ANALYSIS

DANMARKS NATIONALBANK

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OUTLOOK FOR THE DANISH ECONOMY – SEPTEMBER 2019

Slightly lower growth in the coming years

- The Danish economy is in its third year of a boom, and growth has continued in the 1st half of 2019. So far, the economy has proved resilient to the slowdown and unrest in the global economy during the past year.
- Over time, weaker growth abroad will affect the Danish economy, and the labour market is showing the first signs of slowdown. After several years of boom, growth is set to decelerate slightly over the coming years.
- The boom in the Danish economy has evolved without considerable imbalances building up, and the economy is well prepared for a slowdown. Slightly lower growth during a boom period is not an indication that fiscal policy should be eased. Financial conditions are still expansionary.

Uncertainty abroad

will affect the Danish economy

Read more

Slight slowdown in growth

from 1.8 per cent this year to 1.5 per cent in 2021

Read more

Fiscal policy

should not be eased

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- The upswing in the Danish economy continued in the 1st half of 2019. This means that the economy has so far defied the slowdown seen in several of Denmark's largest trading partners over the past year.
- The labour market is showing the first signs of a minor slowdown. There has been a slight increase in unemployment over recent months, and employment has slowed down over the past two months.
- Labour market pressures have eased, and wage increases have flattened. Price pressures are also low. The immediate risk of labour market overheating is low.
- Prospects are for lower export market growth. Eventually, this will also affect the Danish economy.
- After several years of boom, growth is set to decelerate slightly over the coming years. GDP is expected to grow by 1.8 per cent this year, declining to 1.5 per cent in 2020 and 2021, which is roughly in line with potential.
- So far, the current boom has been balanced – underpinned by growth in the labour supply rather than driven by credit growth. So, overall, the Danish economy is well prepared for addressing slightly lower growth.
- In the housing market, prices of owner-occupied flats have slowed down in the larger cities. In the Copenhagen market for flats, this reflects that prices are more aligned with income developments, housing supply, interest rates, etc.
- Risks linked to the growth outlook are mostly downside risks, associated with a stronger-than-expected slowdown in global growth, a possible hard Brexit and/or an escalation of the US-China trade conflict.
- Demand could grow faster than expected. Many homeowners have taken advantage of low interest rates to refinance mortgage debt. If homeowners also use this opportunity to raise additional borrowing, this could further boost consumption – although consumers have been quite cautious so far during the upswing.
- Slightly lower growth rates in the coming years should not be seen as an indication that a downturn is on the way and that fiscal policy should be eased. The economy is currently operating slightly above potential. It is important to keep the labour market reforms in place to support sustained healthy employment growth.

Key economic variables

					2018	2019	
Real growth against the previous year, per cent	2018	2019	2020	2021	Q4	Q1	Q2
GDP (real), per cent	1.5	1.8	1.5	1.5	0.8	0.2	0.8
Employment, 1,000 persons	2,971	3,011	3,036	3,058	2,986	3,000	3,008
Gross unemployment, 1,000 persons	108	104	100	95	105	104	104
Current account, per cent of GDP	5.7	7.0	6.6	6.2	7.1	5.6	9.4
Government balance, per cent of GDP	0.6	2.2	-0.3	-0.5	0.0	2.3	2.7
House prices[1], per cent year-on-year	3.8	2.4	3.5	3.0	3.3	2.3	2.2
Consumer prices, per cent year-on-year	0.7	0.8	1.0	1.5	0.7	1.2	0.7
Hourly wages[2] (manufacturing), per cent year-on-year	2.4	2.4	2.8	3.1	2.4	2.3	2.2

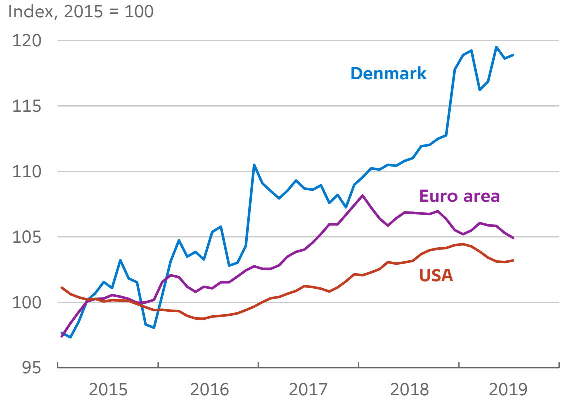
1. Nominal prices of single-family houses.
2. Statistics Denmark's implicit wage index.
Source: Statistics Denmark and own forecasts.

Outlook for the Danish economy

Growth is expected to decline in the coming years
The Danish economy has seen solid growth in recent years with average annual growth in the gross national product, GDP, of 2.1 per cent in 2015-18. This has lifted the Danish economy from a downturn to a boom, now in its third year. Economic growth has been supported by labour market reforms and not driven by credit growth. Consequently, the boom is more balanced than that of the mid-2000s. The upswing in the Danish economy continued in the 1st half of 2019 with GDP growth of 2.1 per cent relative to the 1st half of 2018.

This means that the economy has so far defied the slowdown in activity seen in several of Denmark's largest trading partners, cf. Chart 1. In Europe, growth in the export-intensive manufacturing sectors has declined, including in Germany and Sweden, while the pace of growth is sustained in the more labour-intensive service and construction sectors. In Italy, political uncertainty is contributing to the lack of economic growth since mid-2018, while Brexit-related uncertainty is putting a damper on activity in the UK. In the USA, the effects of last year's accommodative fiscal measures have died away, resulting in slower consumption and investment growth.

So far, Danish industrial production has defied the slowdown in growth abroad Chart 1



Note: Index of industrial production in volumes. 3-month moving averages.
Source: Statistics Denmark, Eurostat and OECD.

The slowdown in the large economies has caused some speculation as to whether a global economic reversal is drawing near. Moreover, several indicators point to an increasing risk over the last few years of a coming recession in the USA and Europe.[1] If this risk materialises, global economic growth will be dampened.

In addition, the latest forecasts from the International Monetary Fund, IMF, the OECD and the European Commission envisage lower global growth than in the previous years. This should be viewed primarily in the light of receding demand due to substantial uncertainty, but the fact that several economies are in a boom with little spare capacity in the labour market also plays a role. For example, the USA and Germany have been in a boom for some years, while the euro area as a whole has only just emerged from the downturn. The transition from downturn to boom has taken place without inflation has risen, and therefore monetary policy in the euro area has remained accommodative.

Although the international institutions have adjusted the global growth outlook downward since March, the Danish export markets are still expected to grow. Given their competitive edge, Danish firms are well equipped to meet foreign demand in the coming years.

Expansionary financial conditions, including very low interest rates, have stimulated the economy during the upswing. The heightened global uncertainty has led to further interest rate decreases in recent months,[2] and market expectations indicate that interest rates will remain even lower until the end

1 See Deanie Marie Haugaard Jensen and Rasmus Mose Jensen, Heightened risk of a global recession, *Danmarks Nationalbank Analysis*, No. 16, August 2019.

2 See Danmarks Nationalbank, Decline in interest rates and refinancing boom, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, No. 19, September 2019.

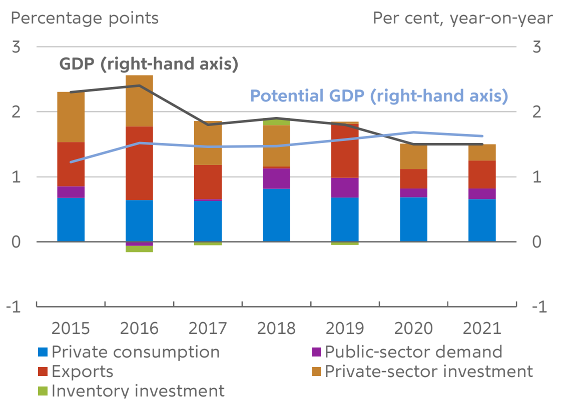
of 2021, compared with the level at the time of the most recent projection from March. This will support economic activity.

However, the effect of the current low interest rates on activity is less pronounced today than it would have been in the mid-2000s and the 1990s. The less pronounced effect can be attributed to the decline in the so called natural real interest rate, which is a measure of the interest rate level that neither stimulates economic activity nor slows it down.[3] There are both Danish and foreign drivers of the falling natural real interest rate, including lower potential growth, changes in international savings behaviour and demographic shifts. Several of these factors can be expected to keep the natural real interest rate low for several years.

Both the labour market and the housing market have seen growth in terms of increased employment and rising house prices, respectively, during the upswing without any significant imbalances building up. The labour market is now showing early signs of slowing down. The pace of labour market growth has declined a little during the year, while unemployment has flattened at around 105,000 full-time equivalents. The pressure on the labour market has also eased a little. Firms state to a lesser extent that labour shortage is an impediment to production, compared with last year, and the rate of wage increase has flattened. Wage increases have been moderate in general during the upswing. This is partly due to the dampened consumer price growth, partly to the expansion of the labour force on account of later retirement and the influx of foreign labour.

In the housing market, prices of owner-occupied flats in cities such as Copenhagen, Aarhus and Aalborg have flattened, while prices of single-family houses nationwide have risen at an unchanged pace in the 1st half of 2019. The slowdown in the cities reflects, inter alia, a considerable volume of new construction, which has increased the supply of housing, and tighter mortgage regulations, etc. The slowdown in prices points towards a soft landing in the Copenhagen market for flats, where prices will become more aligned to household income, etc.

Growth will slow down in the coming years Chart 2



Note: Growth contributions adjusted for imports. Excluding the patent-related payment in the 1st quarter of 2017.
Source: Statistics Denmark and own calculations.

In general, households have hesitated to spend increasing income and wealth on consumption in recent years. Instead, they have consolidated and reduced debt. The falling interest rates since the turn of the year 2018-19 have induced many homeowners to refinance fixed rate mortgage loans to lower-rate loans. Accordingly, more homeowners typically raise additional borrowing to be spent on reducing other debt or increasing private consumption.[4]

Given increasing income and wealth, private consumption is expected to drive growth this year and in the coming years, cf. Chart 2. A contribution from exports is also expected, but less pronounced than in the previous years due to the slightly lower export market growth. Overall, GDP growth is expected to decline a little from 1.8 per cent this year to 1.5 per cent in 2020 and 2021, slightly weaker than in the March 2019 projection. Employment is expected to rise by around 60,000 persons by the end of 2021.

3 See Jakob Feveile Adolfsen and Jesper Pedersen, The natural real interest rate in Denmark has declined, *Danmarks Nationalbank Analysis*, No. 13, June 2019.

4 See Henrik Yde Andersen, Alexander Meldgaard Otte, Stine Ludvig Bech and Ida Rommedahl Julin, 2019, Mortgage refinancing supports private consumption, *Danmarks Nationalbank Analysis*, No. 17, September 2019.

Growth in both GDP and employment is thus expected to slow down to a level close to the respective potential levels. This is appropriate in the current situation with a moderate boom and may contribute to preventing the economy from overheating, in which scenario imbalances would build up, and could lead to an amplified and abrupt subsequent downturn. The output gap, reflecting the difference between actual and cyclically neutral output, is estimated to remain around 1.5 per cent of potential GDP.

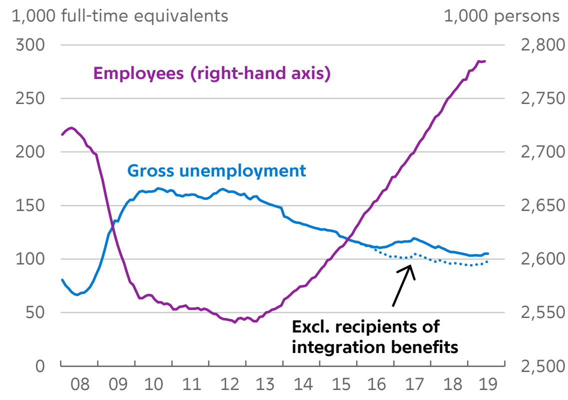
In this scenario, there is no need to ease fiscal policy to address a slowdown in growth. Given that the automatic stabilisers are strong in Denmark, they will as such enhance the probability of a soft landing for the Danish economy. It is important to keep the labour market reforms in place. They are major drivers of the boom, which has so far been balanced, and they are the cornerstone of Denmark's healthy public finances.

The new government has announced that it intends to pursue economic policy within the public finance framework, including the medium-term target of structural balance by 2025. The government has also announced that the current boom is an incentive to prudent fiscal planning. This is also envisaged in the technical Finance Bill from the end of August, and it should, in general, be continued in both the bill which the government will table in connection with the opening of the Folketing (Parliament) and the agreement subsequently concluded.

There are major downside risks to the growth outlook. One of them is the further escalation of the trade conflict between the USA and China during 2019, with the US and Chinese administrations taking turns imposing higher tariffs on imports from the opposite party. In addition, the post-Brexit conditions for trade between the EU and the UK have not yet been clarified. A Brexit without a trade agreement, i.e. a no deal scenario, will potentially have significant implications for the UK, in particular, but it will also impact on the European and Danish economies. Moreover, the downside risks imply a higher global recession risk, signalled especially by the inversion of the US yield curve.

It is also possible that the boom will be stronger than expected, although this scenario is less likely now than previously. Labour market pressures have eased, and wage and price increases are expected to be moderate. However, refinancing boom may act as a catalyst for higher growth in consumption, with households with home equity spending their increased income and savings on consumption to a higher degree than expected. However, consumers as a whole have already had ample opportunity to lift consumption more than seen so far during the boom.

Slowdown in the labour market Chart 3



Source: Statistics Denmark and Jobindsats.

Labour market growth is slowing down

During the upswing, payroll employment has risen steadily by an average of 3,700 persons per month since 2015, but this increase has slowed down in the last two months, cf. Chart 3. This has during the upswing previously been observed in individual months, but not in two consecutive months. Unemployment has flattened in 2019, at 3.8 per cent of the labour force. It is now around 10,000 full-time equivalents below the estimated structural level, implying that the level of unemployment primarily reflects frictional unemployment.

Although employment measured as the number of persons is higher than in 2008, the labour market is not as tight. The employment rate, measured as the share of 16-66-year-olds in employment, is still slightly lower than the 2008 level. In addition, the number of average working hours has declined, as, inter alia, part-time employment has accounted for part of the employment growth.

The labour market is characterised by continuing recruitment challenges, but they are less pronounced than previously. Firms' reporting of labour shortage has declined a little over the last year, and the number of new job postings has flattened. In addition, the number of foreign employees has fallen a little over the past two months after a steady increase during the boom so far.

The most recent labour market developments could be an early indication of more subdued growth in future. This development does not as such give grounds for concern, since employment is currently estimated to be approximately 55,000 persons higher than the cyclically neutral level. The immediate risk of bottlenecks and build-up of imbalances has been reduced.

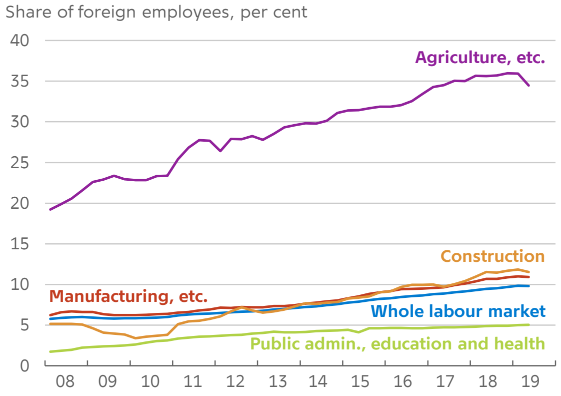
Foreign labour and later retirement have been decisive for the upswing

During the upswing so far, employment has risen by just below 250,000 persons, and the labour force has been expanded by 204,000 persons in total. In the mid-2000s, the labour force increased by only 65,000 persons. The expansion of the labour force is driven especially by the influx of foreign labour and previously agreed labour market reforms, which have lifted the participation rate for, in particular, the older age groups at a time of growing demand for labour.

The share of foreign employees in the Danish labour market has almost doubled since 2010, now constituting 10 per cent. Agriculture in particular makes use of foreign labour, currently just below 35 per cent of the employees are foreign citizens, cf. Chart 4. Some industries will be severely affected by any restrictions on attracting and retaining foreign employees.

Under the 2011 retirement agreement, the early retirement age was raised with effect from 2014, which has as such reduced the early retirement rates for the relevant age groups, cf. Chart 5, left. There is a clear tendency that this has led to later retirement from employment. The employment rates for 60- and 61-year-olds with increased early retirement ages has approached the employment rate for 59-year-olds, cf. Chart 5, right. At the same time, the propensity to use the early retirement scheme has been declining, and correspondingly increasing employment among senior employees, including for age groups that are not directly affected by the higher early retirement age. Thus, increased set-off, more favourable economic conditions, improved health and changed norms may also be of significance to retirement from the labour market.

The share of foreign employees is particularly high in agriculture Chart 4



Note: Share of employees who are foreign citizens in selected industries. Measured as full-time equivalents.
Source: Statistics Denmark, Jobindsats and own calculations.

The importance of the retirement reforms and the increased influx of internationally recruited labour can be illustrated by a model-calculated alternative scenario where the upswing is not to the same extent supported by an increasing supply of labour. Without falling early retirement rates, inter alia due to the 2011 retirement agreement, and without access to more internationally recruited labour, the model calculation shows that GDP would be around 1.0 per cent lower last year, cf. Box 1.

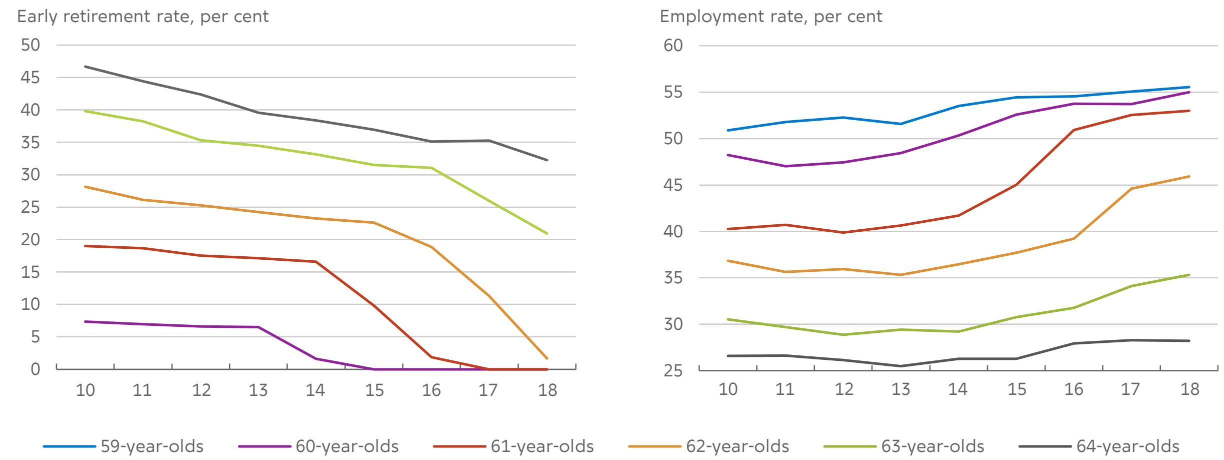
Furthermore, wage growth would have increased and competitiveness and exports would have weakened. Labour market pressures would have intensified, resulting in build-up of potential imbalances. Moreover, a tighter labour market could have led to falling productivity as a consequence of higher job turnover and an influx of less productive labour.

The retirement reforms and increased influx of internationally recruited labour have thus been decisive for ensuring a balanced labour market development without imbalances building up during the upswing.

Experience has shown that rights-based schemes, such as the early retirement scheme, the transitional allowance scheme and the extended entitlement to unemployment benefits for 50-59-year-olds from

Since the retirement agreement took effect in 2014, larger shares of the affected age groups are in employment

Chart 5



Note: The retirement agreement impacts 60-62-year olds from 2014-2018.
Source: UADAM and own calculations.

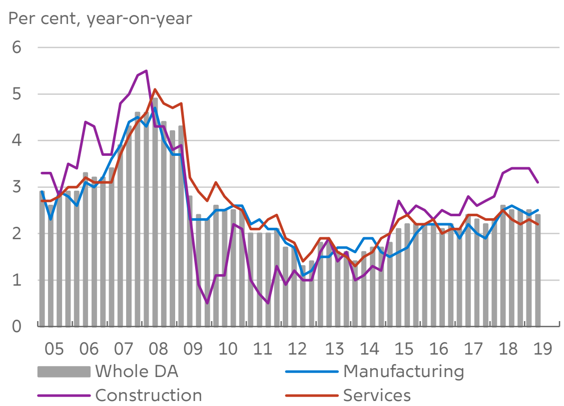
1979, 1992 and 1993, respectively, can lead to more widespread use than intended.[5] If the schemes are used more widely than by those for whom they were intended, there is a risk of lower social prosperity. Instead, more direct targeting of schemes can enhance the effect and limit the costs.

Wage growth has flattened

Over the past year, the acceleration of wages has abated a little in step with the slight easing of labour market pressures. According to wage statistics from the Confederation of Danish Employers, DA, the annual rate of increase in the area covered by DA declined from 2.5 to 2.4 per cent in the 2nd quarter of 2019, cf. Chart 6. The abatement is broadly based across sectors. In the construction sectors, which have accounted for the highest wage increases for a long time, the annual rate of increase declined to 3.1 per cent in the 2nd quarter. The manufacturing firms exposed to competition and the labour-intensive service sectors showed more subdued wage growth. In these sectors, wages rose by 2.5 per cent and 2.2 per cent, respectively, in the 2nd quarter of 2019.

The rate of wage increase has flattened

Chart 6



Source: Confederation of Danish Employers.

5 See e.g. Ministry of Finance, *Financial Review 2014*, Chapter 5 (in Danish only).

Box 1

Without falling early retirement rates and an increased influx of internationally recruited foreign labour during the upswing the labour market pressures would have intensified

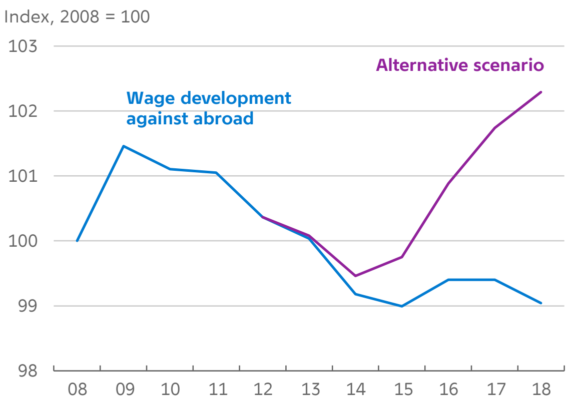
Without a contribution to the labour force from internationally recruited foreign labour[1] and a lower number of early retirees as a result of lower early retirement rates, the upswing could have taken a significantly different course. This can be illustrated by a calculation using Danmarks Nationalbank's macroeconomic model, MONA. In the model calculation, the labour force development is reduced in an alternative scenario corresponding to maintaining the contributions from internationally recruited foreign labour and the participation rate for 60-70-year-olds at the end-2012 levels. The calculation assumes that the higher transfer expenses for early retirement will be financed via lower public consumption.

From the 1st quarter of 2013 to the 4th quarter of 2018, more internationally recruited foreign employees have increased the labour force by around 51,000 full-time equivalents. Moreover, the higher participation rate among 60-70-year-olds has expanded the labour force corresponding to almost 47,000 full-time equivalents. The higher participation rate among the older generations is attributable partly to generally increasing participation rates, partly to the effects of the 2011 retirement agreement, which contributed to reducing the number of early retirees by just under 50,000 full-time equivalents at the end of 2018. Over the period 2014-19, the early retirement age is raised from 60 to 63 years and the set-off of early retirement benefits is tightened under the agreement.

In the model-calculated alternative scenario with a lower labour force, GDP is reduced by around 1.0 per cent, and employment is reduced by just under 40,000 persons in 2018. In the model, the increased pressure on the labour market implies an increase in real wage growth to up to 2.1 per cent annually. In addition, wage growth will weaken competitiveness and reduce export volumes.

Lower GDP growth and weaker wage competitiveness in the alternative scenario without falling early retirement rates and an increased influx of internationally recruited foreign labour

Model-calculated effect	2018
GDP	approx. 1.0 per cent
Employment	almost 40,000 persons
Wage development relative to abroad	approx. 3.3 per cent



Source: Statistics Denmark, Jobindsats and own calculations inter alia on MONA.

1. Internationally recruited foreign labour is defined here as foreign citizens earning wage income in Denmark, who have come to Denmark stating work as the reason for residence. Consequently, the number is lower than the total number of foreign employees, as it excludes persons who have come to Denmark for reasons other than work (e.g. refugees, accompanying family and students).

The rates of wage increase have generally been moderate during the upswing. This is related to the dampened consumer price development, among other things. In recent years, real wages have risen by around 1.5 per cent, which is close to the average since 1990. Real wages mean wages adjusted for consumer price developments, i.e. a measure of purchasing power.

The low wage increases are not unique to Denmark, and in recent years, wage increases in Danish manufacturing firms have been only slightly lower than those of their foreign competitors.

All else equal, recent years' labour market upswing has made it more difficult for firms to fill vacancies. This resulted in moderately higher wage increases in the previous years. Given the outlook of slightly weaker growth and a marginally lower pressure on the labour market, the rate of wage increase in manufacturing is expected to rise only a little in the coming years from 2.4 per cent this year to 3.1 per cent in 2021. Wage increases are thus still moderate.

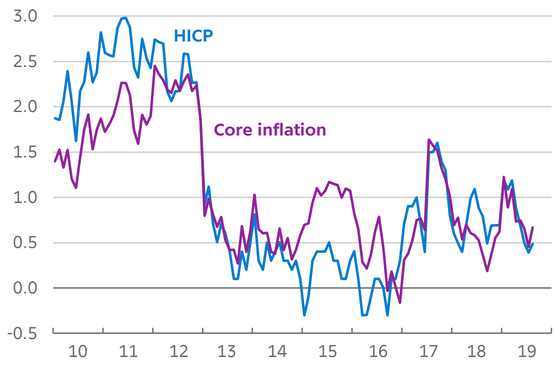
Price pressures are only weak

The annual rate of increase in consumer prices has declined throughout 2019, and the EU's Harmonised Index of Consumer Prices, HICP, rose by 0.5 per cent in August, cf. Chart 7. This implies continuation of the dampened consumer price development seen since the beginning of 2013. The weak price pressure is broadly based. Core inflation, i.e. consumer price inflation excluding energy and unprocessed food, rose by 0.7 per cent in August. Domestic market-determined inflation, IMI, a measure of domestic price pressures, rose by 0.7 per cent, and wholesale prices excluding energy rose by 0.4 per cent.

Price developments are also subdued in the euro area. But they have been weaker in Denmark than in the euro area since mid-2016. The fixed exchange rate policy against the euro entails that the rates of price increase in Denmark and the euro area are in sync in the medium term, but may deviate for short periods.

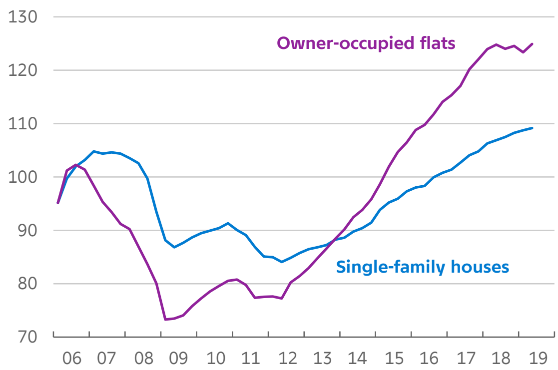
Due to the dampened import price growth and rate of wage increase, domestic price pressures are expected to rise only a little in the coming years. Annual consumer price inflation is expected to rise from 0.8 per cent this year to 1.0 per cent in 2020 and 1.5 per cent in 2021. This is nearly in line with the ECB's expectations of price developments in the euro area.

Weak price pressures Chart 7



Source: Statistics Denmark and own calculations.

House prices are rising, while prices of owner-occupied flats have flattened Chart 8



Note: Own seasonal adjustment.
Source: Statistics Denmark and own calculations.

In Danish cities, the market for owner-occupied flats has slowed down

In Copenhagen, Aarhus and Aalborg, prices of owner-occupied flats have slowed down, while the upward trend of prices continues in Odense. Fewer flats are sold than in recent years, especially in Copenhagen, Aarhus and Aalborg. This, in combination with the completion of large volumes of new construction, has caused the supply of flats on the market to rise. Prices of single-family houses are increasing in all parts of Denmark, and nationwide house prices have risen at roughly the same rate this year as in the 2nd half of 2018, cf. Chart 8. Trading activity is high, and the supply of houses on the market has been stable for the past year and a half.

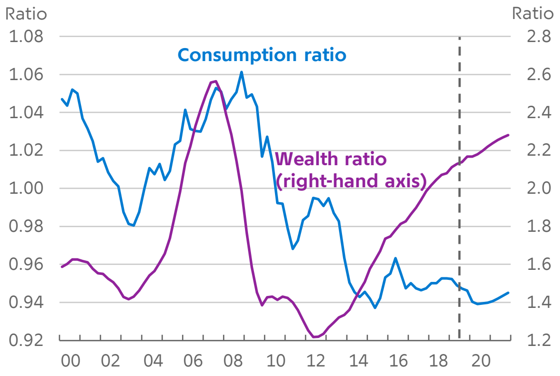
In Copenhagen, prices of owner-occupied flats have risen faster than can be explained by changes in household disposable incomes and the level of interest rates, etc., since 2012. Here, the slowdown in prices is probably associated with the high prices, which have reduced the number of buyers who can afford to buy a home in Copenhagen. Tighter mortgage regulations may also have reduced the number of buyers. Higher prices of owner-occupied flats have also spurred substantial new construction activity, considerably increasing the housing supply in Copenhagen. The new housing taxation system, due to take effect in 2021, may also have dampened demand among Copenhagen home buyers.[6]

Copenhagen is still seeing substantial housing construction, which will further increase the housing stock over the coming years. This could indicate that prices of owner-occupied flats in Copenhagen have peaked for the time being. This points towards a soft landing for the Copenhagen housing market where prices are more aligned to household incomes and the level of interest rates, etc. This helps to reduce the risk that unsustainably high price increases spill over to the rest of the housing market.

Over the coming years, prices of single-family houses nationwide will be underpinned by higher incomes and low interest rates, and, viewed in isolation, the new housing taxation agreement will push up prices of single-family houses until 2021 when the agreement takes effect. Prices of single-family houses nationwide are forecast to rise by 2.4 per cent this year, 3.5 per cent next year and 3.0 per cent in 2021.

Refinancing could boost private consumption
Higher employment, accelerating wage growth and low interest rates have increased household disposable incomes during the upswing. At the same time, household wealth has risen considerably, because households have been reluctant to spend income on consumption, and house prices have increased, providing a good point of departure for higher consumption in the coming years.

Low consumption ratio and high wealth ratio Chart 9



Note: 4-quarter moving averages. Disposable income has been adjusted for restructuring of capital pensions and LD savings in 2013 and 2015.
Source: Statistics Denmark and own calculations.

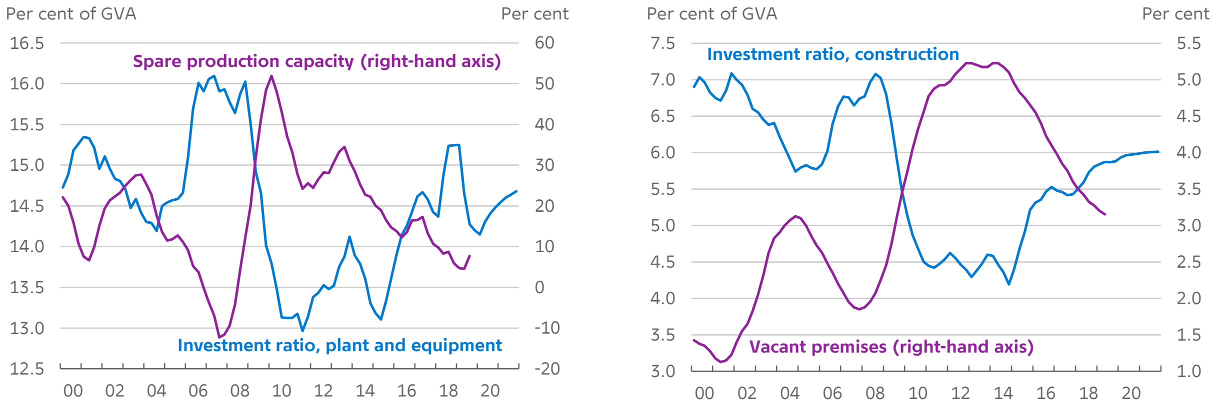
Very low interest rates make it attractive for homeowners with fixed rate home loans to refinance mortgage debt to achieve lower interest payments – an opportunity seized by many homeowners this year. Typically, additional borrowing is raised in the process, and given the house price rises in recent years and the resulting higher home equity, homeowners have ample opportunity to do so. Additional borrowing can be used to reduce other debt or increase consumption. So, the wave of refinancing can spur solid growth in consumption (or home improvements).

Based on assumptions of a sustained low level of interest rates during the projection period, employment growth and solid real wage growth, household disposable incomes are expected to grow in the coming years. In 2020 and 2021, disbursements of excess housing taxes paid will further boost incomes. This will contribute to increasing consumption, but the consumption ratio is expected to remain at a very low level throughout the projection period, cf. Chart 9.

6 See Simon Juul Hviid and Sune Malthe-Thagaard, The impact of the housing taxation agreement on house prices, *Danmarks Nationalbank Analysis*, No. 6, March 2019.

Declining spare capacity and rising investment ratios for plant and equipment (left) and construction (right)

Chart 10



Note: 4-quarter moving averages. The investment ratio for plant and equipment is excluding ships, aircraft, etc. Spare production capacity indicates the share of firms reporting more than adequate production capacity net of the share reporting less than adequate production capacity.
Source: Statistics Denmark, Real Property Statistics and own calculations.

Business investment is expected to grow in line with activity

As activity has picked up, spare production capacity and building vacancies in Denmark have declined, cf. Chart 10. This has triggered a need for business investment, and in recent years sectors have increased the investment share of value added for investments in both plant, equipment and construction. In other words, business investment has mirrored the pattern of previous upswings.[7] The increase in business investment has occurred without substantial debt accumulation in the business sector as a whole.

Low interest rates and prospects of higher demand provide a good point of departure for expanding investment. As a result, investment ratios for plant, equipment and construction are expected to rise towards the end of 2021, cf. Chart 10.

Weaker outlook for Danish exports

Danish firms have taken advantage of their competitive edge and benefited from the growth in global demand since 2013. Exports have shown solid growth, measured in both current and constant prices in recent years. This trend continued in the 1st half of 2019, during which exports of goods and especially manufacturing exports defied the slowdown and political uncertainty in major recipient countries, cf. Chart 11. The solid increase in exports reflects the composition of Danish manufactured exports, with exports of pharmaceutical products and wind turbines accounting for a large share. Exports of pharmaceutical products are generally not very cyclically sensitive, while wind turbine orders may take long to fill and thus deviate from short-term cyclical movements.

However, several international organisations, including the OECD, the IMF and the European Commission, estimate that global growth has peaked in this business cycle. In the coming years, Danish export markets are expected to grow at a slightly slower pace than in the previous years.

Foreign headwinds are expected to slow down manufactured exports. On the other hand, the effective exchange rate of the krone has weakened since the last projection, making Danish export goods cheaper in foreign markets in the short term. Given their strong

7 See Sune Malthe-Thagaard, Strong business investment appetite, *Danmarks Nationalbank Analysis*, No. 15, August 2019.

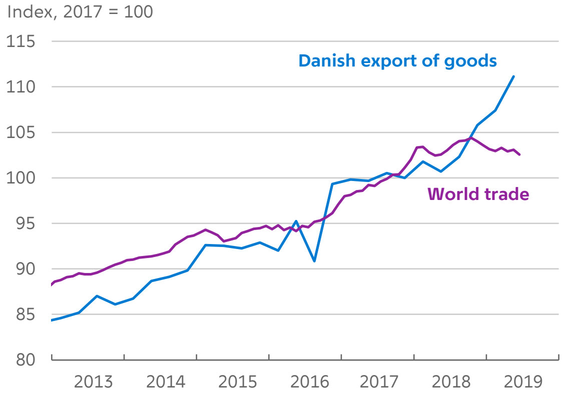
wage competitiveness, Danish firms are well equipped to meet the slowdown in export market growth.

In July, the current account surplus for the past year amounted to kr. 163 billion, cf. Chart 12. The trade surplus for goods make up a large share of the current account surplus, and especially trading in goods that do not cross Danish borders has contributed in recent years. The surplus on the balance of services has been decreasing for a number of years and was close to zero in July against more than kr. 50 billion in the summer of 2015.

The decline in the balance of services reflects subdued growth in exports of services over the past four years, while imports of services have increased as economic activity has picked up. One reason is weak development in exports of sea transport, accounting for most of the trade in services. The completion of major projects, including large wind farms, in Germany and the UK in 2016 has also reduced exports of construction services. Moreover, a decrease in exports of other business services to Germany and the UK also contributes to the decline in the balance of services.

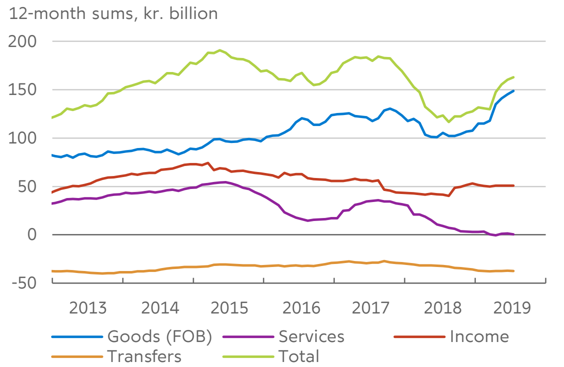
As domestic activity and imports increase, the current account surplus is expected to decline from 7 per cent of GDP this year to 6.2 per cent in 2021. So, the current account surplus will remain high at the end of the projection period.

Exports of goods have defied the slowdown in world trade growth Chart 11



Note: World trade and exports of goods in volume terms. 3-month moving averages for world trade.
Source: Statistics Denmark and CPB World Trade Monitor.

The current account of the balance of payments Chart 12



Note: 12-month moving sums. The sharp rise in the balance of goods for April is due to the fact that Maersk's reflagging of ships from the acquisition of Hamburg Süd, German container shipping line, in April 2018 is eliminated from the current 12-month moving sum.
Source: Statistics Denmark and own calculations.

Large government surplus this year due to revenue from pension yield tax

The government budget surplus is expected to increase from 0.6 per cent last year to 2.2 per cent this year, driven primarily by higher revenue from the pension yield tax this year. Underlying cyclical factors provide only a minor contribution to the improvement.

The government budget balance is sensitive to major fluctuations in revenue from the pension yield tax, in this projection revised by kr. 52 billion relative to the March projection. The upward adjustment is due to lower interest rates and higher financial market returns this year. If fluctuations in pension yield tax and a number of major temporary factors are disregarded, the improvement in the government budget balance during the upswing has been much more smooth, cf. Chart 13. High revenue from the pension yield tax is, to a great extent, of a temporary nature, and therefore should not be seen as an opportunity to ease fiscal policy. Disregarding revenue from the pension yield tax and temporary factors a minor deficit on the government budget balance of 0.3 per cent of GDP is expected.

In 2020 and 2021, small government budget deficits are forecasted. The cyclical contribution is estimated to remain largely unchanged relative to 2019, while repayments of excess housing taxes and lower revenue from pension yield tax will reduce the government budget balance.

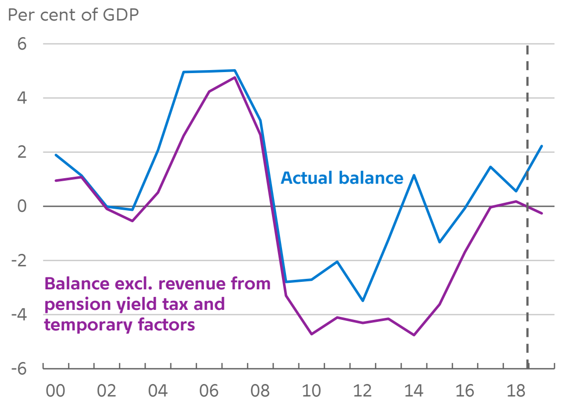
In the *Economic Survey* from August 2019, the Ministry of Finance forecasts a structural deficit at 0.1 per cent of GDP this year, structural balance next year and a structural surplus of 0.4 per cent in 2021.

External factors present downside risks
The Danish risk outlook is greatly affected by external downside risks. Upside risks are linked to domestic factors, but to a lower extent than previously.

The risk of weaker-than-expected global growth exists, especially due to a possible escalation of the US-China trade conflict. The conflict has escalated further during recent months, with US and Chinese administrations taking turns imposing higher tariffs on imports from the opposite party. To this should be added continued uncertainty associated with Brexit and the possibility of a sharper-than-expected slowdown in China, which could further dampen global growth.

Pension yield tax and temporary factors cause strong fluctuations in government budget balance

Chart 13



Note: Temporary factors include e.g. reimbursement of early retirement contributions and extraordinarily large tax payments in connection with the restructuring of capital pensions.
Source: Statistics Denmark, the Ministry of Finance and own calculations.

If the trade conflict results in a general trend towards greater protectionism and less rules-based international cooperation, this will further impede Denmark's foreign trade in the longer term and affect prosperity.

On the other hand, growth in the Danish economy could become stronger over the coming years. Households and firms have robust financial buffers, and should they choose to spend their increased income and savings on consumption and investment to a greater extent than expected, this could further boost the Danish economy. The wave of refinancing seen during the late summer months, caused by the latest declines in interest rates, could serve as a catalyst for further household consumption. However, given their large savings, households have generally had ample opportunity to further increase consumption during the upswing.

At a time when the Danish economy is already experiencing a boom, higher propensity to consume could led to widespread shortage of labour and overheating of the economy. This will increase the risk of an amplified subsequent economic downturn. However, the probability of this scenario materialising has declined in response to recent labour market developments, with slightly easing pressures, and increased downside international risks.

The current boom is not driven by credit growth and has, so far, been balanced. Therefore, the Danish economy is generally well prepared for addressing the current risks. The Danish labour market is highly flexible, with firms being able to adjust output and employment relatively rapidly in case of a downturn, while households are protected from large reductions in income through unemployment benefits. They also have large savings. In this context, the automatic stabilisers will contribute to cushioning the effects of a possible downturn for both households and firms. In addition, Denmark has low government debt and high foreign assets. Therefore, Denmark as a whole has ample scope to buoy up demand, should a very negative risk scenario materialise.

Central forecasts from the projection

Table 1

Real growth on preceding period, per cent	2018	2019	2020	2021	2018 Q4	2019 Q1	2019 Q2
GDP	1.5	1.8	1.5	1.5	0.8	0.2	0.8
Private consumption[1]	2.2	1.6	2.2	2.1	0.4	0.2	0.4
Public consumption	0.9	0.8	0.9	0.7	0.5	0.0	0.3
Residential investment	4.8	3.4	3.4	2.6	0.2	1.8	0.5
Public investment	0.1	3.0	-0.2	3.5	1.6	-0.3	2.0
Business investment	8.7	-4.2	4.8	3.1	-1.4	2.3	-2.2
Inventory investment, etc.[2]	0.2	-0.1	0.0	0.0	0.1	0.3	-1.2
Exports	0.4	2.5	2.1	2.3	0.9	0.1	3.3
Industrial exports	3.0	7.4	2.6	2.8	4.6	2.2	5.0
Imports	3.3	0.1	3.4	3.2	0.0	0.9	-0.2
Employment, 1,000 persons	2,971	3,011	3,036	3,058	2,986	3,000	3,008
Gross unemployment, 1,000 persons	108	104	100	95	105	104	104
Current account, per cent of GDP	5.7	7.0	6.6	6.2	7.1	5.6	9.4
Government balance, per cent of GDP	0.6	2.2	-0.3	-0.5	0.0	2.3	2.7
House prices[3], per cent year-on-year	3.8	2.4	3.5	3.0	3.3	2.3	2.2
Consumer prices (HICP), per cent year-on-year	0.7	0.8	1.0	1.5	0.7	1.2	0.7
Hourly wages[4] (manufacturing), per cent year-on-year	2.4	2.4	2.8	3.1	2.4	2.3	2.2

1. Includes both households and non-profit institutions serving households, NPISH.
2. Contribution to GDP growth (this item comprises inventory investment, valuables and statistical discrepancy).
3. Nominal prices of single-family houses.
4. Statistics Denmark's implicit wage index.

Source: Statistics Denmark and own forecasts.

International background

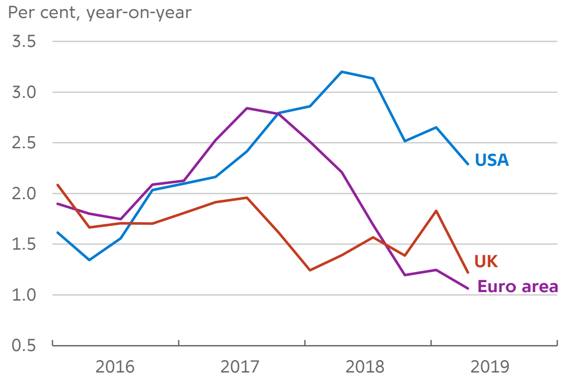
The global economy has been characterised by a dampening of growth since 2018. The slowdown, which is following several years of strong growth, is mainly driven by a negative spiral between trade, investment and industry caused by increased uncertainty. On the other hand, the recovery in the labour markets and in the service sector remains intact.

In their baseline scenario for the coming years, international organisations expect moderate growth. But the outlook is characterised by great uncertainty and risk of a global economic downturn caused by a number of decisions around the world, including the trade conflict and Brexit. This could impede demand, as new investments and purchases of large consumer goods are postponed. Moreover, the uncertainty may result in an abrupt shift in risk appetite and thus tighter financial conditions, especially in countries with high debt. In the euro area, there is an increasing risk that the decline in industry will spread to other parts of the economy.

In general, however, no significant imbalances have built up among the advanced economies during the upswing, e.g. in the form of significant capacity pressures or excessive lending. This reduces the risk of a potentially strong slowdown in the global economy.

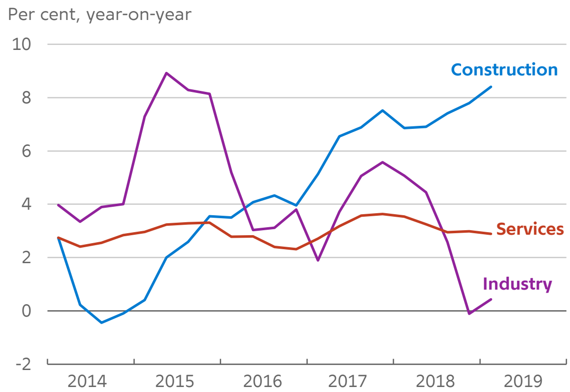
Moderate global growth with heightened risks
The global cyclical dampening that began in the 2nd half of 2018 is still affecting the global economy, cf. Chart 14. In the USA, the slowdown reflects a downturn in investment and private consumption growth, partly because the impact of fiscal easing has declined. US growth increased temporarily in early 2019 due to inventory build-up, but subsequently decreased throughout the year.

GDP growth has abated Chart 14



Source: Macrobond.

The service and construction sectors in the euro area are not affected by the slowdown in the industrial sector Chart 15



Note: Gross value added for the euro area.
Source: Eurostat.

In the euro area, the slowdown is driven by weakness in the industrial sector, while the service and construction sectors are relatively unaffected, cf. Chart 15. Thus, activity in the most job-intensive part of the economy is not affected by the dampening of growth. This reflects, inter alia, that accommodative financial conditions, strong labour markets, increasing wage growth and marginally expansionary fiscal policy help to support domestic demand.

Within the euro area, the slowdown has been particularly pronounced in countries with a large industrial sector. This is especially true for Germany, where declining export market growth contributed to a fall in GDP of 0.1 per cent in the 2nd quarter, cf. Box 2. So far, the German business confidence index, Ifo, indicates that the weak level of activity continued into the 3rd quarter. Furthermore, growth in the euro area is dampened by the stagnant Italian economy that has not seen growth since mid-2018.

Growth in the UK has been weak since mid-2017, partly due to considerable fiscal consolidation and Brexit-related uncertainty. Relatively high inflation, inter alia due to the weakening of the pound sterling in the wake of the Brexit referendum, may also have reduced the purchasing power of consumers and dampened growth in private consumption. In the 2nd quarter of 2019, GDP fell for the first time in nearly seven years. The decrease reflects, among other things, large inventory fluctuations in connection with the original Brexit deadline in March and a weak level of business investment.

In China, annual growth decreased to 6.2 per cent in the 2nd quarter. Among the reasons for the decrease are falling potential growth, the trade conflict with the USA and regulatory tightening measures in the financial area as a result of challenges in relation to high debt. The authorities have launched a number of policy measures aiming to counter the dampening of growth. The measures include fiscal policy easing, lower central bank reserve requirements and a lending facility for the banks to strengthen credit allocation to small firms.

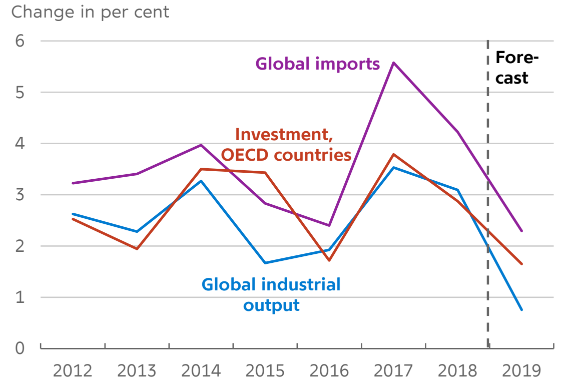
Weak development in global trade

The weak development in global trade continued into 2019, cf. Chart 16. The slowdown is attributable to a negative spiral between trade, investment and industry, presumably driven primarily by the trade conflict between the USA and China. The negative interaction arises as a result of investments with a high import content that are made mainly by exporters in the industrial sector. Hence, a downturn in one of the three segments of the economy will affect the other two.

The slowdown in global industrial output is most pronounced in the electronics and automotive industry. The dampening in the automotive industry is partly related to declining global demand for cars, one reason being the phasing-out in China last year of a tax relief on car purchases that supported sales in 2015-17. Reduced European car sales for e.g. China also has negative derived effects on trade in the euro area, as the sector is characterised by extensive use of value chains where output is divided across countries.

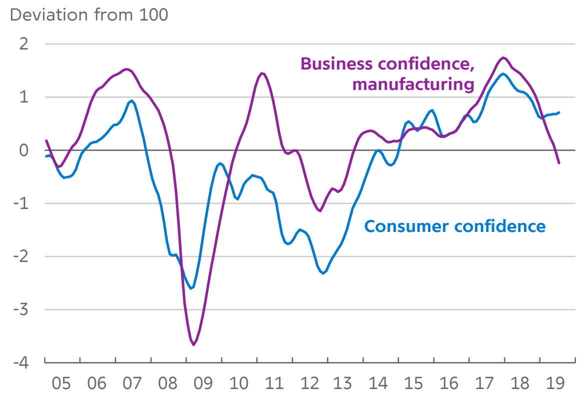
The global PMI indicator for new export orders has recently fallen to a low level, suggesting that global trade is set to be weak in the coming months.

Negative spiral between global trade, industry and investment Chart 16



Note: Data for growth in global imports and investments in the OECD countries for 2019 is from the OECD's May forecast. Growth in industrial output in 2019 is based on data up until June.
Source: OECD and Macrobond.

Consumers in the euro area are more optimistic than firms Chart 17



Note: Based on OECD confidence indicators.
Source: Macrobond.

Growth in private consumption has abated

Strong growth in private consumption has supported the upswing in the advanced economies in recent years. Consumers in the euro area are currently taking a more optimistic view of the economic situation than firms, which are to a greater extent burdened by the downturn in global trade, cf. Chart 17. This is partly attributable to the strong labour markets with accelerating wage growth, indicating continued growth in private consumption.

But at the same time there has been a slowdown in purchases of durable consumer goods in the USA and the euro area alike, cf. Chart 18. This is typically the most cyclically sensitive part of private consumption and it could be the first sign of a reversal of the economy.

Growth outlook characterised by downside risks
In its forecast from July, the IMF expects global economic growth to fall from 3.0 per cent in 2018 to 2.7 per cent in 2019 and then to rise to 2.9 per cent in 2020, cf. Chart 19.

In the USA, the prospects of lower growth in 2019 are attributable to the diminishing effect of fiscal easing, while in the euro area they mask the stagnant Italian economy and weak development in German industry.

The expected increase in the rate of growth from 2019 to 2020 is due to accommodative financial conditions, the gradual unwinding of temporary growth-dampening conditions in the euro area and the improvement of several distressed economies, among other factors.

The USA is expected to experience a continued moderate boom in the coming years, with actual output exceeding its potential level, cf. Chart 20. This indicates that some slowdown is natural after several years of strong growth and few spare resources in the labour market. The same trend is seen in some European countries, including Germany. In the euro area as a whole, actual output has only just exceeded its potential level.

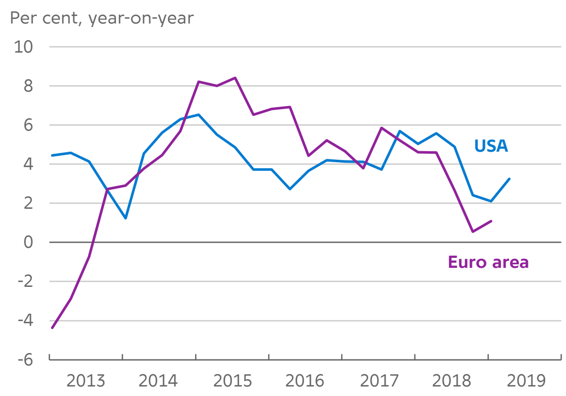
The dampening of growth since 2018 is driven mainly by receding demand due to substantial uncertainty. For example, industrial firms in the euro area are increasingly seeing lack of demand as a production constraint, while labour shortages have decreased a little from a high level since mid-2018.

In principle, however, there is no need for further economic policy easing in addition to what is already assumed, in order to avoid a new economic downturn.

The outlook for the global economy is characterised by downside risks, however. One reason is the considerable uncertainty created by trade conflict, Brexit and challenges to the multilateral rule-based framework for global trade, cf. Chart 21. This could dampen demand more than expected if firms and households exercise restraint when making new investments or purchasing large consumer goods. This risk is increased by the escalation of the trade conflict during 2019, cf. Box 3.

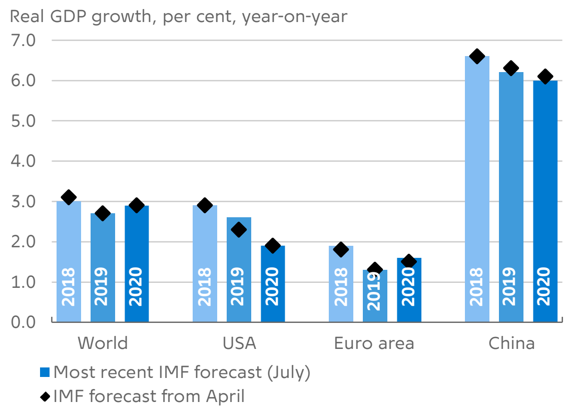
Moreover, an abrupt shift in risk appetite could result in tighter financial conditions with negative derived effects on growth. A stronger-than-expected slowdown in euro area growth with industrial sector

Subdued growth in purchases of cyclically sensitive durable consumer goods Chart 18



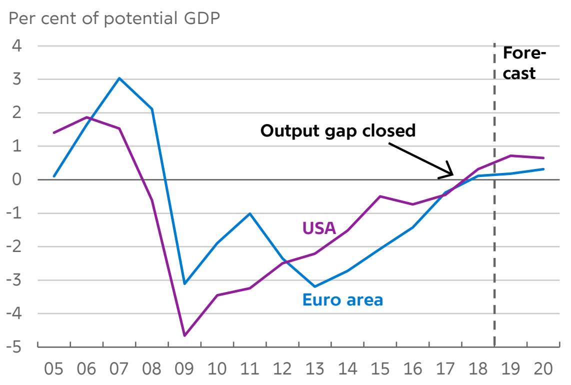
Note: Data for the euro area is calculated as an average of Germany, France, Italy and Spain.
Source: Macrobond.

The IMF expects slightly higher global growth next year Chart 19



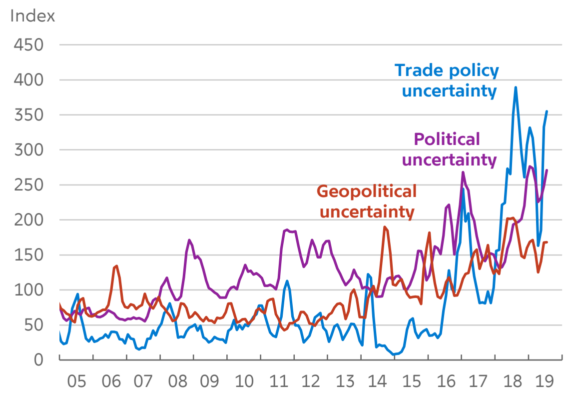
Source: IMF.

The output gap is closed in the USA and the euro area Chart 20



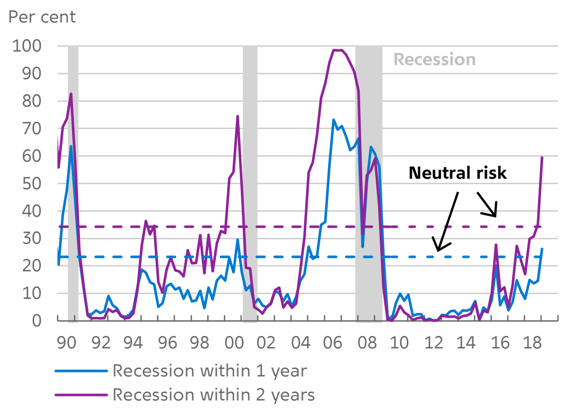
Note: The output gap is calculated as the difference between actual and potential output as a percentage of potential output. The chart shows the average of the estimates from the European Commission, the IMF and the OECD.
Source: The European Commission, the IMF, the OECD and own calculations.

Greater uncertainty dampen growth Chart 21



Note: Uncertainty index based on keywords in international media. 3-month moving averages.
Source: Macrobond.

The risk of a recession in the USA has increased in the last couple of years Chart 22



Note: The method for calculating the probability of recession is documented in Rasmus Mose Jensen and Deanie Marie Haugaard, Heightened risk of a global recession, Danmarks Nationalbank Analysis, No. 16, August 2019.
Source: Macrobond, National Bureau of Economic Research and own calculations.

weakness spreading to other parts of the economy could also derail the baseline scenario.

Since the IMF's forecast, the assumed improvement of the distressed Argentinian economy has also become increasingly doubtful due to the sharp fall in the exchange rate and equity prices after the election in August. This entails a risk of weaker-than-expected global growth.

The downside risks imply that the time of the next recession may have drawn closer. A statistical analysis points especially to increased risks in the USA, where the estimated risk of a recession has increased to a high level over the last couple of years, cf. Chart 22. A US recession would also dampen growth in the rest of the global economy.

Strong labour markets
Despite the global growth slowdown, labour market growth remains strong. In the USA, employment has increased continuously since November 2010, and the employment rate is approaching the pre-crisis level, cf. Chart 23. During the spring, unemployment fell to the lowest level since 1969, but has subsequently increased marginally to 3.7 per cent in July. Annual employment growth declined slightly during 2019 to 1.5 per cent in July, partly due to few spare resources in the labour market. Just under 40 per cent of US firms are reporting labour shortages, and voluntary job turnover is now higher than during the boom in the mid-2000s.

Labour market pressures in the euro area have also increased, cf. Chart 24. Unemployment fell to 7.5 per cent in July – the lowest level in 11 years. There are considerable differences across countries, however. For example, German rate of unemployment is approximately 3 per cent, while the rate is 14 per cent

Two-speed German economy

Box 2

Germany is currently a two-speed economy. The German domestic economy is improving due to factors such as a strong labour market, solid wage growth and accommodative fiscal policy fuelling demand. On the other hand, industry and exports are showing a pronounced slowdown, cf. Chart A. As a result, GDP growth has slowed down considerably since 2018, and GDP fell by 0.1 per cent in the 2nd quarter of 2019. The underlying momentum in the German economy was already weak in early 2019, but the growth rate was temporarily boosted by a number of one-off factors, including realisation of postponed car purchases, a high level of construction activity during the mild winter and increased exports to the UK due to inventory build-up prior to the original Brexit deadline in March.

The slowdown in the German economy is broad-based and primarily attributable to lower export market growth. One explanation is that heightened uncertainty about the trade conflict between the USA and China is dampening global investments and trade, which is an impediment to an export-oriented economy such as Germany's. At the same time, there are signs of the German economy being more severely hit than what can be explained by the declining global trade growth rate alone. For example, industrial output in Germany has fallen more than in the other large euro area member states. This reflects, inter alia, that the German automotive industry accounts for a larger share of total industrial output than in other countries, and that there has been a sharp drop in activity in this industry. In Germany, the automotive industry accounts for just under 5 per cent of GVA and around one fifth of exports. The weakness of the automotive industry masks a combination of temporary disruptions to production and falling global demand for cars. Specifically, problems related to the transition to the new EU emission standards led to a substantial decline in car production in the 2nd half of 2018, cf. Chart B. The disruptions to production were solved temporarily at the turn of the year, however, indicating that the continuous weakness in the automotive industry is driven by demand. Thus, global car sales declined in 2018 for the first time since the financial crisis, due in part to receding demand in China, where a tax relief on cars was phased out last year.

Unlike the industrial sector, the domestic service sector, which accounts for the largest share of employment, has experienced robust growth. There is a general shortage of labour, and the unemployment rate is only 3 per cent of the labour force. Employment is still rising, but the rate of increase has abated a little since 2018. Some leading indicators point to a certain slowdown; for example, the number of job vacancies has fallen, and expectations of future employment in the industrial sector have been negative since the spring. Conversely, the job-intensive service sector is still expecting rising employment, and the increase in short-term employment has been relatively limited since mid-2018.[1]

In August, the German central bank, Deutsche Bundesbank, announced that it expects a minor drop in GDP in the 3rd quarter of 2019 and sees no signs yet that the decline in industry is over. If the dampening of growth in industry and exports persists for an extended period of time, it increases the risk that the slowdown will spread to the labour market and the domestic part of the economy.

The slowdown in Germany is driven by industry, while growth in the service sector is intact

Chart A: German PMI index in industry and services

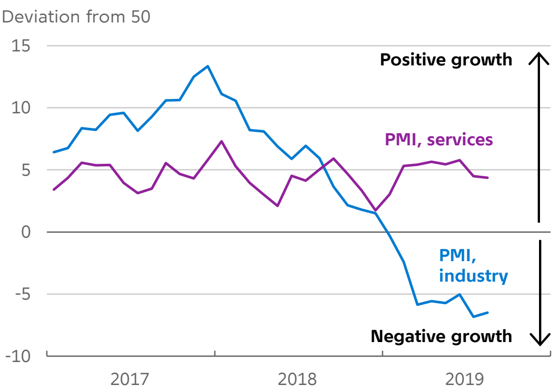
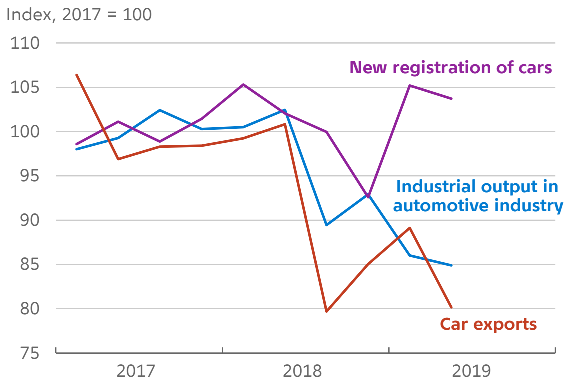


Chart B: Output and exports in the German automotive industry



Source: Macrobond, Eurostat and Verband der Automobilindustrie.

1. Under the short-term employment scheme, employees who are working reduced hours due to a temporary shortage of work are entitled to compensatory payment. The purpose is to avoid dismissals, and the scope of the scheme could therefore predict an imminent labour market reversal.

The trade conflict has escalated in 2019

Box 3

US president Trump has made reduction of the US trade deficit a political priority. Particular focus is on the USA's bilateral deficit vis-à-vis selected trading partners, including China. Consequently, the USA has introduced several rounds of punitive tariffs on imports from China since 2018. Trade policy tensions have escalated further during 2019, when the USA increased tariffs on imports from China totalling 200 billion dollars from 10 per cent to 25 per cent in May. China responded by increasing tariffs on imports from the USA worth 60 billion dollars.

Over the summer, the tone between president Trump and president Xi became more conciliatory in connection with the G20 summit in Japan. In August, the USA nevertheless announced that it would introduce a tariff of 10 per cent on imports from China worth 112 billion dollars as from 1 September, whereas a tariff on goods totalling 160 billion dollars would be postponed until 15 December, inter alia in order to protect consumers from higher prices up to the Christmas trade.

At the same time, the US administration announced that it considers the weakening of the Chinese currency in August to be the result of currency manipulation. At the end of August, the Chinese Ministry of Finance announced that it would resume the import duties on US car components that were put on hold in December 2018 and introduce further punitive tariffs on imports from the USA totalling 75 billion dollars. This caused president Trump to give notice of further tariff increases. The US administration is planning to raise tariffs to 15 per cent instead of 10 per cent, effective from 1 September and 15 December. Moreover, the 25 per cent tariff on imports totalling 250 billion dollars previously applied will be raised to 30 per cent as from 1 October. The most recent escalation of the trade conflict entails a strong increase in the average US tariff, cf. Chart A.

There are indications that the US punitive tariffs have improved the bilateral trade balance between the USA and China, but imports from the rest of the world have risen correspondingly, cf. Chart B. So punitive tariffs have no impact on the total US trade deficit, since the higher tariffs simply lead to a shift in global trading patterns and higher prices of the goods affected.[1]

Higher tariffs will not eliminate the US trade deficit

Chart A: Tariffs in selected countries

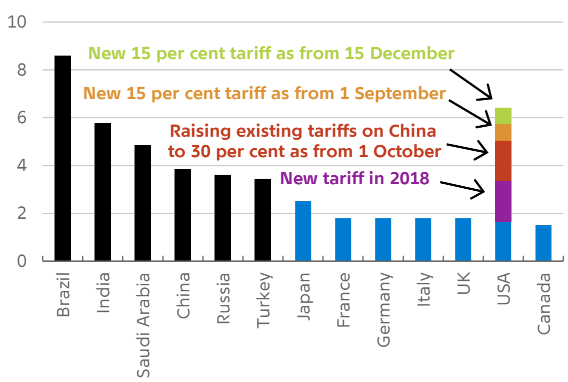
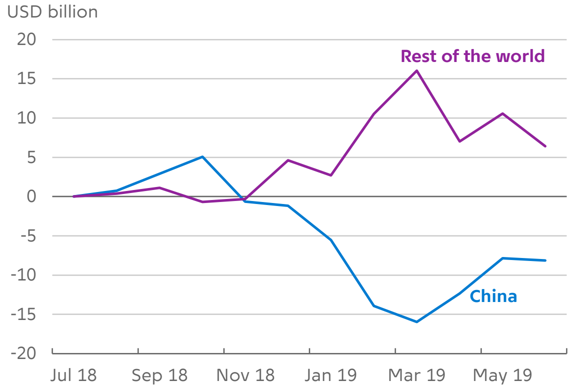


Chart B: US imports from China and the rest of the world



Note: Chart A: Average actual tariffs in 2017, trade-weighted. Emerging economies are shown in black, while advanced economies are shown in blue. For the USA, the purple, red, orange and green parts of the column shows the effect of various measures during the trade conflict. Chart B: Changes in US imports of goods since July 2018.

Source: Chart A: World Bank, Peterson, Macrobond, US Trade Representative and own calculations. Chart B: US Census Bureau.

1. See Mette Kanstrup Petry, Jens Vedelsdal Aurup and Jannick Damgaard, Trade conflict does not improve US current account, *Danmarks Nationalbank Analysis*, No. 18, September 2019, for a discussion of the causes of the US current account deficit.

in Spain despite solid economic growth. Annual employment growth has been largely unchanged during 2019, standing at 1.1 per cent in the 2nd quarter, partly due to strong growth in the construction sector. Employment expectations in industry have decreased considerably since 2018 and are now pointing to falling employment in this part of the economy. This is in contrast to the job-intensive service sector where employment expectations are more positive.

The positive development in the labour markets has been leading to increasing wage growth in the USA and the euro area alike since 2017. In the USA, wage growth has now reached the boom level of the 2000s, while it remains somewhat lower in the euro area, cf. Charts 23 and 24.

Low inflation in the USA and the euro area despite increasing wage growth

Increasing wage growth has not yet filtered through to price developments, which remain subdued in both the USA and the euro area. Combined with higher wage growth, this has resulted in real wage growth, which helps to support private consumption.

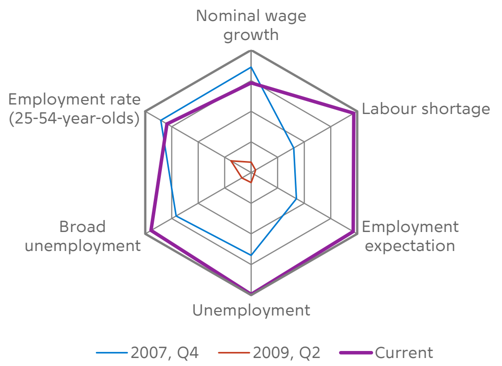
The annual rise in US consumer prices, measured by the rate of increase in the Personal Consumption Expenditures Index, PCE, was 1.4 per cent in July, cf. Chart 25. At the same time, core inflation declined from 2.0 per cent at end-2018 to 1.6 per cent in July 2019. In its June forecast, the Federal Reserve, Fed, expects inflation to rise from 1.5 per cent in 2019 to 2.0 per cent in 2021.

In the euro area, overall inflation, measured as the rate of increase in the Harmonised Index of Consumer Prices, HICP, was 1.0 per cent in August. Thus, inflation was unchanged from July, held down by low energy prices and prices of services. Despite increasing wage growth, core inflation, i.e. consumer price inflation excluding energy, food, alcohol and tobacco, has fluctuated around 1 per cent since 2015 and was 0.9 per cent in August. The subdued price pressure is seen across sectors and product groups. In its September forecast, the ECB expects core inflation to gradually rise to 1.5 per cent in 2021 due to increasing wage growth as a result of a tighter labour market.

Market-based expectations of inflation have fallen both in the USA and the euro area. The euro area especially has experienced a sharp decline since the turn of the year, cf. Chart 26. The long-term market-based inflation expectations now stand at around 1.3 per cent. The decline is also seen in the survey-based inflation expectations.

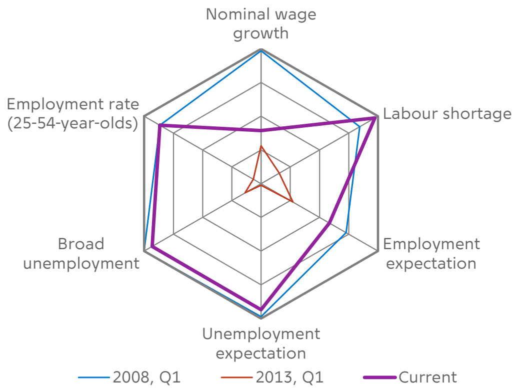
This development should be seen in the context that growth in the euro area has declined and that the

Few spare resources in the US labour market Chart 23



Note: The indicators have been stated as percentiles of their historical observations since 2000. The centre is the minimum and the outer edge the maximum. The unemployment measure has been multiplied by minus 1. The benchmarks are the pre-crisis peak and the bottom of the most recent recession. "Current" refers to the 2nd quarter of 2019 or the most recent observation.
Source: Macrobond.

Mounting labour market pressures in the euro area Chart 24



Note: The indicators have been stated as percentiles of their historical observations since 2000. The centre is the minimum and the outer edge the maximum. The unemployment measure has been multiplied by minus 1. The benchmarks are the pre-crisis peak and the bottom of the most recent recession. "Current" refers to the 2nd quarter of 2019 or the most recent observation.
Source: Macrobond.

growth outlook is characterised by great uncertainty, among other factors. The relatively long period of low inflation may also have had an impact on the formation of inflation expectations.

The ECB and the Fed have both eased monetary policy
Missing inflationary pressures and falling inflation expectations have changed the monetary policy outlook in the USA and the euro area alike.

As expected, the ECB eased the monetary policy stance at the monetary policy meeting on 12 September. The ECB lowered the interest rate on the deposit facility by 10 basis points from -0.40 per cent to -0.50 per cent. Following the interest rate cut, the ECB introduced a two-tiered system for reserve remuneration with a view to support the bank-based transmission of monetary policy.

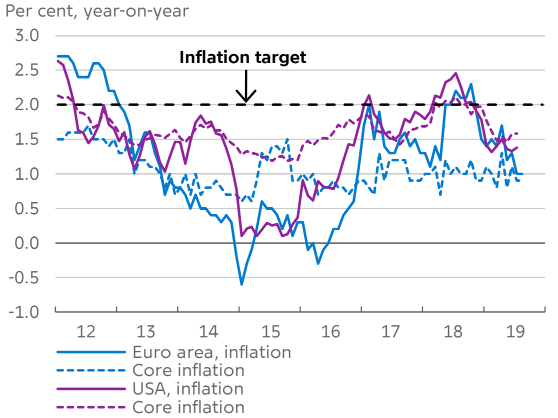
On the same occasion, the ECB strengthened its *forward guidance*. The ECB's Governing Council now expects to keep its monetary policy rates unchanged – or to lower them further – until inflation seems to converge to a level close to, but below 2 per cent, which is ECB's inflation target. At the press conference, the President of the ECB, Mario Draghi, pointed out that fiscal policy should play a far more important role in the future to support economic activity and thus inflation.

The ECB will also restart monthly net purchases of bonds of 20 billion euro from November 2019. The Governing Council expects to continue the net purchases of bonds until a short period before it starts raising the key ECB interest rates. The ECB completed its most recent net purchases of bonds in December 2018.

The ECB also eased the terms of the targeted longer-term refinancing operations, TLTRO III, which was announced in March. The purpose of TLTRO III is to contribute to ensuring accommodative financial conditions in the euro area.[8]

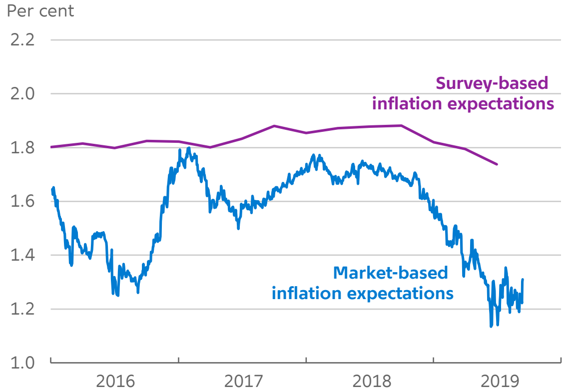
In July, the US Federal Open Market Committee, FOMC, reduced the Fed funds target range by 25

Inflation remains low in the USA and the euro area Chart 25



Source: Macrobond.

Long-term inflation expectations in the euro area have declined Chart 26



Note: Market-based inflation expectations are based on a 5-year/5-year inflation swap, while survey-based inflation expectations are from the ECB's Survey of Professional Forecasters.
Source: Macrobond and Bloomberg.

8 TLTRO III will consist of quarterly market operations from September 2019 to March 2021, where the ECB will offer long-term loans to credit institutions in the euro area on favourable terms.

basis points to 2-2.25 per cent, cf. Chart 27. This was the first interest rate reduction from the Fed since 2008. At the same time, the FOMC decided to stop the reduction of the Fed's balance sheet from August 2019, cf. Box 4.

The decision to ease monetary policy was expected by financial market participants. Jerome Powell, Chairman of the FOMC, emphasised that the reason for the interest rate cut was a mid-cycle adjustment to monetary policy, and that it was not the beginning of a series of interest rate cuts in the near future. Despite Powell's statements, the pricing of Fed funds futures shows that market participants still expect four interest rate cuts of 25 basis points each by the end of 2020. Presumably, this reflects expectations of weaker economic growth in the future.

The financial markets are affected by the prospects of accommodative monetary policy and the trade conflict

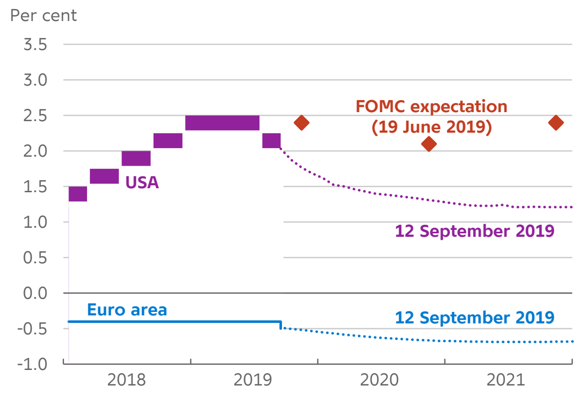
In sovereign debt markets, both European and US yields have continued the downward trend seen since the autumn of 2018. However, the 10-year government bond yields have increased in early September, cf. Chart 28.

German 10-year government yields have been negative since March and have since fallen to new record-low levels. The uncertainty associated with the global economy and concerns about lower growth and lengthy periods of low inflation contribute to the downward pressure on interest rates. Lower interest rates should thus be viewed in the context of the more accommodative monetary policy rhetoric of both the ECB and the Fed. In addition, the very low level of interest rates currently seen globally is the result of the fact that the natural real interest rate has been falling since the mid-1990s.

The decline in interest rates implies that more and more bonds are traded at negative yields, cf. Chart 29. In August, the share of bonds with negative yields reached approximately 30 per cent of the total outstanding volume of investment grade bonds. More than 40 per cent of these bonds consist of Japanese government bonds. Moreover, yields on all German government bonds have been negative since early August. Negative yields are also seen on some corporate bonds.

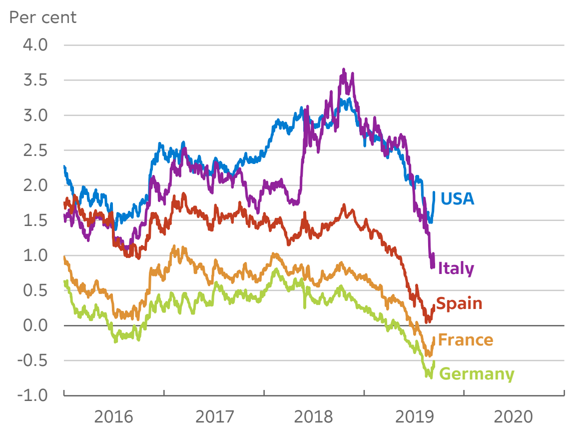
Political uncertainty in Italy has contributed to high volatility in Italian government yields. For example,

The market expects falling monetary policy rates Chart 27



Note: Fed funds target rate for the USA, the ECB's deposit facility rate for the euro area. The dotted lines denote market expectations based on futures and forward prices after the ECB's monetary policy meeting on 12 September 2019.
Source: Federal Reserve, Macrobond, Bloomberg and Scanrate Rio.

10-year government yields have declined sharply Chart 28



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

new internal political unrest in the Italian government caused strong fluctuations in government yields during August. Earlier in the summer, Italian government yields dived sharply after the European Commission decided not to initiate an excessive deficit procedure against Italy. Since May, yields on the Italian 10-year government bond have fallen by approximately 150 basis points overall. This means

The Fed suspends quantitative tightening and maintains a large balance sheet

Box 4

Since October 2017, the Federal Reserve, Fed, has implemented quantitative tightening (QT), i.e. allowing some of its assets, primarily US Treasuries and mortgage-backed securities, MBSs, to roll off the balance sheet as they mature. The Fed has suspended QT as from August 2019.

QT was part of the normalisation of monetary policy that was launched in December 2015 with the first monetary policy interest rate increase after the crisis. It involved gradual phasing out of the reinvestment of maturing assets, not actual divestment. The suspension of QT means that the Fed maintains a balance sheet of almost 4,000 billion dollars, or 19 per cent of GDP, cf. Chart A. By comparison, the pre-crisis balance sheet accounted for around 7 per cent of GDP. In the euro area and Japan, the balance sheets account for approximately 40 per cent and 100 per cent of GDP, respectively. So it seems that the Fed has ample room to further increase its balance sheet if required.

Due to the suspension of QT, the Fed will reinvest all maturing Treasuries. With regard to MBSs, 20 billion dollars worth of maturing securities will be placed in Treasuries, while the rest will be reinvested. As a consequence of this strategy, the Fed is gradually reducing its holdings of MBSs, but increasing its holdings of Treasuries.

According to the US Congressional Budget Office, CBO, the USA will have government budget deficits for years to come, indicating a considerable issuance requirement. The Fed's purchases of Treasuries are expected to account for approximately 15 per cent of annual issuance, cf. Chart B. The Fed's restructuring of its balance sheet is thus exerting downward pressure on US government bond yields.

The Fed's balance sheet will remain large after the end of QT

Chart A: In the future, maturing MBSs will be invested in new Treasuries

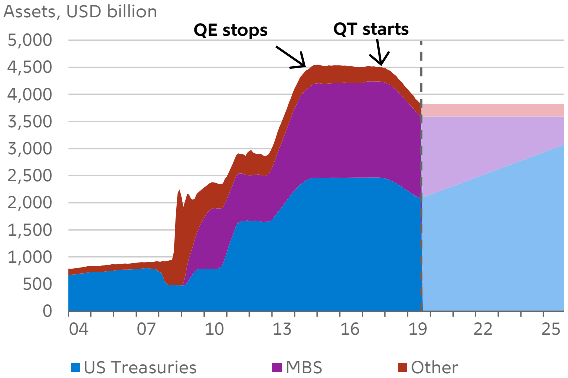
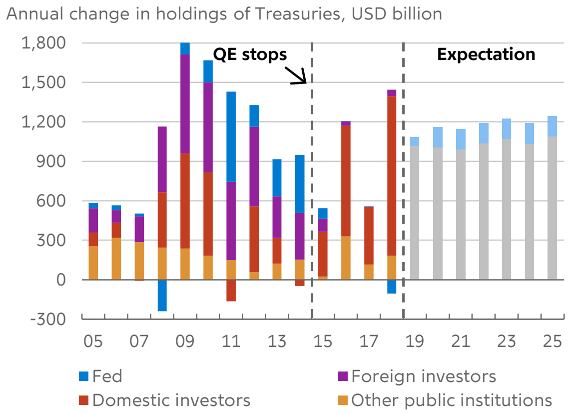


Chart B: The Fed is purchasing Treasuries again

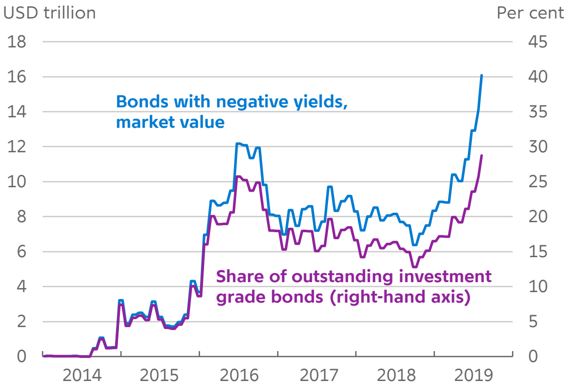


Note: Chart A: The chart contains simple projections of asset composition. A constant balance sheet size is assumed. The projection also assumes that an average 13 billion dollars worth of MBSs will mature each month and be invested in Treasuries. The "Other" category includes e.g. loans, gold and foreign currency. Chart B: The projection of US issuance of Treasuries is based on estimates from the US Congressional Budget Office.

Source: Macrobond, Congressional Budget Office and own calculations.

Rising share of outstanding investment grade bonds traded at negative yields

Chart 29



Source: Bloomberg.

Prospect of more accommodative monetary policy has led to rising equity prices

Chart 30

Source: Macrobond.

that the spread to the German 10-year government bond has been reduced substantially.

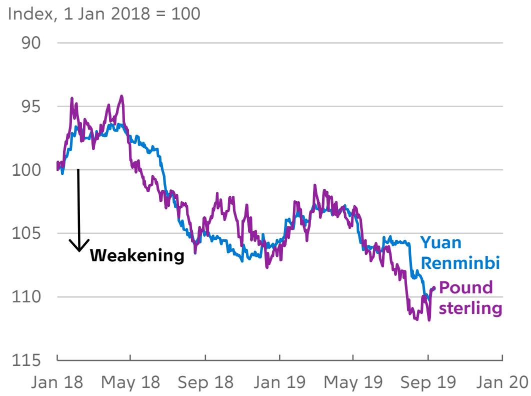
The global equity markets have generally risen since the turn of the year, although the trade conflict between the USA and China has led to declining equity prices in some periods. Overall, the leading US and European stock indices have increased considerably this year, cf. Chart 30. One reason for this increase is the central banks' more accommodative monetary policy rhetoric and higher-than-expected company earnings.

In the foreign-exchange markets, the Chinese and UK currencies have weakened against the dollar, cf. Chart 31. In early August, Yuan Renminbi fell to a level of over 7 CNY per dollar. The Chinese currency has not been so weak against the dollar since 2008. The weakening should be seen in the light of the trade conflict between the USA and China as well as more subdued growth in China.

The development in the pound sterling reflects substantial Brexit-related economic and political uncertainty. According to the current agreement, the UK is set to leave the EU on 31 October 2019. In the financial markets, speculation is rife that the risk of the UK leaving the EU without a deal has risen based on new signals from the British government.

The UK and Chinese currencies have weakened against the dollar

Chart 31



Note: Based on the exchange rate/price of 1 dollar measured in the currency in question.
Source: Macrobond.

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

The projection has been prepared using the macroeconomic model MONA and is based on the available economic statistics, including Statistics Denmark's quarterly national accounts for the 2nd quarter of 2019. The projection is based on statistics published until and including 13 September 2019. The projection also involves a number of assumptions concerning the international economy, financial conditions and fiscal policy.

The international economy

Export market growth is assumed to be 2.6 per cent in 2019 and 3.1 per cent and 3.2 per cent, respectively, in 2020 and 2021. This is weaker than previously expected, reflecting the latest forecasts from the OECD, IMF and the European Commission. The downward adjustments reflect a slowdown in world trade in 2019, driven by decreasing growth and political uncertainty in major recipient countries. The growth profile reflects international organisations' expectations of increased import growth in our recipient countries.

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

Interest rates, exchange rates and oil prices

Developments in short- and long-term interest rates in the projection are based on the expectations of future developments that can be derived from term structures in the financial markets. Throughout the projection period, the 3-month money market inter-

Overview of projection assumptions

Table A1

	2018	2019	2020	2021
International economy:				
Export market growth, per cent year-on-year	3.4	2.6	3.1	3.2
Foreign price[1], per cent year-on-year	2.9	2.0	1.7	1.5
Foreign hourly wages, per cent year-on-year	2.7	2.5	2.7	2.6
Financial conditions, etc.:				
3-month money market interest rate, per cent p.a.	-0.5	-0.6	-0.8	-0.9
Average bond yield, per cent p.a.	0.7	0.5	0.4	0.4
Effective krone rate, 1980 = 100	103.6	103.1	103.4	103.4
Dollar exchange rate, DKK per USD	6.3	6.7	6.8	6.8
Oil price, Brent, USD per barrel	70.9	63.6	57.8	56.7
Fiscal policy:				
Public consumption, per cent year-on-year	0.9	0.8	0.9	0.7
Public investment, per cent year-on-year	0.1	3.0	-0.2	3.5
Public sector employment, 1,000 persons	825	830	832	833

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

est rate, measured by the CITA swap rate, is expected to be negative and decline further from the current level of -0.5 per cent.

The average bond yield is an average of yields to maturity for outstanding government and mortgage bonds. It constitutes 0.3 per cent in the 3rd quarter of 2019 and rises slightly over the projection period to just over 0.4 per cent by the end of 2021.

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

The price of oil was around 63 dollars per barrel at the time of the forecast. The oil price is assumed to develop in line with futures prices, decreasing to just under 57 dollars by the end of 2021.

Fiscal assumptions
The projection is based on preliminary national accounts data on public sector consumption and investment as well as the planned fiscal policy in the *Economic Survey from August 2019*, the medium-term projection from the *Updated 2025 development* and the economic agreements with local and regional government.

Real public consumption is expected to rise by 0.8 per cent this year, 0.9 per cent in 2020 and 0.7 per cent in 2021. Public investment is expected to increase by 3.0 per cent this year, decline by 0.2 per cent in 2020 and increase by 3.5 per cent in 2021, cf. Table A1.

Revisions in relation to the previous projection
Forecasts for GDP growth are adjusted upwards by 0.1 percentage points this year, downwards by 0.2 percentage points in 2020 and 0.1 percentage points in 2021. Overall, changed assumptions affect GDP growth to a limited extent only, but mask opposite effects from export market growth and interest rates, cf. Table A2. Lower interest rates are, to some extent, a result of increased uncertainty, which is estimated to offset some of the positive effect from the change in interest rate developments in 2020 and 2021.

The forecast for consumer price inflation (HICP) is somewhat weaker throughout the projection period compared with the latest projection. This year it reflects a slightly weaker-than-expected price development, while in 2020 and 2021 it reflects weaker price pressures from abroad and more subdued wage growth.

Revisions in relation to the previous projection Table A2

	GDP			Consumer prices (HICP)		
Per cent, year-on-year	2019	2020	2021	2019	2020	2021
Projection, March 2019	1.7	1.7	1.6	1.2	1.5	1.8
Contribution to revised forecast from:						
Export market growth	-0.1	-0.2	-0.1	0.0	0.0	0.0
Interest rates	0.0	0.2	0.2	0.0	0.0	0.0
Exchange rates	0.1	-0.1	-0.1	0.0	0.0	0.0
Oil prices	0.0	0.0	0.0	0.0	-0.2	0.0
Other factors	0.0	-0.2	-0.1	-0.4	-0.4	-0.2
This projection	1.8	1.5	1.5	0.8	1.0	1.5

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

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