ANALYSIS

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OUTLOOK FOR THE DANISH ECONOMY — SEPTEMBER 2021

The economy heading back towards a moderate boom

Pressure in several parts of the Danish economy

Rapid recovery after the crisis has made it difficult for companies to recruit, which are also affected by continued disruptions of global supply chains. Further production disruptions may make the recovery longer and more uneven.

Continued high capacity pressure in the Danish economy in the coming years

The recovery is expected to continue in the coming years, and the Danish economy will move into a moderate boom like before the pandemic. The general assessment is that the current pressure will not develop into an overheating of the economy.

The Government should be prepared to tighten its economic policy

There is a risk of a selfreinforcing and unsustainable upswing with increased indebtedness. The Government should therefore be prepared to tighten fiscal policy more than planned to avoid an abrupt turn of the economic cycle. Regardless, measures are needed to strengthen the robustness of the housing market.

CONTENTS

Highlights

THE GLOBAL ECONOMY

The global economy has continued to recover over the summer after solid GDP growth in the 2nd quarter in the United States and Europe. There are prospects of high growth in the world economy, but pressure on supply chains is currently dampening the pace of world trade.

DANISH ECONOMY

The improvement in export markets and phased out restrictions are expected to result in further growth in the Danish economy. However, there will likely be bumps on the way out of the pandemic. Employment is expected to increase further, and the economy is heading towards a moderate boom.

CONSUMPTION

After the reopening of society, the consumption of services is approaching the pre-pandemic levels, and the composition of the consumption of goods and services is also about the same as before. There are no signs of significant further pent-up demand.

BOTTLENECKS

The recovery of the Danish economy has created recruitment difficulties in companies. Labour shortages are assessed to be partly temporary and reflect many concurrent reemployments. In itself, this is not regarded as leading to a significantly higher pressure on wages.

HOUSING MARKET

Prices in the housing market have risen sharply in the past year. One reason is that households have an increased appreciation of their home. Price increases are estimated to abate going forward, but there is still great uncertainty about price developments.

RISK OUTLOOK

The way out of the pandemic is untried, and the prerequisites for a scenario with very heavy growth are present. This may lead to overheating, which may result in an abrupt subsequent economic downturn. On the other hand, the pandemic is not over yet, and there may be new setbacks.

Key economic variables

Real growth relative to the previous year, per cent	2020	2021	2022	2023
GDP (real), per cent	-2.1	3.8	3.1	2.4
Employment, 1,000 persons	2,982	3,040	3,090	3,104
Gross unemployment, 1,000 persons	132	110	88	87
Balance of payments on current account, per cent of GDP	8.2	6.8	7.1	7.3
Government budget balance, per cent of GDP	-0.6	-0.9	2.1	1.5
House prices[1], per cent year-on-year	4.5	11.6	4.6	1.2
Consumer prices, per cent year-on-year	0.3	1.5	1.7	1.6
Hourly wages[2] (manufacturing industry), per cent year-on-year	2.2	2.7	3.2	3.1

Source: Statistics Denmark and own calculations.
1. Nominal prices of single-family houses.
2. Statistics Denmark's implicit wage index.

" The government should be prepared to tighten its economic policy more than planned.

Outlook and economic policy

Strong global recovery with disruptions
In line with the rollout of the covid-19 vaccines, the pandemic is now gradually under control in most developed economies. Unlike before the vaccine rollout, periods with increased infection have not given rise to significantly more hospital admissions. This has allowed a reopening of many service industries in several countries and resulted in a strong recovery in the global economy in the 2nd quarter.

The recovery has continued over the summer, well supported by significant fiscal policy stimuli, accommodative financial conditions and a partial normalisation of households' high savings rates. This is also assessed to be among the most important driving forces in the coming years, and the IMF expects global GDP growth of 6.0 per cent this year and 4.6 per cent next year. The strength of the recovery is very uneven across countries, as especially emerging economies have poorer access to vaccines than the advanced economies. The US economy will be entering a boom next year, while the business cycle stance will be roughly neutral in the euro area.

Delivery difficulties and higher commodity prices in global economy Chart 1

Note: Delivery times are based on PMI indices for the euro area. The price index for industrial raw materials is based on the index published by the Hamburg Institute of International Economics (HWWI).
Source: Macrobond.

Alternating lockdowns and changed behaviour have resulted in major shifts in global production and demand patterns, and the repercussions from this are still affecting the global economy. High demand for goods, together with production and transport disruptions, has led to increasing pressure in several places in the Danish and international economies with interruptions in supply chains, long delivery times and higher prices of commodities and raw materials as well as increased freight rates, see chart 1. This has resulted in a marked increase in producer prices – and, in the United States in particular, also consumer prices. In Europe, there has still only been a limited spill over to the underlying consumer prices, but the effect will probably be a little more pronounced in the next few years, including in Denmark.

At the same time, the reopenings after the vaccination of the populations, particularly in the developed countries, have given rise to a heavy rebound of several service industries. This has resulted in recruitment difficulties and pressure on the labour markets in many countries when many vacancies have had to be filled at the same time.

The global economy may well experience further bumps and disruptions on the way out of the pandemic. However, the current pressure across the economies, particularly in parts of the manufacturing industry and in construction, is generally regarded as transitory. The pressure largely reflects the need to reduce backlogs of delayed deliveries from the alternating lockdowns of the past 18 months and that, in the same period, consumers worldwide have directed their demand at goods or building projects. International organisations such as the IMF and OECD assume that demand patterns are largely approaching pre-pandemic contours, in line with the pandemic subsiding, but it will take some time to get through the backlog of delayed deliveries. Therefore, there will presumably be bottlenecks in the global economy for a while yet – and probably at least for the rest of the year.

Higher activity level than before the pandemic
In Denmark, the activity level was already higher in the 2nd quarter than before the pandemic, and consumption and labour market indicators point towards this trend having continued over the summer. Employment is also higher now than before

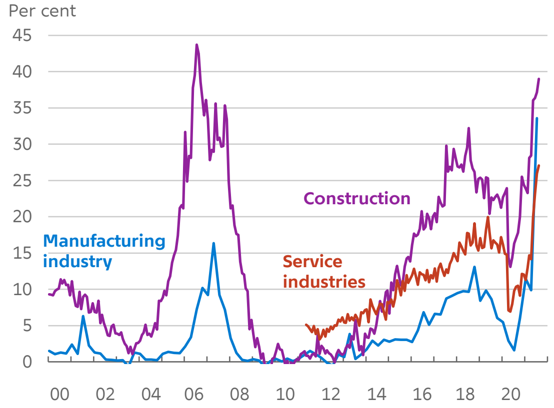
the pandemic, after almost 85,000 persons found employment in the period from March to July. This is a significantly higher number than expected in the latest projection from June. Part of the increase in employment is connected with the testing and vaccination programme aimed at containing the pandemic, but the many job postings indicate that employment growth will continue even though these actions are scaled down.

Labour market pressure has increased

The very sharp increase in employment over a short period has made it difficult for companies to find labour. Among the service industries, the labour shortage is especially pronounced in the industries that were subject to restrictions and that have had a need to re-employ many people. This applies, for example, to hotels and restaurants. Employment of testing and vaccination staff has contributed to enhancing the recruitment problems. In the manufacturing industry and in construction, which to some extent compete with certain parts of the service industries on attracting labour, recruitment difficulties have also increased after the reopening of society.

To a certain extent, the current large recruitment challenges are assessed to reflect the many re-employments in the wake of the reopening of society. The recruitment challenges will ease off slightly as positions are filled and the testing and vaccination programme is scaled down. Unemployment is close to the neutral level, and there are still persons outside the workforce who can step in. Previously implemented reforms also contribute to increasing the workforce, for example by raising the retirement age, and the number of foreign employees is also rising. Activity in the manufacturing industry and in construction has been high during most of the pandemic, and here the recruitment difficulties could increase the wage pressure. This may also spread to the rest of the labour market and result in slightly higher wage increases.

Companies are reporting recruitment difficulties in all trades and industries after reopening Chart 2



Note: Labour shortages are own seasonal adjustment.
Source: Statistics Denmark and own calculations.

Housing market pace has slowed down

The pandemic has also had a huge effect on the housing market with significant price increases at home and abroad. The price increases primarily reflect that many people have increased their appreciation of housing during the pandemic.[1] Recently, however, the price increases have eased off slightly, and the trading activity also appears to have decreased from a very high level. The pace seems to have slowed down a little also in other Nordic countries.

The slower pace in the housing market is linked to the reopening of the economy and may reflect that much of the increased appreciation of housing has already passed through to prices. However, there is still considerable uncertainty about future developments in the housing market. Going forward, price increases are expected to be more subdued, but

1 See Adrian Michael Bay Schmith, Jesper Pedersen, Simon Juul Hviid and Simon Thingaard Hetland, Housing market robustness should be strengthened, *Danmarks Nationalbank Analysis*, No. 16, June 2021.

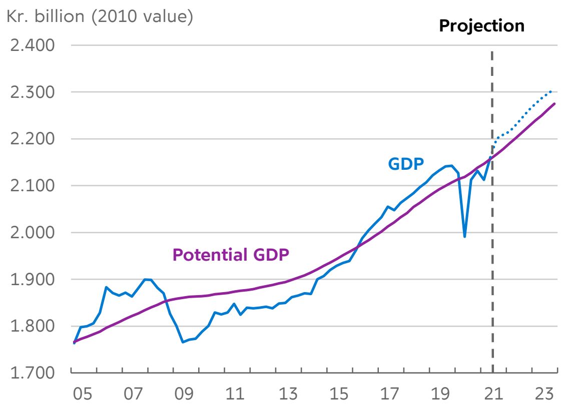
prices are nevertheless expected to be significantly above the development expected before the pandemic by the end of 2023.

Danish economy heading back towards a boom
The preconditions for further growth in the Danish economy are present. There is improvement in export markets, and the increase in the number of people who have been vaccinated reduces the fear of infection and the risk of new lockdowns, even though infection rates have not yet been brought under control globally. The Danish economy is now completely free of restrictions, and consumption opportunities are largely the same as before the pandemic.

As the restrictions have been removed, the use of Danish payment cards in the service industries has increased, while the high level of purchases of goods seen during the lockdowns has decreased. Excluding travel, the distribution of card turnover between goods and services is, in fact, about the same as before the pandemic. This indicates that the recovery in the Danes' consumption is nearing completion, and the same signs are being seen abroad[2].

During the pandemic, household wealth has increased considerably, and especially the value of housing and pension wealth as well as unlisted equity has increased. This type of assets is relatively illiquid and is typically converted into consumption over a number of years[3], and over the past decade the consumption ratio has fallen even though the wealth ratio has increased strongly. Against this background, private consumption is not expected to get an extraordinary boost from increasing wealth and pent-up demand. Consumption is estimated to increase only slightly more than household income in the future, and return to approximately the same level as in the years before the pandemic measured relative to income.

Danish economy is heading towards moderate boom Chart 3



Note: The potential GDP is the long-term level of sustainable real output in the economy without creating inflationary pressures.
Source: Statistics Denmark and own calculations.

Economic growth is expected to continue in the coming years, supported by accommodative financial conditions and growth abroad, leading to increasing exports, private consumption and investments. Conversely, growth in public consumption is expected to slow down slightly as covid-related measures are reduced. GDP is expected to rise relatively sharply by 3.8 per cent in 2021, 3.1 per cent in 2022 and 2.4 per cent in 2023. The development means that, already next year, the economy will be back in a moderate boom, similar to the pre-pandemic period. The output gap[4] is forecast to be 1,5 per cent in 2023, when activity in the economy is also expected to have returned to the level projected before the outbreak of the pandemic. Employment is expected to increase by just over 40,000 persons from the 3rd quarter of 2021 and towards the end of 2023.

2 Dossche et al, COVID-19 and the increase in household savings: an update, ECB Economic Bulletin, Issue 5/2021, 2021.

3 Studies on Danish data find a marginal propensity to consume of approximately 4 per cent from unexpected increases in wealth on the housing and stock market, respectively. See, Henrik Yde Andersen and Søren Leth-Petersen, Housing Wealth or Collateral: How home value shocks drive home equity extraction and spending, Journal of the European Economic Association, no. 19, 2021, and Andersen et al, Dynamic spending responses to wealth shocks: Evidence from Quasi-lotteries on the stock market, *CEBI-working paper*, 2021.

4 Difference between actual and estimated potential level of GDP. The potential GDP is the long-term level of sustainable real output in the economy without creating inflationary pressures.

The development may well be characterised by bumps on the way out of the pandemic, as backlogs of delayed deliveries are reduced. At the same time, virus mutations still pose a threat to the Danish and the international economy.

Potential for widespread and persistent pressure
An essential precondition for a stable and balanced growth development is that the current, high pressure on the labour market is temporary and that demand does not increase sharply as the pandemic subsides. This applies both domestically and globally. In Denmark, the large wealth accumulated from increasing equity and house prices, involuntary savings during the lockdowns and disbursement of holiday allowance provides a potential for very strong growth in private consumption. Abroad, especially in the United States, massive economic stimuli also support demand.

If the global recovery in the wake of the pandemic becomes strong and synchronous, it could give rise to widespread labour shortages, very low unemployment, very frequent job changes and sharp wage increases. That could propagate to the housing market and lead to a mutually self-reinforcing scenario with self-fulfilling expectations of further increases in house prices, increased lending and higher demand. Such a self-reinforcing scenario may result in an abrupt turn in the economic cycle. That can be reinforced, if the pandemic simultaneously prolongs the disruptions in supply chains and changes in consumption patterns that worsen the bottlenecks.

The Government should be ready to tighten its fiscal policy further
If the course of development out of the pandemic in the coming years proceeds in a balanced manner, as expected in the main scenario in this projection, there will be no need for a greater tightening of fiscal policy than planned. But with the last restrictions being phased out, the remaining part of the reserves set aside for measures to contain the pandemic should not be used for measures aimed at boosting demand.

In general, there is room for the economy to absorb greater capacity pressure, as the economy enters a moderate boom. For a number of years, the Danish economy has been characterised by large savings surpluses, and both households and companies on aggregate have large wealth. The Danish economy is fundamentally sound, and competitiveness is good. Therefore, the economy can cope with a period with higher capacity pressure, even though it moderately weakens wage competitiveness and reduces the large surplus on the balance of payments.

However, the way out of the pandemic is uncertain and untried. And the course of growth may yet develop into an overheating of the economy. The Government should therefore be prepared to tighten its economic policy by more than planned to dampen activity and thus avoid a self-reinforcing and unsustainably strong economic upswing that builds up to a subsequent abrupt turn in the economic cycle. Abolishing the Housing Job Scheme (BoligJobordningen) is a good measure to include as part of a larger tightening, as the scheme distorts the market and has contributed to increasing the activity level in an already busy construction industry in the past year.

Previously implemented reforms and the influx of foreign labour helped to support a balanced economic upswing in the period before the pandemic. Given the outlook for the Danish economy for a moderate boom, it is a good time to implement measures increasing production capacity further. That will contribute to a balanced economic upswing – also in future.

Housing market structures must be strengthened now
As part of strengthening the resilience of the Danish economy, this is a good time to improve the structures of the housing market that can prevent unsus-

Economic policy

The Government should be prepared to tighten economic policy to dampen capacity pressure, as the rate of growth may become stronger and develop into an overheating of the economy.

With the outlook for the economy moving into a moderate boom, it is a good time to implement measures increasing production capacity further.

Housing market structures should be improved so that they reduce fluctuations in house prices and the incentive to raise debt.

tainable risk build-up in households. First and foremost, it is important that the new, stabilising housing taxation system is introduced as planned from 2024, as it will reduce fluctuations in house prices.

An amortisation requirement for borrowers with mortgage debt exceeding 60 per cent of house value will reduce vulnerability and will only have a very modest dampening effect on price developments. In the long term, it will benefit housing market robustness that homeowners have wealth to cushion house prices fall. A reduction of the tax value of the interest deduction will reduce the incentive to raise debt. Together, these measures will also dampen fluctuations in house prices.

Danish economy – trends

Reopening of society has resulted in recruitment difficulties
Activity recovered rapidly after the reopening of society in spring. GDP rose by 2.3 per cent in the 2nd quarter and was thus above the pre-pandemic level already before the summer. This has also spilled over to the labour market, where the number of employees increased by almost 85,000 persons from March to July. Especially the reopened service industries, including hotels, restaurants, culture and leisure activities, have seen an increase in employment in recent months. In total, employees are now up by more than 50,000 persons relative to before the outbreak of the pandemic, and the total employment is thus close to the expected pre-pandemic path. The number of job advertisements remains high, indicating that labour market growth has continued since June.

Gross unemployment fell to 109,000 persons in July and is close to the pre-pandemic level. Since then, the weekly Chartes for registered unemployed persons have fallen further. Higher employment than before the pandemic has, in particular, come from a large share of young people and senior citizens either entered or stayed in employment. Increased employment among senior citizens reflects increases in retirement ages, which has made a major contribution to the workforce, that is estimated to having been structurally increased by almost 35,000 persons from 2019 to 2021.

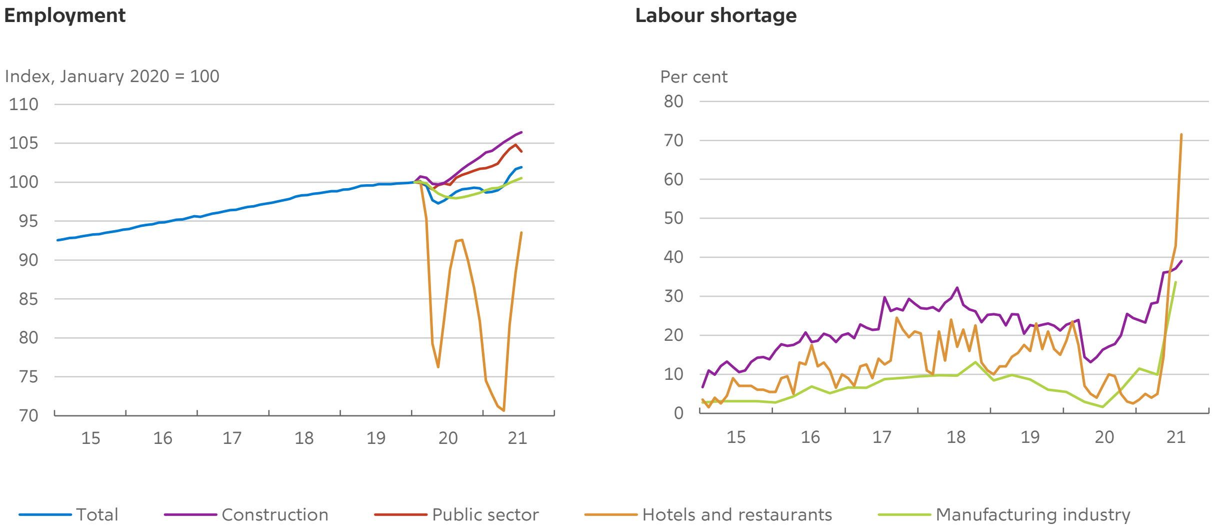
The rapid and sharp increase in employment has made it particularly difficult for companies to find labour, and the indicators of labour shortages are now significantly above the pre-pandemic level, see chart 4. Especially in several service industries where employment has been very low during the lockdowns, such as hotels and restaurants, the shortage of labour has increased very sharply in recent months.

The labour shortage in these service industries reflects to some extent that many companies have had to hire new employees at the same time after the reopening of society. In other service industries, such as transport, the labour shortage has not increased in the same way.

These recruitment challenges are further exacerbated by the measures aimed at containing the

Employment has increased heavily, and there are recruitment difficulties in most parts of the economy

Chart 4



Note: Labour shortages are own seasonal adjustment. Hotels and restaurants are not seasonally adjusted.
Source: Statistics Denmark and own calculations.

pandemic, such as testing and vaccination, having engaged a part of the labour force.[5] In addition, requirements for hygiene and control of corona passports may have increased the need for labour in many industries after the reopening of society.

Especially in the service industries, the recruitment difficulties are expected to ease a little in line with the companies filling the vacant positions after the lockdowns. At the same time, labour is expected to be released as measures to contain the pandemic are scaled down to a lower level.[6]

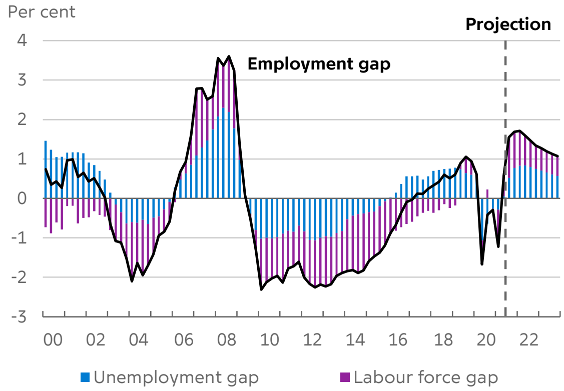
Labour shortages have been widespread for some time in construction and parts of the manufacturing industry as a result of demand having been shifted towards goods-producing industries. In connection with the reopening of society, the shortage of labour has increased further in manufacturing and construction, reflecting to some extent increased competition for labour from service industries.

The order books are full in many industrial and construction companies, and housing demand is expected to remain high. Conversely, a shift back towards consumption of services in Denmark and worldwide will dampen some of the activity in the goods-producing industries. The assessment is that recruitment difficulties in these industries will remain for some time yet, but that they will gradually return to a level close to or slightly higher than before the pandemic, where companies in construction and the manufacturing industry also reported a large labour shortage.

In the years up to the pandemic, increases in the labour force contributed to balanced growth in employment. In future, pressure in the labour market is also expected to be eased by increases in the labour force as a result of increases in the age limits for early retirement and old-age retirement. In addition, senior policy schemes in companies may contribute to retaining senior employees in the workplace. Concurrently, there are no clear signs that the pandemic is hindering the influx of foreign labour. In July 2021, the number of employed foreign nationals was 10,000 higher than immediately before the pandemic. In total, the structural workforce is forecast to be expanded by almost 40,000 persons by the end of 2023, and employment is expected to increase by just over 40,000 persons from the 3rd quarter 2021 to the end of 2023.

Pressure on the labour market is expected to ease off from 2022

Chart 5



Note: The gap is the difference between the acutual and potential level of the labour force, employment and unemployment. The potential level is the long-term level the economy can perform without creating inflationary pressure.
Source: Statistics Denmark and own calculations.

Overall, the pressure on the labour market is projected to ease gradually in the coming years, see chart 5. Unemployment is projected to be slightly below the structural level, as was the case before the pandemic, and where it did not lead to higher wage pressure.

Wages increases will rise slightly in coming years

Increased pressure on the labour market is also reflected in the wage development. The wage growth rate in the private sector increased further in the 2nd quarter of 2021, rising to 3.1 per cent year-on-year, see chart 6. Rising wage increases are seen across industries, but especially in the service indus-

5 In June 2021, the trade union journal Fagbladet 3F found that at least 20,000 persons were engaged in coronavirus swab testing, see (*link*).

6 All coronavirus restrictions ceased on 10 September, while the testing capacity is being gradually scaled down. All rapid test sites will close on 1 October.

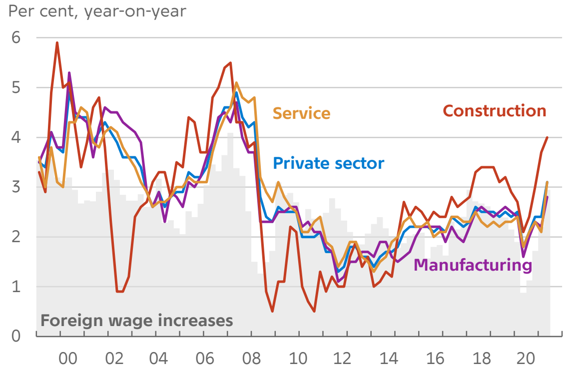
tries, where several restrictions were eased, saw a jump in the wage growth rate in the 2nd quarter. However, wage increases are still highest in construction, where there have been reports of recruitment difficulties for some time.

The wage increases are still characterised by temporary after-effects from the lockdown of Danish society in spring 2020, and the rising wage growth rates across the industries are not solely a sign of great pressure on the labour market. In 2020, wage negotiations in many companies was postponed to later in the year. As wage negotiations has again been conducted in many companies in the 2nd quarter of this year, the annual wage growth rate comprises a double pay adjustment.[7] Underlying this, wage increases in the private sector have so far been subdued during the pandemic.

Wages in the manufacturing industries are forecast to grow by 2.7 per cent and 3.2 per cent in 2022 and 3.1 per cent in 2023.[8] This is slightly higher than in the years before the pandemic, and the wage increases reflect the general recovery in the economy and the labour market.

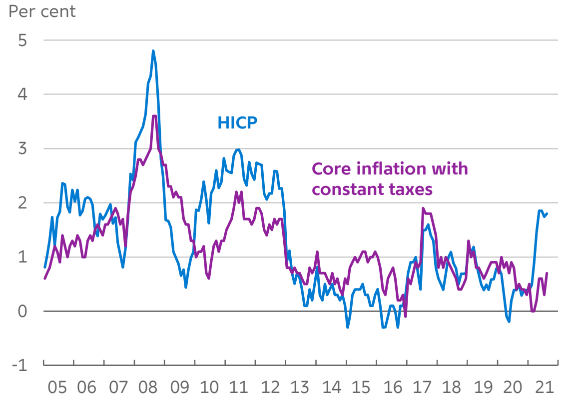
Danish industrial wages have grown slightly faster than abroad during the pandemic, see chart 6. In turn, the development in wages was slightly weaker than abroad in the years leading up to the pandemic, and productivity growth was stronger in Denmark at the same time. Danish companies are therefore well placed in the competition with foreign companies[9], and there is room for slightly higher wage increases in the coming years. If the wage growth rate is higher than abroad, this will make Danish goods and services relatively more expensive, which will dampen the demand pressure on the Danish economy and reduce the very high surplus on the balance of payments.

Wage increases are now higher than before the pandemic Chart 6



Note: Foreign wage increases in manufacturing specifies wage increases among 25 of Denmarks largest trading partners weighed together using DKK-weights.
Source: Confederation of Danish Employers (DA), the Statistics Committee and own calculations.

Subdued underlying price pressure Chart 7



Note: Last observation is August 2021.
Source: Statistics Denmark and Eurostat.

7 See Lønomkostningerne inden for DA-området steg 3,1 procent i 2. kvartal 2021 (Payroll costs in DA area increased by 3.1 per cent in Q2 2021), Dansk Arbejdsgiverforening (Confederation of Danish Employers), *Statistik-Nyt*, August 2021.

8 The projection applies to wages in the manufacturing industries from Statistics Denmark's implicit wage index.

9 See Erik Haller Pedersen, Adrian Michael Bay Schmith and Rasmus Rold Sørensen, Globalisation affects measures of wage competitiveness, Danmarks Nationalbank Analysis, No. 27, December 2019.

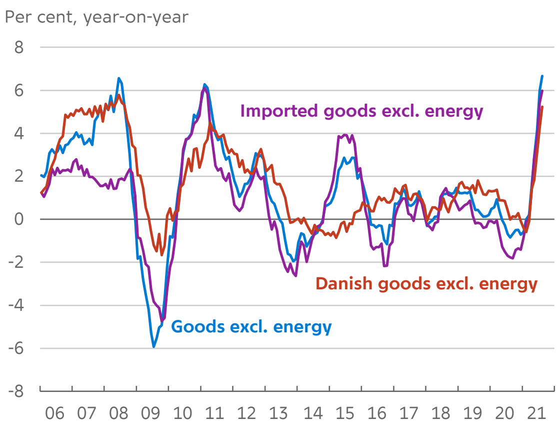
Consumer price increases will pick up in coming years

Consumer price increases have picked up since the turn of the year, and measured by the EU's Harmonised Index of Consumer Prices (HICP), prices rose by 1.8 per cent in August, see chart 7.[10] The higher annual wage growth rate, in particular, reflect the fluctuations in oil prices in the past year, which are resulting in significant increases in energy and consumer prices. The price increases are also supported by higher taxes on tobacco. Excluding tax changes, energy and unprocessed food products, price increases were 0.7 per cent year-on-year in August. The underlying price pressure is thus still very subdued and lower than immediately before the pandemic.

Large global demand for goods, together with disruptions in production and supply chains, has resulted in heavy increases in freight rates, commodity and input prices. This has resulted in increased pressure at an early stage in the price chain, and producer and wholesale prices have risen significantly since the turn of the year, see chart 8. The pass-through on the underlying consumer prices in Denmark has so far been limited, which is also the case in the euro area.[11] However, the pass-through will typically come with some delay and depends on the companies' ability and willingness to pass on the rising production costs to consumers or reduce their profit margins.

The pressure on producer prices is predominantly regarded as temporary and is expected to ebb away as the disruptions of the production and supply chains are resolved and consumption largely returns to pre-pandemic patterns. For more lasting effects on inflation, the pressure must be reflected in inflation expectations and wage formation. Experience has shown that large fluctuations in commodity prices only have a temporary effect on price increases.[12]

Wholesale prices have risen Chart 8



Source: Statistics Denmark and own calculations.

Higher consumer price increases abroad may also spill over to Danish inflation, and inflation has risen sharply in the United States.[13] However, the ECB expects a limited effect on European prices from higher US inflation[14], and, historically, there has been no close correlation between Danish and US core inflation.

During 2022, higher producer prices are expected to increase consumer price increases temporarily. Conversely, the contribution from price increases on energy will decrease. Higher wage growth will also increase inflation, and in total consumer price increases are expected to increase from 1.5 per cent in 2021 to 1.7 per cent in 2022 and 1.6 per cent in 2023.

Consumption is approaching previous consumption patterns

Despite the marked downturn in the Danish economy, household income and purchasing power have increased over the past year. This is partly due to

10 Far fewer prices were imputed in July, which reduces uncertainty about the price development.

11 See box 7 from the ECB's Economic bulletin, Recent developments in pipeline pressures for non-energy industrial goods inflation in the euro area, August 2021.

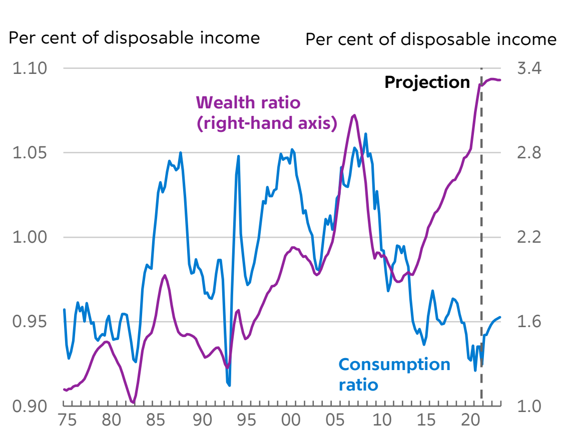
12 See Anne Ulstrup Mortensen and Jonas Staghøj, Falling oil and consumer prices, *Danmarks Nationalbank Quarterly Review*, 1st quarter 2015.

13 See International economy – trends below.

14 See Hearing of the Committee on Economic and Monetary Affairs of the European Parliament (europa.eu).

compensation schemes and subdued consumer price increases. Households' expectations of their own finances have remained high during the pandemic, and the underlying willingness to consume has been intact. However, restrictions aimed at containing the pandemic have limited consumers' opportunities for spending. This has resulted in large declines in consumption over the past year and an involuntarily high level of savings.[15]

The consumption ratio was low despite a high wealth ratio in the years preceeding the pandemic Chart 9



Note: 4 quarter moving average. Disposable income is adjusted for restructure of capital pensions and savings under LD pensions in 2013 and 2015.
Source: Statistics Denmark and own calculations.

With the reopening of the economy, household consumption opportunities are no longer limited, and turnover has increased rapidly in the industries that were previously closed down. Overall, private consumption increased by 4.3 per cent in the 2nd quarter and is now close to the pre-pandemic level. The turnover on Danish payment cards points towards further consumption growth in the 3rd quarter.

Over the summer, the composition of the consumption has approached the same pattern as in the years before the pandemic, see box 1. Especially the consumption of services such as restaurants has been hard hit by restrictions and fear of infection, but it has recovered over the summer. The consumption of goods has periodically also been affected by lockdowns, but has generally maintained a high level during the pandemic. One reason for this is that the consumption of especially durable goods such as furniture can be postponed and recouped later to a greater extent than services. For example, hairdressers have a limited potential for recouping the backlog. In addition, a high degree of digitalisation and widespread opportunities for online shopping have supported the consumption of goods during the lockdowns.[16]

During the pandemic, household wealth has increased significantly, especially as a result of large house and equity price increases, involuntary savings and disbursement of holiday allowance. This wealth provides a basis for households to increase their consumption considerably. However, during the latest economic upswing, there was a decoupling between wealth and consumption ratio, and increasing wealth from the housing and equity markets is typically converted into consumption over a number of years.[17] Additionally, most of the wealth is accumulated in relatively illiquid assets such as housing, pensions and unlisted equity.

Therefore, the wealth increases are not expected to be significantly converted into increased consumption in the short term, and there are signs that pent-up demand for durable goods has more or less been recouped. Therefore, total consumption is not expected to receive an extraordinary boost from higher wealth and pent-up demand in future, and the composition of consumption is estimated to remain roughly as before the pandemic. Private consumption is expected to increase by 3.1 per cent this year, by 6.1 per cent next year and by 2.1 per cent in 2023. The

15 See, for example, Andersen et al, High savings during corona were driven by restrictions rather than precautionary consumers, *Danmarks Nationalbank Economic Memo*, No. 2, February 2021, and Dossche et al, COVID-19 and the increase in household savings: an update, *ECB Economic Bulletin*, Issue 5/2021.

16 See Amy Yuan Zhuang, Digitalised economies have performed better during the pandemic, *Danmarks Nationalbank Economic Memo*, No. 6, August 2021 (memo available in Danish only).

17 Studies on Danish data find a marginal propensity to consume of approximately 4 per cent from unexpected increases in wealth on the housing and stock market, respectively. See, Henrik Yde Andersen and Søren Leth-Petersen, Housing Wealth or Collateral: How home value shocks drive home equity extraction and spending, Journal of the European Economic Association, no. 19, 2021, and Andersen et al, Dynamic spending responses to wealth shocks: Evidence from Quasi-lotteries on the stock market, *CEBI-working paper*, 2021.

high growth rate in 2022 reflect very low consumption at the beginning of 2021. After consumption has recovered during the summer, private consumption is forecast only to increase slightly faster than household disposable income, so that the consumption ratio will gradually return to the pre-pandemic level at the end of the projection period, see chart 9.

Signs that housing market pace is slowing down
The housing market has been moving at a high pace in the past year. In June, the prices of single-family houses and owner-occupied flats were thus 12 per cent and 13 per cent higher than in the previous year respectively, see chart 10. The development has been unusual and is regarded as being significantly driven by an increased appreciation of housing among households derived from employees being sent home during the pandemic.[18]

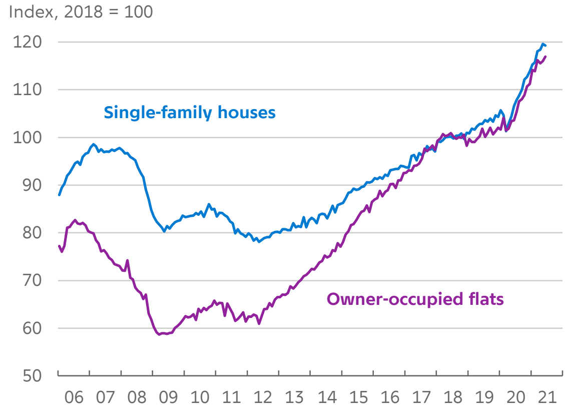
However, there are signs that the housing market pace is slowing down, see chart 11. The number of trades is again approaching the years before the pandemic, and indicators from Boligsiden point towards weak price increases in July and August, when adjusting for seasonal fluctuations.

Despite the slower pace, the number of homes for sale is, however, still significantly lower than in previous years. The times on the market are short, and the price reductions given are still small, although they have increased a bit recently. This indicates a continued strong demand, which may still push prices up for some time to come.

There is considerable uncertainty about how the driving forces for the housing market will develop in future. This is particularly related to the extent to which higher appreciation of housing is fully reflected in the prices, and whether the increased value of housing will be of a temporary or permanent nature. Specifically, it has been assumed that increased appreciation of housing is only partially permanent and has not yet been fully reflected in the prices.[19] This year, the price of single-family houses is

Significant rise in house prices in the past year

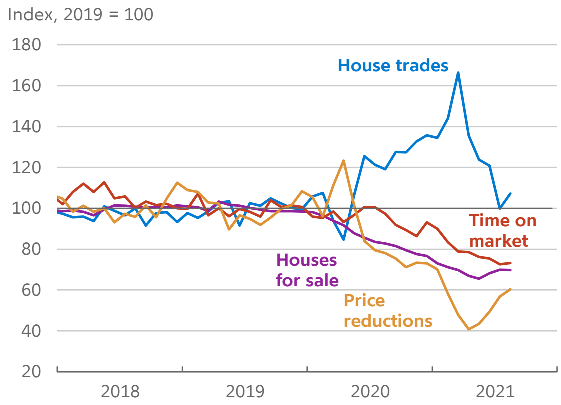
Chart 10



Note: Seasonally adjusted house prices.
Source: Statistics Denmark and own calculations.

Signs that activity is returning to pre-pandemic level

Chart 11



Note: The Chart shows the development for single-family houses. All Chartes are seasonally adjusted (own seasonal adjustment) except price reductions.
Source: Boligsiden and own calculations.

18 See Adrian Michael Bay Schmith, Jesper Pedersen, Simon Juul Hviid and Simon Thingaard Hetland, Housing market robustness should be strengthened, *Danmarks Nationalbank Analysis*, No. 16, June 2021.

19 See Adrian Michael Bay Schmith, Jesper Pedersen, Simon Juul Hviid and Simon Thingaard Hetland, Housing market robustness should be strengthened, *Danmarks Nationalbank Analysis*, No. 16, June 2021.

expected to increase by 11.6 per cent, and then slow to 4.6 per cent and 1.2 per cent in 2022 and 2023, respectively. This is slightly lower than estimated in the June projection.

Soaring house prices, together with rising incomes, have contributed to increased housing investments in the past year. This is most pronounced in 2021, when housing investments are expected to grow by 14 per cent. It also reflects the temporarily expanded Housing Job Scheme, which is expected to have brought forward many projects, as well as refurbishments in the social housing sector as a result of the Green Housing Agreement. A more subdued development in housing investments is therefore also expected in the following years.

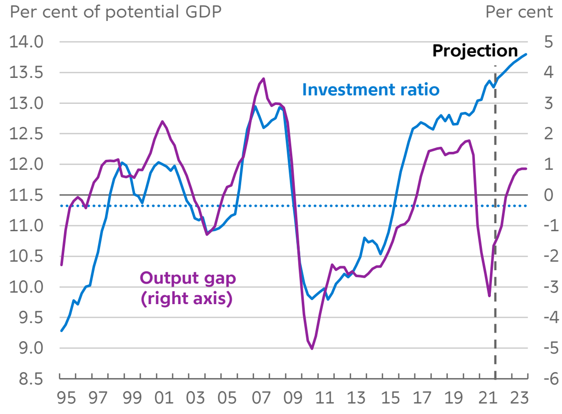
Prospects of continued investment growth
Business investments have come through the crisis fairly unscathed. Construction activity consist of many larger projects which are typically completed, even if the business cycle turns, and construction activity typically drops with a lag compared to GDP as new projects are not initiated. As demand has quickly recovered, new projects has not been hit, and business construction investments has remained at a high level during the pandemic. However, investments in plant and equipment fell sharply during the first and second lockdowns, but with a quick recovery both times.

The growth in the Danish manufacturing industry has led to manufacturing companies reporting increasing capacity utilisation, and they expect to increase their investments in future. With the prospect of increased activity both domestically and in the export markets as well as great capacity pressure, business investments are expected to increase, see chart 12. This implies that the investment ratio will increase slightly the coming years and remain above the average level since 1990.

Danish companies are well equipped to exploit growth on export markets
Exports have increased significantly in the 1st half of 2021, see chart 13. However, this covers significant differences in the trade in goods and services. Exports of goods have been supported by the current global manufacturing upswing and have thus contributed significantly to the recovery. However, parts of the service exports are still trailing behind. Especially tourism, which has not fully returned this summer, and building and construction services are dragging down service exports.

Gradual increase in investments as capacity pressure increases

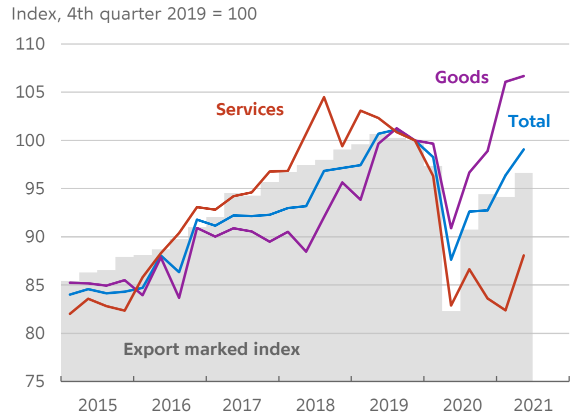
Chart 12



Note: The investment ratio is business investments over potential GDP. The output gap states the deviation of actual GDP from potential GDP, which is the long-term level of sustainable real output in the economy without creating inflationary pressures. Four-quarter moving averages.
Source: Statistics Denmark and own calculations.

High exports of goods, while exports of services are subdued

Chart 13



Note: Exports stated in volumes. The export market index covers imports in volumes of goods and services among Danish trading partners. The development up to 2020 is based on the OECD's Economic Outlook.
Source: Statistics Denmark, OECD and own calculations.

Imports have generally recovered faster and more strongly than exports. Especially imports of goods have increased significantly. This must be seen in the light of the high investment level, but also the strong consumption demand and the shift towards goods. The increase in imports has gradually reduced the surplus on the balance of payments over the past year. However, the surplus is still 7.7 per cent of GDP in July (measured as a 12-month moving sum).

The export companies' volume of orders is high, and there are prospects of further growth in Denmark's primary export markets. Competitiveness is good, and Danish companies have a good starting point for exploiting the current growth in the export markets, even if increased capacity pressure should lead to higher wage increases in Denmark than abroad.

International organisations estimate that the demand for goods is declining slightly, in line with a shift in consumption patterns back towards services also being expected abroad.[20] Therefore, the increase in exports is expected to be most pronounced for services, whereas the growth in exports of goods will decrease. Overall, exports are estimated to grow by 3.5 per cent this year, by 8.4 per cent in 2022 and by 3.7 per cent in 2023.

In 2021, the balance of payments surplus is expected to fall to 6.8 per cent of GDP as the Danish economy moves towards a boom. If the current large increases in freight rates continue throughout the rest of the year, this may, however, contribute to a stronger balance of payments than expected. In the coming years, the balance of payments surplus is expected to grow gradually to slightly above 7 per cent of GDP, as a result of higher net exports of tourism and energy as well as small gains in the terms of trade.

Expansive fiscal policy despite tightening

In the Finance Bill, the economic policy is planned in accordance with a significant tightening in 2022, which, measured by the one-year fiscal effect, dampens capacity pressure in the economy by 1.9 per cent. This mainly reflect the expiry of compensation schemes and most of the measures aimed at supporting demand and containing the pandemic during 2021. Excluding the compensation schemes and other temporary measures, the economic policy will dampen economic activity by 0.2 per cent in 2022. In 2022, the Government's reserve for measures to contain the pandemic will amount to kr. 4 billion, and if it is not implemented, it will dampen activity further.

Despite the tightening of fiscal policy, however, there are still prospects of an overall expansive economic policy in 2022. The multi-year fiscal effect, which takes into account the after-effects of, for example, the disbursement of holiday allowance, is positive. At the same time, public employment will remain high in 2022, and a deficit of 0.2 per cent on the structural balance is budgeted for, which is a deterioration relative to the years before the pandemic.

The tightening of fiscal policy, together with the prospects of higher tax payments as a result of growth in the Danish economy, contributes to a marked improvement in the actual balance. In 2022, a surplus on the government budget balance of 2.1 per cent of GDP is forecast following a deficit of 0.9 per cent in 2021. In 2023, a budget balance surplus of 1.5 per cent of GDP is estimated.

Continued great uncertainty connected with the pandemic

In countries, where vaccination of the population is widespread, periods of increasing infection rates has not lead to a marked increase in hospital admissions. However, the pandemic is not over yet, and mutations of the virus pose a threat to the Danish economy and the international economy. Mutations are especially a risk as long as a large part of the world's population has not been vaccinated. It is also still unknown how long the vaccines are effective against the virus.

The risk of new, major lockdowns has nevertheless been reduced with the vaccine rollout, and great adaptability among households and companies can mitigate large declines in activity if parts of the economy should again be affected by restrictions or fear of infection. Changes in consumption and production patterns may instead worsen some of the existing bottlenecks in the labour market, in global supply chains and in the housing market.

20 See, for example, World Economic Outlook (interim) from the IMF, July 2021.

Bottlenecks in the economy may also be exacerbated by households having accumulated large wealth as a result of disbursements of frozen holiday allowance, involuntary savings during the lockdowns and a large increase in home equity as well as other assets that can trigger increased demand. This poses a particular risk in the housing market, where increased lending of home equity may lead to unsustainable debt build-up, which must subsequently be reduced with resulting very weak private demand, as happened after the financial crisis.

Consumption is bouncing back – prospects of consumption and income going hand in hand

Box 1

Studies show that demand-driven recoveries like the recent course of development differ across consumption types.[1] For durable consumer goods, there will often be a pent-up demand, which means that deferred consumption is recouped during the recovery. The consumption of these goods must therefore be expected to be significantly above its usual level for a period. For services, however, the literature does not point towards consumption being accumulated and recouped to the same extent. This indicates that you cannot expect a higher service consumption over a longer period during the recovery.

Precisely this development can be found in the Danes' use of payment cards since the reopening of society in spring. Consumption of durable consumer goods has thus been higher than usual after the reopenings, but it has gradually returned to the normal level after the reopening, see chart A. Parts of the consumption of durable consumer goods, such as car purchases, are not always settled with payment cards. However, there does not seem to be a large pent-up demand for cars. A simple calculation indicates that, in July, there are outstanding car purchases corresponding to approximately the purchases made in a quarter despite lockdown and delivery problems in the automotive industry.[2]

In turn, consumption of services has increased more gradually overall. The consumption of services is now roughly back to the pre-pandemic level, but this covers underlying shifts. The use of Danish payment cards for travel-related activities is thus approx. 25 per cent below the pre-pandemic level, while the opposite applies to consumption in restaurants, bars and hotels. However, there are signs that there is still interest in travelling[3], and the composition of the service consumption is thus expected to normalise gradually, as travel restrictions are lifted.

The turnover on Danish payment cards at the end of August shows that the consumption ratios of services and durable consumer goods are now close to the composition before the outbreak of the pandemic, see chart B. This indicates that the recovery of the Danes' overall consumption is nearing completion. This is in contrast to, for example, the United States, where the consumption of services is roughly back to its pre-pandemic level, but the share of consumption is still low as consumption of goods remains high. At the same time, consumer confidence in Denmark also shows that households' appetite for durable consumer goods is declining. The same picture emerges for plans for new car purchases, which are just slightly above the pre-pandemic level. There are consequently no clear signs that, for example, there will be more car purchases than usual, even if the delivery problems are minor and the suppressed consumption has been recouped.

Developments in the Danes' consumption in recent months – in terms of both level and composition – indicate that accumulated demand for consumer goods may be completed during the 2nd half of 2021. Therefore, there are generally no signs of a major correction of consumption in the coming year. Basically, the structures of the economy have not changed significantly in the wake of the pandemic,[4] which indicates that the future course of development will not differ markedly from the years leading up to the pandemic when the adjustment has been completed.

Chart A
Accumulated demand for durable consumer goods is about to have been recouped

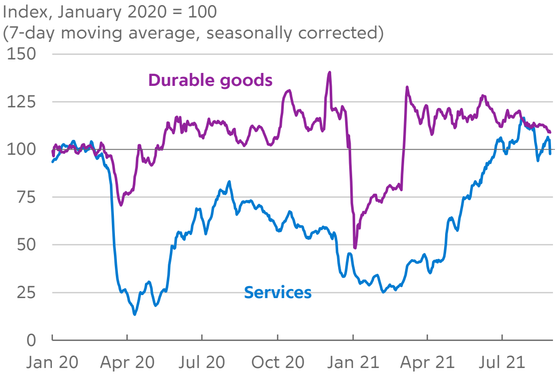
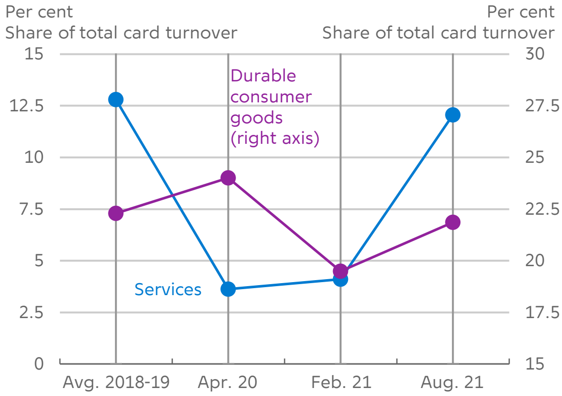


Chart B
Consumption shares are normalised



1. See, for example, M. Beraja and C. Wolf, Demand Composition and the Strength of Recoveries, Massachusetts Institute of Technology, mimeo, 2021, and N. G. Mankiw, 1982, Hall's Consumption Hypothesis and Durable Goods, *Journal of Monetary Economics* (10), pp. 417-425, 2021.
2. Since the outbreak of the pandemic, there have, accumulated, been 50,000 fewer registrations than the course of development for 2017-2019 would indicate. In the same period, there has been an average of 200,000 new registrations of passenger cars for households.
3. For example, searches for flights on Momondo.dk are close to the pre-pandemic level.
4. See, for example, Barrett et al, After-Effects of the COVID-19 Pandemic: Prospects for Medium-Term Economic Damage, *IMF Working Paper*, July 2021, who finds limited scarring effects for developed countries.

Key economic variables

Table 1

Real growth relative to the previous period, per cent	2020	2021	2022	2023	2020 Q4	2021 Q1	2021 Q2
GDP	-2.1	3.8	3.1	2.4	0.9	-0.9	2.3
Private consumption[1]	-1.3	3.1	6.1	2.1	1.0	-5.1	4.3
Public consumption	-1.7	4.7	-1.8	0.9	6.2	-1.8	2.5
Residential investments	10.1	14.0	0.1	-1.8	5.4	5.5	3.0
Public investments	9.8	3.9	-1.6	17.4	17.5	-13.4	7.2
Corporate investments	2.1	4.6	3.9	3.7	8.3	-5.0	3.1
Inventory investments etc.[2]	-0.1	-0.5	0.0	0.0	-0.5	-1.3	0.4
Exports	-7.0	3.5	8.4	3.7	0.0	3.8	-2.5
Industrial exports	-0.9	9.7	0.7	3.4	2.2	6.7	1.2
Imports	-4.1	3.7	8.8	3.9	4.9	-4.0	0.2
Employment, 1,000 persons	2,982	3,040	3,090	3,104	2,996	2,978	3,035
Gross unemployment, 1,000 persons	132	110	88	87	129	128	117
Balance of payments on current account, per cent of GDP	8.2	6.8	7.1	7.3	5.7	7.4	7.9
Government budget balance, per cent of GDP	-0.6	-0.9	2.1	1.5	-1.3	-0.6	-1.5
House prices[3], per cent year-on-year	4.5	11.6	4.6	1.2	8.4	12.1	13.3
Consumer prices (HICP), per cent year-on-year	0.3	1.5	1.7	1.6	0.4	0.6	1.7
Hourly wages[4] (manufacturing industry), per cent year-on-year	2.2	2.7	3.2	3.1	1.9	2.1	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 investments, valuables and statistical discrepancy).
3. Nominal prices of single-family houses.
4. Statistics Denmark's implicit wage index.

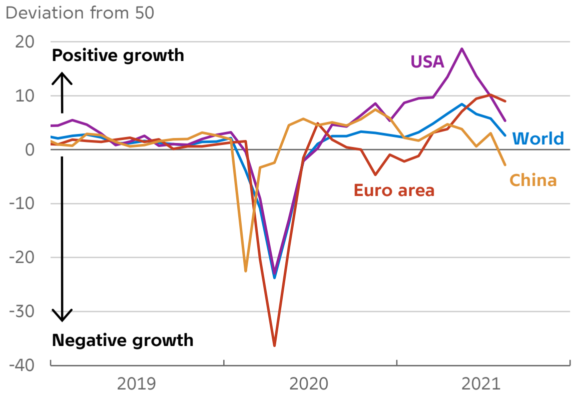
International economy – trends

Recovery continues after easing of restrictions and increased vaccine rollout

Growth in the global economy has continued over the summer, with business confidence, measured by the PMI index, pointing towards solid growth until August, although at a somewhat slower pace than earlier in the year, see Chart 14. The world economy is supported by a number of factors, including progress with vaccine rollout in advanced economies, significant fiscal policy stimuli, accommodative financial conditions and a partial normalisation of the high savings rates of households. The dampening of business confidence since May indicates a slowdown in the pace of the global recovery after some months of high growth. This is natural to some extent, as activity levels are normalising in several countries. In addition, infection outbreaks have hampered activity in Asia during August.

Business confidence points to slower growth over the summer

Chart 14



Note: PMI index for the whole economy.
Source: Macrobond.

The course of the pandemic remains a key factor in the global economic recovery. New infection flare-ups driven by the more contagious delta variant and uneven access to vaccines are increasingly giving rise to different growth trajectories across countries. Especially some of the emerging market economies are now hampered by the virus outbreak, while access to vaccines has kept the pandemic under better control in the advanced economies.

Several parts of the world economy are currently characterised by supply limitations due to changing demand patterns and logistical bottlenecks. Increased purchases of durable consumer goods, strong growth in manufacturing and production disruptions have created pressure on global supply chains and resulted in a shortage of several materials. Many countries are also experiencing a great shortage of labour, although employment remains below the pre-pandemic level. The sharp increases in the prices of cars and services hit by the pandemic, which have driven the high inflation rate in the United States since spring, are partly also linked to supply and demand imbalances. Several of the supply constraints are expected to subside when capacity and consumption patterns normalise again.

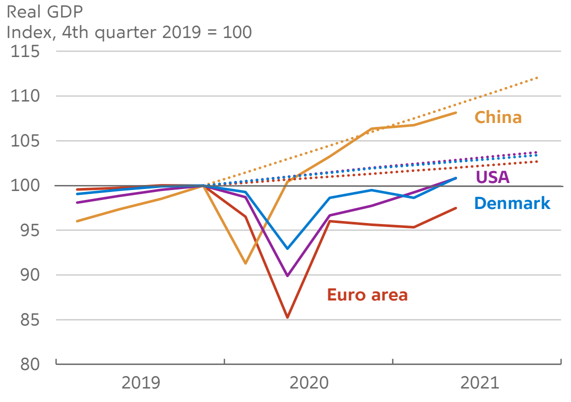
Solid global GDP growth in Q2 2021

The recovery in the euro area has been slower than in the United States in the past year due to a number of factors, including later rollout of vaccines. In the 2nd quarter, GDP in the euro area was still just over 2 per cent below the pre-pandemic level even though activity bounced back strongly after the lockdown earlier in the year, see Chart 15. Especially the reopening of large parts of the European economy gave rise to growth in the service sector and private consumption. Among the large euro countries, Spain stands out with a GDP that was nearly 7 per cent lower in the 2nd quarter than before the pandemic, one reason being that tourism, which has been hit hard by restrictions, constitutes a major part of the economy. Germany saw significant growth in the domestic parts of the economy in the 2nd quarter, but production fell in manufacturing, where supply problems prevented companies from utilising solid order books. Overall, German GDP rose to a level that was approx. 3 per cent lower than before the virus outbreak.

Solid US growth continued in the 2nd quarter of 2021, where the GDP level was approx. 1 per cent higher than before the virus outbreak. Strong increases in private consumption, supported by new cash disbursements to households in the spring, were among the factors contributing to the GDP growth.

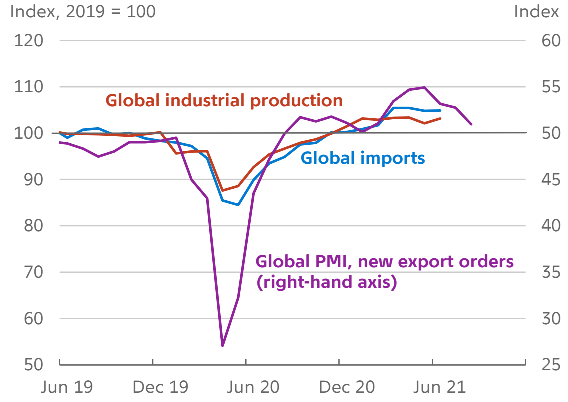
In China, the economy has more than recovered the lost GDP from the lockdown and was back on the

Strengthened recovery of global economy in the 2nd quarter of 2021 Chart 15



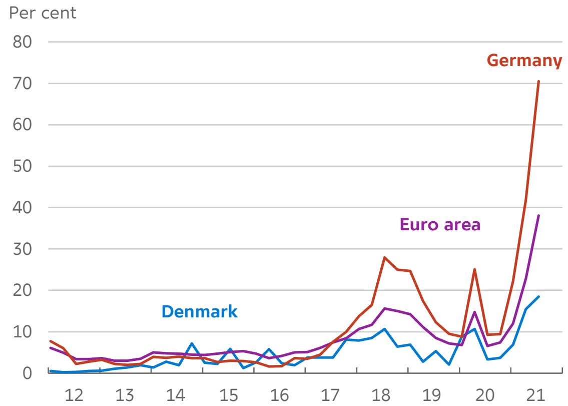
Note: The dotted lines indicate the IMF's forecast from January 2020 before the coronavirus outbreak.
Source: Macrobond, IMF and own calculations.

Indicators point towards slower growth in global trade in goods Chart 16



Note: The figure shows new export orders for manufacturing industry.
Source: Macrobond.

Pressure on supply chains results in shortage of materials for companies Chart 17



Note: The chart shows the proportion of companies in manufacturing industry that state that a shortage of materials is hampering their production.
Source: Macrobond.

pre-pandemic growth track already at the end of 2020, partly as a result of solid growth in exports and investments. The economic upswing in China has continued at a slower pace in the 1st half of 2021 due to, among other factors, regional outbreaks of infection and rollback of monetary and fiscal policy stimuli. Over the summer, rising infections and restrictions have again hampered the economy. For example, business confidence, measured by the PMI index, fell to just over 47 in August, thus pointing towards a slowdown in activity.

Progress in global trade continues at slower pace following pressure on supply chains

World trade in goods has seen strong growth since the summer of 2020, supported by, among other factors, shifts in consumption towards goods at the expense of services and strong growth in manufacturing, which is generating a large part of the trade across countries. However, growth in global trade in goods has slowed down slightly since spring, and the indicators for new export orders point towards slower growth than previously, see Chart 16. One reason for this is that, after the reopenings, there has again been a certain switch back towards purchases of domestic services, which create less trade between countries than goods.

In addition, global trade is currently hampered by several supply constraints. Delivery times have increased to a very high level, inventories are low and there is a shortage of several materials such as microchips. This has created disruptions of the global value chains, especially in production of cars and electronic products. Within the EU, especially German industrial companies have problems with a scarcity of materials that is hampering their production, see Chart 17. High demand for transport and the occurrence of bottlenecks have also led to significant increases in freight rates, which are now several times higher than before the virus outbreak. These supply constraints will likely also affect the economy in the coming quarters.

Global trade in services is still some way from the pre-pandemic level, one reason being that tourism and travelling remain hampered by restrictions. In the euro area, for example, the number of holiday overnight accommodations was still around 45 per cent lower in June than the same month in 2019, which has especially affected the tourist-dependent Southern European countries. Over the summer, the number of flights has increased steadily in the EU, but it was approx. 30 per cent below the level from 2019 in mid-August. This suggests that the recovery of tourism will be sluggish and will not be completed until the rollout of vaccines is more widespread throughout the world.

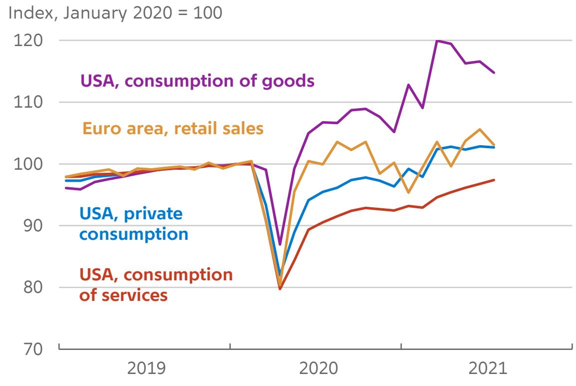
Strong growth in private consumption is a significant driving force behind global recovery

There has been strong growth in private consumption in several countries during 2021, where especially rising incomes, high savings rates, fiscal policy stimuli and vaccine rollout have created good conditions for consumption growth. In the euro area, retail sales have increased in recent months until August after a sharp drop during the lockdowns earlier in the year, see Chart 18. Consumer confidence has also improved steadily throughout the year, indicating continued consumption growth.

In the United States, consumption increased significantly in the spring after new cash disbursements to households, and it has since stabilised at a level that is virtually on a par with the pre-pandemic trend.

In several countries, the coronavirus outbreak has led to significant changes in demand patterns as a result of new preferences and limitations of consumption opportunities. For example, consumption of goods increased at the expense of services. In the United States, where data are compiled faster than in other major economies, the consumption of services is, however, recovering, although it still accounts for a significantly smaller share of total consumption than before the pandemic. This indicates that consumption patterns are normalising with some sluggishness.

Strong consumption growth supports economic upswing in the United States and the euro area Chart 18



Note: Private consumption and retail sales are stated in constant prices.
Source: Macrobond.

Increasing consumption of services will, for example, contribute to alleviating capacity pressure in some parts of the economy, where demand has been extraordinarily high during the coronavirus crisis.

In addition to shifts in consumption, the demand pattern has also changed during the pandemic, with a larger share of the physical retail trade having switched to online commerce. This has supported consumption by increasing opportunities for consumers despite restrictions, and it has contributed to the highly digitalised economies having performed better during the pandemic.[21]

Going forward, household purchasing power will be supported by high accumulated savings and increased wealth during the pandemic, resulting in further potential consumption growth. In both the United States and the euro area, however, savings rates are still higher than before the virus outbreak.

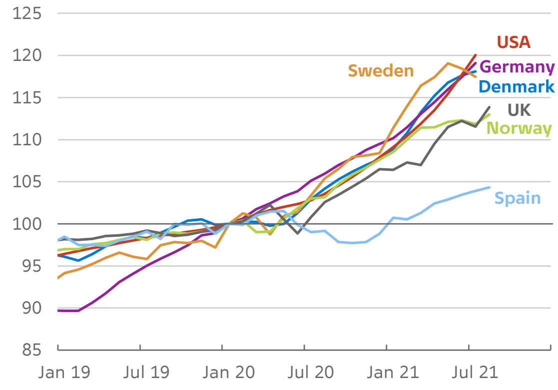
In some countries, house prices are still rising after the reopening, while they are declining in others

House prices have risen markedly in many advanced countries since the coronavirus outbreak, partly

21 See Amy Yuan Zhuang, Digitalised economies have performed better during the pandemic, *Danmarks Nationalbank Economic Memo*, No. 6, August 2021 (Memo available in Danish only).

because lockdowns and more time spent at home have resulted in a preference shift towards larger or better housing. Monetary policy easing during the pandemic and a significant increase in household savings have also supported the housing market. While the pace remains high in some countries like Germany and the United States, prices fell in July in Sweden, see Chart 19. This may be related to the reopening over the summer having increased consumption opportunities and reduced interest in home purchases. In the United Kingdom, prices fell briefly when stamp duty on home sales was reintroduced in July after a year of exemption, but they increased again in August.

House prices have risen considerably during the pandemic Chart 19

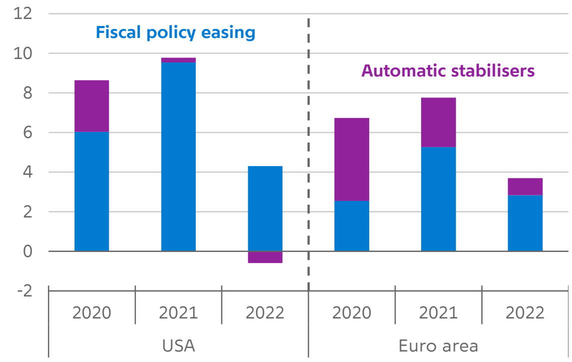


Note: Nominal prices.
Source: Macrobond and Boligsiden

Significant fiscal policy stimuli are supporting euro area and US demand

Extraordinarily large fiscal policy stimuli continue to support demand and are a major driving force behind the recovery. During the pandemic, the discretionary fiscal policy easing has been somewhat more extensive in the United States than in the euro area, which is a contributing factor to the faster US recovery. However, part of the difference in the discretionary fiscal policy stimuli to the economy is offset by the automatic stabilisers being greater in the euro area, where a more comprehensive welfare system provides greater support for household income during an economic downturn, see Chart 20.

Extensive fiscal policy easing supports demand Chart 20



Note: Fiscal policy easing has been calculated as the change in the structural primary balance. The extent of the automatic stabilisers has been approximated as the product of the output gap and a semi-budget elasticity. The sum total of the two constitutes the overall fiscal policy impulse and roughly corresponds to the development in the actual primary balance.
Source: OECD, European Commission and own calculations.

In the euro area, an accommodative fiscal policy will still support the economy in 2022. In addition, there are several conditions that suggest that the actual fiscal policy is more accommodative than indicated by standard fiscal indicators. The comprehensive government loan guarantees to, for example, companies are not included in the calculation of the government budget balance, and the funds from the EU Recovery Fund have a neutral effect on the government budget balance, as the expenses are offset by a transfer from the EU on the revenue side. In addition, it makes a significant difference whether the rollback of crisis measures, such as wage compensation and increased health expenses, is regarded as discretionary fiscal policy. Excluding these crisis-related expenses, there is only prospect of a slight tightening of public budgets in 2022 relative to 2021.

The EU's fiscal policy rules in the Stability and Growth Pact have not prevented the euro countries from pursuing an accommodative fiscal policy during the pandemic, as, in the period 2020-2022, the European Commission is using the built-in flexibility in the fiscal framework to allow deviations from the normal budgetary requirements due to exceptional circumstances. A crucial criterion for reintroducing budgetary requirements is that GDP is back at the level from the end of 2019. Against this background, the budgetary requirements of the Stability and Growth Pact are expected to be reintroduced in 2023. In addition, the European Commission launched a review of the EU's fiscal policy framework before the pandemic, which is likely to be resumed later in 2021. One purpose of this is to ensure a well-functioning fiscal policy framework that supports the sustainability of public finances and does not lead to a pro-cyclical fiscal policy.

In March, the US Congress passed a large-scale fiscal policy relief package, American Rescue Plan, of 1,900 billion dollars, or approx. 9 per cent of GDP. A large part of this package has already affected economic activity in the 1st half of 2021. This includes cash disbursements to households of 1,400 dollars in the spring and a temporary increase in unemployment benefits, which, in the short term, had a strong stimulating effect on the economy. Part of the funds in the relief package will not be used until 2022, and the fiscal policy will therefore also contribute to increased activity next year.

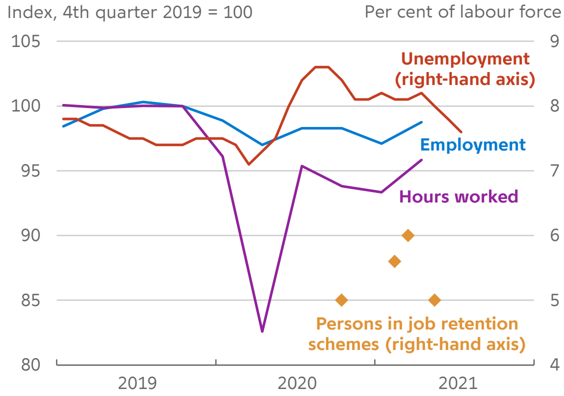
Labour markets are recovering, but still lag somewhat behind pre-pandemic level

The foreign labour markets are generally still lagging somewhat behind the pre-pandemic level, despite growth in employment and signs of increased labour shortages.

In the euro area, there is significant labour market slack. For example, both employment and the number of hours worked are still lower than before the virus outbreak, see Chart 21. Over the summer, there has been progress in the labour market after the lockdowns earlier in the year. Unemployment has fallen markedly until July, the number of people in job retention schemes has also decreased again, and employment expectations point towards continued creation of jobs in both manufacturing and the service sector. Furthermore, companies across industries are now reporting a greater shortage of labour than in the years before the financial crisis.

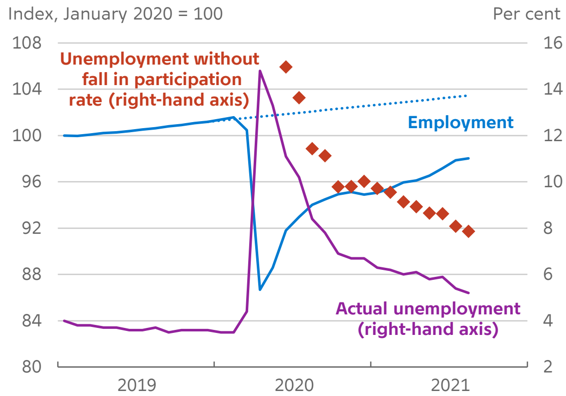
US employment rose sharply over the summer, but was still lower in August than the trend before the coronavirus outbreak, see Chart 22. At the same

Significant labour market slack in euro area Chart 21



Source: Macrobond and ECB.

Rising employment in US labour market Chart 22



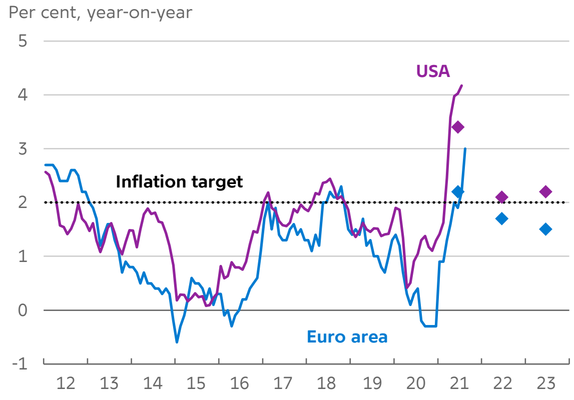
Note: The dotted line shows the pre-pandemic trend in employment by keeping the participation rate constant at the February 2020 level.
Source: Macrobond and Peterson Institute.

time, unemployment has fallen significantly to 5.2 per cent of the labour force in August. However, this underestimates the extent of available resources, as more people have simultaneously left the labour force, especially people aged over 55. This may reflect that bringing forward retirements has helped reduce the overall participation rate by almost 2 percentage points.

Although employment is still subdued, there are several indications of significant pressure on the US labour market. For example, many companies report an extraordinarily large shortage of labour, there is a high rate of voluntary job turnover and the number of vacancies is high relative to unemployment. This indicates that there has been a deteriorated match between the wishes of the workforce and the demand of companies during the pandemic. The Federal Open Market Committee (FOMC) assessed at its meeting in July that the high shortage of labour will probably persist in the 2nd half of 2021.

US wage growth has picked up in line with the recovery in the labour market and was 3.6 per cent year-on-year in the private sector in the 2nd quarter. Especially hotels and restaurants have granted large wage increases, as this is one of the industries with a pronounced labour shortage. In the euro area, wage growth is subdued.

Inflationary pressure is somewhat higher in the United States than in the euro area Chart 23



Note: The blue and purple dots indicate the ECB's and the Fed's projection of HICP inflation and PCE inflation from their latest forecasts in September and June, respectively.
Source: Macrobond, ECB and Federal Reserve.

US inflation has risen while price pressure remains subdued in euro area

Inflation has risen further in both the euro area and the United States and is now higher than in the period leading up to the coronavirus outbreak. Euro area inflation, measured by the annual rate of increase in the Harmonised Index of Consumer Prices (HICP), increased to 3 per cent in August from 2.2 per cent in July, see Chart 23. Core inflation, i.e. consumer price inflation excluding energy, food, alcohol and tobacco, has increased to 1.6 per cent in August.

In the United States, the annual increase in consumer prices, measured by the rate of increase in the Personal Consumption Expenditures (PCE) deflator, was 4.2 per cent in July, while core inflation was 3.6 per cent.

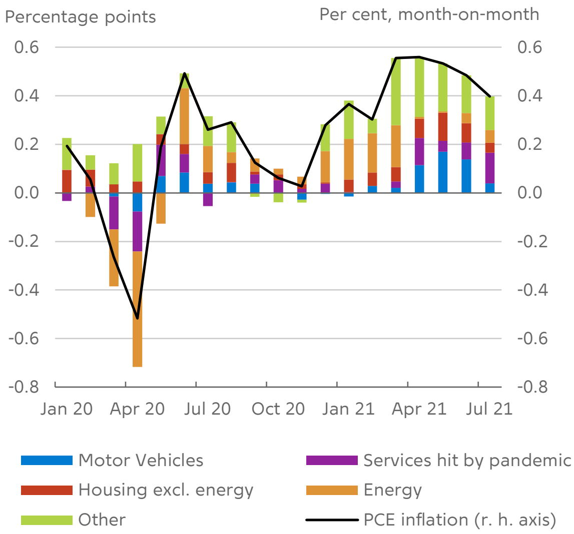
Inflation increases are largely driven by base effects from the sharp fall in price levels at the beginning of the pandemic, but higher commodity prices and pandemic-related disruptions in global supply chains are also pulling up prices. Commodity prices and freight rates have risen significantly since last spring, and, against this background, companies in the euro area and the United States are reporting sharply rising input prices, which are contributing to pushing prices up higher. Corporate profit margins have also come under pressure because they have absorbed some of the higher costs. In the euro area, the expiry of the temporary VAT reduction in Germany last year has also increased the year-on-year rate of price increases. Excluding VAT and tax changes, core inflation in the euro area was 1.1 per cent in August.

Prices have generally risen more in the United States than in the euro area, and this is not just driven by base effects. The monthly rate of increase in PCE inflation in the United States has been at a high level in recent months. Especially extraordinary price increases on cars and services hit by the pandemic pulled up the rate of increase, see Chart 24. Due to the fixed exchange rate policy, inflation in Denmark is more closely linked to that of the euro area. Price increases in the United States are thus expected to have a limited direct effect on Danish prices.

Larger price increases on cars and other durable consumer goods in the United States than in the euro area may be related to, among other factors, the import share of these product groups. According to the OECD's TiVA database, the United States import a larger share of consumer goods than the euro area. This thus suggests that bottlenecks in global supply chains have had a greater impact on inflation in the United States than in the euro area. The ECB also points out in an analysis that the strengthening of the nominal effective euro exchange rate since the coronavirus outbreak has helped curb price increases for imported consumer goods.[22] House prices have also risen more sharply in the United States than in the euro area. This may have had a greater spill over effect on rents.[23]

It must generally be expected that the extraordinary price increases in the United States in particular are temporary and will ease off as the base effects ebb away, and that there will be an adjustment of capacity and demand patterns after the pandemic. In its latest forecast from June, the Fed expected PCE inflation to decrease from 3.4 per cent in 2021 to just over 2 per cent in 2022 and 2023. In September, the ECB maintained its expectation that the price increases are temporary and that HICP inflation will drop from 2.2 per cent in 2021 to 1.5 per cent in 2023.

US inflation has been pulled up by higher car prices and reopening Chart 24



Note: Motor vehicles and parts comprise both new and used vehicles. Services hit by the pandemic comprise restaurants and hotels, leisure and culture as well as airfares.
Source: Macrobond and own calculations.

While, according to the ECB, the underlying price pressure in the euro area will remain subdued due to the significant spare capacity in the economy and weak wage pressure, several FOMC members point out that significant fiscal policy stimuli, labour shortage and rising house prices may create sustained inflationary pressure in the United States. The Federal Reserve Dallas showed in a calculation that higher rent inflation during the pandemic may increase PCE inflation by 0.5 percentage points towards the end of 2023.[24]

In the latest Survey of Professional Forecasters for the 3rd quarter, the analysts have raised their expectations for inflation this year. In the euro area, it is thus expected to be 1.9 per cent and PCE inflation in the United States is expected to be 4.1 per cent. However, inflation expectations remain unchanged in the longer term and in line with the ECB's and the Fed's forecasts. Well-anchored inflation expectations are of significance to the behaviour of consumers and companies and are thus important to the actual formation of inflation.

22 See Gerrit Koester, Ieva Rubene, Eduardo Gonçalves and Jakob Nordeman, Recent developments in pipeline pressures for non-energy industrial goods inflation in the euro area, *ECB Economic Bulletin*, Issue 5/2021.

23 Expenses for owner-occupied homes are not included in the HICP inflation rate, but they are calculated based on tenants' expenses for rent in the PCE inflation rate. ECB assessed in 2016 that the difference between HICP inflation with and without expenses for owner-occupied homes would be maximum 0.2 percentage points in the period 2011-16, see Assessing the impact of housing costs on HICP inflation, *ECB Economic Bulletin*, Issue 8/2016.

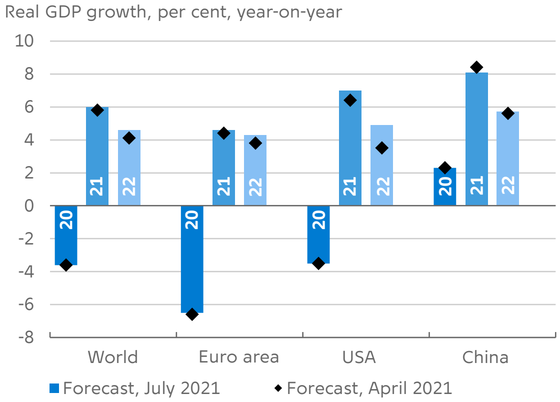
24 See Xiaoqing Zhou and Jim Dolmas, Surging house prices expected to propel rent increases, push up inflation, Dallas Fed Economics, August 2021.

Prospects of strong recovery of global economy with increased divergence between countries

There are prospects of high global growth in the coming years, driven by better vaccine access, fiscal policy stimuli, accommodative financial conditions and an expected reduction in large household savings. At the same time, the economic recovery will gradually spread from manufacturing to the service sector in the countries in which the pandemic is under control. Overall, the IMF expects global economic growth of 6.0 per cent in 2021 and 4.6 per cent in 2022, see Chart 25. However, the strength of the recovery differs widely across countries, as the low vaccine access in emerging market economies makes them more vulnerable to infection outbreaks than the advanced economies.

Prospects of high global growth in 2021-2022

Chart 25



Note: For the world, the IMF's forecast is based on market-based exchange rates.
Source: IMF, World Economic Outlook Update July 2021.

The US economy will be entering a boom next year, while the economic cycle situation will be roughly neutral in the euro area. The Congressional Budget Office thus estimates that the output gap in the United States, i.e. the difference between actual and potential production, will reach 2.5 per cent in 2022, whereas the European Commission expects an almost closed output gap in the euro area.

There are several uncertainty factors related to the outlook for the world economy, which may give rise to a more uneven economic cycle than that assumed in the main scenario. Especially the course of the pandemic remains a key factor in the global economic recovery. The IMF expects that waves of infections will occur on an ongoing basis until vaccines are widely available worldwide by the end of 2022. This poses a risk that infection flare-ups caused by new virus mutations will dampen activity more than expected, especially in countries with low vaccine adherence.

According to the IMF's forecast, the current strong pressure on the supply chains is generally expected to be temporary, but it may hamper production and trade for an extended period of time. This may, for example, occur if infection outbreaks cause disruptions of global logistics, or if the demand for durable consumer goods remains at a high level and only sluggishly switches towards services. Several foreign central banks have expressed the view that the pressure on the supply chains in their economies may persist in the 2nd half of 2021 and not necessarily subside fully until sometime next year.

International organisations are generally expecting a relatively sluggish normalisation of household savings rates, which will be roughly back to the pre-pandemic level in the United States and the euro area in 2022. A faster reduction in the high accumulated savings during the virus outbreak will give a significant boost to demand. In the United States, this may, together with major fiscal policy stimuli, lead to an overheating of the economy followed by an abrupt economic downturn, for example if high inflation leads to a sudden tightening of financial conditions, interest rate increases or a correction of high asset prices. There is an increased risk that this will occur in a situation in which the current labour market pressure becomes persistent and creates large wage and price increases.

In some European countries, the rollback of liquidity supporting measures for companies and households poses a particular risk of abrupt adjustments of the economy that could derail the recovery.

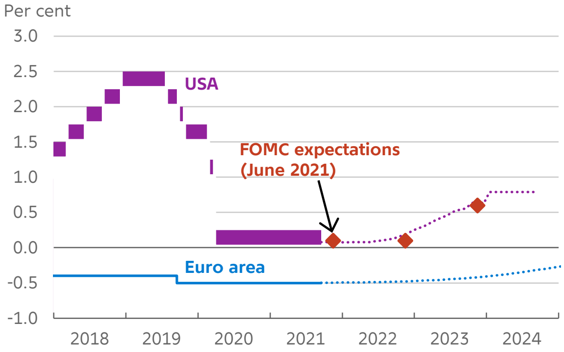
ECB has changed forward guidance after new monetary policy strategy

In July, the ECB changed its forward guidance on interest rates in connection with its new monetary policy strategy with a symmetrical inflation target of 2 per cent, see Box 2. The ECB does not expect interest rates to rise until inflation persistently reaches 2 per cent before the end of the forecast. There are thus prospects of an extended period of low interest rates in the euro area, see Chart 26.

At its monetary policy meeting in September, the ECB announced that the purchases under the extraordinary Pandemic Emergency Purchase Programme (PEPP) would be completed at a moderately slower pace than in the previous two quarters. One of the reasons for the decision was that the ECB assessed that the financial conditions will remain accommodative despite lower purchases. The ECB purchased assets under PEPP for 80 billion euros per month in March-July, while the purchases in August fell to 65 billion euros.

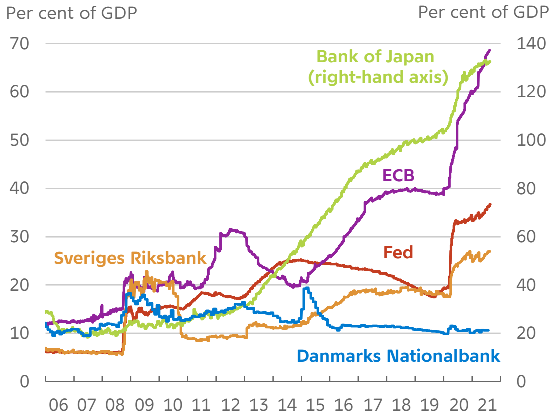
In the United States, there were no monetary policy changes at the latest meeting in July. The market participants now expect the Fed to start raising interest rates from mid-2022 to 0.7 per cent at the end of 2023. This is slightly higher than the FOMC's expectation from June. According to Federal Reserve New York's Markets Participants Survey, a majority of the market participants expect the Fed to reduce its purchases in the 4th quarter of 2021 or the 1st quarter of 2022. There are consequently prospects that ECB's balance sheets, as a share of GDP, will remain higher than the Fed's, see Chart 27.

Markets expect US interest rate hike in 2022 Chart 26



Anm.: The dotted lines indicate the markets' expectations of monetary policy interest rates on 15 September 2021.
Kilde: Rio Scanrate, Macrobond and Federal Reserve.

ECB's balance sheets have risen more than those of other central banks since year-end Chart 27



Source: Macrobond.

Government yields have fallen due to downward risks to growth outlook

Yields on 10-year government bonds have fallen over the summer in both the euro area and the United States, see Chart 28. They are now back at the same level as at the beginning of the year despite vaccine rollout progress, positive growth prospects and rising inflation expectations. The fall in yields reflects, among other factors, that investors are increasingly concerned about downward risks to the recovery due to the spread of the delta variant, a slower pace in the US vaccine rollout and weaker economic data than expected.

In addition, the ECB's relatively high purchases under PEPP in March-July may also have put downward pressure on long interest rates in the euro area. The effect has probably been enhanced by the market's expectations of a continued accommodative monetary policy by the ECB as a result of the changed forward guidance in July.

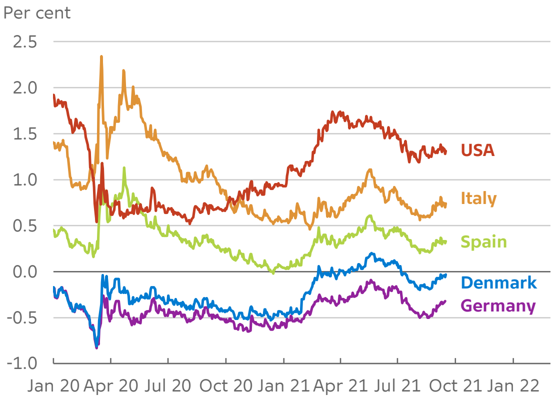
According to the Fed's calculations, the decrease in interest rates in the United States over the summer has primarily been driven by a lower term premium. This reflects that investors are more willing to hold bonds with longer maturities and therefore demand less compensation for it. This may be a sign that investors see the higher inflation as temporary. Long real interest rates have also fallen over the summer in the euro area and the United States. According to the IMF, this may reflect that investors have downgraded their expectations for the long-term growth potential.

Equity markets rise further after brief downturn

The equity markets saw a brief downturn during July due to rising infection rates and concerns about growth prospects. However, equity prices quickly

Part of the increase in government yields from earlier in the year has been reversed

Chart 28



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

returned to the upward trend since last spring and are still supported by robust corporate earnings, comprehensive monetary and fiscal policy measures and vaccine rollout progress in the advanced economies. The high accumulated savings during the pandemic, especially in the United States, have probably also contributed to increased demand for shares among households.

In Denmark, the euro area and the United States, the leading stock indices are at record levels. The P/E ratio, which measures equity prices in relation to corporate earnings, indicates that the valuation of European and US equities are close to the level from the dot.com bubble in the early 2000s. However, part of the development can be explained by the marked drop in interest rates over the past 20 years. There are signs that the equity risk premium, which takes into account that interest rates are lower today than then, is not particularly low.[25]

New ECB monetary policy strategy

Box 2

At the beginning of July, the ECB announced changes to its monetary policy strategy.[1] The mandate remains to maintain price stability in the euro area, but the medium-term inflation target has been changed to 2 per cent from "below, but close to, 2 per cent". This target is also symmetrical, which means that negative and positive target deviations are regarded as equally undesirable. There may consequently be periods in which inflation is slightly above 2 per cent. without this triggering a tightening of monetary policy.

The Harmonised Index of Consumer Prices (HICP) has been maintained as a measure of prices, but it is recommended that expenses for owner-occupied homes be included in HICP to provide a better picture of the inflation rate that is relevant to households.

The ECB also announced various initiatives for how, in future, it will take climate change and the green transition into account in the drafting of its policy.

The new monetary policy strategy is the result of a thorough review initiated by the ECB in January 2020 for the first time since 2003. The review covers monetary policy strategy, tools and communication about monetary policy. The ECB intends to assess at regular intervals whether its monetary policy strategy is expedient. The next assessment is expected to be made in 2025.

The changes to the ECB's monetary policy strategy will not impact the way in which Danmarks Nationalbank pursues its fixed exchange rate policy. In an analysis, Danmarks Nationalbank reviews what these changes mean to the Danish economy.[2]

1. Read more on the ECB's website.
2. See Jesper Pedersen and Nastasija Loncar, New ECB strategy and the Danish economy, *Danmarks Nationalbank Analysis*, No. 21, September 2021.

25 See Danmarks Nationalbank, Accommodative financial conditions strengthen economic upswing, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, No. 23, September 2021.

Appendix: Assumptions in and changes of 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 2021. The projection is based on statistics published up to and including 15 September 2021. The projection also involves a number of assumptions concerning the international economy, financial conditions and fiscal policy.

International economy
Export market growth is assumed to be 6.9 per cent in 2021, 6.0 per cent in 2022 and 3.7 per cent in 2023. Export market growth is unchanged from the June projection and reflect that there are no major changes in the latest forecasts from the OECD, IMF and European Commission.

Wage increases abroad are 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 the yield curve in the financial markets. The 3-month money market interest rate, measured by the CITA swap rate, is assumed to be negative throughout the projection period and to remain largely unchanged at the current level of -0.4 per cent.

In the projection, the effective krone rate and the dollar rate are assumed to remain constant at their current levels.

In early September 2021, the oil price was around 73 dollars per barrel. The oil price is assumed to develop in line with futures prices, falling gradually to about 63 dollars per barrel by the end of 2023.

Fiscal policy assumptions
The projection is based on preliminary national accounts data on public sector consumption and investment as well as the planned fiscal policy in *Economic Survey, August 2021* and *Updated 2025 development, August 2021*.

Real public consumption is expected to increase by 4.7 per cent this year, to decrease by 1.8 per cent in 2022 and to increase by 0.9 per cent in 2023. Public investments are expected to increase by 3.9 per cent in 2021, to decrease by 1.6 per cent in 2022 and to increase by 17.4 per cent in 2023, see table A.1. The strong growth in public investments in 2023 reflect lower investments in 2022 compared to previously planned and larger investments from 2023 onwards in the latest medium term projection.

Revisions in relation to the previous projection
Forecasts for GDP growth have been adjusted upwards by 0.5 percentage points this year relative to the previous projection, but downwards by 0.6 percentage points in 2022. The upward adjustment this year and the subsequent downward adjustment in 2022 must primarily be seen in relation to the Danish economy having performed better than forecast during the 1st half of 2021. The forecast of the rate of increase in consumer prices, HICP, has been adjusted upwards by 0.2 percentage points this year and in 2022.

Overview of projection assumptions

Table A1

	2020	2021	2022	2023
International economy:				
Export market growth, per cent year-on-year	-8.9	6.9	6.0	3.7
Foreign price[1], per cent year-on-year	-2.3	0.5	1.0	1.6
Foreign hourly wages, per cent year-on-year	1.4	2.1	2.3	2.6
Financial conditions etc.:				
3-month money market interest rate, per cent p.a.	-0.6	-0.4	-0.4	-0.4
Average bond yield, per cent p.a.	0.3	0.4	0.5	0.6
Effective krone rate, 1980 = 100	104.1	104.3	104.0	104.0
Dollar exchange rate, DKK per USD	6.5	6.2	6.3	6.3
Oil price, Brent, USD per barrel	41.8	68.3	68.0	64.5
Fiscal policy:				
Public consumption, per cent year-on-year	-1.7	4.7	-1.8	0.9
Public investment, per cent year-on-year	9.8	3.9	-1.6	17.4
Public sector employment, 1,000 persons	833	849	846	845

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 has imports.

Changes in the projection

Table A2

	GDP			Consumer prices (HICP)		
Per cent, year-on-year	2021	2022	2023	2021	2022	2023
Projection from June	3.3	3.7	2.2	1.3	1.5	1.6
Contribution to revised forecast from:						
Export market growth	0.1	0.0	0.0	0.0	0.1	0.1
Development in interest rates	0.0	0.0	0.1	0.0	0.0	0.0
Exchange rates	0.1	0.1	0.0	0.0	0.1	0.1
Oil prices	0.0	0.0	0.0	0.0	0.0	0.0
Other factors	0.3	-0.8	0.1	0.1	0.0	-0.2
This projection	3.8	3.1	2.4	1.5	1.7	1.6

Note: The transition from the previous projection to this projection may not add up due to rounding.

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