ANALYSIS

DANMARKS NATIONALBANK

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OUTLOOK FOR THE DANISH ECONOMY — SEPTEMBER 2020

Prospects of moderate recession the coming year

Significant parts of the Danish economy quickly recovered
Since the reopening, economic activity has picked up in large parts of the Danish economy. However, the lockdown resulted in large economic losses, and Danish GDP is overall expected to decrease by 3.6 per cent this year. The economy is now in a moderate recession.

Further recovery will be sluggish
Internationally, many countries are in deep recession, and a full recovery of economic activity will take a long time. This puts a damper on Danish export opportunities. At the same time, some domestic industries will be affected by restrictions for a period of time. For these industries, recovery will be more gradual.

Support should not be permanent
The different relief packages are useful in the current situation. However, they should be phased out in line with restrictions being lifted, as they hamper business sector dynamics and labour market mobility. The proposed fiscal policy is well aligned with the current economic situation.

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Highlights

THE GLOBAL ECONOMY

Over the summer, there has been a significant recovery of activity in the world economy following an unprecedented downturn in the spring. However, international organisations are predicting that the remaining recovery will be slow. This implies prospects of a sluggish development in Danish exports in the coming period.

DANISH ACTIVITY

Since mid-April, society has gradually reopened, and household consumption is back to the pre-lockdown level. There are no signs that the pandemic has resulted in significant and persistent behavioural changes, but it continues to hamper parts of the economy. Overall, the economy is now in a moderate recession.

LABOUR MARKET

The labour market has improved over the summer. The wage compensation scheme has been phased out without any further increase in unemployment. However, unemployment remains high, and restrictions in some industries may imply that many will have to find work in industries other than those they came from.

HOUSING MARKET

Turnover on the housing market has remained high, and house prices are expected to rise by 1.6 per cent this year. The increase is supported by low interest rates and the relief packages that supported incomes during the lockdown. Unlike during the financial crisis, developments on the housing market are not prolonging economic recovery.

GROWTH OUTLOOK

GDP is expected to decrease by 3.6 per cent this year, pulled down by a large drop in consumption and exports in the first half of the year. Households will drive much of the recovery, partly because they had sound finances before the downturn. The last part of the recovery will be sluggish, and the economy is projected to be in a mild recession in 2022.

RISK OUTLOOK

Uncertainty about the outlook for the Danish economy is especially connected with the risk of a resurgence of the pandemic with measures to prevent infection and behavioural changes. Moreover, the impact of economic policy is uncertain. Conversely, rapid development of an effective vaccine or treatment will result in a speedier recovery than expected.

Key economic variables

Real growth relative to the previous year	2019	2020	2021	2022
GDP (real), per cent	2.3	-3.6	3.6	2.3
Employment, 1,000 persons	2,998	2,947	2,969	2,999
Gross unemployment, 1,000 persons	104	141	139	131
Current account, per cent of GDP[1]	7.8	6.8	6.1	6.1
Government balance, per cent of GDP	3.8	-3.5	-2.5	-1.9
House prices[2], per cent year-on-year	3.0	1.6	1.5	3.1
Consumer prices, per cent year-on-year	0.7	0.3	0.9	1.2
Hourly wages[3] (manufacturing), per cent year-on-year	2.4	2.3	1.8	2.3

Source: Statistics Denmark and own calculations.
1. The most recent revision of the balance of payments is not a part of the latest quarterly national accounts and is therefore not a part of the statistical basis of these projections.
2. Nominal prices of single-family houses.
3. Statistics Denmark's implicit wage index.

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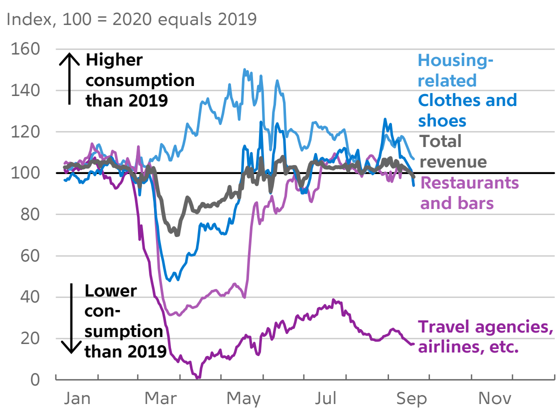
The new temporary short-time work scheme is good but should not be permanent, as it reduces labour market flexibility.

Outlook and economic policy

Rapid recovery in large parts of the economy
Since mid-April, Danish society has gradually reopened, and significant parts of the Danish economy have quickly recovered. Household consumption had thus rebounded and was close to the pre-lockdown level at the end of May and has remained high over the summer, see Chart 1. The recovery has taken place on the basis of an unprecedented economic downturn in activity, with the gross domestic product (GDP) falling by 6.9 per cent in the 2nd quarter.

Economic activity remains affected by behavioural changes and various restrictions aimed at preventing the spread of infection. The extent of the restrictions and behavioural changes will vary over time, depending on the development in infections, as currently seen. This may result in minor activity fluctuations in individual sectors, but restrictions and behavioural changes are not assumed to affect aggregate activity to the same extent as during the lockdown in the spring. Based on the available indicators and the extent of the restrictions, GDP is estimated to increase by 4.8 per cent in the 3rd quarter.

Household consumption remained high during the summer Chart 1



Note: Card turnover covers Danish cards processed by Nets. The turnover is a seven-day moving average up to and including 19 September 2020. From Monday, 6 April 2020, a comparison has been made with Monday, 15 April 2019, to ensure a correct comparison of the Easter weeks. The categories are broadly defined and comprise related goods as well as services.
Source: Nets Denmark A/S and own calculations.

Consumption and thus production have increased the most in the industries that were hit hard by the lockdown. This is, for example, seen for restaurants and bars. Generally, consumption is roughly back to the pre-coronavirus level in all the industries that are no longer subject to restrictions. This trend applies across various age groups.[1] Thus, senior citizens also have a consumption of restaurant services and hairdressing services that is close to the pre-coronavirus level, even though they make up a large part of the coronavirus risk group.

The development in consumption among senior citizens indicates that the pandemic and lockdown have so far not resulted in significant behavioural changes that will persist after Danish society emerges from the coronavirus crisis. Demand for most goods and services is therefore expected to recover when an expected vaccine, rapid test or effective treatment is developed. Until then, it is still expected that the ongoing measures aimed at fighting the pandemic will hamper economic activity.

In August, the Danish Parliament (Folketinget) decided to postpone the planned phase 4 of the reopening, and new, temporary restrictions have been announced across the country. As a result, some industries remain subject to restrictions and will be characterised by low activity for a period of time. Furthermore, Danish exporters are facing weak foreign demand. These factors mean that it will take time for economic activity to recover and for Denmark to emerge from the recession.

Labour market growth after large downturn
There has also been a turnaround in the development on the labour market during the summer as the Danish economy has recovered. The number of persons covered by the wage compensation scheme

1 Source: Danske Bank's card turnover data.

peaked at just under 250,000 persons at the beginning of June. Since then, the scheme has been largely phased out. This has taken place without a further sharp fall in employment, and indicates that the vast majority of employees covered by the scheme have returned to their jobs. Furthermore, wage-earner employment has increased lately, most recently by approximately 25,000 persons in June and July together.

However, the consequences of the pandemic in the form of temporary behavioural changes and the measures taken to contain the spread of infection have made their mark on the labour market, and seasonally adjusted employment fell by approximately 95,000 persons in the 2nd quarter. The decline was particularly pronounced in the air transport, hotel and restaurant industries.

The number of registered unemployed persons increased by approximately 45,000 persons in just four weeks after the lockdown, particularly driven by the very limited activity in the industries that were subject to most restrictions. Since then, unemployment has been decreasing slightly, despite the gradual phasing-out of the wage compensation schemes. However, unemployment remains on a par with the years following the financial crisis.

However, there are signs that firms' demand for labour is roughly back to the pre-coronavirus level. This improves the opportunities for unemployed persons to find employment in other industries as the economy adapts to the new situation, where this is necessary. Likewise, employment among foreign nationals in Denmark has been rising slightly since June after a heavy drop during the lockdown.

Calm on financial markets and housing market progress

The financial markets have been calm in the past six months. This should be seen in light of the central banks' intensification of bond purchase programmes and liquidity measures. The financial conditions are favourable for both corporations and households, which can, for example, obtain very low interest rates on housing loans. This helps boost economic activity in the Danish economy again.[2]

Until the coronavirus-triggered economic downturn, the Danish economy had undergone a long-term balanced upswing, in which both households and the corporate sector used the upswing to consolidate themselves. Danish corporations were thus generally robust prior to the coronavirus pandemic, and they have therefore had good access to financing during this economic downturn. This means that, unlike in previous downturns, corporate investments are not hampered by a need for consolidation and limited access to liquidity. Although corporate investments are currently low due to weak demand, corporations thus have good opportunities to invest in adjustments related to, for example, digitalisation or green transition in the coming years.

Interest rates are low on the housing market, and the relief packages have underpinned incomes. After a sharp fall in March, house prices rose over the summer and are expected to rise by 1.6 per cent for 2020 as a whole. A similar situation is seen in a number of other advanced economies. In Denmark, the price development also reflects that households are again expecting rising house prices. Unlike during the financial crisis, developments on the housing market are thus not a driving factor for the current macroeconomic development.

Sluggish recovery ahead

Much of the recovery of the Danish economy will be driven by domestic consumption returning to the pre-coronavirus level. Restrictions are assumed to be in place throughout 2020, but the economy is assumed to begin to operate freely during next year. Futhermore, restrictions and behavioural changes are assumed not to affect aggregate activity to a substantial extent, because restrictions only affect activity in a limited number of industries, e.g. restaurants and bars.

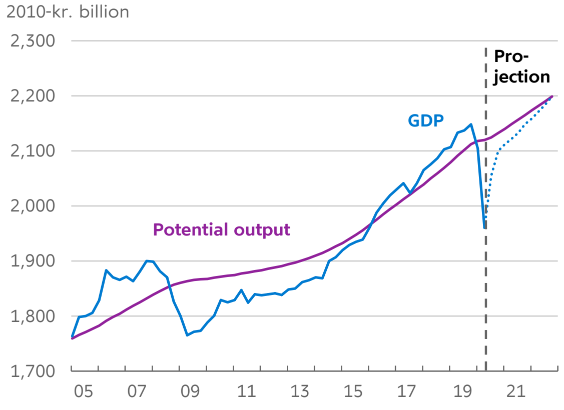
Households have been consolidating themselves for a number of years and have saved up a relatively large share of their income seen in a historical perspective. Therefore, they do not need to increase their savings further and are expected to return relatively quickly to consuming the same share of their income as before the economic downturn. However, the composition of consumption will be heavily affected by restrictions for a period of time.

2 See Danmarks Nationalbank, Stable financial markets support economy in recession, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, No. 17, September 2020.

In addition, during the economic downturn, the relief packages offering, for example, wage compensation have supported household incomes, which will be increased further in the coming year by the possibility of having frozen holiday allowance disbursed. Furthermore, the fiscal policy is expansive with, for example, the agreement on renovation in the social housing sector (green housing agreement) and the Government's Finance Bill for 2021. However, the postponement of the disbursement of excess property taxes paid pulls in the opposite direction.

Although much of the economic activity has returned relatively quickly, the last part will only recover gradually. The continued spread of infection and the decision to maintain a number of restrictions mean that occupations in the culture and leisure industry and in the travel and air travel industry must expect low activity for an even longer period of time. On the labour market, many unemployed persons and persons in short-time work schemes may therefore end up having to find employment in other industries than those they came from.

The previous output level is only gradually being recovered Chart 2



Note: Potential output describes the level of production that the economy can attain without building up an unsustainable price pressure in the long term.
Source: Statistics Denmark and own calculations.

Many of Denmark's trading partners abroad have experienced a heavy economic downturn, resulting in a sharp drop in world trade over the spring. Since then, a number of measures to prevent infection have been eased in a number of countries, and production has been resumed. Part of the world trade will therefore return quickly. However, a full recovery is expected to be somewhat further into the future due to low international demand. Although there have been some signs of improvement in Danish exports over the summer, a sluggish development in exports is thus expected in the coming period. Only in the course of 2022 are Danish exports projected to return to the same level as at the beginning of 2020.

The recovery of the last part of both Danish and international demand is thus expected to be slow. This results in a reduced corporate need for production capacity expansion. Coupled with already low capacity utilisation, this means lower growth in corporate investments which further contributes to the sluggish recovery.

Overall, Danish GDP is expected to contract by 3.6 per cent this year. The output level projected before the coronavirus-triggered economic downturn will only gradually be recovered in the coming period, see Chart 2. The Danish economy will thus be in a mild recession in the course of 2022. The main reason why most of the recovery will take place within a short time frame is that the downturn in the Danish economy has not occurred as a result of significant imbalances in the economy that need to be corrected first.

The labour supply is estimated to increase by 27,000 persons towards 2022 as a result of reforms already adopted, including indexation of the statutory retirement age. These reforms have significantly contributed to ensuring a balanced development during the previous upswing. Employment is expected to gradually increase in the coming years, so that it will be around 4,000 persons higher at the end of 2022 than at the beginning of 2020. This is significantly lower than projected before the coronavirus-triggered economic downturn. Unemployment is expected to be approximately 23,000 persons above the pre-coronavirus level, which is approximately 6,000 persons above the structural level.

Uncertainty about the impact and duration of the pandemic

The economic development in the coming period will first and foremost depend on the development of the pandemic, which may lead to behavioural changes and new measures to prevent infection that will hamper economic activity. In addition, there is still uncertainty about future EU/UK post-Brexit trade relations as well as the growing trend towards protectionism and global tensions.

Conversely, if an effective vaccine, treatment or rapid test is developed more quickly than expected, this may give rise to renewed optimism and a return to pre-crisis behaviour in both production and consumption.

Temporary relief should not be made permanent
The Danish economy is characterised by a high degree of labour market flexibility and good business sector dynamics. This is a strength in relation to recovering from the coronavirus crisis. Hiring and firing employees on the Danish labour market is easy and associated with relatively low costs. Firms can therefore regularly adjust their production to demand, and employees can switch jobs to firms that offer the best conditions.

During a short-term decline in activity, it may, however, be appropriate to encourage firms and employees to maintain their employment relationships. This reduces loss of employees' firm-specific competences, and the employees' attachment to the labour market is maintained. The new temporary short-time work scheme is therefore a good measure in the current situation. However, it is important that the scheme is not made permanent, as it reduces labour market flexibility.

One reason for the strong business sector dynamics in Denmark is a good framework for dismantling weak corporations. This means that unproductive corporations are closed down and thus do not take up labour and capital that could have been used more efficiently elsewhere in the economy. This flexibility is important in the current situation with major shifts in the patterns of demand, which may be of a long-term nature in some cases. It is therefore important that compensation schemes are phased out in line with the termination of activity-limiting restrictions. Such phasing out ensures that the most productive and innovative corporations grow, which contributes to an increase in wealth and welfare in Denmark. Economic policy should therefore focus on ensuring adequate demand in the economy.

Economic policy

It is important that compensation schemes are phased out when activity-limiting restrictions can be lifted. Compensation schemes have supported employment in firms, that have limited activity due to restrictions, but they hamper business sector dynamics and labour market mobility.

The new temporary short-time work scheme contributes to maintaining the attachment between corporations and employees. However, it is important that the scheme is not made permanent, as it reduces labour market flexibility.

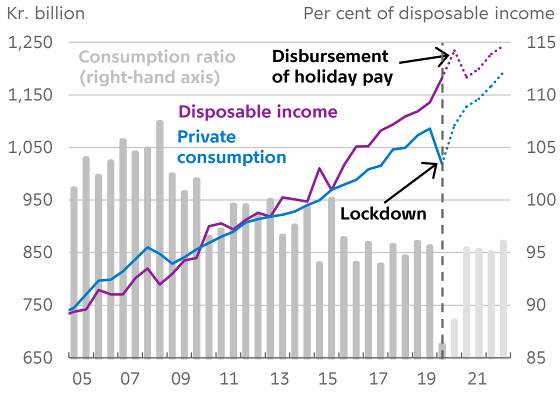
The planned fiscal policy in the Finance Bill is well aligned with the expected economic development and, together with the disbursement of frozen holiday allowance, it supports the recovery. Given the great uncertainty about the economic development in the coming years, flexibility is important, including in relation to fiscal policy.

The Danish economy – trends

The desire to consume is intact
Since mid-April, significant parts of the Danish economy have gradually reopened in line with a decrease in the spread of infection. This has been accompanied by an increase in household demand. Card turnover figures show that a number of the industries that have been subject to relatively few restrictions have maintained or increased their revenue throughout the period after the lockdown, see Chart 1 (on page 3). This applies, for example, to dealers in housing-related products and services. At the same time, many of the industries which have been subject to relatively many restrictions have gradually normalised their revenue. This applies, for example, to restaurants and bars. There are thus no immediate signs of significant behavioural changes in Danes' consumption patterns after the reopening.

The consumption ratio, i.e. household consumption as a share of income, fell during the lockdown period, see Chart 3. The fall came after a number of years with an already low consumption ratio following household consolidation in the wake of the financial crisis. Households therefore had healthy finances at the outset of the economic downturn. The consumption ratio is thus expected to gradually return to the same level as during the upturn.

The consumption ratio increases in the coming period Chart 3



Note: The chart shows semi-annual observations. The vertical line marks the transition from data to projection. Disposable income is adjusted for discretionary disbursement of frozen holiday funds as well as restructuring of capital pensions and savings under LD Pensions in 2013 and 2015.
Source: Statistics Denmark and own calculations.

Part of the increase in consumption is expected to come from deferred consumption. For example, car sales fell significantly in the 2nd quarter, but have been higher than before the coronavirus-triggered economic downturn over the summer. This indicates that a number of car purchases were postponed as a result of the lockdown. In addition, net spending on tourism in the 2nd quarter was lower than in previous years. This means that, although far fewer tourists have visited Denmark, even more Danes have chosen to spend their money in Denmark instead of abroad as a result of travel restrictions. This has helped boost domestic consumption.

The possibility of having frozen holiday pay disbursed is expected to contribute to increasing private consumption by a total of kr. 14 billion during the coming year, including derived effects over the coming year, see Box 1. In addition, household incomes have generally been buoyed by the relief packages during the lockdown and are estimated to grow by a total of 7.2 per cent in 2020, when including the effect from the holiday pay disbursement.

In August, the Parliament decided to postpone the planned phase 4 of the reopening. This means that a number of occupations in the culture and leisure industries are likely to continue to have low activity for an extended period. Added to this is the travel and air travel industry, which expects low activity for an even longer period.

An overall picture emerges that Danes' consumption has quickly returned to the pre-lockdown level on most consumption items after a heavy decrease. Incomes have first and foremost been buoyed up by the relief packages during the lockdown. At the same time, household consumption desire is intact, and the consumption ratio will be restored in the coming period.

The temporary decrease in consumption therefore first and foremost reflects that consumption possibilities have been limited as a result of the infection prevention restrictions, and secondly, that

Disbursement of holiday pay boosts private consumption

Box 1

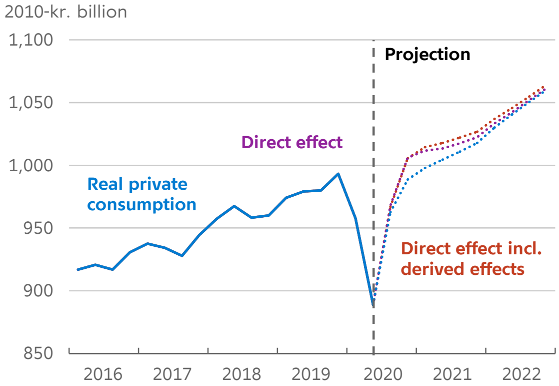
In June, the Government entered into an agreement which includes the possibility of receiving a disbursement of three out of five weeks' frozen holiday pay, equal to kr. 59 billion. However, the effect on private consumption will be lower, as the funds are income taxed. There is also some uncertainty as to how many persons will choose to have their holiday pay disbursed, and how large a share of the disbursed funds will be converted into consumption.

Experience from the disbursements of funds under the Special Pension Savings Scheme (SP) during the financial crisis shows that approximately 60 per cent of the disbursed amounts were converted into consumption.[1] Likewise, a new study of disbursements of paid early retirement contributions shows that 43 per cent of the disbursed funds were converted into consumption. The consumption is especially driven by persons with limited available liquid funds, distributed on all income groups.[2]

This projection is based on the assumption that 75 per cent[3] of the funds are disbursed in the 4th quarter of 2020, that they are taxed at an average rate of 35 per cent, and that there is a marginal consumption propensity of 43 per cent. This results in a direct first-year effect on private consumption of approximately kr. 13 billion, which is distributed on the period from the 3rd quarter of 2020 to the 2nd quarter of 2021.

The disbursements contribute to increasing economic activity. This produces derived effects on employment and income that further boost private consumption. The total first-year effect on private consumption amounts to approximately kr. 14 billion, see the chart below. Overall, GDP will increase by 0.2 per cent in 2020 and 0.4 per cent in 2021.

Private consumption is boosted by disbursed holiday pay



Note: The chart shows the development in real private consumption without the effect of disbursed holiday pay, with direct effects recognised and with both direct and derived effects recognised, respectively.
Source: Statistics Denmark and own calculations.

1. See Claus Thustrup Kreiner, David Dreyer Lassen and Søren Leth-Petersen, Liquidity Constraint Tightness and Consumer Responses to Fiscal Stimulus Policy, *American Economic Journal: Economic Policy,* pp. 351-379, No. 11, 2019.
2. See Henrik Yde Andersen, spending when Illiquid savings become liquid: evidence from Danish wage earners, *Danmarks Nationalbank Working Paper,* No. 161, September 2020.
3. The estimate is based on an overall assessment of how the Danes have previously withdrawn otherwise tied-up savings when given the opportunity. In 2009, the vast majority of employees withdrew the funds from the Special Pension Savings Scheme, while around half had their early retirement contributions repaid on withdrawal from the early retirement scheme in 2012. A number of factors come into play in relation to the decision to withdraw holiday pay in 2020, including age, current income taxation, expectations of setoff against public benefits, and whether consumers already have access to liquid funds.

consumers have only partially been able or willing to consume other available goods. Until there is a vaccine or effective treatment, the pandemic will continue to hamper parts of private consumption. For 2020 as a whole, private consumption is expected to decrease by 2.8 per cent, especially driven by the large decline since the lockdown and until mid-April. The recovery in consumption has been under way since then and will continue gradually in 2021 and 2022.

Danish exports hit hard by weak demand abroad

The coronavirus outbreak has led to a simultaneuos sharp drop in demand in virtually all countries. This led to a substantial decrease in the volume of Danish exports, which fell by 14.1 per cent in the 2nd quarter. Particularly exports of services have decreased heavily, see Chart 4. The decline is particularly seen in services related to air freight and tourism. Earnings from sea freight services have however been nominally stable as a result of increasing freight rates.

The decrease in Danish exports of goods has been lower than that seen in the overall world trade, see Chart 4. The reason for this is that the composition of Danish exports of goods has become less cyclically sensitive in the past many years, see Chart 5. Exports of pharmaceuticals play an increasing role here, and agricultural exports also continue to constitute a significant share of the overall exports. These goods are less cyclically sensitive.[3] At the same time, the markets near Denmark in Northern Europe have been less affected by the pandemic relative to the markets in many other countries. These markets close to Denmark make up a large proportion of Danish exports. The decline in Danish exports of goods has therefore been correspondingly smaller.

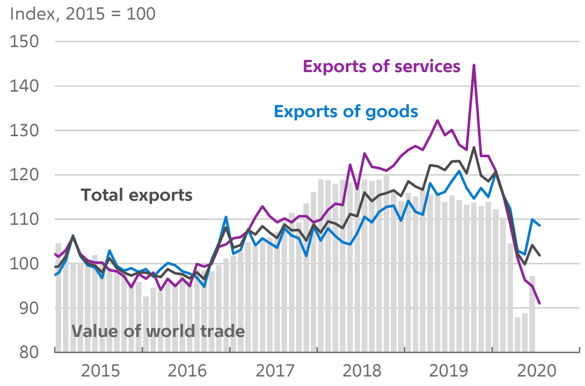
Export activities have shown signs of recovery during the summer. The increase reflects that measures to prevent infection have been eased in a number of countries, with a resulting resumption of production and consumption. Going forward, however, part of the global trade will be hampered by weak demand. The OECD therefore expects that world trade will be around 3 per cent lower at the end of 2021 than before the coronavirus[4]. This will entail a sluggish recovery of Danish exports in the coming period. Only in the course of 2022 are Danish exports thus expected to return to the same level as at the beginning of 2020. After a fall of 9.0 per cent in 2020, exports are expected to increase by 5.4 per cent in 2021 and 5.3 per cent in 2022.

Imports fell by 13.9 per cent in the 2nd quarter despite a rapid reversal of domestic demand. Viewed in isolation, the decrease in imports has contributed to supporting Danish GDP to the extent that Danish households have substituted their consumption of imported goods and services with domestically produced goods and services.

The decrease in imports is mainly due to lower imports of means of transport as a result of production shutdown abroad and postponed car purchases. The cessation of production shutdowns is expected to boost imports relatively quickly again. Imports

Sharp fall in exports in the 2nd quarter

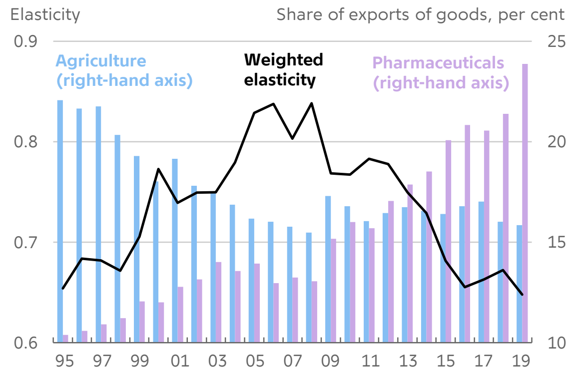
Chart 4



Note: Development in exports at current prices based on the balance of payments statistics.
Source: Statistics Denmark, CPB World Trade Monitor and own calculations.

The composition of exports is less cyclically sensitive than during the financial crisis

Chart 5



Note: Weighted elasticity between world trade and Danish exports of goods at current prices. The elasticities are based on Adrian Michael Bay Schmith and Helle Eis Christensen, Large drop in Danish exports, but the composition might ease the fall, *Danmarks Nationalbank Economic Memo,* No. 8, June 2020 (memo available in Danish only). Weighting is based on foreign trade statistics.
Source: Statistics Denmark and own calculations.

3 See Adrian Michael Bay Schmith and Helle Eis Christensen, Large drop in Danish exports, but the composition might ease the fall, *Danmarks Nationalbank Economic Memo,* No. 8, June 2020 (memo available in Danish only).

4 See *OECD Economic Outlook,* June 2020 (single-hit scenario).

are further supported by the recovery of domestic demand.

The relatively sluggish development in Danish exports and the faster recovery of imports result in a decrease in the current account surplus, which is expected to be 6.1 per cent of GDP in 2022, see Chart 6.

Corporate investments will be modest in the coming period

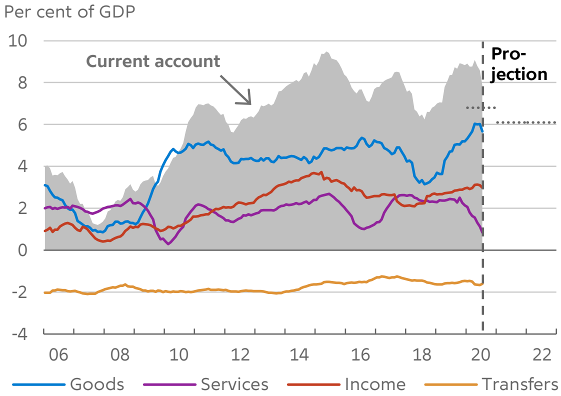
The investment plans of the manufacturing industry decreased markedly in the 2nd quarter and have remained low in the 3rd quarter, see Chart 7. Concurrently, capacity utilisation has decreased because production has declined. Both parts reflect, among other things, the large immediate decline in demand among the corporations' customers in both Denmark and abroad.

With vacant production capacity and the prospect of weaker demand, many corporations are expected to postpone a planned expansion of their production capacity. Investments in equipment (machinery, software etc.) can be reduced relatively quickly, and the decrease was also sharp here in the 2nd quarter. In turn, the decrease was lower in commercial construction. This should be seen in the context of many construction projects being long-term projects that are generally concluded. Therefore, some lag can be expected in the decline in commercial construction. Conversely, some corporations have chosen to use the period of low activity to initiate renovations.

Corporate investments are expected to be moderate in the coming years relative to the pre-coronavirus level. This should, among other factors, be seen in light of the gradual recovery of exports, which reduces the need for increased production capacity in the coming period.

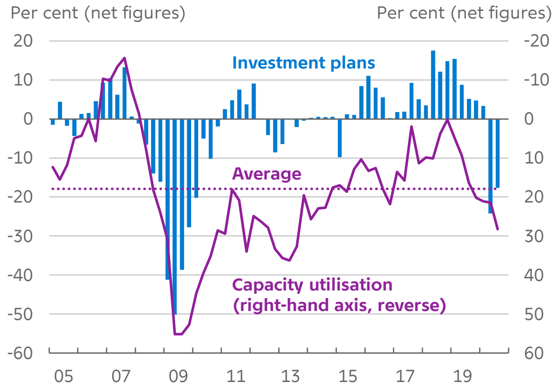
The Danish corporate sector has consolidated itself during the economic upswing and was better equipped to handle an economic downturn at the coronavirus outbreak than previously. During this economic downturn, Danish corporations have thus had good access to credit. Although they have made less use of private loan financing, corporations have made extensive use of the large-scale liquidity offers contained in the relief packages, including the possi-

Slight decline in current account surplus Chart 6



Note: Stated as 12-month moving sums as a percentage of GDP through July 2020. The dotted lines indicate the estimated annual averages for the current account in the projection. The figures include the most recent revision of the balance of payments.
Source: Statistics Denmark and own calculations.

Industry investment plans remained low in the 3rd quarter Chart 7



Note: The dotted line indicates the average from 2005 onwards.
Source: Statistics Denmark and own calculations.

bility of deferring VAT and tax payments.[5] This means that, unlike in previous economic downturns, corporations are not forced to postpone their investments by more than what the decrease in demand among their customers warrants. In the years to come, corporations thus have good opportunities for investing in adjustments as a result of, for example, digitalisation or green transition.

Overall, business investments are expected to fall by 10.7 per cent in 2020, followed by a gradual recovery with a growth rate of 1.2 per cent in 2021 and 3.1 per cent in 2022.

Public activity stabilises the economy

After many years of gradual consolidation of public finances, a large deficit is projected this year. This reflects the very large relief packages implemented to keep a safety net under the economic activity during the lockdown.

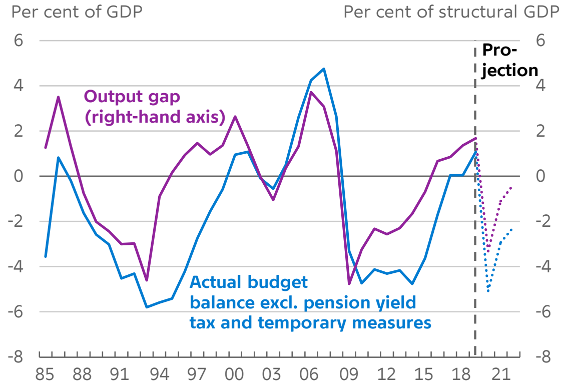
The Government's Finance Bill for 2021 results in a structural balance, which is expected to be close to the deficit limit of the Budget Act of 0.5 per cent of GDP by 2020. The reason for the deficit is that the Finance Bill contains a number of fiscal policy relaxations which give a fiscal effect of 2.6 per cent of GDP in 2020 and -0.4 per cent in 2021. Economic policy is therefore generally aligned to the cyclical developments. A prudent fiscal policy combined with large automatic stabilisers means that the public sector has a strong countercyclical impact on the economy, i.e. it contributes to evening out cyclical trends, see Chart 8.

The pandemic has left deep marks on the labour market

After many years of continuously increasing employment, the pandemic resulted in a heavy decrease, and employment fell by approximately 95,000 persons in the 2nd quarter, see Chart 9.[6] Most of the decrease was in the private sector, where employment decreased by 4.1 per cent. The trend

Public finances contribute to evening out cyclical trends

Chart 8

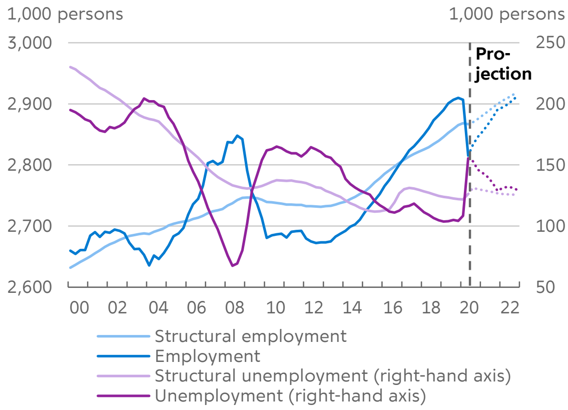


Note: Temporary measures cover, for example, the disbursement of paid early retirement contributions in 2018 and tax payments related to the disbursement of frozen holiday pay in 2020.

Source: Statistics Denmark and own calculations.

Employment fell by 95,000 persons in the 2nd quarter

Chart 9



Source: Statistics Denmark and own calculations.

5 See Danmarks Nationalbank, Stable financial markets support economy in recession, *Danmarks Nationalbank Analysis (Monetary and financial trends),* No. 17, September 2020.

6 For an elaboration of the current situation on the labour market, see the coming Economic Memo from Danmarks Nationalbank on the post-coronavirus labour market by Bess, Borgensgaard and Rasmussen.

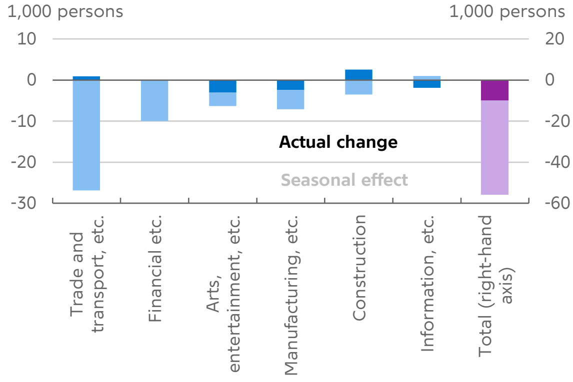
has reversed over the summer, and the number of employees increased by approximately 25,000 persons in June and July as a whole, and it is now 56,000 persons lower in relation to the lockdown. The increase is primarily driven by the trade and transportation industries. In line with the recovery of demand in both Denmark and abroad, employment is expected to increase gradually in the coming years, so that it will be approximately 4,000 persons higher at the end of 2022 than at the beginning of 2020. The projected increase reflects, among other factors, that the labour supply is estimated to increase by approximately 27,000 persons as a result of reforms already adopted, including indexation of the pensionable age.

Approximately half of the decrease in employment during the lockdown period can be attributed to a decrease in the transport and trade industries, which include air travel, hotels and restaurants. In relation to total employment in industries, the culture and leisure industry is hardest hit with a decline in employment of approximately 10 per cent.

There is a significant difference between seasonally adjusted and non-seasonally adjusted wage-earner employment. The difference reflects that the employment typically increases during the summer season. Non-seasonally adjusted employment has thus only decreased by approximately 10,000 persons, and the decrease is thus 46,000 persons lower than the seasonally adjusted employment warrants, see Chart 10. Part of the difference probably reflects a smaller increase in employment than usual among, for example, students, who, under more normal circumstances, would be employed in part-time jobs during this period.

Coronavirus-plagued summer season explains much of the low employment

Chart 10



Note: Actual change states the non-seasonally adjusted decrease in the number of persons employed in a given industry. The seasonal effect has been calculated as the difference between seasonally adjusted and non-seasonally adjusted development in employment. The total height of the column thus indicates the seasonally adjusted change in employment from February to July 2020.
Source: Statistics Denmark and own calculations.

The number of registered unemployed persons increased by approximately 45,000 persons in just four weeks after the lockdown, particularly driven by the very limited activity in the industries that were closed down. Since then, unemployment has been decreasing slightly, despite that wage-compensation schemes have been used to a lesser extent. The declining unemployment indicates that employees on wage compensation have either remained employed with their original employer or have found employment elsewhere.

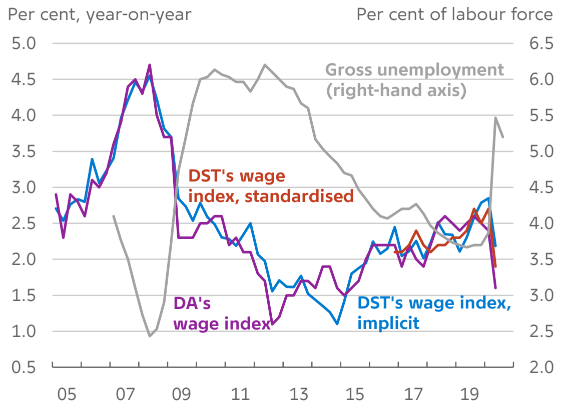
Gross unemployment however remains approximately on a par with the years following the financial crisis. Many unemployed persons were previously employed in the industries that have been subject to the severest restrictions. There may therefore be an adjustment in which unemployed persons find employment in other industries for a period of time. In addition, among the net registered unemployed persons since 8 March, persons with unskilled or short educational backgrounds are overrepresented. These groups may have difficulties finding employment outside their current industries, which entails a risk of contributing to a sluggish conversion of the economy.

However, there are signs that firms overall demand for labour is roughly back to the pre-coronavirus level. This is, for example, shown by figures for newly posted job advertisements. This improves opportunities for unemployed persons to find employment in other industries in line with the economy adapting to the new situation.

During the lockdown period, employment among foreign nationals in Denmark decreased by 7 per cent of the total employment of foreign nationals, but the trend has since been stable and slightly increasing. Despite border closures, fear of infection and the decline in economic activity in general, there are thus signs that foreign labour may also contribute to the activity on the labour market in the future.

Rising unemployment dampens wage growth, but some conditions may be temporary

Chart 11



Source: Statistics Denmark (DST) and the Confederation of Danish Employers (DA).

Higher unemployment dampens the rate of wage increases

In the period leading up to the coronavirus-triggered economic downturn, wage growth was modest on the Danish labour market, considering that unemployment was slightly below the structural level for much of the period. However, the development in consumer prices has been subdued in the same period, and there has been a fair increase in real wages overall.

In spring, the labour market parties agreed on a new three-year collective agreement for the private labour market with annual wage increases that are slightly higher than in the period 2015-19. However, the central collective agreements determine wages only within the standard wage area, comprising about 20 per cent of employees on the private labour market. For the rest of the labour market, only the minimum payment is fixed in the central collective agreements. Here, wages are negotiated locally, typically resulting in wages which are higher than the minimum wage. This contributes to the flexibility of the Danish labour market and allows for rapid adjustments during the current cyclical economic downturn.

In the 2nd quarter, wage developments on the labour market were, in fact, characterised by uncertainty about the economic impact of the pandemic. The annual rate of wage increase in the manufacturing industries thus fell from 2.7 per cent in the 1st quarter to 1.9 per cent, see Chart 11. The decrease must be seen in light of the fact that several negotiations have been postponed and temporary agreements on wage reduction have been made.

The coronavirus-triggered economic downturn hit the labour market hard, resulting in rising unemployment and lower demand for labour. Although unemployment is again decreasing, the higher unemployment is expected to put downward pressure on the rate of wage increases. In 2020, manufacturing industry wages are expected to increase by 2.3 per cent, before falling to 1.8 per cent in 2021 and rising to 2.3 per cent in 2022.

Low rate of price increases is set to increase gradually in line with the increase in demand

The rate of consumer price increases has increased slightly over the summer after a sluggish price development in the spring. In August, the EU-harmonised consumer price index (HICP) increased by 0.4 per cent on an annual basis, see Chart 12. The increasing inflation in recent months reflects, among other factors, a reversal of the decline in the international oil price in the spring.

The underlying inflationary pressure also appears to have been strengthened slightly lately, if prices of energy and non-processed food are disregarded, i.e. so-called core inflation. The core inflation rate was of 0.8 percent on an annual basis in August. However, one of the reasons for the slightly higher core inflation rate is that increased duties on cigarettes have made themselves felt on prices.

Overall, the annual rate of increase in consumer prices is expected to fall from 0.7 per cent in 2019 to 0.3 per cent this year. The slightly lower inflation is a reflection of, among other factors, lower oil prices and lower demand during the corona-related economic downturn. The effect from higher cigarette prices is pulling in the opposite direction. In addition, price increases in firms as a result of higher costs due to restrictions on activity to prevent infection may lead to higher prices.

Going forward, the recovery in domestic demand, which is stimulated by fiscal policy measures, is expected to support further price increases. In 2021 and 2022, consumer prices are thus estimated to increase by 0.9 and 1.2 per cent, respectively.

The housing market is robust

During the lockdown, much of the activity on the housing market came to a halt in line with the rest of the economic activity. A number of trades were postponed, and greater price reductions were given on real property trades than previously. However, trading activity was rapidly restored and has remained high over the summer for both single-family houses and owner-occupied flats.

The rapid recovery of trade activity has meant that the number of houses for sale has been declining throughout the period, and this is also reflected in house prices. After a big drop in March, house prices rose throughout the 2nd quarter and are roughly back to their pre-coronavirus level, see Chart 13. The development is similar for owner-occupied flats, and a similar pattern is also found internationally.

The relatively favourable development on the housing market can especially be attributed to fundamental factors. The demand is influenced by households' expectations of their long-term income, which has not decreased significantly, partly due to the relief packages and the reopening of the economy. Interest rates also remain low. In addition, households are expecting rising house prices again, presumably because of the rapid recovery of economic activity. Also, other housing needs may have arisen during the lockdown, which has contributed to keeping trading activity going. Overall, house prices are expected to rise by 1.6 per cent in 2020, 1.5 per cent in 2021 and 3.1 per cent in 2022.

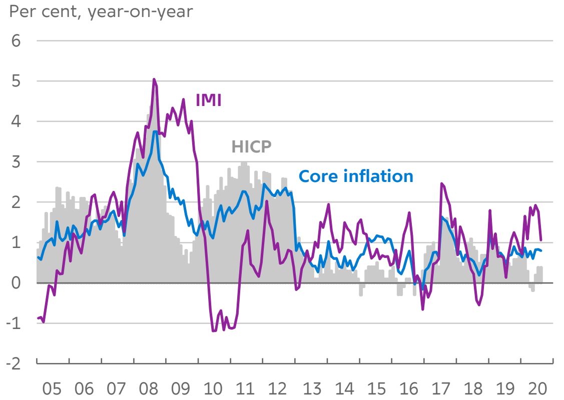
Housing construction is expected to remain high in the coming years. The expectation is firstly due to the favourable house price development, which increases incentives for building new dwellings. Secondly, residential investments are supported by the political agreement on renovation in the social housing sector (green housing agreement) and the disbursement of frozen holiday pay.

Great uncertainty about the future impact and duration of the pandemic

The outlook for the coming years is characterised by both downward and upward risks. The primary reason for this is that both the Danish economy and the world economy are driven by how the pandemic develops. The scope of restrictions and behavioural changes may vary over time, dependent of developments in infection numbers, as it is currently seen. A resurgence of the pandemic, with significant infec-

Price developments are subdued despite reversal of energy prices

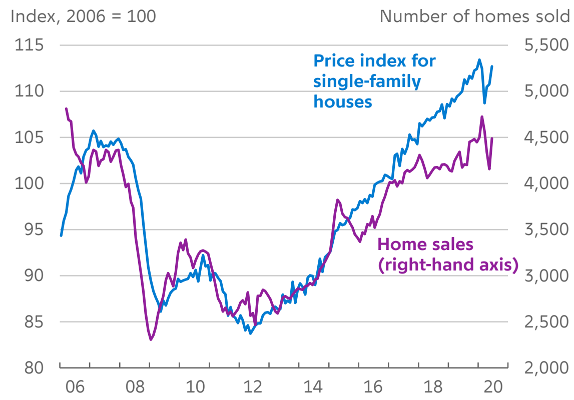
Chart 12



Note: Core inflation has been calculated as HICP excl. energy and unprocessed food. IMI is domestic market-determined inflation.
Source: Statistics Denmark and own calculations.

House prices are rising rapidly again after a lockdown drop

Chart 13



Note: The last observation is June 2020 for both price index and home sales. Home sales indicate sales of single-family houses.
Source: Statistics Denmark and own calculations.

tion prevention measures or behavioural changes among the households, will lead to further loss of economic activity. Moreover, many new restrictions in significant parts of the economy may lead to liquidity problems for the affected corporations if the lost earnings make it impossible to pay deferred taxes and other expenses.

A consequence of the development since the occurrence of the coronavirus may be a shift in demand and production patterns. The composition of the demand for labour may therefore end up changing significantly and permanently. At the same time, there is a risk that new unemployed persons cannot quickly be converted to employment in industries with a need for labour. This leads to high unemployment in some industries and labour shortages in others. This could lead to a situation with both increasing wage pressure and high unemployment.

The many relief packages aimed at mitigating the negative economic consequences have led to large deficits in the public finances in both Denmark and other countries, resulting in increasing public debt. Especially in some foreign countries, the deficits may subsequently lead to concerns about the viability of the public debt, resulting in a new wave of financial turbulence. Such turbulence may cause problems for corporations both abroad and in Denmark.

Abroad, there is still uncertainty about future EU/UK post-Brexit trade relations. In addition, the growing trend towards protectionism and global tensions continues.

The effects of domestic fiscal policy measures are uncertain, for example the disbursement of frozen holiday pay. One reason for this is that the households' consumption propensity is connected with significant uncertainty in the current situation. Another example is the new real estate valuations for approximately kr 8.3 billion. After the latest postponement, it is now investigated whether it is possible to roll out new valuations in the summer of 2021, which is assumed in this outlook. However, the time for the refunds is considered as uncertain. The uncertainty also applies to fiscal and monetary policy measures abroad, which may end up being more extensive than assumed, especially in 2021.

However, there is also a possibility that the development will be more favourable than expected. This applies particularly if an effective vaccine, treatment or rapid test is developed soon and results in a more complete reopening of the economy both in Denmark and abroad as well as renewed optimism among households and corporations. There is also the possibility that the recovery will be less sluggish because the Danish economy and parts of the international economy were without significant imbalances prior to the coronavirus outbreak. Therefore, corrections are not needed to the same extent as in previous economic downturns.

Key economic variables

Table 1

Real growth relative to the previous period, per cent	2019	2020	2021	2022	2019 Q4	2020 Q1	2020 Q2
GDP	2.3	-3.6	3.6	2.3	0.5	-2.0	-6.9
Private consumption[1]	2.2	-2.8	7.0	3.2	1.4	-3.6	-7.2
Public consumption	1.2	1.3	1.5	0.8	1.4	-1.8	-1.5
Residential investment	6.1	5.2	3.4	1.5	1.9	3.6	1.9
Public investment	0.7	7.9	3.3	2.6	-4.5	12.7	-3.0
Business investment	1.5	-10.7	1.2	3.1	0.5	-4.5	-11.7
Inventory investment, etc.[2]	-0.3	0.0	0.0	0.0	0.1	0.3	-0.6
Exports	1.8	-9.0	5.4	5.3	-0.5	-1.6	-14.1
Industrial exports	9.5	-5.7	4.6	5.4	-1.6	1.4	-12.0
Imports	0.5	-6.8	7.1	5.9	0.5	-1.3	-13.9
Employment, 1,000 persons	2,998	2,947	2,969	2,999	3.006	3.006	2.912
Gross unemployment, 1,000 persons	104	141	139	131	104	108	155
Current account, per cent of GDP[3]	7.8	6.8	6.1	6.1	8.0	7.5	7.9
Government balance, per cent of GDP	3.8	-3.5	-2.5	-1.9	3.2	0.1	-4.9
House prices[4], per cent year-on-year	3.0	1.6	1.5	3.1	3.6	2.5	1.4
Consumer prices (HICP), per cent year-on-year	0.7	0.3	0.9	1.2	0.7	0.6	0.0
Hourly wages[5] (manufacturing), per cent year-on-year	2.4	2.3	1.8	2.3	2.8	2.8	2.7

Source: Statistics Denmark and own calculations.

1. Includes both households and non-profit institutions serving households (NPISH).
2. Contribution to GDP growth (this item comprises inventory investment, valuables and statistical discrepancy).
3. The most recent revision of the balance of payments is not a part of the latest quarterly national accounts and is therefore not a part of the statistical basis of these projections.
4. Nominal prices of single-family houses.
5. Statistics Denmark's implicit wage index.

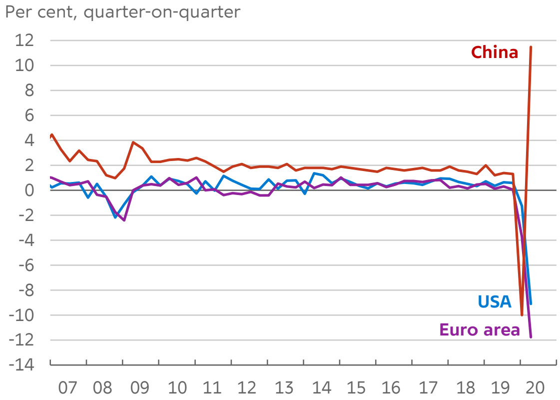
The international economy – trends

Recovery after unprecedented economic downturn
Global economic activity is recovering after an unprecedented economic downturn in the 2nd quarter. The recovery is based on a gradual return of consumption possibilities in line with the infection prevention measures having been eased. The economy is supported by a wide range of fiscal and monetary policy measures implemented since the coronavirus outbreak. These measures have also contributed to ensuring favourable financial conditions and creating stability on the financial markets.

The activity level is expected to pick up further in the coming period, although at a more moderate pace, because the economy needs to adjust to a situation that is still characterised by the pandemic. In the coming period, the activity level will therefore remain somewhat lower than before the coronavirus outbreak. This will especially be the case in some service sector industries which require a high degree of social interaction. Especially tourism, which contributed around 10 per cent of global GDP in 2019, will be affected for a longer period.[7] Moreover, some of the consequences of the economic downturn have not yet materialised. The reason for this is that a large number of fiscal policy relief packages were launched during spring which have provided financial support for corporations. The relief packages are temporary measures that will need to be phased out sooner or later. When this happens, some corporations may face a necessary transition.

The global economic growth outlook is still characterised by exceptional uncertainty. This is primarily linked to the development of the pandemic and to how long it will be necessary to maintain restrictions that impact economic activity negatively. In addition, it is difficult to predict how the pandemic will affect, for example, consumer behaviour, international trade and global value chains in the longer term. There is much to indicate that the recovery will be gradual and will occur at different paces across countries and sectors.

Lockdown resulted in historically large decreases in GDP Chart 14



Source: Macrobond.

Lockdown resulted in heavy economic downturn in the 2nd quarter
In the vast majority of countries, the decline in economic activity was related to the period March to May, when the economy was characterised by supply restrictions and limited consumption possibilities. It was consequently not surprising that the fall in GDP was unprecedented in the 2nd quarter in many countries, see Chart 14. This was especially driven by a significant drop in private consumption in connection with the lockdown.

In the euro area, GDP fell almost 12 per cent after a decrease of just under 4 per cent in the 1st quarter. Among the large euro area countries, the overall decrease in GDP in the first half of the year has been particularly large in France, Italy and Spain, whereas the economic downturn has been less pronounced in Germany and the Netherlands.

In the USA, GDP also decreased heavily in the 2nd quarter, whereas, in turn, China saw a strong recovery following an unprecedented economic downturn

7 Estimate from the World Travel and Tourism Council covering both direct and indirect contributions to GDP (subsidiary trades).

in the 1st quarter. China's improvement reflects the fact that it started its recovery earlier than other countries as a result of differences in the development of the coronavirus.

Economic activity has increased after global lockdown

In most countries, activity has increased considerably in line with the gradual reopening of the economy. Especially China has seen improvement in industrial production, as factories were able to reopen already at the beginning of the year. Economic activity is now largely back to the pre-coronavirus level. Retail sales have also increased gradually in line with the reopening, but are still somewhat lower than previously.

In the euro area and in the USA, industrial production has also increased in line with the easing of restrictions, but, in July in the euro area, it was still approximately 7 per cent below the level at the beginning of the year. In the USA, industrial production was also approximately 7 per cent lower in August than at the beginning of the year. Conversely, retail sales in both economies have rapidly returned to pre-lockdown levels.

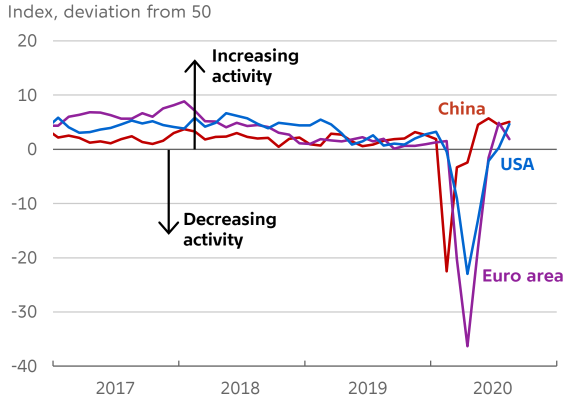
Confidence indicators have risen from a historically low point in April, which indicates that the economic recovery will continue, see Chart 15. In China and the euro area, however, the indicators have fallen slightly again over the summer. On the face of it, this indicates that the future increase in activity will be more gradual relative to the period just after the reopening.

A number of real-time indicators, including Google's mobility indicator, also suggest that the increase in economic activity has diminished. This applies, for example, to the USA and Spain, where new local coronavirus outbreaks over the summer have probably affected the development, see Chart 16.

Many emerging economies continue to be affected by high infection rates

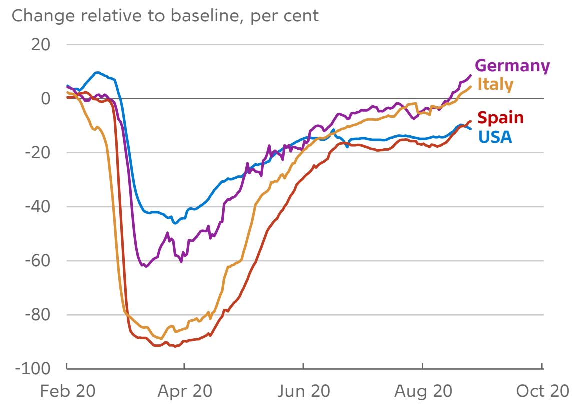
The development in many emerging economies continues to be affected by national measures aimed at containing the spread of infection. For example in India and in a number of South American countries, the number of new cases of coronavirus increased over the summer. This has meant that measures to limit the spread of infection have been increased or prolonged in several areas. In addition, many

Business confidence again indicates rising activity Chart 15



Note: Purchasing Managers' Index for the whole economy *(PMI composite)*.
Source: Macrobond.

Google's mobility indicator indicates that the increase in activity has diminished Chart 16



Note: Google's mobility indicator shows the number of visitors and length of visits relative to a baseline period (3 January to 6 February). The chart shows the development in the 'retail and recreation' category, i.e. in shopping centres, shops, restaurants, amusement parks, museums etc. The chart shows a seven-day moving average.
Source: Macrobond and own calculations

countries are hit by lower external demand. A major reason for this is that the coronavirus has had a significant negative impact on international tourism. The combination of lower revenues and higher healthcare costs has meant that a large number of countries have applied for emergency funding from the IMF, see Box 2.

World trade has bounced back after a big drop in spring

World trade increased in June after a big drop totalling 15 per cent in the first five months of the year, see Chart 17. However, world trade is still about 9 per cent down on the level at the beginning of the year. World trade fell during the spring, partly due to production restrictions, which have contributed to a decline in exports in several countries. During the lockdown, there was a particular decline in sales of cars, machinery and fuel.

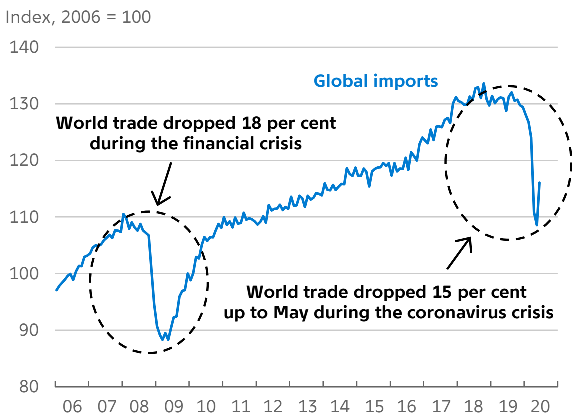
Several leading indicators point to a further increase in world trade in the coming period. However, a structural transformation of global value chains or an escalation of political trade tensions may result in world trade remaining at a lower level in the future. Because of the pandemic, there is, for example, a risk that some countries will move in a more protectionist direction, or that some corporations will prefer to have more control of the critical parts of their supply chain in the future.

Private consumption has increased in line with the gradual reopening

In both the euro area and the USA, the drop in GDP was primarily driven by a significant decrease in private consumption due to limited consumption possibilities and declining consumer confidence. The decrease in private consumption has instead resulted in higher savings, which must be seen in the context of household incomes having been partially protected by targeted state relief packages. In the USA, the savings ratio rose to 34 per cent in April. It has subsequently fallen to approximately 18 per cent, which is, however, still more than twice the average level from 2010-19.

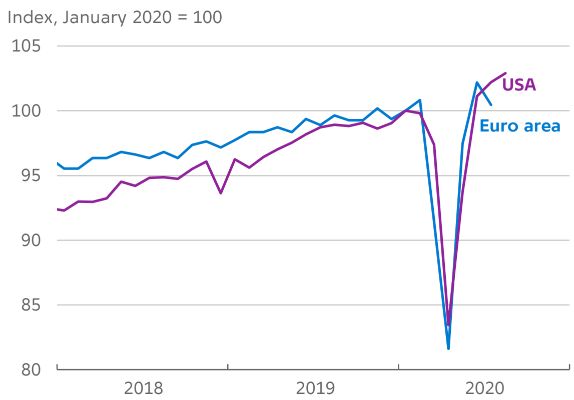
Higher private savings have created good conditions for a rapid increase in private consumption in line with the reopening. The reason for this is that the reopening of, for example, shopping centres, restaurants, hairdressers and cultural institutions has meant that consumption possibilities have returned. As mentioned above, this has been reflected in retail sales, see Chart 18. However, new coronavirus outbreaks continue to cause great uncertainty and impact consumer confidence negatively, which may contribute to a more sluggish increase in consumption and maintain savings at a higher level than usually. In addition, the end of temporarily higher unemployment benefits in the USA at the end of July may have a negative impact on consumption.

World trade is recovering after big drop — Chart 17



Note: Import volumes. World trade declined for seven consecutive months after the financial crisis and for five months during the coronavirus crisis.
Source: Macrobond.

Retail sales have bounced back quickly after the reopening — Chart 18



Note: Retail sales excl. motor vehicles and fuel.
Source: Macrobond and own calculations.

IMF lending has increased during the coronavirus crisis

Box 2

In spring, the International Monetary Fund, IMF, approved a crisis package to meet the urgent funding needs of its member countries as a result of the coronavirus crisis. The package gives temporary access to rapid emergency funding of a limited size, a new short-term liquidity line and limited debt relief to the poorest countries.

More than 100 countries – corresponding to more than half of the IMF member countries – have contacted the IMF with requests for emergency funding, loan extensions or new loan programmes. Since March, the IMF has approved emergency loans to 69 countries totalling 30 billion dollars. In addition, eight new loan programmes/extensions of existing loans have been approved for a total of 12 billion dollars. This is a historically large number of loans in such a short period.

The IMF also approved three flexible credit lines, totalling 47 billion dollars, in May. The credit lines allow countries with strong economies to borrow funds in the event of balance of payments problems. The three credit lines have not been drawn on yet.

In April, the IMF set up a new short-term liquidity line for countries with healthy economies and policies that need quick liquidity due to moderate balance of payments problems. So far, no countries have submitted applications under this facility.

To help the poorest countries with rapid debt relief, the IMF reformed its emergency fund in April. A total of 29 countries have had payments to the IMF written off for provisionally six months. The amounts are quite small and are funded by donations from member countries.

The IMF has sufficient resources for now
The increase in lending during the coronavirus crisis only constitutes a small part of the IMF's total lending capacity of around 1,000 billion dollars. At the end of July, a total of 24 per cent of the IMF's lending capacity was tied up in loan commitments, see Chart A. Most of these are for a limited number of countries, see Chart B.

A special challenge, however, is the IMF's trust which grants subsidised loans to the poorest countries (Poverty Reduction and Growth Trust, PRGT). The trust's lending has risen sharply since March, while subsidy resources, which pay for the favourable element of the loans, are limited. The IMF's staff are working on a proposal to address the problem.

The uncertain global economic situation and downside risks make it likely that larger and longer-term credit lines will be demanded in the coming period.

The IMF's emergency loans in connection with the coronavirus crisis have a higher risk than the IMF's normal credit lines, as their loan terms are limited. Conversely, the size of the loans is relatively small. The IMF is de facto a 'preferred creditor', which means that the IMF ranks higher than other creditors for its claims if a borrowing country cannot meet its debt liabilities. Historically, the IMF has never had any bad debts.

Denmark's loan commitment to the IMF is kr. 84 billion. In addition, Danmarks Nationalbank has made loan commitments of kr. 4.4 billion to the IMF's PRGT.

Chart A:
IMF's lending capacity can handle the demand

GRA resources, billion dollars (total 1,019 billion dollars)

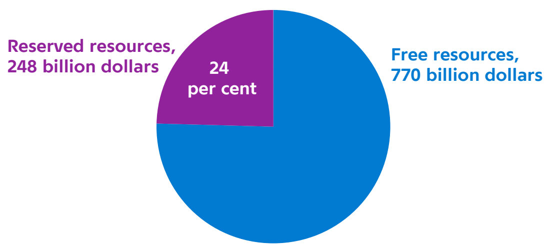
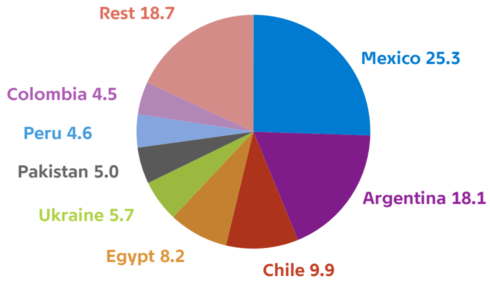


Chart B:
Most of the IMF's reserved resources go to a small group of countries

Reserved GRA resources, per cent (total 248 billion dollars)



Note: Chart A: Resources in IMF's General Resource Account (GRA) as at 31 July 2020. PRGT resources are not included. Chart B: Includes loan commitments not drawn on. The loan commitments to Mexico, Chile, Peru and Colombia are preventive and have not yet been drawn on.
Source: IMF and own calculations.

New large recovery package will support the EU's economy in the coming years

Box 3

At an extraordinary EU summit in July, EU's heads of state and government agreed to set up a recovery package to avoid a prolonged economic downturn caused by the coronavirus crisis. The recovery package will have a total budget of 750 billion euros (5.4 per cent of the EU's GDP). 390 billion euros is given as grants to some of the hardest-hit member states, while the remaining 360 billion is offered as loans. Under the agreement, the European Commission has been authorised to raise loans of 750 billion euros on the financial markets.

Most of the funds from the new package will be channeled through a new recovery facility. According to the agreement, the aim is to allocate 70 per cent of the grants in 2021 and 2022, while the remaining 30 per cent are expected to be allocated In 2023. The allocation of grants will be based on the drop in GDP in 2020 and 2021 in each country. However, it is not yet completely clear when the member states will be able to receive funds from the new facility.

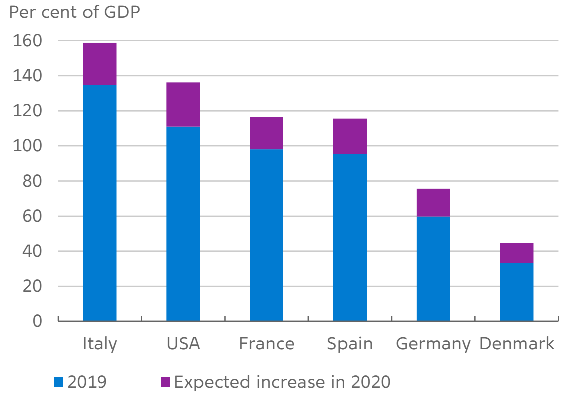
In addition to the grants, the 360 billion euros offered as loans provides an opportunity for low-cost funding of the increased costs connected with the coronavirus. Each member state can borrow a maximum of 6.8 per cent of its gross national income (GNI), and the loans must be repaid by the end of 2058.

As a condition for receiving funds under the new recovery facility, the member states must draw up national recovery plans containing an overview of planned reforms and public investments in the coming years. The plans must be in accordance with the country-specific recommendations under the European Semester, and the applicant country must be able to document plans for increased investments in digitalisation, and at the same time, a substantial part of the funds must be allocated to the green transition. The European Council approves the recovery plans after the European Commission has assessed them. The funds will be distributed on an ongoing basis as the member states comply with their recovery plans and implement the agreed reforms.

The agreement on the EU's recovery package must be finally negotiated with the European Parliament and approved by the national parliaments in the autumn. It is expected to be operational from 2021.

Public debt will grow significantly in 2020

Chart 19



Note: Gross public debt.
Source: European Commission.

The economic downturn has resulted in major drains on public finances

Since the global lockdown in March, extraordinarily large fiscal policy relief packages have been implemented to limit the economic downturn. This has contributed to avoiding corporate liquidations and has supported employment. A number of measures have also been implemented at EU level, most recently a European recovery package aimed at supporting the economies of some of the worst hit countries, see Box 3. The combination of an unprecedented economic downturn and large-scale relief packages has resulted in great drains on public finances. According to the European Commission, the total EU deficit is expected to grow from 0.6 per cent of GDP in 2019 to 8.3 per cent of GDP in 2020, including particularly large deficits of over 10 per cent of GDP in Italy and Spain. In virtually all countries, public debt is thus expected to increase significantly in 2020 – in some countries by more than 20 percentage points, see Chart 19.

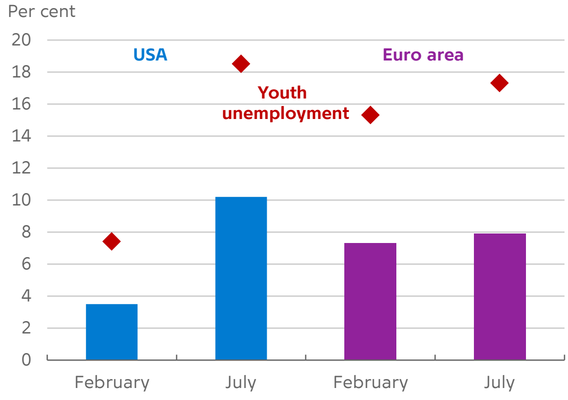
According to the EU's fiscal policy rules (the Stability and Growth Pact), gross public debt in EU member states must, as a general rule, be maximum 60 per cent of GDP, and the deficit on public finances must be maximum 3 per cent of GDP. However, the European Commission has announced an exemption to these rules in 2020 and 2021 to give room for automatic stabilisers and fiscal stimuli measures. In the long term, however, there may be a need for fiscal consolidation to avoid unsustainable growth in government debt.

In connection with the relief packages, a number of states have also provided large guarantees for banks' lending to corporations that have been hard hit. This means that the central government has assumed a higher credit risk for the private sector.

If the current economic downturn results in a large increase in corporate liquidations, this may result in the public sector incurring further costs.

Higher unemployment has especially hit young people

Chart 20



Source: Macrobond.

The lockdown has had large impacts on the labour markets

The lockdown has resulted in a marked deterioration in the situation on the labour markets. The US unemployment rate rose from 3.5 per cent in February to 14.7 per cent in May, but has subsequently fallen to 8.4 per cent in August. In recent months, employment has, for example, increased in restaurants, bars and cafes, where many employees were laid off temporarily during the lockdown. Particularly employees who have been temporarily laid off have returned to their jobs, and the number of temporarily unemployed persons has thus been halved since April. In August, however, more than six million Americans were still registered as temporarily unemployed.

In the euro area, the unemployment rate increased from 7.2 per cent in March to 7.9 per cent in July. The increase has thus been limited relative to the drop in GDP. This should be seen in the context of the national wage compensation schemes having contributed to keeping people in employment. Instead, many employees have had their working hours reduced, for example in Spain and Germany, where total working hours decreased by 21 per cent and 15 per cent, respectively, in the 2nd quarter. In Germany, the reduction in working hours is equal to around seven million jobs (approximately 16 per cent of the workforce) based on the average working hours in 2019. The European Central Bank (ECB) estimates that up to 24 per cent of all employees in Germany may have been covered by a wage compensation scheme. In France and Italy, up to 47 per cent and 44 per cent, respectively, of the employees may have been covered by a wage compensation scheme[8]. These figures indicate that unemployment would have been much higher without these schemes.

Some population groups have been more affected by the lower demand for labour than others. In both the USA and the euro area, unemployment among, for example, young people has increased by a relatively higher rate than total unemployment, see Chart 20. In the USA, for example, unemployment among young people aged under 25 has more than doubled since March and was 18.5 per cent in July. In the euro area, unemployment among young people has increased by the highest rate in Spain, where the youth unemployment rate is again around 40 per cent, which was also the level during the financial crisis.

The expectation of increasing economic activity indicates that employment will increase in the coming period. Conversely, unemployment may increase when relief packages and wage compensation schemes are phased out. This applies particularly in the euro area, where the lockdown may have delayed effects. Unemployment may also increase if corporations' temporary liquidity challenges result in solvency problems and liquidations. Seen overall, the European Commission expects unemployment in the euro area to rise to 9.6 per cent in 2020.

Due to higher unemployment, wage pressures are expected to remain very subdued in the coming period.

8 See da Silva, Dossche, Dreher, Foroni and Koester, Short-time work schemes and their effects on wages and disposable income, *ECB Economic Bulletin*, No. 4, June 2020.

Inflation remains significantly lower than in the run-up to the coronavirus outbreak
Euro area inflation, measured by the rate of increase in the Harmonised Index of Consumer Prices (HICP), fell to -0.2 per cent in August from 0.4 per cent in July. The price increases which followed the reopening of the economies in June and July were thus more than reversed in August, see Chart 21. In August, inflation was mainly kept down by oil prices, although the negative contribution from this has diminished in line with oil prices increasing again. Small price increases on food products also helped drag down inflation after sharp increases in food prices in the spring. An analysis by the ECB[9] indicates that part of the increase in food prices in March was due to changing consumption patterns such as hoarding and a more limited supply of food products as well as rising costs of hygiene measures in stores.

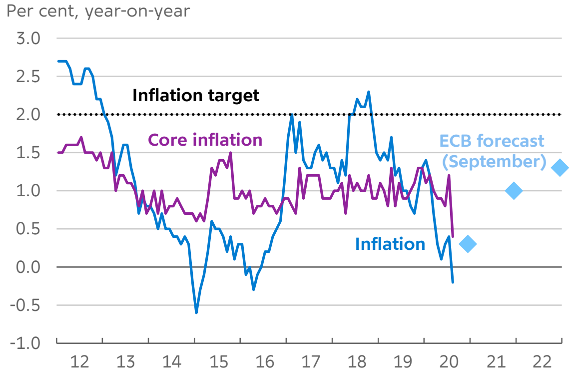
Core inflation, i.e. consumer price inflation excluding energy, food, alcohol and tobacco, fell to 0.4 per cent in August.

In addition to the negative contribution from energy prices, service prices also fell – driven by declines on both the supply side and the demand side. Part of the decrease in August must be expected to be transient, as the large annual summer sales in France, Italy and Belgium were postponed to August, thus dragging prices downwards. In Germany, the temporary VAT reduction also contributed to inflation (HICP) declining overall to -0.1 per cent in August from 0.8 per cent in June.

In its latest September forecast, the ECB expects inflation to remain very low in 2020 and then to gradually increase to 1.3 per cent towards 2022.

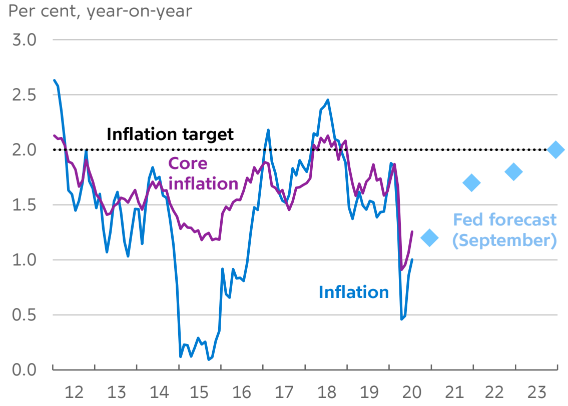
In the USA, the annual increase in consumer prices, measured by the rate of increase in the Personal Consumption Expenditures (PCE) deflator, was 1.0 per cent in July, see Chart 22. Inflation is dampened by low energy prices, among other factors. In its latest forecast from September, the Federal Reserve (Fed) expects inflation to increase to 2 per cent over the coming years.

Prospects of low, but gradually rising inflation in the euro area Chart 21



Source: Macrobond and ECB.

Inflation has risen slightly in the USA after big drop Chart 22



Source: Macrobond and Federal Reserve.

Market-based inflation expectations in the euro area and the USA have risen since the end of May, reaching about the same level at the end of August as before the coronavirus outbreak. Estimated US inflation is thus now above the inflation target of 2 per cent, while it is still somewhat below this target in the euro area, see Chart 23. The market-based expectations

9 See Ieva Rubene, Recent developments in euro food prices, *ECB Economic Bulletin*, No. 5, July 2020.

not only reflect market expectations for future inflation, but may also be affected by liquidity premiums on the securities on which the calculation is based.

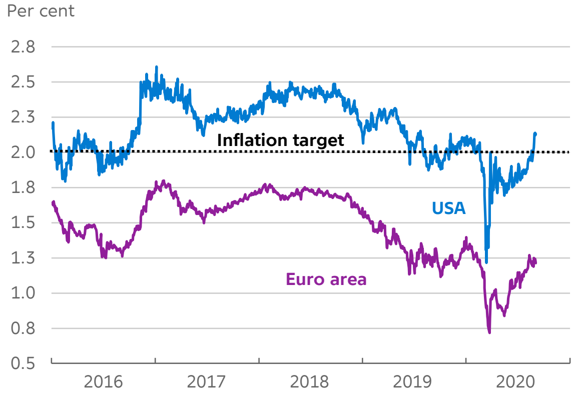
Prospects of gradually increasing activity surrounded by great uncertainty
The international organisations expect a gradual increase in economic activity in the coming period. However, the recovery will occur at different paces across countries and sectors. In its most recent forecast from September, the OECD revised its estimate for global growth in 2020 up compared to its forecast in June. This is partly due to the fact that the drop in GDP in the USA is expected to be smaller than previously, and that the growth rate in China is now expected to be positive in 2020. However, the recovery in activity will be gradual, and the growth outlook remains characterised by exceptional uncertainty due to the development in infections, see the section *Great uncertainty about the future impact and duration of the pandemic*. By the end of 2021, the level of GDP will still be below the level in the end of 2019 in many countries, and a lot lower than the level expected before the coronavirus outbreak, see Chart 24.

In addition to the pandemic, there is a risk that new political tensions between the USA and China could lead to a new escalation of the trade dispute. It may have a major impact on international trade and economic growth if countries move in a more protectionist direction as a result of the pandemic. Maintaining and supporting rules-based international collaboration is therefore essential. In this connection, there is still no clarification on the future trade relations between the EU and the UK when the transitional period expires at the end of the year. This is currently creating uncertainty in the corporate sector. A hard transition to new terms of trade at the year end will have negative consequences for the economy – particularly in the UK.

The central banks' balance sheets are growing as a result of the extensive monetary policy measures in spring
In the past few months, the central banks have generally maintained the monetary policy stance from the spring, when a large number of extraordinary measures were announced. At recent monetary policy meetings, the Fed, the ECB, the Bank of England, Sveriges Riksbank and Norges Bank have maintained interest rates. According to market expectations, monetary policy interest rates in the USA and the

Inflation expectations are back to pre-coronavirus levels

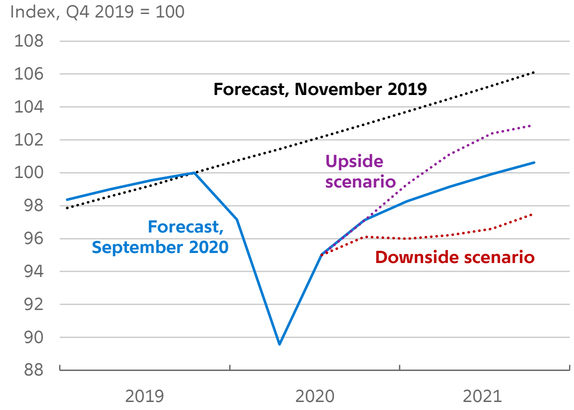
Chart 23



Note: Market-based inflation expectations are based on a 5-year/5-year inflation swap.
Source: Bloomberg.

Prospects of a gradual recovery in coming years

Chart 24



Note: OECD forecast for global real GDP.
Source: OECD Interim Economic Assessment, September 2020.

The Fed has updated its monetary policy strategy

Box 4

During the annual Jackson Hole symposium, the Chair of the Federal Open Market Committee (FOMC), Jerome Powell, announced an update on the Fed's announcement of its monetary policy strategy. The announcement describes how the Fed interprets the monetary policy mandate. It also describes the framework that the Fed regards as best suited to achieve the goals of maximum employment and price stability.

The announcement maintains that the long-term inflation target is 2 per cent, but the wording has been changed, so that the Fed's objective is now to ensure that inflation averages 2 per cent over a period. This means that if inflation has been below 2 per cent in periods, it must also be above 2 per cent in other periods.

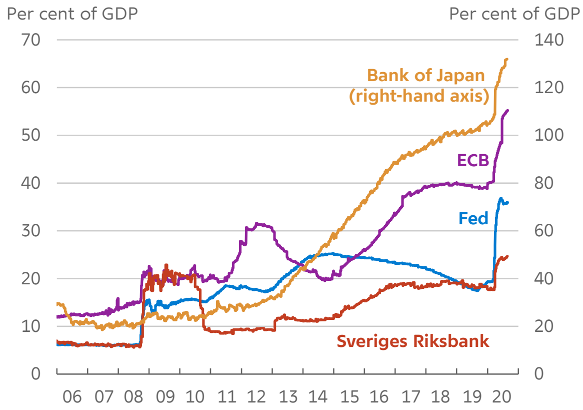
The announcement was also changed regarding the target for maximum employment. It is now explicitly formulated that the target is broadly based and inclusive, which refers to the importance of strong labour markets – especially in the low and middle income segments. In addition, the wording regarding a deviation from maximum employment has also been changed, so that it reflects more closely that employment may be above the estimated maximum without this resulting in undesired increases in inflation.

Finally, the announcement contained a passage on monetary policy challenges in a low-interest environment.

The update of the announcement is the main result of the evaluation of the monetary policy basis initiated by the Fed in 2018. The evaluation covers monetary policy strategy, tools and communication about monetary policy. The evaluation is the first to involve the public, with experts, citizens and organisations having been consulted. The Fed's intention is to evaluate the monetary policy about every five years in the future.

Extensive monetary policy measures have increased the central banks' balance sheets

Chart 25



Source: Macrobond.

euro area will remain largely unchanged in the coming years.

At the end of July, however, the Fed announced an extension of the flexible credit lines[10] implemented in spring. The facilities were due to expire at the end of September, but they have now been extended until the end of the year. The Fed also extended the temporary dollar swap agreements with a number of central banks, including Danmarks Nationalbank, until the end of March 2021. At the end of August, the Fed also announced a change to its monetary policy strategy, see Box 4.

At the beginning of July, Sveriges Riksbank increased its asset purchase programme from 300 to 500 billion Swedish kronor. At the same time, the programme was extended to include purchases of corporate bonds. In addition, the conditions for the extraordinary open market operations were eased.

The monetary policy measures implemented in the spring have significantly increased central bank balance sheets, see Chart 25. In terms of share of GDP, the increase in the Fed's and the ECB's balance sheets has been of the same magnitude, see Chart 26. However, the composition is different. The Fed has especially bought assets, while the ECB has focused more on using lending and liquidity measures. The differences reflect that the euro area economy relies more on bank financing, while the US economy is

10 The extension includes the following facilities: Primary Dealer Credit Facility, Money Market Mutual Fund Liquidity Facility, Primary Market Corporate Credit Facility, Secondary Market Corporate Credit Facility, Term Asset-Backed Securities Loan Facility, Paycheck Protection Program Liquidity Facility and Main Street Lending Program.

primarily based on market financing via corporate bonds and other financial instruments.

Bulgaria and Croatia in ERMII

In July, Bulgaria and Croatia became part of the European Exchange Rate Mechanism (ERMII), in which Denmark also participates. Both these new member countries also join the banking union. To qualify as a member of the euro area, the countries must have participated in ERMII for at least two years without significant pressure on their currencies and without devaluations.

Government yields have fallen slightly

Government bond yields have been slightly decreasing over the summer, see Chart 27. Interest rates fell slightly in early June when the ECB announced the extension of the Pandemic Emergency Purchasing Programme (PEPP), and the Fed announced its expectation that monetary policy interest rates would remain close to zero for an extensive period.

For Italian and Greek bonds, the yield spread vis-à-vis Germany has narrowed slightly over the same period. The ECB points out that purchases under PEPP have played a significant role. The flexibility of the purchasing programme has, for example, meant that the ECB has been able to adjust the country distribution in its purchases of government bonds on an ongoing basis. In line with an improvement in market conditions over the summer, relatively fewer Italian securities, for example, were purchased in June-July relative to March-May, see Chart 28. Otherwise, the purchases have largely followed the capital key.

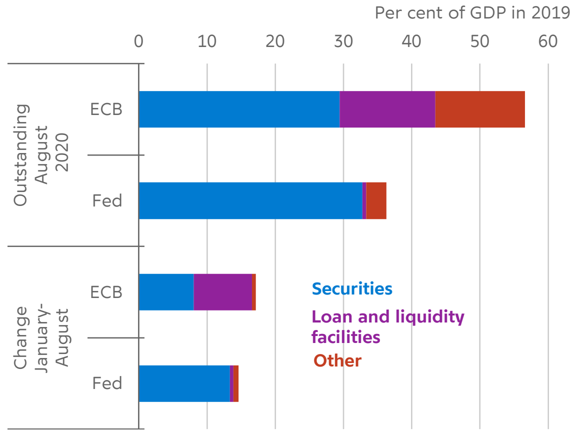
Significant differences in loans to corporations

In the euro area and Sweden, corporate borrowing through banks and other financial institutions increased significantly in the spring. However, the development in the euro area comprises widely differing trends across the countries. While the growth rate in loans increased significantly in Spain, Greece, France, Italy and Portugal, it remained virtually unchanged in countries like Germany and the Netherlands.

Differences across countries – also outside the euro area – may be ascribed to, for example, differences in the economic downturn, see Chart 29. However, the solid corporate capitalisation prior to the coronavirus outbreak has also played a role, as have the size and design of the monetary and fiscal policy measures aimed at meeting corporate liquidity needs.

The monetary policy measures in the euro area and the USA in the spring have been of roughly the same magnitude

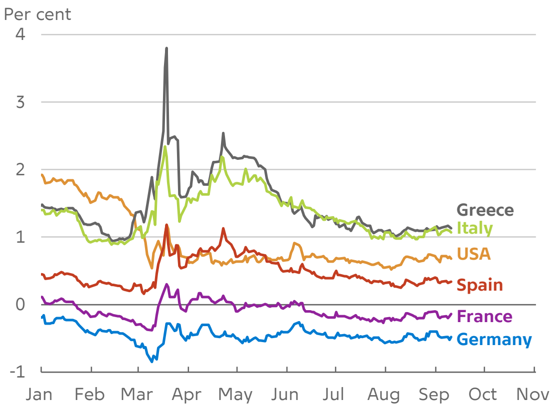
Chart 26



Note: Stated 28 August for the ECB and 25 August for the Fed. 'Other' comprises all other assets in the central banks' balance sheets, such as gold stocks and foreign assets.
Source: ECB, Fed and Macrobond.

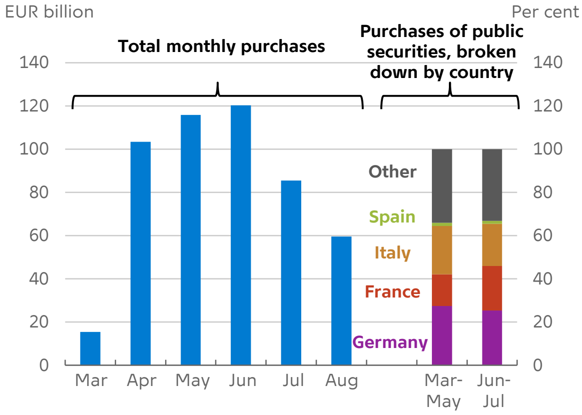
Government yields have decreased slightly in recent months

Chart 27



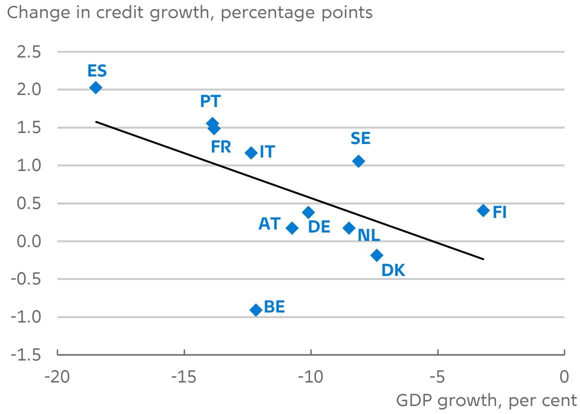
Note: 10-year government bond yields in 2020.
Source: Macrobond.

PEPP gives the ECB flexibility to adjust its purchases of government bonds Chart 28



Source: ECB and own calculations.

Countries which have experienced the biggest economic setbacks have increased corporate sector lending the most Chart 29



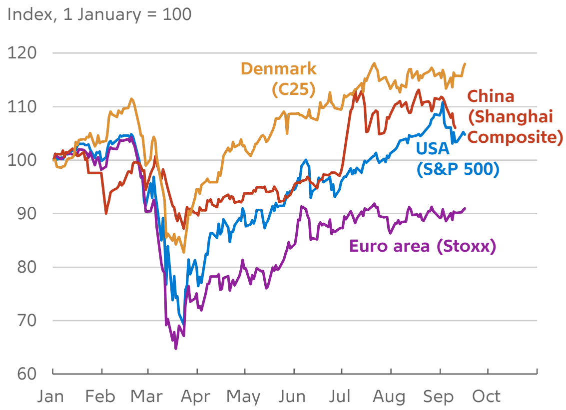
Note: Change in monthly credit growth since March and quarterly change in GDP in the 2nd quarter of 2020.
Source: Macrobond.

Equity markets have continued to rise

Equity markets have increased steadily since the markets plummeted from the end of February to the third week in March. The US, Chinese and Danish markets have thus more than made up the losses. Equity prices in the USA and China have, however, fallen slightly again during September. In the euro area, the key stock index is not yet on a par with the pre-coronavirus level, see Chart 30. The rapid turnaround and recovery of the lost ground on the equity markets are in contrast with developments in the real economy, where recovery is slower.

Part of the difference in the development on the equity markets and in the real economy reflects the composition of the stock indices. In the countries that have seen the highest equity market growth, a large proportion of the corporations operate within technology and life sciences, both sectors which have performed well during the crisis. In the USA, the increase is also driven by a few companies such as Apple and Amazon. The development on the equity markets is thus not necessarily representative of the overall economic development.

The US, Chinese and Danish equity markets have put the coronavirus crisis behind them Chart 30



Note: Developments in the key stock market indices in 2020.
Source: Macrobond.

Appendix:
Assumptions in and revisions of the projection for the Danish economy

The projection has been prepared using the macroeconomic model MONA and is based on the available economic statistics, including Statistics Denmark's quarterly national accounts for the 2nd quarter of 2020. The projection is based on statistics published up to and including 11 September 2020. The latest revision of the balance of payments is not included in the latest quarterly national accounts and is, thus, not part of the projection. The projection also based on a number of assumptions concerning the international economy, financial conditions and fiscal policy.

The international economy
Export market growth is assumed to be -9.4 per cent in 2020, 6.6 per cent in 2021 and 6.0 in 2022. The decline in 2020 is slightly greater than previously assumed (-0.8 percentage points in 2020 and 0.6 percentage points in 2021, respectively), reflecting the latest forecasts from the OECD, the IMF, the European Commission and the European Central Bank. The downward revision reflects a larger economic downturn in 2020, while the slightly higher growth in 2021 reflects base effects.

Wage growth abroad is assumed to be moderate in the coming years, and price increases abroad are also assumed to be modest.

Interest rates, exchange rates and oil prices
Developments in short-term and long-term interest rates in the projection are based on the expectations of future developments that can be derived from term structures in the financial markets. The 3-month money market interest rate, measured by the CITA swap rate, is expected to be negative throughout the projection period and remain largely unchanged at the current level of -0.5 per cent.The average bond yield is an average of yields to maturity for outstanding government and mortgage bonds. It is expected to fall to 0.3 per cent in 2020 and then remain roughly unchanged during the projection period.

The effective exchange rate and the dollar rate have increased in recent months. In the projection, the effective exchange rate and the dollar rate are assumed to remain at their current levels.

By mid-September 2020, the oil price was around 40 dollars per barrel. The oil price is assumed to develop in line with futures prices, rising gradually to just under 47 dollars per barrel by the end of 2022.

Fiscal policy assumptions
The projection is based on preliminary national accounts data on government consumption and investment as well as the planned fiscal policy in *Economic Survey, August 2020* and *Updated 2025 development, August 2020*.

Real government consumption is expected to increase by 1.3 per cent this year, 1.5 per cent in 2021 and 0.8 per cent in 2022. Government investment is expected to increase by 7.9 per cent in 2020, 3.3 per cent in 2021 and 2.6 per cent in 2022, see Table 1.

The expected disbursement of excess housing taxes are sassumed to increase household disposable income during the remaining part of the projection period from 2021 onwards. Reserves for additional fiscal stimulus initiatives in the Budget Bill for 2021 is posted as a capital transfer to households and, thus, only affect the government budget balance with no effect on private consumption.

Revisions in relation to the previous projection
Forecasts for GDP growth have been adjusted upwards by 0.6 percentage points this year relative to the previous projection, but downwards by 0.6 percentage points in 2021. The upward revision in 2020 reflects a slightly lower economic downturn in the 2nd quarter of 2020 than estimated, and the fact that indicators for domestic demand point towards a stronger recovery in the 3rd quarter of 2020. However, the development in exchange rates and export market growth pulls the forecast slightly downwards, see Table 2. The level of activity in 2021 is roughly unchanged from the June projection, and the lower growth rate reflects base effects.

The estimate for the rate of increase in consumer prices (HICP) is slightly higher in 2020, but virtually unchanged throughout the rest of the projection period relative to the latest projection. The upward revision of 2020 mainly reflects slightly higher inflation during the summer than estimated.

Overview of the projection assumptions

Table 1

	2018	2019	2020	2021	2022
International economy:					
Export market growth, per cent year-on-year	3.4	2.4	-9.4	6.6	6.0
Foreign price[1], per cent year-on-year	2.9	0.7	2.1	2.2	1.8
Foreign hourly wages, per cent year-on-year	2.7	2.4	1.9	1.8	2.4
Financial conditions, etc.:					
3-month money market interest rate, per cent p.a.	-0.5	-0.6	-0.6	-0.5	-0.5
Average bond yield, per cent p.a.	0.7	0.5	0.3	0.3	0.4
Effective krone rate, 1980 = 100	103.6	103.0	104.2	105.4	105.4
Dollar exchange rate, DKK per USD	6.3	6.7	6.5	6.3	6.3
Oil price, Brent, USD per barrel	70.9	64.4	40.6	43.1	46.1
Fiscal policy:					
Public consumption, per cent year-on-year	0.4	1.2	1.3	1.5	0.8
Public investment, per cent year-on-year	2.0	0.7	7.9	3.3	2.6
Public sector employment, 1,000 persons	824	829	830	837	841

1. Weighted import price for all countries to which Denmark has exports. The projection assumes the same growth rates for the weighted export prices in the countries from which Denmark receives imports.

Changes in the projection

Table 2

	GDP			Consumer prices (HICP)		
Per cent, year-on-year	2020	2021	2022	2020	2021	2022
Projection, September 2019	-4.1	4.2	1.6	0.2	0.9	1.2
Contribution to revised forecast from:						
Export market growth	-0.1	0.0	0.1	0.0	0.0	0.0
Interest rates	0.0	0.1	0.1	0.0	0.0	0.0
Exchange rates	-0.2	-0.3	-0.1	0.0	-0.2	-0.2
Oil prices	0.0	0.0	0.0	0.0	0.0	0.0
Other factors	0.8	-0.4	0.7	0.1	0.2	0.1
This projection	-3.6	3.6	2.3	0.3	0.9	1.2

Note: The transition from the previous to this projection may not add up due to rounding. "Other factors" also cover data revisions.

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DANMARKS NATIONALBANK
LANGELINIE ALLÉ 47
DK-2100 COPENHAGEN Ø
WWW.NATIONALBANKEN.DK

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DANMARKS NATIONALBANK

CONTACT

Ole Mikkelsen
Communications and Press Officer

omi@nationalbanken.dk
+45 3363 6027

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