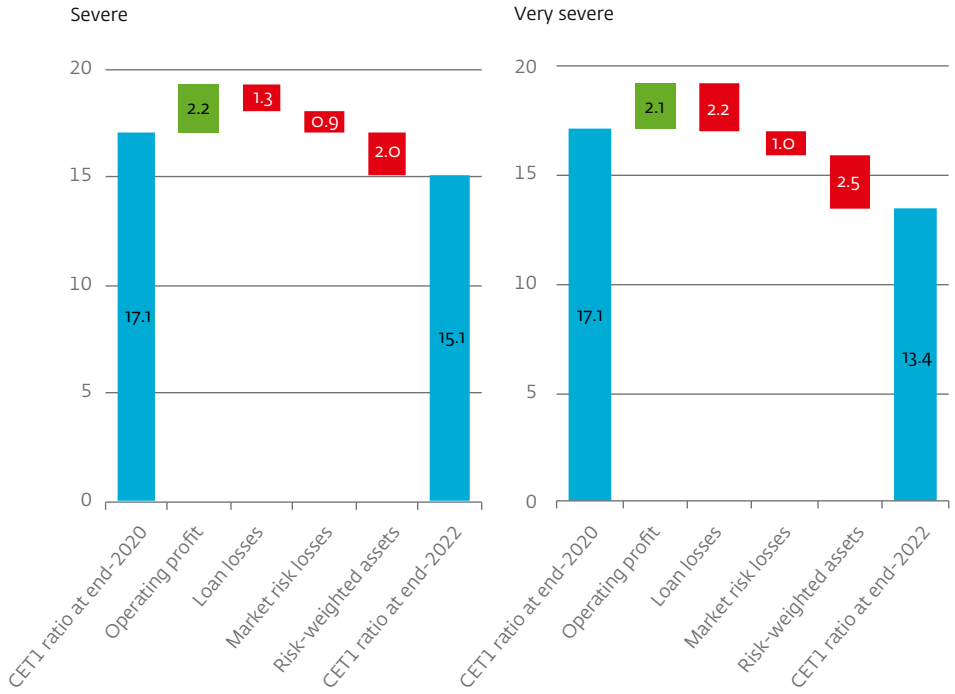
Currently, the average risk-weighted capital position (CET1 ratio) of Dutch banks is around 17%. This capital position has held up well since the start of the pandemic. This is due in part to restrictions on dividend distributions and the low risk weighting of state-guaranteed loans. Although the number of loans with increased credit risk is already increasing (Figure 25), any major credit losses are unlikely to occur until 2021 or 2022.

According to the analysis, the average capital ratio of Dutch banks in a severe scenario will fall by about 2 percentage points, from 17% to 15%. In the very severe scenario, capital ratios fall by an average of almost 4 percentage points (Figure 24). In both cases, this would amount to a significant deterioration of Dutch banks' capital position. However, because of their current relatively strong buffers, banks are in principle able to absorb this impact without excessive repercussions in terms of lending to households and businesses. The banks also remain comfortably above the regulatory capital requirements. The measures taken by DNB in the spring to temporarily lower the buffer requirements may also be a factor here.[15] This is because they give banks more capacity to absorb losses.

The impact on the average capital ratio is driven partly by credit losses, which are mainly due to rising business failures. About half of the losses fall into the corporate portfolio, followed by almost a quarter in the SME segment. Losses on mortgage portfolios remain relatively limited. The share of corporate losses is more or less in line with their share of risk-weighted assets.

Figure 24 Capital impact in each scenario

Percentages of risk-weighted assets



Source: DNB.

Note: Operational and market risk estimates are based on the EBA's 2018 European stress test.

14 All the results in this chapter are averages of the six Dutch banks supervised directly by the ECB.
15 See DNB (2020), DNBulletin, DNB temporarily lowers bank buffer requirements to support lending, 23 March.

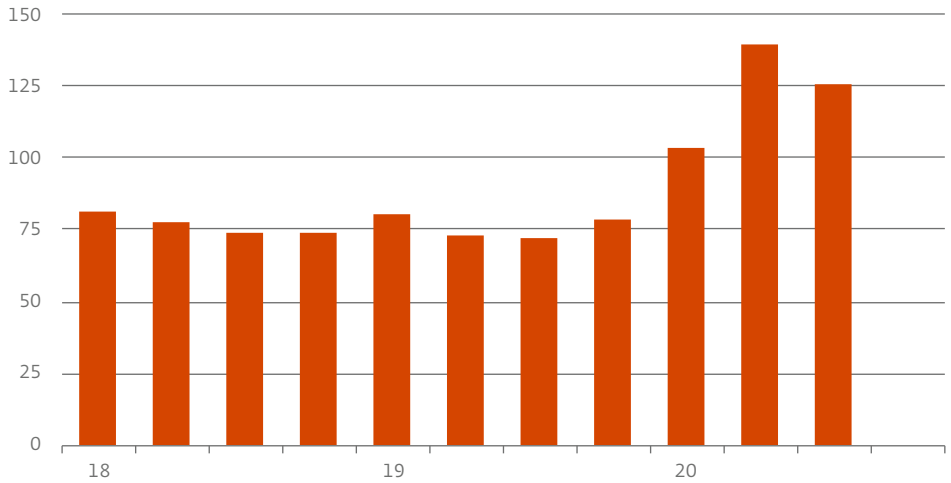
In terms of their share of the balance sheet, the losses on SMEs are relatively high and those on real estate are fairly low. Total credit losses in the severe and very severe scenarios amount to EUR 8.5 billion and EUR 14 billion respectively. However, the banks remain operationally profitable even in the very severe scenario; the net interest margin and other income are higher than the costs incurred, as illustrated by the green bars in Figure 24. Losses are nevertheless recorded once credit losses and market risk are deducted, which is not unusual in a stress test.

The impact of loans where the probability of default increases but no losses have to be recognised is even greater than the effect of the credit losses. This leads to in an increase in banks' risk-weighted assets (RWA), thereby reducing the (risk-weighted) capital ratio. Here too, the biggest impact is expected in the corporate portfolios, followed by SMEs and real estate. This risk is already rising, as the number of loans with significantly higher credit is increasing sharply (Figure 25). Vigilance is required particularly in a situation where loan risk may be obscured by measures such as moratoria, guarantees and tax deferrals.

The estimated impact on capital positions is now smaller compared to the DNB pandemic stress test in the spring. In what was then the severe scenario, the average CET1 capital ratio was liable to fall by 5.5 percentage points. On that occasion too, an even more severe scenario was calculated, the perfect storm scenario, in which credit losses increased to such an extent that banks would cut their lending.
The impact in the current very severe scenario is smaller than in the severe scenario in the spring. This difference can be explained by the upward adjustments to the economic outlook in recent months. Although the GDP contraction in 2020 is of historic proportions, the decline is less severe than initially feared. The projections have also been revised upwards for 2022. There are still tail risks, but these are less severe than at that time.

Figure 25 Loans with elevated credit risk (stage 2 exposures)

EUR billions



Source: DNB.

Note: State 2 exposures for the large banks.

Overall, this stress test shows that in more negative scenarios than the baseline the impact on bank balance sheets, while manageable, may still be substantial. That is particularly true if the government support measures are scaled back further. It is therefore important that banks stay alert to the build-up of credit risks. In the period ahead DNB will continue to monitor closely the impact of economic developments on the financial sector.

Key data in forecast for the Dutch economy

Percentage changes, unless stated otherwise

	2019*	2020	2021	2022
Volume of expenditure and output				
Gross domestic product	1.6	-4.3	2.9	2.9
Private consumption	1.5	-7.1	4.8	4.5
Public expenditure	1.5	-0.5	4.1	3.7
Business investment	6.7	-7.3	2.6	8.5
Housing investment	1.6	-1.9	-4.7	2.0
Exports of goods and services	2.6	-4.0	5.2	3.7
domestically produced	-0.2	-6.0	4.2	2.9
re-exports	7.0	-1.2	6.5	4.8
Imports of goods and services	3.1	-4.5	6.6	5.6
domestically used	0.5	-6.7	6.7	6.2
Wages and prices				
Negotiated wages, private sector	2.3	2.8	1.3	0.7
Compensation per employee, private sector	2.4	3.2	2.1	0.8
Unit labour costs	3.0	8.1	-2.9	-1.0
Prices of domestically produced exports	0.8	-2.0	1.7	1.8
Harmonised consumer price index	2.7	1.2	1.5	1.5
House prices, existing own homes	6.9	7.1	2.0	1.1
Labour market				
Employment (persons, growth)	1.8	-0.9	-2.3	1.0
Labour supply (persons, growth)	1.4	-0.2	0.3	0.5
Unemployment (persons x 1,000)	314	379	634	588
Unemployment (% of labour force)	3.4	4.0	6.5	6.0

	2019*	2020	2021	2022
Public sector and financial				
EMU balance (% of GDP)	1.7	-6.3	-4.9	-3.3
EMU debt (% of GDP, based on end-of-period)	48.7	59.2	60.6	61.1
Current account (% of GDP)	9.9	9.0	8.9	7.7
Mortgage loans (based on end-of-period)	1.8	1.8	1.2	0.8
Bank lending to NFCs (based on end-of-period)**	-1.9	0.6	-2.0	0.6
International assumptions				
Volume of relevant world trade	2.5	-10.8	6.4	5.1
Volume of GDP US	2.2	-3.6	3.8	2.2
euro area	1.3	-7.3	3.9	4.2
emerging markets	3.4	-2.3	6.7	4.6
Short-term interest rate in the euro area (%)	-0.4	-0.4	-0.5	-0.5
Long-term interest rate in the Netherlands (%)	-0.1	-0.4	-0.4	-0.4
Euro exchange rate (USD)	1.12	1.14	1.18	1.18
Competitor prices	1.9	-3.4	0.5	1.7
Oil price (UK Brent in USD per barrel)	64.2	42.4	44.0	45.7
Commodity prices excluding energy (USD)	-3.7	2.5	8.4	0.4

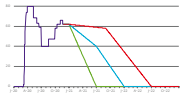
Sources: DNB and ECB.

* Annual figures have been calculated based on seasonally adjusted quarterly figures and may therefore deviate marginally from the most recent National Accounts.

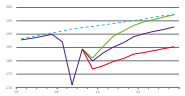
** Excluding cash pooling, adjusted for securitisations and breaks.

Figures

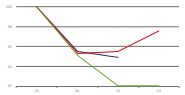
Click here for the underlying data



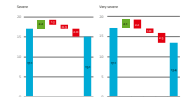
21. Developments in social distancing measures



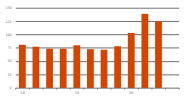
22. Output loss caused by COVID-19 pandemic



23. GDP level in various scenarios



24. Capital impact in each scenario



25. Loans with elevated credit risk (stage 2 exposures)

Click here for the underlying data