ANALYSIS

DANMARKS NATIONALBANK

20 MARCH 2019 — NO. 7

OUTLOOK FOR THE DANISH ECONOMY – MARCH 2019

The Danish economy is heading deeper into the boom

- The Danish economy is in a balanced upswing for the sixth year in a row. Some sectors are experiencing labour shortages, but wage increases are still moderate. In the housing market, prices have flattened over the last half year. Economic growth seems to continue at a more steady pace.
- No significant imbalances have built up during the upswing, and the Danish economy is well prepared for addressing the current risks, including a dampening of growth abroad.
- Economic policy, including fiscal policy, has contributed to a balanced growth path. It is important to continue this and to stick to the structural reforms implemented and the objective of structural balance of public finances in 2021. Slightly lower-than-expected economic growth is appropriate to avoid overheating of the economy, and it does not call for offsetting fiscal measures.

Balanced boom

but with labour market pressures

Read more

1.7 per cent growth in real GDP

in 2019 and 2020. 1.6 per cent in 2021

Read more

Fiscal policy

is in sync with the cyclical position

Read more

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Outlook for the Danish economy at a glance

- The boom in the Danish economy continued in the 2nd half of 2018. Employment growth was unchanged.
- Low interest rates have supported the economy during the upswing, but it has not resulted in strong credit growth. The upswing is balanced.
- Labour market pressures remain substantial, and there are initial signs of this being reflected in higher wage increases.
- Consumer price inflation is only moderate and underlying inflation pressures in the economy are limited.
- Financial conditions are expansionary. Savings are high and wealth is increasing. There is a solid foundation for continued growth in demand.
- Global growth has slowed down over the last few quarters and shows several signs of having peaked in this business cycle.
- Growth in the Danish economy is estimated to continue, although at a more moderate pace. GDP growth is expected to be 1.7 per cent in 2019 and 2020 and 1.6 per cent in 2021.
- There are major downside risks. The slowdown abroad may be more pronounced than assumed in the projection. In addition, the trade conflict between the USA and China has not been put to rest, and the terms for Brexit are subject to considerable uncertainty.
- Since no significant imbalances have built up, the Danish economy is well prepared for addressing the current risks – boom-related pressures as well as weaker growth abroad, including the consequences of a "no deal" Brexit scenario.
- During the upswing so far, economic policy has contributed to a balanced growth path. It is important to continue this and to stick to the structural reforms implemented and the medium-term fiscal plan, which shows a small structural balance surplus in 2021. The expected dampening of economic growth does not call for expansionary fiscal measures.

Key economic variables

					2018		
	2018	2019	2020	2021	Q 2	Q 3	Q 4
GDP (real), per cent	1.2	1.7	1.7	1.6	0.3	0.4	0.7
Employment, 1,000 persons	2,972	3,004	3,030	3,053	2,968	2,977	2,987
Gross unemployment, 1,000 persons	108	101	94	89	109	107	105
Current account, per cent of GDP	6.0	6.6	6.1	5.6	4.7	6.8	7.3
Government balance, per cent of GDP	0.3	-0.2	-0.3	-0.4	-0.1	-0.3	1.6
House prices[1], per cent year-on-year	3.5	2.9	3.6	2.9	4.0	2.9	2.3
Consumer prices, per cent year-on-year	0.7	1.2	1.5	1.8	0.9	0.7	0.7
Hourly wages (manufacturing), per cent year-on-year	2.4	2.8	3.3	3.4	2.5	2.4	2.3

1. Nominal prices of single-family houses.
Source: Statistics Denmark and own forecasts.

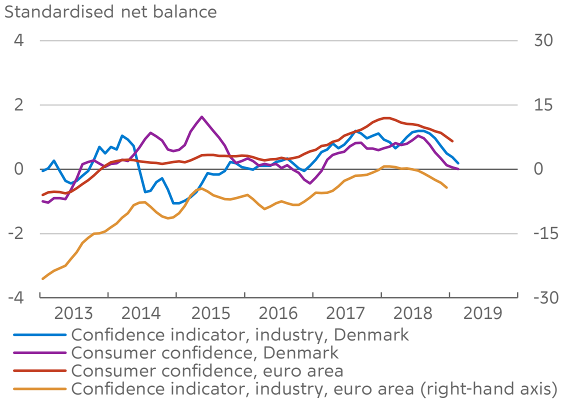
Outlook for the Danish economy

The Danish economy is heading deeper into the boom in the coming years
The Danish economy is in a balanced upswing for the sixth year in a row. Growth continued in the 2nd half of 2018, with GDP growth of 2.2 per cent over the last four quarters. Employment growth has been unchanged. GDP growth has probably peaked during this upswing, but solid economic growth is expected this year and in the coming years when growth will be close to its potential.

The financial conditions remain highly expansionary, and the markets expect interest rates in Denmark to remain low. The low interest rates have supported the economy during the upswing, but without it resulting in strong credit growth. The upswing is balanced. However, the downside risks have increased, primarily due to the risk of a more pronounced slowdown in the global economy than assumed in the projection.

Declining confidence indicators over the last half year

Chart 1



Note: 3-month moving averages.
Source: Statistics Denmark and Eurostat.

Global growth has slowed down over the last few quarters and shows several signs of having peaked in this business cycle. Confidence indicators have weakened both in Denmark and abroad over the last half year, cf. Chart 1. This may be an early sign of a future slowdown in employment growth.

In the euro area, the slowdown in growth is driven primarily by weaker foreign demand. In the USA, highly expansionary fiscal policy has contributed to strong growth during 2018. This year and next year, it will probably be followed by lower growth as the extraordinary fiscal stimuli come to an end. At present, the markets do not expect further increases in US monetary policy interest rates. In 2018, China experienced the lowest growth since 1990.

Major downside risks exist, indicating a stronger global slowdown in growth. Should this materialise, it will happen in an environment of continued highly expansionary financial conditions. Given that many countries' monetary policy interest rates are historically low, the options of further monetary policy stimuli to the economy are limited. Although unemployment has declined during the upswing, the level remains high in many euro area member states.

The trade conflict between the USA and China has not been put to rest and may escalate to the detriment of the global economy. The terms of Brexit and its consequences for the UK economy, in particular, are also subject to substantial uncertainty. The Danish economy will also be affected, but indications are that the detrimental effects will be more modest even in the event of a "no deal" Brexit, cf. Box 1.

In Denmark, the pace of employment growth was unchanged in 2018, and unemployment continued to fall, but slowly. Some sectors still have considerable labour shortages. However, the shortages have been slightly less pronounced over the last half year, especially in the construction sectors which account for the largest labour shortages.

Labour market pressures have caused the rate of wage increase to rise a little, although it remains moderate so far. Weak consumer price increases, an influx of foreign labour and later retirement among the older age groups have probably contributed to enabling employment to rise considerably without any notable acceleration of the rate of wage increase.

In the housing market, prices of single family houses continued to rise nationwide during 2018, but slowed down a little towards the end of the year. In Copenhagen, the market for owner-occupied flats is showing signs of a soft landing. Prices in this market have been almost flat since the spring of 2018. This has reduced the risk of prices in Copenhagen being driven upwards by self-fulfilling expectations of further price increases.

In general, households and firms have consolidated themselves during the upswing. Lending has picked up and over the past year it has increased at more or less the same pace as economic growth, cf. Monetary and financial trends, 1st half 2019.

The outlook is that the boom may continue for some years to come, although at a more moderate pace. GDP growth is expected to decline from 1.7 per cent in 2019 and 2020 to 1.6 per cent in 2021. According to a preliminary calculation, real GDP growth in 2018 is 1.2 per cent, a level influenced by a large patent-related payment in early 2017 and its negative effect on growth in 2018.

In 2019 and the coming years, private consumption, exports and investments will be the primary drivers of growth, along with private consumption, cf. Chart 2.

Economic growth is expected to fall slightly below its potential towards the end of the projection period. The output gap, i.e. the difference between actual and cyclically neutral output, is forecast to be 1.6 per cent of GDP at the end of 2021, when a moderate boom is still predicted to exist. Employment is expected to increase by 75,000 persons over the same period.

After a long period of almost continual GDP growth, it will thus decline a little over the coming years, easing pressures on the labour market and corporate capacity. This is a natural and suitable development in order to avoid overheating of the economy. Thus, a dampening of growth does not call for easing of fiscal policy. The automatic stabilisers in e.g. the tax system and for income transfers will contribute to a soft landing, enabling the economy to continue functioning in a close to neutral cyclical position. There are thus reasons to believe that the current boom will not be followed by a deep recession as seen in the 2000s when the economy overheated, cf. Chart 3.

During the upswing so far, economic policy, including fiscal policy, has contributed to a balanced growth path. It is important to continue this and also to stick to the structural reforms implemented and the medium-term fiscal plan, which shows a small surplus on the structural balance in 2021.

Substantial uncertainty about the conditions for trade with the UK after 29 March

Box 1

A "no deal" Brexit scenario may impact Danish-UK trade to a significant degree. But the terms of the "no deal" scenario are subject to great uncertainty. Given that the UK is Denmark's fourth largest export market, the Danish economy will be affected by more cumbersome terms of trade as a result of tariffs or changed product standards. The extent of the effect will depend on the number of barriers implemented and the nature of the logistical challenges.

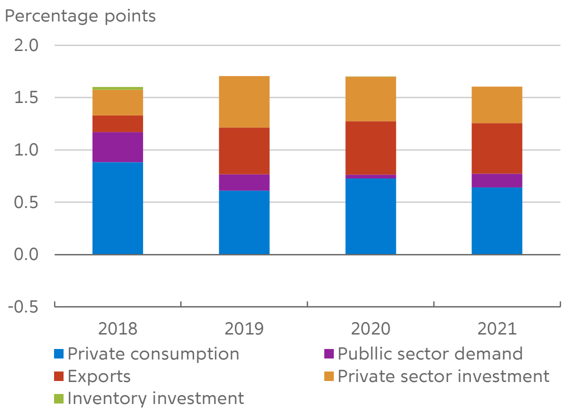
Several national and international studies have sought to quantify the effect. Overall, the Danish economy will be robust enough to withstand even a "hard Brexit" scenario. However, it is also clear that some industries could suffer major consequences. These are the food, machinery and textile industries, among others, which are particularly exposed to the UK economy.

Besides the short-term consequences of Brexit for the Danish economy, there may be long-term effects as well. For example, productivity may be adversely affected by lower exploitation of comparative advantages of trade. The result will be lower prosperity in the longer term in both Denmark and the UK.

According to IMF and OECD calculations, a hard Brexit will reduce Danish GDP by 1.2-1.3 per cent after a 5-10 year period.

GDP growth is driven by private consumption, exports and investment

Chart 2



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

The economic policy stance during the upswing has contributed to preparing the Danish economy for addressing the current downside risks, should they materialise. Generally, the economy is able to handle a certain international slowdown, including the consequences of a hard Brexit, without this resulting in a deep recession. In this context too, the automatic stabilisers will contribute to cushioning the effect for households and firms.

Later retirement and foreign labour counter labour market pressures

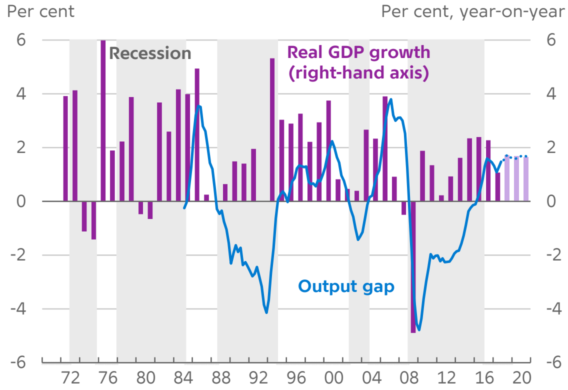
Employment growth continued unabated in 2018, cf. Chart 4. Since the upswing gained momentum in 2013, total employment has increased by more than 225,000 persons, of which 50,000 over the past year. Growth has almost entirely taken place in the private sector, where employment has increased especially in the service sectors.

The increased demand for labour has been accommodated mainly by an expansion of the labour force by 175,000 persons since 2013. The reduction of the population outside the labour force accounted for just over 95,000 of this number. This is a result of later retirement of employed persons and of persons entering the labour market. The remainder of the employment growth can be attributed to an increase of the population in the groups of working age. The influx of foreign labour has accounted for around one third of the employment growth during the upswing.

Unemployment is just over 100,000 persons, corresponding to 3.7 per cent of the labour force. The level of unemployment has not yet been pressed as far down as seen during the overheating in the 2000s, but it is still around 10,000 below the cyclically neutral level, which is estimated at around 115,000 persons. A substantial share of this number is temporary unemployment related to job changes no notable contribution to any sustained employment growth can be expected from here[1].

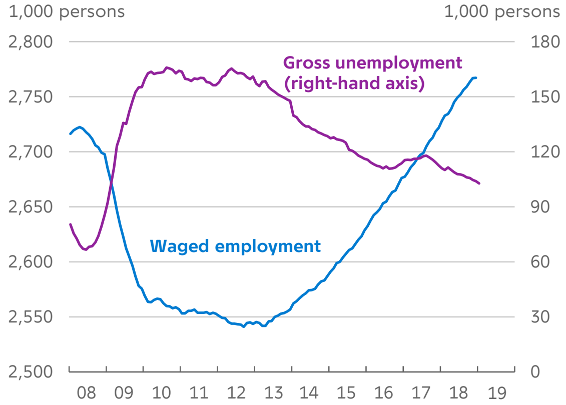
Several firms find it difficult to recruit the labour needed, although less so over the last half year, especially in construction, cf. Chart 5. In the current upswing, the challenges have been less pronounced

Overheating is typically followed by a deep recession Chart 3



Note: The output gap is the difference between actual and potential, i.e. cyclically neutral, output.
Source: Statistics Denmark and Danmarks Nationalbank.

Employment growth has continued Chart 4

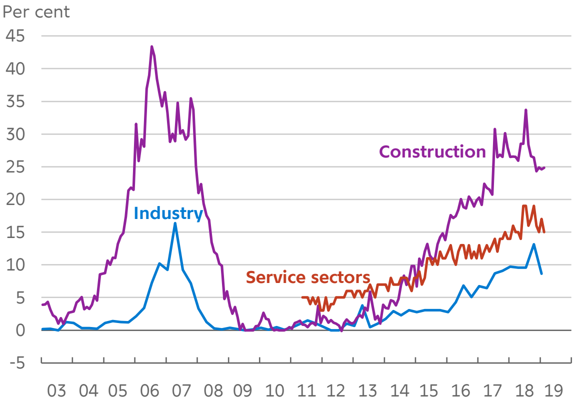


Source: Statistics Denmark.

1 Cf. Christian Ellermann-Aarslev, The labour market is slowly tightening, *Danmarks Nationalbank Analysis*, No. 13, September 2018.

Labour shortage in construction has subsided

Chart 5



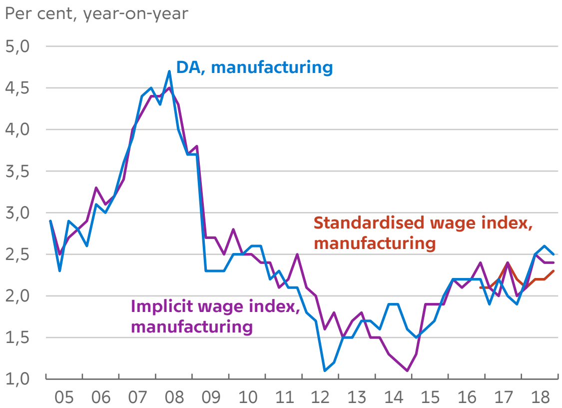
Note: Share of firms (adjusted for size) stating that shortage of labour is an impediment to production.
Source: Statistics Denmark.

New wage statistics, same picture

Box 2

Statistics Denmark has developed a new wage index: a standard calculated wage index. The purpose is to reduce the sensitivity of calculated wage developments to changes in employee composition. This sensitivity was present in the previous index, now called the implicit wage index. The new index closer resembles the wage index produced by the Confederation of Danish Employers ("KonjunkturStatistikken") without being outright identical.

Wage developments in manufacturing are unchanged



Note: In the standard calculated and the implicit wage indices, manufacturing covers manufacturing, mining and utility services.
Source: Statistics Denmark and Confederation of Danish Employers, DA.

The annual rate of wage increase in the private sector overall is higher using the standard calculated wage index than using the implicit index. This applies broadly across industries, but in recent years the rates of wage increase have been almost identical in the export-intensive manufacturing sectors, irrespective of the index – standard calculated or implicit – or the DA (KonjunkturStatistikken), cf. the chart above. However, in recent quarters, the standard calculated index has risen slightly less than the other two wage indices. In the assessment of Denmark's wage competitiveness, the new index does not change the general picture.

than during the period of overheating in the mid-2000s. Overall, labour market developments have been relatively stable in the current upswing. This is expected to continue in the coming years.

Current employment is estimated to be approximately 60,000 higher than the cyclically neutral level. Employment is expected to rise by a further 75,000 persons towards the end of 2021, the majority of whom will come from a larger labour force. Reforms adopted previously contribute to expanding the labour force, mainly due to the gradual increases of the ages of early retirement and retirement. Towards the end of the projection period, employment growth is expected to moderate a little, while wage growth is expected to rise.

Slightly higher wage growth
In the 4th quarter, private sector wages were 2.2 per cent higher than one year earlier, according to Statistics Denmark's implicit wage index. According to the new standard calculated index, the annual rate of increase was 2.7 per cent, cf. Box 2, which is higher than in recent years. In the light of the sustained low rate of increase in consumer prices, this implies a solid increase in real wages.

Wage increases in the private sector have risen, particularly in the construction sectors, cf. Chart 6. This should be seen in the light of the tighter labour market. In the current cyclical environment, the rate of wage increase is still moderate, but experience shows that wage pressures during an upswing occur with a lag and may accelerate fast.

In manufacturing, where exports account for a large share of production, wages rose by 2.4 per cent in the 4th quarter. Wage growth has also increased for foreign competitors.

The wage competitiveness of Danish firms, measured in terms of relative payroll costs, has deteriorated over the past year but remains good viewed in a longer perspective.

Capacity pressures are forecast to push up wage growth further over the coming years, to around 3 per cent p.a. Wages constitute a key cyclical regulator and slightly higher wage growth can contribute to alleviating some of the labour market pressures.

Moderate growth in consumer prices

Consumer prices are showing moderate growth. Over the past year, the rate of price increase has been slightly lower than 1.0 per cent, but it rose a little in early 2019.

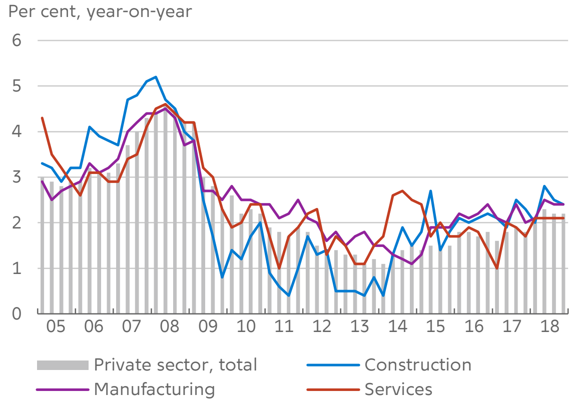
Except in a short period in mid-2017, consumer price development has been weaker in Denmark than in the euro area in recent years, cf. Chart 7, mainly driven by weaker energy and food prices in Denmark in that period. In early 2019, inflation in Denmark was again at the same level as inflation in the euro area.

Core inflation, calculated as HICP excluding energy and unprocessed food, has also been lower in Denmark for a period, but in the past few months it has reached the same level as core inflation in the euro area. Inflation rates in Denmark and the euro area have previously deviated from time to time, but they are in sync in the medium term.

Underlying price pressures in the Danish economy have risen in recent months, but remain moderate. Core inflation, i.e. consumer price inflation excluding energy and unprocessed food, was 1.4 per cent in January 2019. Domestic market-determined inflation is also moderate.

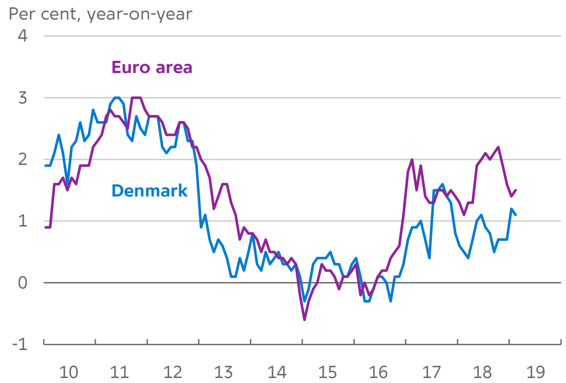
In the first months of the year, wholesale prices excluding energy were just over 1 per cent higher than one year earlier. This means that overall price pressures in the wholesale link are also moderate. Oil

Slightly higher wage growth Chart 6



Note: Implicit wage index.
Source: Statistics Denmark.

Inflation in Denmark is currently lower than in the euro area Chart 7



Note: The EU's Harmonised Index of Consumer Prices, HICP.
Source: Eurostat.

prices have fallen since the summer of 2018, and energy prices have a downward impact on the overall price index in the wholesale link.

Low import price growth is one of the drivers of the moderate consumer price inflation. The effective exchange rate of the krone, which impacts on prices in Danish kroner of foreign goods, has declined a little since last summer after increases by 4-5 per cent in the preceding few years.

Accelerating wage growth and capacity pressures are expected to amplify domestic inflationary pressures. Consequently, consumer prices are expected to rise in the coming years. The expected increase is 1.2 per cent this year, 1.5 per cent in 2020 and 1.8 per cent in 2021.

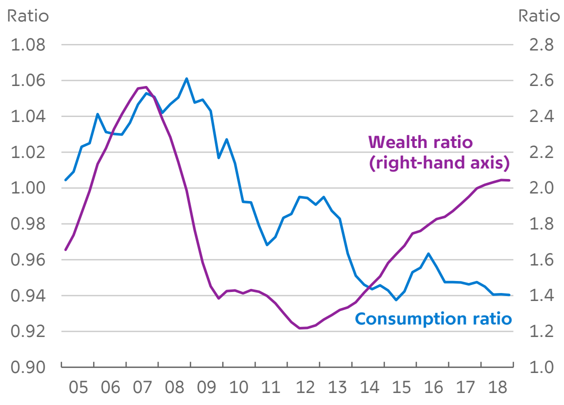
A solid foundation for private consumption and business investment

Low interest rates support households' disposable incomes. At the same time, low consumer price inflation has resulted in appreciably higher real wages for households. They continue to save a considerable share of their income, which – together with rising house and asset prices – has increased their wealth during the upswing. This is a good point of departure for increased private consumption in the coming years. Another part of the picture is the high consumer confidence level over the past year, although it has been declining since mid-2018. Only modest growth in the consumption ratio is expected until 2021 from a very low level, cf. Chart 8.

The low interest rates entail cheaper funding for firms. Together with prospects of higher demand, particularly domestic demand, this is a good point of departure for expanding investment. Moreover, the increasingly higher capacity utilisation leads to a higher need for new investment. So far, business investment has been more moderate than during previous upswings, but they have been known to rise suddenly some way into an upswing, cf. Chart 9.

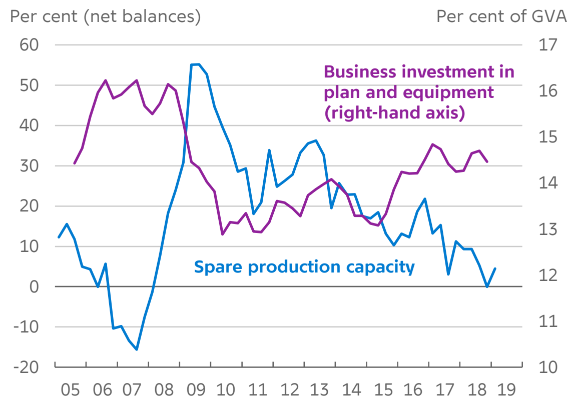
Residential investment has also increased during the upswing, especially in the Copenhagen area where house prices have risen the most. Both new construction and major repairs have accounted for the higher investment. The agreement on a new housing taxation system from the spring of 2017 makes it advantageous for property developers to sell newly constructed housing projects before 2021. That could lead to a further increase in activity in the

A low consumption ratio Chart 8



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

Decline in spare production capacity Chart 9



Note: The net balance denotes the difference between too much and too little production capacity. Investment in plant and equipment is shown as a 3-quarter moving average.
Source: Statistics Denmark.

construction sectors, which are already experiencing labour shortages.

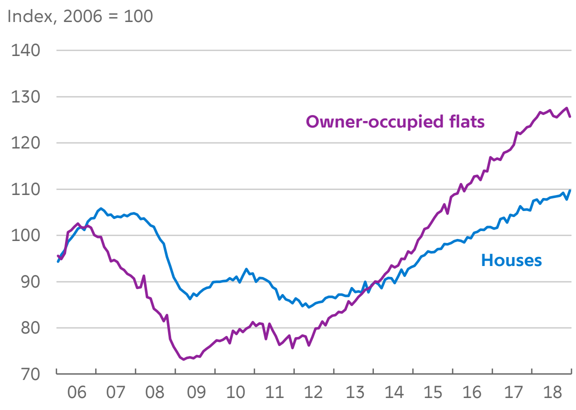
Slowdown in house prices
Prices of single-family houses rose nationwide in the first part of 2018, but slowed down a little towards the end of the year, cf. Chart 10. In this period, trading activity for single-family houses flattened out at a high level, and the supply of houses on the market was unchanged. Prices of owner-occupied flats nationwide have flattened since the spring of 2018, and this pattern is seen in most large cities in Denmark.

In Copenhagen, where a large share of the country's owner-occupied flats are located, prices have been almost unchanged for the past year, cf. Chart 11. At the same time, trading activity has subsided. This could indicate that prices have peaked for the time being. Substantial new construction and the consequent increase in the housing stock contributed to the slowdown, but demand has probably also declined as prices have reached a high level. In addition, the new housing taxation system, which was adopted in 2017 to take effect in 2021, could already now have a dampening effect on prices of owner-occupied flats in particular[2]. Finally, the adjustment of the good practice rules may have dampened demand as a result of the restriction of some home buyers' access to free choice of type of financing[3].

Prices of owner-occupied flats in Copenhagen are still high, higher than the level to be explained by the development in household disposable incomes and the level of interest rates, etc. However, an assessment on the basis of Danmarks Nationalbank's house price bubble model shows that there is no house price bubble in the sense of price increases being driven by self-fulfilling expectations of further price rises.

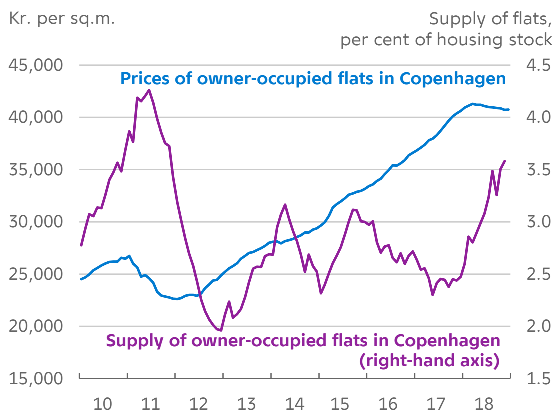
Given this slowdown, the Copenhagen housing market is set for a soft landing where prices will be more

The prices of owner-occupied flats are flattening Chart 10



Note: Nominal prices, seasonally adjusted.
Source: Statistics Denmark and Danmarks Nationalbank.

Slowdown in the Copenhagen housing market Chart 11



Source: Boligsiden and Finance Denmark.

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

3 In 2016, rules entered into force on prudent lending to households with high LTI ratios and insufficient wealth in growth areas. But these rules are not found to have had any notable effect on prices or trading activity, cf. Christian Sinding Bentzen, Henrik Yde Andersen and Simon Juul Hviid, *Danmarks Nationalbank Analysis,* No. 18, November 2018.

likely to reflect the development in household income and the level of interest rates. In Copenhagen, households are more sensitive to interest rates compared with the national average, and strong interest rate increases may result in more abrupt downward price adjustments. Other potential contributing factors are that the supply of new residential construction is expected to remain high in the coming years and that the sale of project flats seems already to have fallen somewhat over the past year.

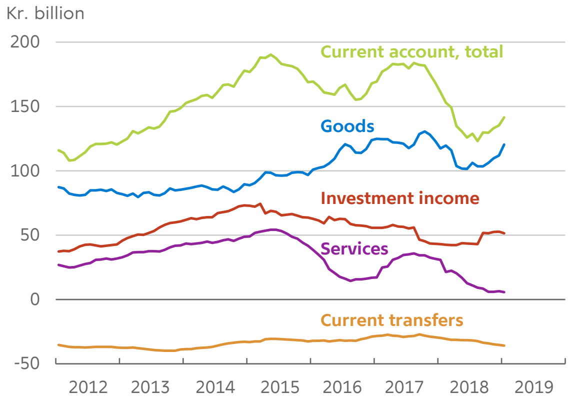
Against the backdrop of a positive outlook for the Danish economy and a sustained low level of interest rates, prices of single-family houses nationwide are expected to rise in the coming years, but at a slower pace than previously. The projection assumes that the agreement on a new housing taxation system will support prices of single-family houses until 2021 when the agreement takes effect[4]. Conversely, slightly higher interest rates will have a downward effect on price growth. Prices of single-family houses nationwide are thus forecast to rise by a little more than 3 per cent p.a. towards 2020 and a little under 3 per cent in 2021.

Slightly weaker outlook for Danish exports
Danish firms have benefited from the global growth, and exports, measured in both current and constant prices, continued to rise in the 2nd half of 2018 despite slightly weaker growth in some trading partner countries. Industrial exports accounted for the strongest growth, while exports of services were flat.

The development in exports is expected to be more subdued in the coming years. Growth in world trade has declined. This is associated with a downward adjustment of growth expectations in many countries, including Germany, but stronger protectionism with higher tariffs on selected products could also play a role.

The slowdown in world trade and prospects of lower growth in the euro area have led to a small downward adjustment of market growth in Denmark's export markets in the projection period, cf. Appendix. However, export market growth is still robust. Overall, in terms of competitiveness, Danish firms

Decline in the current account surplus Chart 12



Note: 12-month sums.
Source: Statistics Denmark.

are well equipped to meet demand in the export markets. Wage competitiveness has declined over the past year, but remains robust, and the effective krone rate has weakened a little since last summer. In the short term, this supports exports, making Danish export goods cheaper in the foreign markets.

The current account surplus has declined by kr. 25 billion since the beginning of 2018. Measured as a 12-month sum, the surplus was kr. 130 billion at end-2018, corresponding to 6 per cent of GDP, cf. Chart 12. This development was driven mainly by a decline in the trade surplus for goods and especially services. The decline in the surplus on the balance of services over the past year or so is driven mainly by increased imports of services and lapse of the effect of a large patent-related payment in the 1st quarter of 2017. The return on Danes' foreign assets has been flat. As domestic activity picks up in the coming years, the current account surplus is expected to decline further, but to remain at a high level.

In contrast to the current account surplus, current savings are positive for both households and firms and virtually zero for the public sector, cf. Chart 13.

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

Viewed in a longer perspective, a surplus for all three sectors at the same time is unusual.

The general government budget is in balance
The government budget surplus was 0.3 per cent of GDP in 2018. Disbursements of early retirement contributions made earlier to persons who opted out of the early retirement scheme reduced the surplus a little.

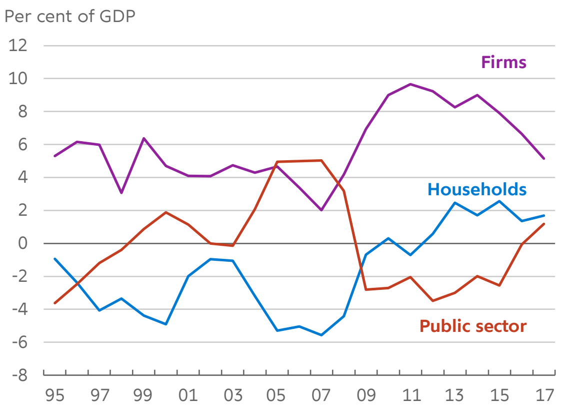
Viewed in isolation, the continued economic growth will improve the general government budget balance towards 2021. Conversely, the extraordinary refund of property taxes in connection with the introduction of the new property valuation system in 2020 and 2021 will weaken the government budget balance. Against this background, a result close to balance is expected this year and the next two years.

This year and next year the government expects a structural government budget deficit of 0.1 per cent of GDP. The planned fiscal policy stance thus has a margin to the lower limit in the Budget Act of -0.5 per cent of GDP.

The downside risks in the projection have increased
The downside risks in the projection are linked mainly to external conditions, while the upside risks are linked to domestic conditions.

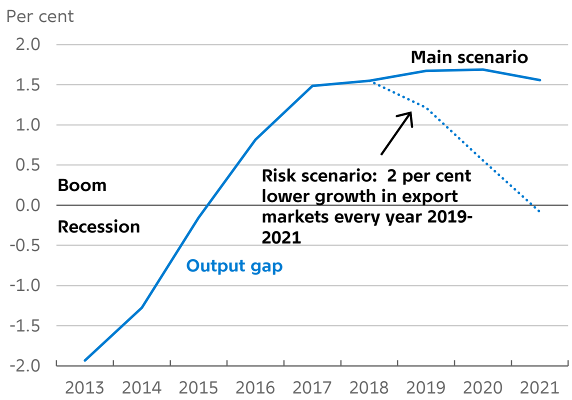
The risk of weaker-than-expected global growth has increased relative to the autumn projection. The slowdown in growth in Germany and China, among others, may be stronger than expected. Uncertainty about the international trade conflict and Brexit also play a role. The tendency towards increased protectionism and the general weakening of the rule-based multilateral cooperation pose a downside risk which could affect Denmark's trade with abroad. This may impede prosperity developments in the slightly longer term.

Savings surplus for firms, households and the public sector Chart 13



Note: Net lending.
Source: Statistics Denmark and own calculation.

Risk scenario: Denmark is hit, but not likely to enter a deep recession Chart 14



Anm.: Calculations using Danmarks Nationalbank's macroeconomic model, MONA.
Kilde: Danmarks Nationalbank.

The current highly expansionary US fiscal policy may lead to overheating and subsequently to a marked recession. Such a scenario may affect the pricing of financial assets and amplify the challenges in several emerging economies.

A major slowdown abroad will also affect the Danish economy, which is nevertheless well prepared for withstanding a slowdown in foreign demand, should the downside risks materialise. Current financial savings for both households and firms are positive, and their wealth is substantial. At the same time, public finances in Denmark are sound. This is a good point of departure. Simulations, using Danmarks Nationalbank's macroeconomic model, MONA, show that a 2 percentage point slower-than-anticipated export market growth each year 2019-21 will entail notably lower growth in the Danish economy, but it will not result in a deep recession, cf. Chart 14.

The upside risks are linked mainly to domestic conditions. Danish households are still cautious and have financial room for stronger consumption growth than assumed in the projection. In addition, over the coming years, households will receive various one-off disbursements in the form of reversal of excess housing taxes previously paid. Stronger-than-expected consumption growth in a boom period could increase the risk of a more widespread shortage of labour in the economy.

The projection assumes that the tendency towards later retirement will continue in the coming years and that it will still be possible to attract foreign labour. Otherwise the labour market will tighten faster.

Central forecasts from the projection

Table 1

					2018		
Real growth on preceding period, per cent.	2018	2019	2020	2021	Q 2	Q 3	Q 4
GDP	1.2	1.7	1.7	1.6	0.3	0.4	0.7
Private consumption[1]	2.3	1.8	2.2	2.1	0.6	-0.1	0.3
Public consumption	0.5	0.5	0.4	0.6	-0.1	-0.8	1.2
Residential invest	5.1	2.7	2.9	2.3	0.6	-0.8	0.2
Public investment	3.4	4.1	-0.4	3.3	1.2	2.0	0.9
Business invest	5.3	1.4	5.2	4.5	14.4	-18.9	-1.8
Inventory investment, etc.[2]	0.1	0.0	0.0	0.0	-0.8	0.4	0.0
Exports	0.5	2.3	2.5	2.6	-0.2	1.7	0.9
Industrial exports	3.1	3.4	3.2	3.4	1.0	0.5	3.4
Imports	2.9	2.0	3.4	3.7	2.2	-4.6	0.0
Employment, 1,000	2,972	3,004	3,030	3,053	2,968	2,977	2,987
Gross unemployment, 1,000 persons	108	101	94	89	109	107	105
Current account, per cent of GDP	6.0	6.6	6.1	5.6	4.7	6.8	7.3
Government balance, per cent of GDP	0.3	-0.2	-0.3	-0.4	-0.1	-0.3	1.6
House prices[3], per cent year-on-year	3.5	2.9	3.6	2.9	4.0	2.9	2.3
Consumer prices (HICP), per cent year-on-year	0.7	1.2	1.5	1.8	0.9	0.7	0.7
Hourly wages (manufacturing), per cent year-on-year	2.4	2.8	3.3	3.4	2.5	2.4	2.3

Source: Statistics Denmark and own forecasts.
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.

International background

Global economic growth is set to slow down. While growth has already slowed down in the euro area and China, it is expected to do so in the USA when the effects of the tax reform and fiscal stimuli gradually diminish in 2019-20. The slowdown is a natural element of a balanced economic cycle, as it gets harder to bring additional resources into the economy after several years of high growth. The dampening of growth could become stronger than expected, however, and the downside risks dominate over the projection horizon. This applies e.g. to the risk of an escalation of the trade conflict between the USA and China, which has been suspended for the time being while the parties are negotiating a new trade agreement. In addition, Brexit without a trade agreement with the EU ("no deal" Brexit) or a marked slowdown in China could potentially cause a confidence crisis with derived effects on the global economy.

Global dampening of growth – especially in the euro area

Global growth has slowed down a little over the last few quarters. This is mainly reflected in industrial production, which has fallen in the euro area, while growth has declined in China, cf. Chart 15.

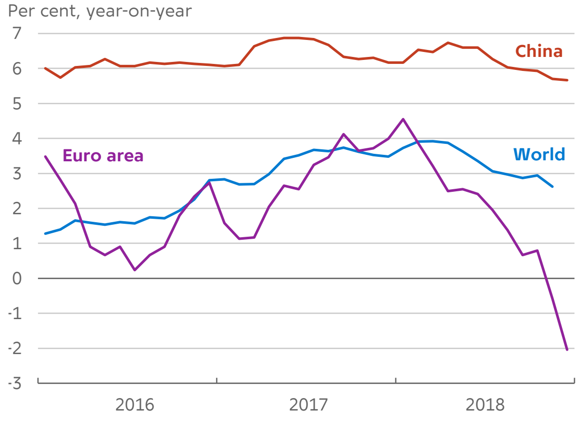
The slowdown in growth is partly attributable to temporary factors, including problems related to the transition to the new EU emission standards, which have hit the German automotive industry in particular, and to the yellow vest demonstrations in France.

In the euro area, the slowdown in growth can also be attributed to weaker foreign demand following strong growth in 2017. Nominal growth in exports of goods, which account for just under 20 per cent of euro area GDP, fell from 7.1 per cent in 2017 to 3.7 per cent in 2018, cf. Chart 16, inter alia due to declining growth in exports to China, Russia and Turkey. This development should be seen in the light of the Chinese slowdown, the impact of falling oil prices on the Russian economy, and the Turkish currency crisis. On the other hand, export growth increased to the USA, which experienced a significant economic upswing in 2018.

The Chinese economy is undergoing a transition where investment and exports play a smaller role, while consumption accounts for a larger share. This may dampen export growth to China, since the

Decrease in industrial production in the euro area

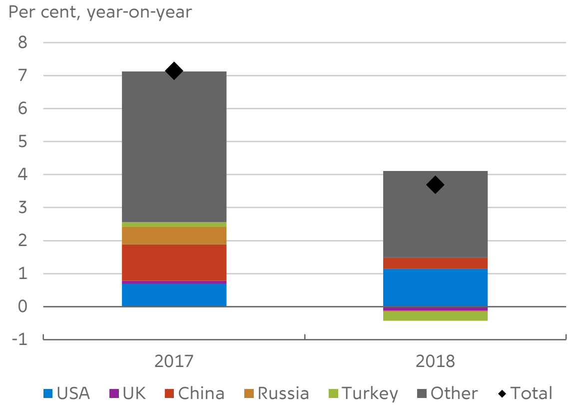
Chart 15



Note: 3-month moving averages.
Source: Macrobond.

Lower nominal export growth in the euro area

Chart 16



Note: The chart shows the nominal annual growth in euro area exports of goods broken down by contributions from the five largest recipient countries and other countries.
Source: Macrobond.

import content of consumption is relatively smaller, thereby contributing to explaining the weak increase in euro area exports to China. The Chinese contribution to global growth has been constant in the past few years despite gradually declining growth rates, cf. Chart 17. The reason is that the Chinese economy continues to grow at a faster rate than the global average and accounts for an increasing share of the global economy.[5]

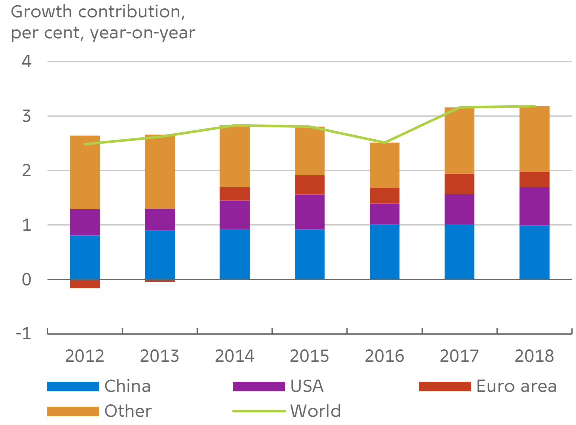
Growth in domestic demand has been largely unchanged in the euro area. This reflects the positive spiral whereby growth in the labour market and in disposable incomes helps to support private consumption and vice versa. Recently, employment growth in the euro area has declined slightly, however, cf. Chart 18.

GDP growth in Germany declined to 1.5 per cent in 2018, down from an average of 2.1 per cent in the period 2014-17. In addition to lower export growth, the slowdown can be attributed to weak development in private consumption despite labour market growth. The Italian economy is in a technical recession following GDP declines in both the 3rd and 4th quarters 2018, caused in part by weak development in investment due to political uncertainty. The Spanish economy, on the other hand, shows fairly strong growth, driven mainly by domestic demand.

In China, growth has declined despite fiscal stimuli. Among the reasons are regulatory fiscal tightening measures in the financial area and the trade conflict with the USA. GDP grew by 6.6 per cent in 2018, which was the lowest level since 1990.

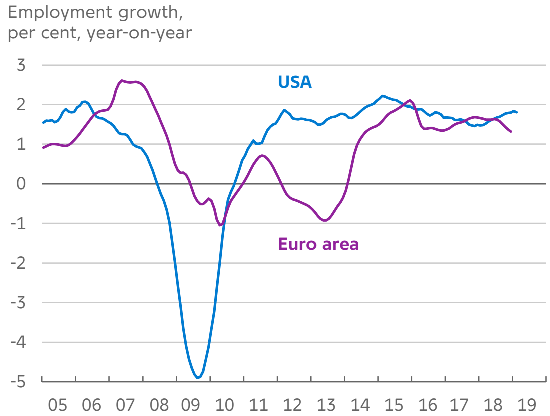
In the USA, the tax reform and other fiscal stimuli contributed to strong growth throughout 2018. The federal government was partially shut down for five weeks from 22 December 2018 until 25 January 2019 due to political disagreement over the budget and especially the building of a wall on the Mexican border. According to the Congressional Budget Office, the shutdown will, viewed in isolation, reduce GDP by 0.1 per cent in the 4th quarter and 0.2 per cent in the 1st quarter. Most of the output loss is expected to be recovered, but this does not apply to just over

Global growth is, to a great extent, driven by China Chart 17



Source: Macrobond.

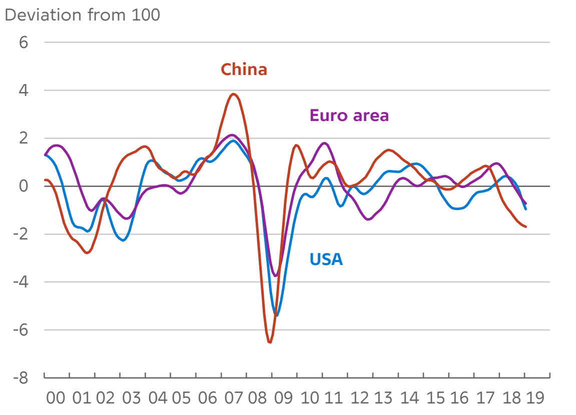
Employment growth in the euro area has declined slightly Chart 18



Note: 3-month moving averages.
Source: Macrobond.

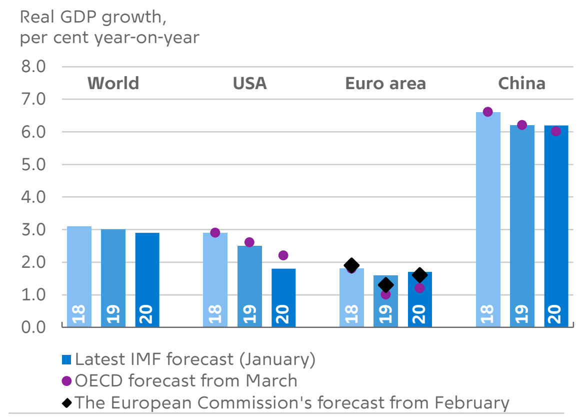
5 This can be illustrated by the fact that China's contribution to global growth in 2018 was actually higher than in 2012, despite growth in 2012 being more than 1 percentage point higher than in 2018.

The OECD's leading indicators point to a dampening of growth Chart 19



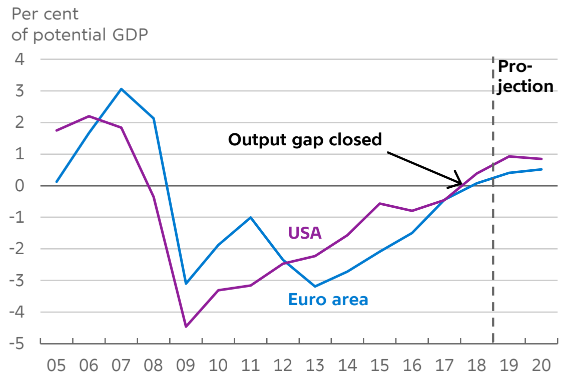
Note: A value above/below 100 indicates growth above/below the long-term trend.
Source: Macrobond.

The IMF expects slightly lower global growth in the coming years Chart 20



Source: European Commission, IMF and OECD.

The output gap is closed in the USA and the euro area Chart 21



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: Macrobond.

one-fourth, because, unlike government employees, the private sector is not compensated for loss of income.

Global growth has peaked

Global growth shows several signs of having peaked in this business cycle. For example, leading indicators from the OECD show that growth in the world's three largest economies is expected to decline to a level below the long-term trend, cf. Chart 19. The indicators are based on data for e.g. orders, inventories, equity markets and confidence barometers and typically show turning points in the economy 6-9 months ahead of GDP.

The International Monetary Fund, IMF, is also expecting a minor global slowdown in growth in the next few years, cf. Chart 20. The dampening of US growth can be attributed to factors such as the gradual scaling down of the extraordinary stimuli from tax cuts and additional federal appropriations. The international organisations' growth estimates for the euro area have gradually become more pessimistic in recent months, especially in relation to 2019. To some extent, this reflects weaker-than-expected growth at the end of 2018.

Actual output in both the USA and the euro area is now higher than estimated for potential output (positive output gap), cf. Chart 21. Despite the boom, fiscal policy has been eased substantially in the USA in recent years, while being virtually neutral in the euro area. In 2019, expansion of fiscal policies is expected in the euro area, including in Germany and Italy.

In order to avoid overheating, a slight fall in growth rates is a sign of health when the economy has reached its potential level. But in the euro area this happens at a time when the economy is still stimulated by extraordinarily accommodative monetary policy. This leaves some uncertainty as to the actual robustness of the upswing in the euro area.

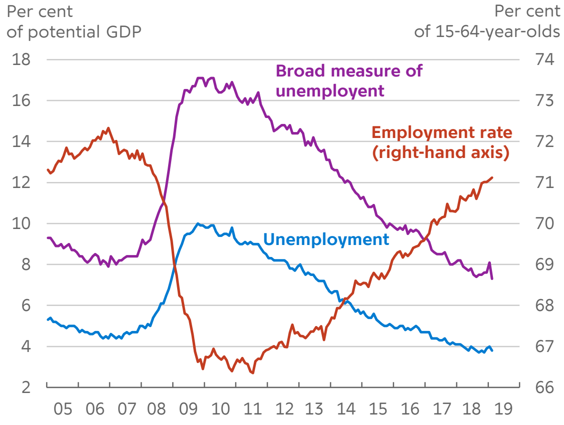
In the assessment of the IMF, the projection involves significant downside risks. These include an escalation of the trade conflict between the USA and China where the countries have been taking turns in imposing extra tariffs on goods imported from the opposite party. However, things looked up after the G20 meeting in early December when President Donald Trump and President Xi Jinping concluded an agreement to refrain from introducing new tariffs before 1 March in order to be allowed to arrive at a trade agreement. On 24 February, President Trump announced that the USA would further postpone the introduction of new tariffs on Chinese goods as a result of progress in the negotiations, but no new deadline has been specified so far.

There is also considerable uncertainty about Brexit and its consequences for the UK economy. The pound weakened substantially after the referendum in June 2016, but has shown a more or less flat trend against the euro since then. Initially, the weakened pound contributed to eroding consumers' purchasing power and dampening the increase in private consumption. At the same time, investment activity was weak due to the heightened uncertainty. As a result, growth in the UK economy has been weaker than expected before the Brexit referendum. If the UK has to leave the EU without a trade agreement, the Bank of England expects a severe domestic recession resulting in an immediate drop in GDP by up to 8 per cent.

Finally, further tightening of financial conditions, e.g. in the form of plunging equity prices, higher rates of interest and increased interest rate spreads, could result in contagion effects from the financial markets to the real economy. This could particularly affect countries with high private and public sector debt. A confidence crisis in the financial markets could be caused by e.g. Brexit without a trade agreement or a more pronounced slowdown in China than expected.

Few spare resources in the US labour market

Chart 22



Note: The broad messure of unemployment includes not only the unemployed but also those with a marginal affiliation to the labour market and people working part time who would like to work full time.
Source: Macrobond.

Increased labour market pressures lead to higher wage growth

The US labour market has seen more or less continuous growth since unemployment peaked at 10 per cent in the autumn of 2009, cf. Chart 22. The employment rate is at almost the same level as before the financial crisis, and unemployment has been around 4 per cent since the autumn of 2017. The broad measure of unemployment, which includes not only unemployed people, but also people with a marginal affiliation to the labour market and involuntary part-time employees, has averaged 7.7 per cent over the past year, lower than the pre-crisis level. As a result, it now takes US firms an average of 31 days to fill a vacant position against 23 days in 2007 and 17 days in 2009.

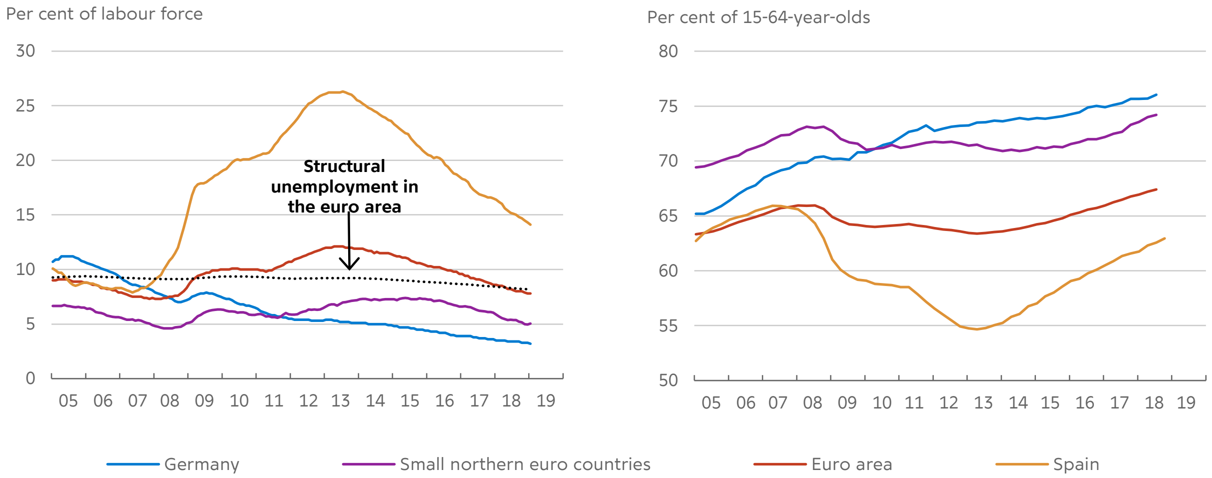
Unemployment in the euro area has declined to a level close to the pre-crisis level, but the labour market is currently more balanced, as reforms have helped reduce structural unemployment. The levels of unemployment vary considerably across the euro area, however. For example, unemployment is 3.2 per cent in Germany, but 14.1 per cent in Spain, cf. Chart 23 (left). The Spanish economy is suffering from structural challenges with high long-term unemployment, youth unemployment of almost 40 per cent and many involuntary part-time employees on temporary contracts. This illustrates that some euro

Labour market pressures and employment rates in the euro area

Chart 23

Labour market pressure varies across the euro area

The euro area employment rate is higher now than before the crisis



Note: Left – Small northern euro area member states shows the simple average for Finland, the Netherlands and Austria. Structural unemployment for the euro area is shown as an average of the estimates from the European Commission and the OECD.
Right – Small northern euro area member states shows the simple average for Finland, the Netherlands and Austria.
Source: Macrobond.

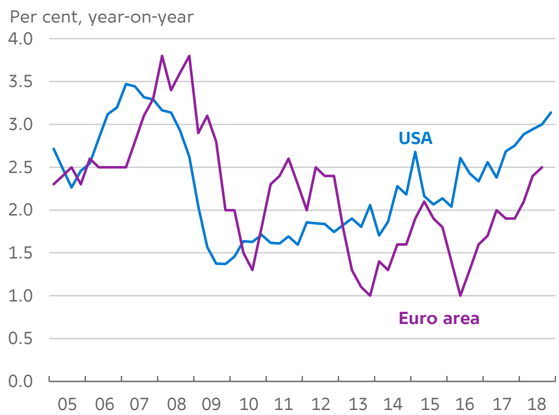
area member states still have unused resources that can be brought into the labour market.

The employment rate in the euro area has increased to a record-high level, cf. Chart 23 (right). This can be attributed to the boom and to comprehensive labour market reforms in several countries. For example, the employment rate in Germany has grown by more than 10 percentage points since the implementation of the Hartz reforms, which introduced the so-called mini jobs, increased the incentives to stay in the labour market for longer and strengthened the active labour market policy in the first half of the 2000s. Spain implemented a major labour market reform in 2012, but its employment rate remains somewhat below the euro area average.

Mounting labour market pressures generate increased wage growth in both the USA and the euro area, cf. Chart 24. Wage growth is highest in the USA, which also experiences the strongest labour market pressure. A growing proportion of firms are reporting labour shortages, and this could contribute to amplifying wage pressures in the coming quarters.

Growing wage pressures in the USA and the euro area

Chart 24



Note: Private sector wage growth.
Source: Macrobond.

Dampened price pressures despite increasing wage growth

The annual rise in US consumer prices, measured by the rate of increase in the Personal Consumption Expenditures index, PCE, was 1.8 per cent in November, cf. Chart 25. The Federal Open Market Committee, FOMC, expects annual rates of increase of 1.9 and 2.1 per cent in 2019 and 2020, respectively. Expectations for 2019 reflect e.g. lower energy prices, which are only expected to have a temporary impact on overall inflation. Prices of services in particular contribute to inflation. On the other hand, the price development for goods is very subdued, reflecting e.g. that goods prices are kept in check to a greater extent due to international competition.

In the euro area, the increase in nominal wage growth has not yet filtered through to price developments either. Hence, core inflation, i.e. consumer price inflation excluding energy, food, alcohol and tobacco, has fluctuated around 1 per cent since 2015. General price developments, measured by the rate of increase in the Harmonised Index of Consumer Prices, HICP, subsided at the end of 2018 due to falling energy prices. The European Central Bank, ECB, expects the contribution from energy prices to gradually decline, meaning that the fall will not have any implications for monetary policy.

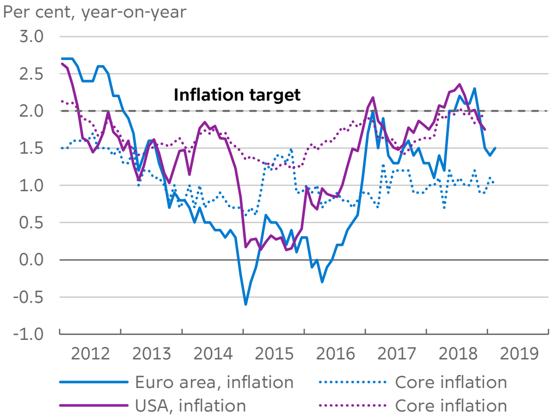
According to the market, the Federal Reserve has stopped raising interest rates

At its meeting in January, FOMC kept the target range unchanged at 2.25-2.50 per cent, cf. Chart 26. Since December 2015, when the FOMC first raised the interest rate after the financial crisis, the monetary policy interest rate has been raised by 2.25 percentage points. In its latest forecast from December, the FOMC adjusted its expectations of interest rate increases downwards from three to two in 2019 and from two to one in 2020. The reasons given were lower global growth, increased financial market volatility and tighter financial conditions such as plunging equity prices, higher rates of interest and increased interest rate spreads.

According to the its press release from January, the FOMC decided to stop its use of *forward guidance*, i.e. explicit statements on future monetary policy intentions, in relation to interest rate decisions. The aim is to strengthen the data dependence on interest rate decisions. For the time being, the FOMC will continue providing *forward guidance* on the size of the Fed's balance sheet.

Falling energy prices weigh on US and euro area inflation

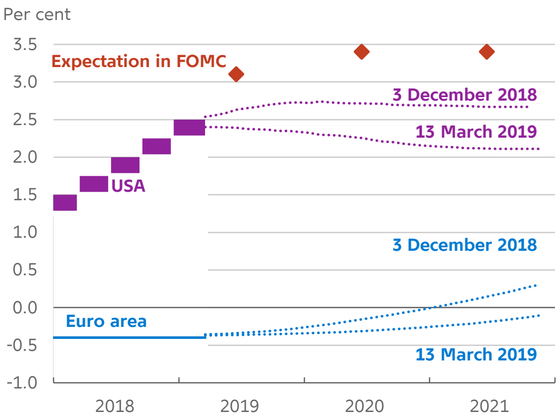
Chart 25



Note: Core inflation is defined as HICP excluding energy, food, alcohol and tobacco for the euro area and the Personal Consumption Expenditures index, PCE, excluding energy and food for the USA.
Source: Macrobond.

The financial markets do not expect further interest rate increases in the USA

Chart 26



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

Pricing of Fed funds futures now shows that market participants regard it as almost certain that the FOMC has stopped raising interest rates in this business cycle. This could indicate the market assessing that the time of the next recession has drawn closer. This can also be seen by a flattening of the yield curve, cf. Chart 27. Historically, a negative slope of the yield curve has often preceded recessions in the USA. That is not yet the case.

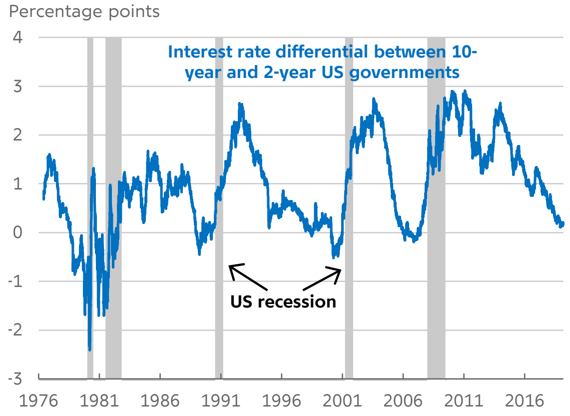
At its interest rate meeting in March, the ECB kept its deposit rate at -0.40 per cent. At the same time, the ECB changed its forward guidance to the effect that monetary policy interest rates are now expected to remain unchanged at least until the end of 2019. Before March, the rate of interest was not expected to be raised until after the summer of 2019 at the earliest. Furthermore, ECB President Mario Draghi announced a new series of targeted longer-term refinancing operations, TLTROs, starting in September 2019 and ending in March 2021. TLTROs are aimed at strengthening the transmission of monetary policy by supporting lending to households and non-financial corporations. The monetary policy adjustment should be viewed in the light of the ECB's substantial downward adjustment of its GDP growth forecast for 2019 and the fact that it now expects a growth rate of only 1.1 per cent, down from its previous forecast of 1.7 per cent. Risks linked to the growth outlook are downside risks, due to factors such as political uncertainty, the threat from increased protectionism and financial market volatility.

Since June, the ECB has gradually reduced its asset purchases. The ECB finally stopped making further purchases at the end of December. It plans to reinvest the full amount from maturing bonds purchased under the programme. The reinvestments will be continued for a prolonged period after the time of the first rise in interest rates. The ECB assesses that, viewed in isolation, the effects of the purchase programme will reduce the average 10-year government yield in the euro area by 1.0 percentage point in 2019, falling to just over 0.5 percentage point in 2023.

Uncertain growth pattern pushes down interest rates

Lower risk appetite triggered an investor flight to safe assets at the end of 2018. This contributed to pushing down the 10-year government yields in the euro area.

The US yield curve signals expectations of lower future growth Chart 27



Note: The chart shows the difference between the yields on a 10-year and a 2-year US government bond.
Source: Macrobond.

Italian government yields rose notably after the election in March 2018, cf. Chart 28. Forming a government turned out to be difficult, and the process featured diverging political announcements, including about the euro cooperation and fiscal accommodation. Italy's new government was in place in June, but its first draft budget clashed with the EU's fiscal rules, causing uncertainty during the autumn. In December, the Italian budget was approved by the European Commission and the Italian parliament, which led to a drop in interest rates.

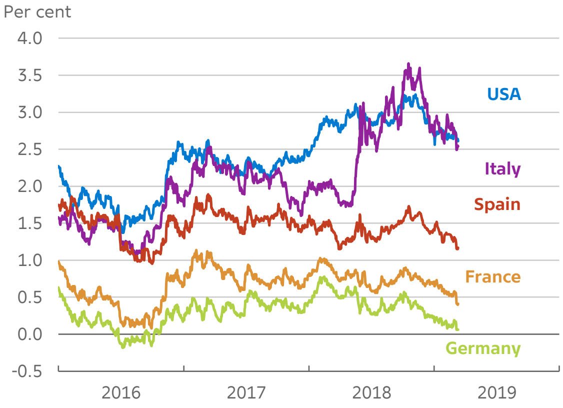
US government yields fell at the beginning of the year, in line with market expectations of fewer increases in monetary policy interest rates.

Equity market turbulence in 2018

Equity markets fluctuated substantially in 2018. The leading US stock index, S&P 500, rose steadily from the spring of 2018, while the other major stock indices fell, cf. Chart 29. However, mounting concerns about an imminent recession in the USA and uncertainty about the future monetary policy stance led to substantial drops in December, resulting in the US index also ending with a negative balance for the year as a whole.

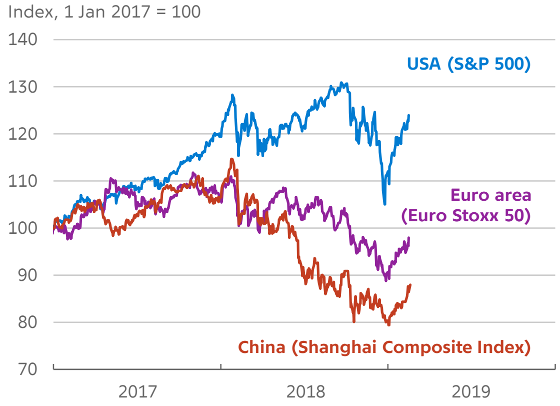
Price developments in the European stock market, measured by Euro Stoxx 50, showed a downward trend throughout most of 2018. The ECB's asset

Falling Italian government yields after EU budget approval Chart 28



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

Higher equity prices in early 2019 after considerable falls in December Chart 29



Source: Macrobond.

purchase stop and Brexit concerns contributed to driving prices further down. The Chinese stock market, measured by the Shanghai Composite index, was burdened by the ongoing trade conflict between the USA and China and fell sharply throughout 2018.

In early 2019, equity price falls were partially reversed in the USA as well as in the euro area and China. The increasingly positive equity market trends are partly attributable to expectations of new growth stimulating initiatives in China, positive signals from the USA and China of a new trade agreement as well as the prospect of less severe monetary policy tightening in the USA and the euro area than previously expected.

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 4th quarter of 2018. The projection involves a number of assumptions concerning the international economy, financial conditions and fiscal policy.

The international economy
Export market growth is expected to be 3.2 per cent in 2019 and 3.5 per cent in 2020 and 2021, cf. Table A1. This is weaker than previously expected, reflecting the latest estimates from the IMF, the European Commission and the OECD. The downward adjustments reflect growth slowdown and political uncertainty in major 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. The money market interest rate, measured by the T/N rate, is projected by a 3-month CITA swap rate.

The average bond yield (average of yields to maturity for government and mortgage bonds) is expect-

Overview of projection assumptions

Table A1

	2018	2019	2020	2021
International economy:				
Export market growth, per cent year-on-year	3.2	3.2	3.5	3.5
Foreign price[1], per cent year-on-year	2.1	1.1	1.6	1.6
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	-0.5	-0.4	-0.2
Average bond yield, per cent p.a.	0.7	0.7	0.9	1.1
Effective krone rate, 1980 = 100	103.6	102.9	102.9	102.9
Dollar exchange rate, DKK per USD	6.3	6.5	6.5	6.5
Oil price, Brent, USD per barrel	70.9	65.2	64.8	62.8
Fiscal policy:				
Public consumption, per cent year-on-year	0.5	0.5	0.4	0.6
Public investment, per cent year-on-year	3.4	4.1	-0.4	3.3
Public sector employment, 1,000 persons	826	827	828	829

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.

ed to rise over the projection period, from 0.7 per cent initially to 1.2 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.

In early March 2019, the price of oil was around 64 dollars per barrel. The oil price is assumed to develop in line with futures prices, which entails a slight downward trend towards 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 December 2018 and the updated 2025 development from August 2018. Real public consumption is expected to rise by 0.5 per cent in 2019. Public consumption is expected to rise by 0.4 per cent in 2020 and 0.6 per cent in 2021. Public investment is expected to rise by 4.1 per cent in 2019 and further by -0.4 per cent in 2020 and 3.3 per cent in 2021, cf. Table A1.

Revisions in relation to the previous projection
Forecasts for GDP growth is adjusted downwards in 2019 due to weaker export market growth, cf. Chart A.2. The forecast for consumer price inflation (HICP) is somewhat weaker compared with the previous projection.

Revisions in relation to the previous projection Table A2

	GDP			Consumer prices, HICP		
Per cent year-on-year	2018	2019	2020	2018	2019	2020
Projection, September 2018	1.3	1.8	1.7	0.8	1.4	1.6
Contribution to revised forecast from:						
Export market growth	-0.2	-0.3	-0.1	0.0	0.0	-0.1
Interest rates	0.0	0.0	0.1	0.0	0.0	0.0
Exchange rates	0.0	0.1	0.1	0.0	0.0	0.1
Oil prices	0.0	0.0	0.1	-0.1	-0.3	0.0
Other factors	0.1	0.1	0.0	-0.1	0.1	-0.1
This projection	1.2	1.7	1.7	0.7	1.2	1.5

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

ABOUT ANALYSIS

As a consequence of Danmarks Nationalbank's role in society we conduct analyses of economic and financial conditions.

Analyses are published continuously and include e.g. assessments of the current cyclical position and the financial stability.

The analysis consists of a Danish and an English version. In case of doubt regarding the correctness of the translation the Danish version is considered to be binding.

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