ANALYSIS

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OUTLOOK FOR THE DANISH ECONOMY – SEPTEMBER 2018

Boom with no signs of imbalances

- Growth in the Danish economy continues, with average GDP growth of 1.8 per cent in 2017 and 2018 and similar growth rates in the coming years. There are no signs of considerable imbalances having built up, and there is scope for intensified demand pressure due to e.g. prospects of continued solid growth in the labour force.
- The risk of increased protectionism has to some extent materialised in 2018, and an escalation will threaten continued growth in the global and the Danish economy.
- One precondition for balanced growth is that fiscal policy does not stimulate demand further. The government should also be prepared to step in and tighten fiscal policy with a view to dampening growth in demand.

CONTENT

A moderate boom

with mounting labour market pressures

Read more

1.8 per cent growth in real GDP in 2017-18

1.8 per cent in 2019 and 1.7 per cent in 2020

Read more

Fiscal policy

should not stimulate demand further

Read more

Outlook for the Danish economy at a glance

- The Danish economy has moved further into the upswing without considerable imbalances building up.
- The global economy is also growing and there are prospects of solid growth in Denmark's export markets.
- Labour market pressures have intensified, and there are initial signs of this being reflected in higher wage increases, especially in the construction sectors.
- Consumer prices are still showing a weak trend and underlying inflation pressures in the economy remain moderate.
- Financial conditions are expansionary. Consumers are optimistic, savings are high and wealth is rising. There is a solid foundation for continued growth in demand.
- The housing market is picking up in all of Denmark, supporting growth. In Copenhagen, there are signs of prices for owner-occupied flats having peaked for the time being.
- Real GDP is expected to grow by 1.8 per cent on average in 2017 and 2018 and similarly in 2019 and 2020. Employment is expected to increase by a further 70,000 towards 2020.
- The projection's upside risks are related to potentially somewhat stronger-than-expected propensities to consume and invest among households and firms. This will result in higher-than-expected capacity pressures. The downside risks are linked mainly to abroad, including the issue of whether protectionism will spread.
- In good times it is important to prepare for the time after a cyclical reversal. Fiscal policy should contribute to a continually balanced upswing and should not stimulate demand further. This will help to soften the landing after the boom. Dampening of growth towards the end of the boom does not call for special economic policy measures.

Key economic variables

Real growth against the previous year, per cent	2017	2018	2019	2020	2017 Q4	2018 Q1	2018 Q2
GDP (real), per cent	2.3	1.3	1.8	1.7	0.9	0.3	0.2
Employment, 1,000 persons	2,921	2,969	3,002	3,026	2,939	2,953	2,965
Gross unemployment, 1,000 persons	116	107	99	93	115	111	109
Balance of payments, per cent of GDP	7.6	5.9	6.3	5.8	6.5	4.9	4.6
Government balance, per cent of GDP	1.1	0.0	-0.3	-0.5	1.3	-0.1	0.5
House prices[1], per cent year-on-year	4.0	3.8	3.1	2.7	3.9	4.9	3.8
Consumer prices (HICP), per cent year-on-year	1.1	0.8	1.4	1.6	1.2	0.5	0.9
Hourly wages (manufacturing), per cent year-on-year	2.1	2.5	3.0	3.3	2.0	2.2	2.5

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

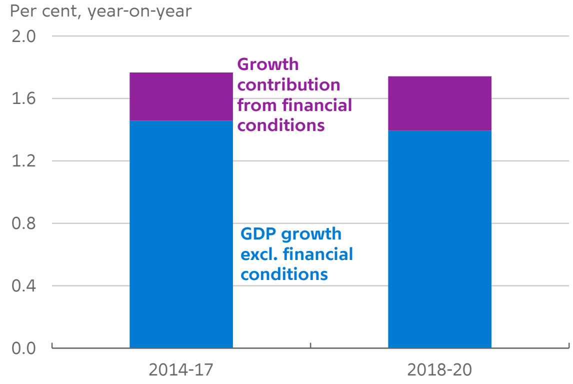
Outlook for the Danish economy

The boom continues without signs of considerable imbalances building up

The Danish economy has been in an upswing since the beginning of 2013, with sustained growth in the gross domestic product, GDP, and rising employment. Although moderate compared with previous upswings, the rate of growth has been above the potential. This development continued in the first half of this year. This is one of the longest periods of continuous growth in the most recent decades, and it has taken place without any considerable imbalances building up. Especially the continually increasing labour force has been a key prerequisite for the long-lasting upswing – and for it to continue.

Financial conditions are expansionary at the moment and have been so for some time, thereby helping to sustain the boom[1]. The markets expect the expansionary financial conditions – including very low interest rates – to continue throughout the projection period, cf. Chart 1.

Expansionary financial conditions are supporting economic growth Chart 1



Note: Expansionary financial conditions assessed on the basis of interest rates, credit, house prices and equity prices. Adjusted for the patent payment in 2017, cf. Box 1.
Source: Danmarks Nationalbank.

The low interest rates have buoyed up the housing market in recent years, and this growth has spread to almost all of Denmark. But for owner-occupied flats in Copenhagen, the number of trades subsided a little in the 1st half of 2018 and prices have fallen marginally. This could indicate that price increases for owner-occupied flats in the large cities, including Copenhagen, have peaked for the time being. Copenhagen was also first to show signs of dampening during the cyclical reversal in the mid-2000s.

Recent years' rising house prices have boosted household wealth. At the same time, households have been saving for a relatively long time and now have more robust financial buffers. Disposable incomes have increased in step with rising employment and low interest rates. Together with high consumer confidence, these factors provide a good point of departure for non-credit-driven growth in private consumption in the coming years, just as households have buffers against higher interest rates.

The global economy is also growing at a good pace, supported by accommodative monetary policies and in the USA by a strongly expansionary fiscal policy. But in the euro area growth has slowed down a little over the last few quarters.

The international growth and the very low interest rates are strong stimuli for the demand for Danish goods and services. This provides a solid foundation for the Danish boom to continue and for the Danish economy to move deeper into the boom. However, increased uncertainty about the international situation should also be taken into account. The USA has introduced several protectionist measures against its trading partners, which have retaliated. Any further escalation will weaken international trade and may ultimately affect Denmark's export and import opportunities and thus prosperity.

Growth in real GDP is forecast at 1.3 per cent this year, rising to 1.8 per cent in 2019 and 1.7 per cent in 2020. Compared with the most recent projection, this represents a downward adjustment of the growth forecast for 2018. The main reason is that Statistics Denmark has placed a large patent-related payment

1 See Jakob Roager Jensen and Jesper Pedersen, Financial conditions are supporting the upswing, *Danmarks Nationalbank Analysis,* No. 14, September 2018.

in the 1st quarter of 2017, cf. Box 1. The GDP growth forecast for 2017 and 2018 as a whole is 1.8 per cent on average.

On the demand side, private consumption and exports will be the main drivers of growth in the coming years, cf. Chart 2. Employment is expected to rise by 70,000 persons until end-2020, so that it will have increased by a quarter of a million persons, i.e. almost 10 per cent, in total since 2013.

As the economy enters the more advanced stages of the boom in the coming years, production capacity pressures will intensify.

The Danish economy is well prepared for this. There are still available resources outside the labour market to be tapped, e.g. students, and as the early retirement and retirement ages are raised further in the coming years, more and more people will postpone retirement. At the same time, the large current account surplus provides scope for meeting some of the demand via higher imports. The output gap, reflecting the difference between actual and cyclically neutral output, is assessed to grow only slightly.

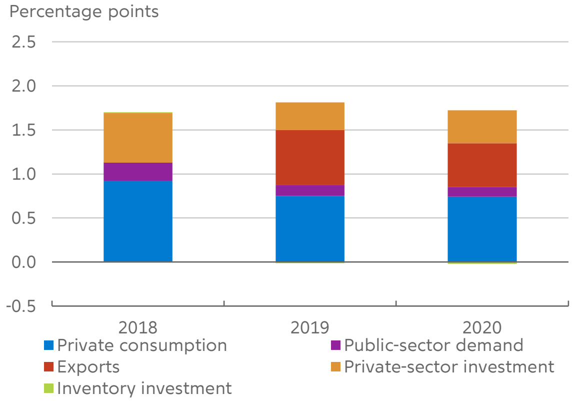
This assessment is associated with significant uncertainty about the precondition of a larger labour force and the spare capacity in the labour market. In previous booms, it has been seen that rapid tightening of the labour market – typically in combination with the housing market – can trigger overheating of the economy.

Given the outlook for continued low interest rates, it falls heavily on fiscal and structural policies to ensure a continually balanced upswing. According to the Finance Bill, the fiscal and structural policies will have a slightly dampening overall effect on capacity pressures in the Danish economy this year and next year. However, this is solely attributable to predicted effects of previous reforms. Fiscal policy does not contribute to dampening growth in demand this year and next year. The agreement on the Finance Act 2019 should not stimulate demand further.

At the same time, the government should be prepared to step in and tighten fiscal policy at short notice with a view to dampening growth in demand if there are signs that the economy is about to overheat.

A slowdown will set in at some point after a long upswing period and the pressure on the labour mar-

GDP growth is driven by private consumption and exports Chart 2

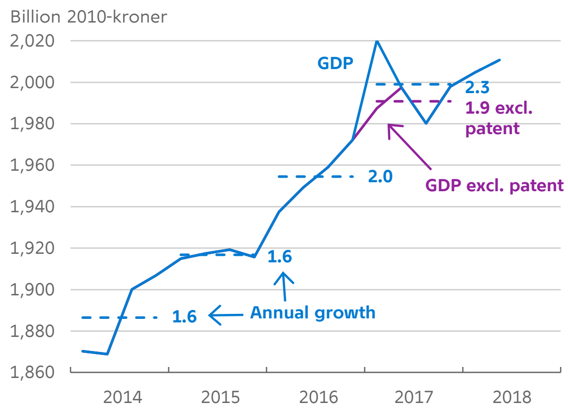


Note: Growth contributions adjusted for imports. The patent-registration in the 1st quarter 2017 is disregarded.
Source: Statistics Denmark and Danmarks Nationalbank.

Uncertainty about the GDP growth profile Box 1

In the published national accounts for the 4th quarter of 2017, Statistics Denmark placed a large non-recurring payment for a Danish-owned patent in the 1st quarter of 2017, cf. the chart. This impacts on the growth profile in 2017 and 2018, boosting GDP by 0.4 per cent in 2017 and implying a corresponding reduction in 2018 when the extraordinary growth contribution no longer applies. Statistics Denmark may possibly introduce accrual of the patent-related payment later, thereby changing the GDP growth profile again.

Uneven GDP growth profile



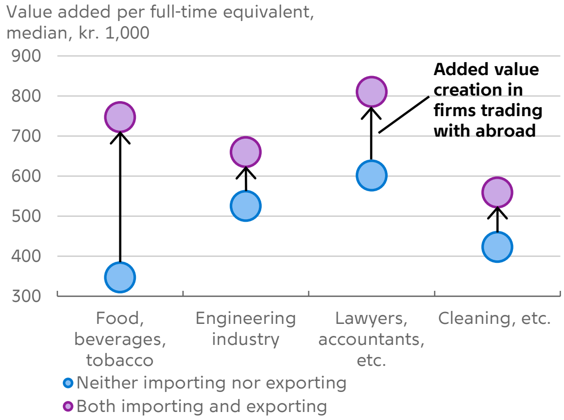
Source: Statistics Denmark and Danmarks Nationalbank.

ket and on capacity will deminish. This is a natural development and not a signal to ease fiscal policy. The automatic stabilisers in, inter alia, the taxation and income transfer systems will contribute to a soft landing.

Increased protectionism threatens the Danish economy

Protectionism has played a large role in the economic policy debate in recent years, and several specific protectionist measures have been implemented in recent months. Should this escalate, the Danish economy may be severely hit in the slightly longer term, given its high dependence on international trade. The current upswing and the prospect of continued growth are, to a large extent, linked to foreign demand for Danish goods and services and Danish firms' and consumers' access to foreign-produced goods. Access to markets abroad is the very foundation for Denmark's prosperity. On average, productivity is higher for firms which trade with abroad than for firms which do not, cf. Chart 3. So reduced international trade may also impede prosperity growth via this channel in the long term.

Higher productivity for firms trading with abroad Chart 3



Note: Data for 2015. The data is as described in Mark Strøm Kristoffersen, Morten Spange and Sune Malthe Thagaard, Diffusion of new knowledge benefits firms' productivity, *Danmarks Nationalbank Analysis*, No. 18, September 2017.
Source: Statistics Denmark and Danmarks Nationalbank.

Stronger – but manageable – labour market pressure

Employment is still rising by 3-4,000 persons per month, while unemployment is falling. This implies stronger pressure on the labour market[2].

Since the upswing took off in early 2013, employment has risen by almost 200,000 persons. Virtually all of the increase has taken place in the private sector, especially in the service sectors. The construction sectors account for the proportionally strongest growth and also for the strongest capacity pressure. About one-third of the total growth is accounted for by foreign labour. One-fourth is derived from a higher participation rate among 60-year-olds and older, and another fourth is due to declining unemployment. The remaining sixth is accounted for by individuals entering the labour market, for instance other recipients of income transfers.

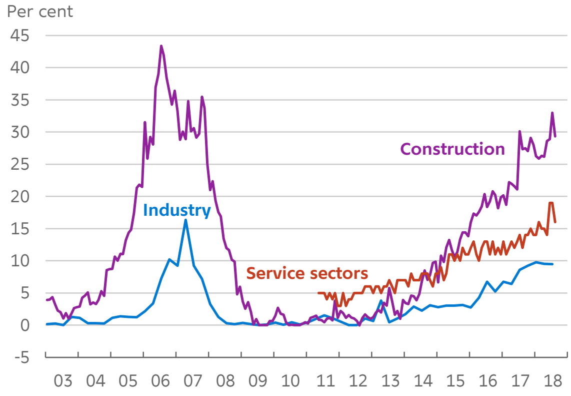
Employment growth has been healthier and more balanced during the current upswing than during the upswing in the mid-2000s, which ultimately led to overheating of the economy. Relative to the number of persons of working age, employment is somewhat lower than the 2008 level, and furthermore the average number of working hours has declined.

Access to foreign labour has been crucial during the current upswing, which would probably have derailed without this labour resource. In future, it may be more difficult to attract sufficient qualified foreign labour as many of the countries supplying this labour, especially in Eastern Europe, are booming, implying good employment opportunities in the home country at rising wages. However, this has not yet had a full impact on the influx of labour.

A large share of the firms are reporting increasing difficulties in attracting the qualified labour they need, cf. Chart 4. Relative to the number of unemployed persons, the number of new job postings is, however, still somewhat lower than ten years ago, cf. Chart 5. Moreover, capacity utilisation in industry is not high compared with previously, and both employment in construction and the volume of

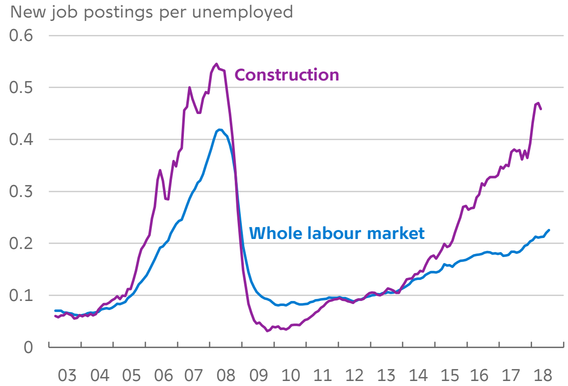
2 Cf. Christian Ellermann-Aarslev, The labour market is slowly tightening, *Danmarks Nationalbank Analysis*, September 2018.

Increased labour shortage Chart 4



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

The labour market is less tight than in the mid-2000s Chart 5



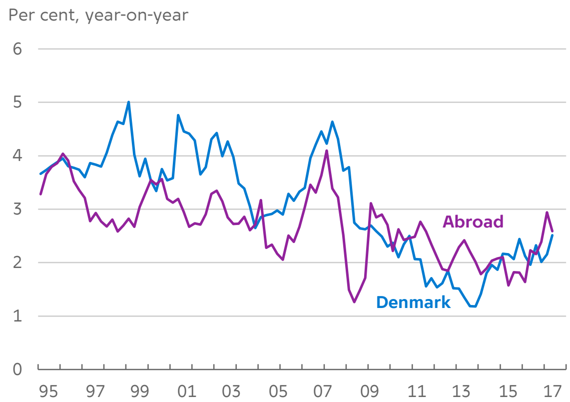
Note: 3-month moving averages. Own seasonal adjustment for construction sectors.
Source: Statistics Denmark and Danmarks Nationalbank.

residential and construction projects nationwide are somewhat lower than in the mid-2000s.

If the technical fluctuations related to integration benefits and the restructuring of the unemployment benefit system are disregarded, unemployment has fallen steadily since mid-2012. Gross unemployment, including integration benefit recipients who are ready to enter the labour market, is at around 110,000 persons, which is slightly lower than its cyclically neutral level, but unemployment has by no means reached rock bottom, as it did ten years ago.

Current employment is estimated to be approximately 40,000 higher than the structural level. In the coming years, reforms already adopted will contribute to boosting the structural labour force by a further 60,000 persons. The main driver is the gradual increase of the early retirement and retirement ages. Employment is expected to rise by 70,000 towards 2020, the majority of whom will derive from a larger labour force. Overall, the current labour market pressure is some distance away from the overheating in 2008, and this situation is expected to be maintained throughout the projection period.

Higher wage growth in Denmark Chart 6



Note: Hourly wages in manufacturing.
Source: Statistics Denmark, Confederation of Danish Employers and OECD.

Higher wage growth

There are indications that the stronger labour market pressure is beginning to be reflected in the rate of wage increase. In the 2nd quarter, private sector wages were 2.3 per cent higher than one year earlier, according to Statistics Denmark. This is higher than in recent years, but still moderate, cf. Chart 6. In the light of the sustained low rate of increase in consumer prices, this implies a solid increase in real wages.

In the construction sectors, where capacity pressures are assessed to be strongest, wages rose by 2.8 per cent, i.e. 0.8 percentage point more than in the 1st quarter. The construction sectors are typically the first areas where increased pressures in the economy are reflected in wage growth.

In manufacturing, where exports account for a large share of production, wages rose by 2.5 per cent in the 2nd quarter. Wage growth has also increased for foreign competitors in recent quarters.

The outcome of the collective bargaining for the public sector in the spring was that wage increases over the next three years will be higher than those seen in the most recent collective agreement period and approximately in line with the framework of the key private-sector agreements concluded around one and a half years ago.

Mounting capacity pressures are forecast to gradually push up wage growth further over the coming years, to just over 3 per cent p.a. This is within the acceptable range if the economy is not to derail.

Slightly weaker outlook for Danish exports
Measured in current prices, exports of goods have been flat throughout 2017 and in 2018 so far. Exports of services have decreased a little, partially due to normalisation after a major patent sale that was registered in the 1st quarter of 2017. Exports of sea freight, which are particularly exposed to trade barriers, have shown weak growth and are now 5 per cent lower than one year ago. At the same time, imports of goods and services have risen, although not strongly, given the domestic cyclical upswing.

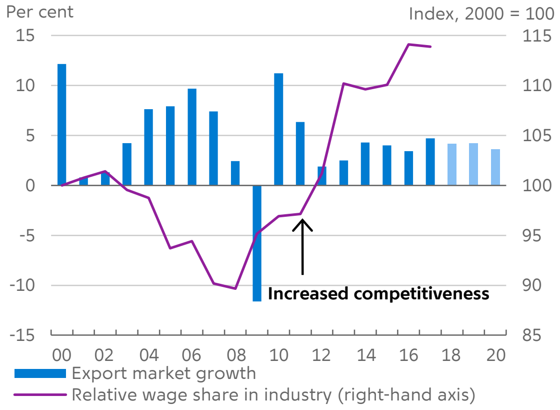
Growth in world trade had declined in recent quarters, and the indicators point to further declines. This is associated with an international slowdown at the beginning of the year, but stronger protectionism with higher tariffs on selected products could also play a role.

The slowdown in world trade and prospects of slightly lower growth in the euro area have led to a small downward adjustment of market growth in Denmark's export markets this year and next year, but the growth level is still robust, cf. Chart 7.

The competitiveness of Danish firms remains good, and they are well equipped to continue to meet demand from abroad.

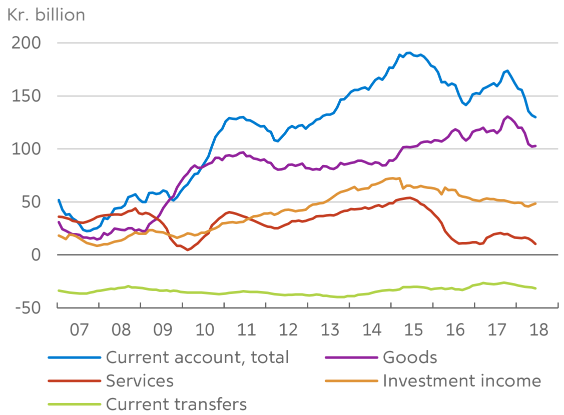
The current account surplus has decreased by approximately kr. 50 billion since last autumn, cf. Chart 8. Calculated as a 12-month sum, the surplus now amounts to around kr. 120 billion, corresponding to 5.6 per cent of GDP. Developments have been driven mainly by a lower surplus on trade in goods and services. The return on Danes' foreign assets has also fallen a little. 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.

Slightly lower export market growth and good competitiveness Chart 7



Note: Export market growth reflects growth in imports for goods and services in Denmark's export markets. The relative wage share in industry measures the wage competitiveness of the Danish industrial sector relative to Denmark's largest trading partners.
Source: Statistics Denmark and Danmarks Nationalbank.

Decline in the current account surplus Chart 8



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

Weak growth in consumer prices
Consumer prices are still showing a weak trend. The rate of price increase (HICP) was 0.8 per cent in August, which is somewhat weaker than in the

euro area, where it was 2.0 per cent. Danish price increases have now been weaker than those of the euro area for some time. The lower inflation in Denmark mainly reflects lower food price increases. Inflation rates in Denmark and the euro area have previously deviated in the short term. In the medium term the inflation rates are in step.

Underlying price pressures in the economy remain moderate. Core inflation, i.e. consumer price inflation excluding energy and unprocessed food, is around 0.6 per cent, and consequently a little lower than consumer price inflation. Domestic market-determined inflation has fallen in recent months.

Oil prices have risen in the first part of 2018, and energy prices increase the overall price index in the wholesale link. Import prices do not contribute to increasing price pressures, as they are kept in check by a strengthened effective exchange rate of the krone. This makes foreign goods cheaper in Danish kroner. The effective exchange rate of the krone has appreciated by approximately 4 per cent since the beginning of 2017, reflecting, inter alia, a weaker dollar rate.

As wage increases and capacity pressures intensify, consumer prices are expected to rise a little more in the coming years. The expected increase is 0.8 per cent this year, 1.4 per cent in 2019 and 1.6 per cent in 2020.

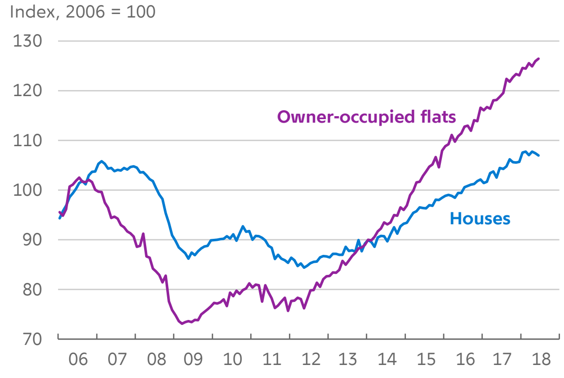
Prospering housing market moving towards better geographical balance

House prices at the national level have flattened in recent month, cf. Chart 9. Developments in the housing market have been favourable since 2012, with rising prices and turnover. Initially, growth was concentrated in the large cities, but a broader geographical spread has been observed in recent years.

Trading activity remains high but has slowed down a little in recent months for owner-occupied flats. The supply of homes for sale has been flat in the last year for single-family houses but has increased for owner-occupied flats. Meanwhile, the time on market has decreased. There are, however, considerable geographical differences. In some regions of Denmark, the supply of homes for sale remains high, and the time on market is lengthy.

During the upswing, the Copenhagen area has accounted for the highest house price inflation.

House prices have flattened Chart 9



Note: Seasonally adjusted.
Source: Statistics Denmark and Danmarks Nationalbank.

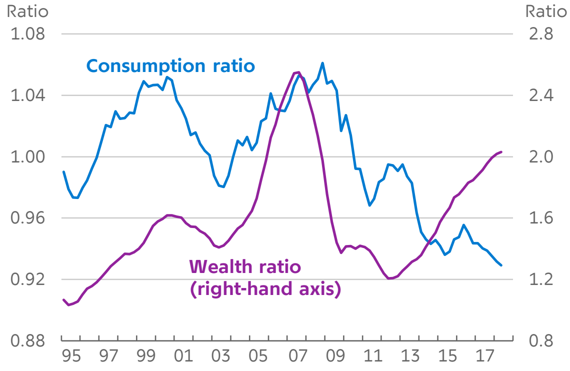
However, prices for owner-occupied flats in Copenhagen have slowed down over the last year and show signs of having peaked for the time being. In this connection it should be noted that prices for owner-occupied flats in Copenhagen are assessed to have risen more than warranted by developments in disposable incomes and interest rates. At the same time, Copenhagen has a higher prevalence of riskier mortgage types than the rest of Denmark. This increases the interest rate exposure of homeowners. The price slowdown is therefore welcome.

A considerable supply of newly constructed houses and flats may have contributed to the price slowdown in Copenhagen. In addition, the amendment of the housing taxation rules from 2021 onwards, adopted last year, may already have a dampening effect on price increases, especially for owner-occupied flats. Finally, another possible reason could be the revised good practice rules imposing restrictions, since the turn of the year, on the choice of mortgage type for home buyers with high debt-to-income and loan-to-value ratios (macroprudential measures).

When house prices rise in one area, buying a home in another area, primarily within commuter distance, becomes more advantageous. In particular, price developments in Copenhagen tend to spread to prices all over the country, i.e. a ripple effect[3]. The years of high price increases in Copenhagen thus boost prices in the suburbs and then in the rest of the country. This occurs with a certain lag, so the slowdown currently taking place in Copenhagen will eventually ripple on to the rest of the housing market.

Against the backdrop of a positive outlook for the Danish economy and a sustained low level of interest rates, house prices are expected to continue to rise in the coming years. The market expects interest rates to rise gradually in the coming years but remain very low. Against this background, prices of single-family houses are forecast to rise by approximately 3-4 per cent p.a. at the national level towards 2020. This roughly corresponds to the expected growth in household disposable incomes.

Households are prudent despite rising income and wealth Chart 10



Note: The consumption and wealth ratios have been adjusted for restructuring of capital pensions and LD savings in 2013-15. The ratios denote consumption and (consumption-determining) wealth relative to disposable income.
Source: Statistics Denmark and Danmarks Nationalbank.

A solid foundation for private consumption and business investment

Rising house prices and prudent consumer behaviour over a number of years have increased household wealth considerably. At the same time, disposable incomes are growing in step with rising employment, and the purchasing power of wages has been boosted, as wage increases have exceeded consumer price increases for a number of years. Consumption has not followed suit and private consumption at this low level is unusual so far into a boom period. Danish households have a solid foundation for increasing consumption in future, cf. Chart 10.

The financial market participants expect slightly higher interest rates in the coming years. This will to a certain extent dampen house price increases, private consumption and business investment. Viewed in a longer-term perspective, interest rates will remain low, which will stimulate demand.

Overall, business investment is aligned with the cyclical position in Denmark. Private-sector business investment is expected to rise further as capacity tightens. This applies especially to investment in plant and equipment.

Small government surplus

2017 showed a government surplus of 1.1 per cent of GDP, the first surplus since the financial crisis if adjustment is made for extraordinary measures. A result close to balance is expected this year and the coming few years. Viewed in isolation, the continued economic growth will improve the general government budget balance until 2020. Conversely, disbursement of contributions previously made to the early retirement scheme to those opting out and the extraordinary refund of property taxes in connection with the introduction of the new property valuation system will tend to have a negative impact on the government budget balance. In addition, the budget balance is highly sensitive to the revenue from pension yield tax, which depends on developments in interest rates and equity prices.

Balanced risks, but threats of more protectionism increase downside risks

The households are still eager to save. If this changes, there is significant potential of a stronger increase in private consumption than assumed in the projection. Moreover, this year and next year households will receive various one-off disbursements in the form of reversal of housing taxes previously paid and disbursement of contributions previously made to the early retirement scheme to those opting out. This

3 Cf. Simon Juul Hviid, A regional model of the Danish housing market, *Danmarks Nationalbank Working Paper*, No. 121, September 2017.

may strengthen consumption more than assumed in the projection. This could also be triggered if the strong house price rises so far in Copenhagen spread to large parts of Denmark.

Stronger-than-expected consumption growth in a boom period could increase the risk of a widespread shortage of labour. This may lead to inappropriately high wage increases, which will notably weaken competitiveness.

The downside risks of the projection are linked mainly to external developments. A very expansionary fiscal policy in the USA is increasing the already large budget deficit. That will increase the risk of the US economy overheating again. Combined with government finance imbalances, this could trigger interest rate increases in the short term and a marked recession some years later. That will be the case if fiscal policy offers only limited scope for mitigating the recession. This scenario will weaken the global economy, with a resultant risk of a stronger and faster downturn after the boom in Denmark.

The tendency towards increased protectionism poses a downside risk which could affect Denmark's trade with abroad. It is a threat to growth in the slightly longer term.

Central forecasts from the projection

Table 1

Real growth against the previous year, per cent	2017	2018	2019	2020	2017 Q4	2018 Q1	2018 Q2
GDP	2.3	1.3	1.8	1.7	0.9	0.3	0.2
Private consumption[1]	1.6	2.3	2.2	2.3	1.6	0.9	0.3
Public consumption	0.6	0.4	0.5	0.6	0.8	0.0	-0.5
Residential investment	8.7	8.4	1.6	2.9	1.5	5.9	0.6
Public investment	-5.5	1.2	2.0	0.9	5.7	-3.8	-2.7
Business investment	5.9	8.5	0.5	4.9	0.8	2.2	13.5
Inventory investment, etc.[2]	0.1	0.0	0.0	0.0	0.0	0.6	-1.1
Exports	4.4	-0.2	2.8	2.6	1.3	-0.9	-0.4
Industrial exports	5.9	2.4	4.0	3.6	0.9	0.3	0.3
Imports	4.3	2.7	2.2	3.6	2.4	1.3	0.5
Employment, 1,000 persons	2,921	2,969	3,002	3,026	2,939	2,953	2,965
Gross unemployment, 1,000 persons	116	107	99	93	115	111	109
Balance of payments, per cent of GDP	7.6	5.9	6.3	5.8	6.5	4.9	4.6
Government balance, per cent of GDP	1.1	0.0	-0.3	-0.5	1.3	-0.1	0.5
House prices[3], per cent year-on-year	4.0	3.8	3.1	2.7	3.9	4.9	3.8
Consumer prices, per cent year-on-year	1.1	0.8	1.4	1.6	1.2	0.5	0.9
Hourly wages, per cent year-on-year	2.1	2.5	3.0	3.3	2.0	2.2	2.5

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

The global economic growth continues, but with a more uneven distribution across countries than in 2017. Global growth is supported by accommodative monetary policies, high asset prices and optimism among consumers and firms. The USA is in a strong boom with emerging signs of overheating, while the boom in the euro area is more moderate. The risk of weaker-than-expected global growth has increased. The main reasons are trade policy tensions centred on the USA and a procyclical US fiscal policy that could lead to strong overheating and a subsequent downturn with derived effects on the global economy.

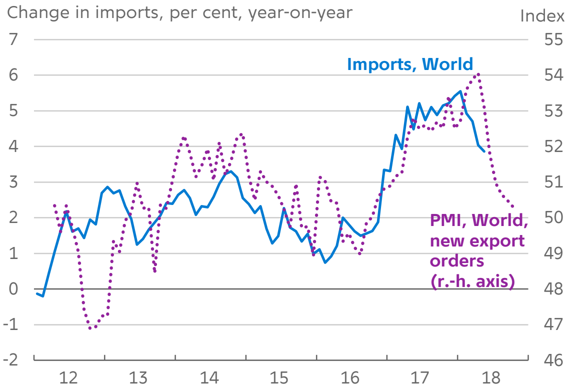
So far, the trade conflict's impact on the global economy has been limited

The trade conflict between the USA and its largest trading partners has escalated since 1 March, when the USA announced a tariff of 25 per cent on steel imports and 10 per cent on aluminium. Several countries have retaliated by imposing punitive tariffs on certain US products, and especially the trade conflict between the USA and China has escalated. The two countries have taken turns to announce punitive tariffs on more products imported from the opposite party. In addition, there have been marked trade policy tensions between the USA and the EU, but the voices have been more conciliatory after the summit on 25 July between US president Donald Trump and Jean-Claude Juncker, President of the European Commission.

Growth in world trade has been declining since the beginning of 2018, cf. Chart 11. This development can be regarded as normalisation after a year with very high growth, and the current annual growth rate of around 4 per cent is on a par with the historical average since 2000. The mounting trade tensions may also have played a role, however. This is reflected in the global PMI indicator (Purchasing Managers' Index) for new export orders, which has fallen over the last few months. This may indicate that growth in world trade is set to decline further in the coming months.

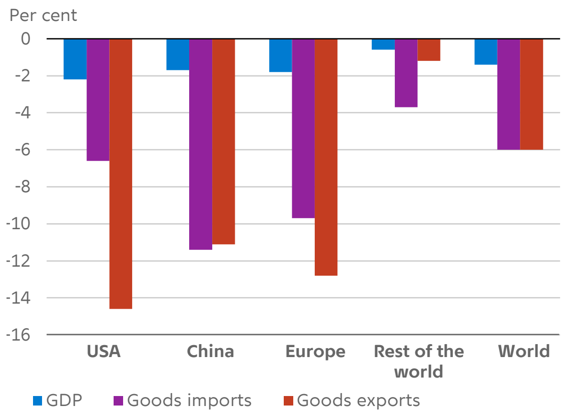
International trade leads to higher economic growth and prosperity, due to the opportunities for specialisation, knowledge sharing, enhanced competition and access to new markets, among other factors. That is why a trade conflict will always have a negative impact on global growth, and its extent will depend on the volume of trade restrictions. OECD calculations show a reduction of global GDP by 1.4 per cent in the medium term if the USA, China and Europe increase tariffs by 10 percentage points for all imports of goods, cf. Chart 12. So far, the countries have increased tariffs considerably less, but the calculations illustrate how an escalation of the trade

Lower growth in world trade Chart 11



Note: 3-month moving averages for imports. The PMI has been shifted three months ahead.
Source: Macrobond.

An extensive trade conflict will dampen global growth Chart 12



Anm.: The chart shows the medium-term effects of the USA, China and Europe raising tariffs by 10 percentage points for imports of goods from all partner countries (but not internally in Europe). In this connection, Europe means the EU, Switzerland and Norway. The calculations do not include confidence effects.
Kilde: OECD, *Economic Outlook*, November 2016.

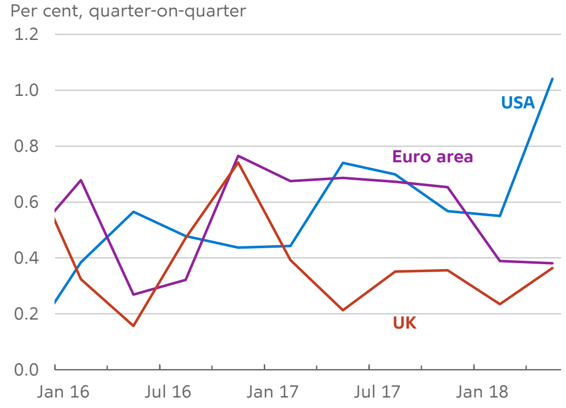
conflict may have a marked impact on the global economy.

In the USA, quarterly GDP growth was high in the 2nd quarter of 2018, cf. Chart 13, mainly driven by private consumption and business investment. It may be linked to a positive growth effect from the implemented tax reform, which cut corporate and personal taxes from 1 January 2018. In the euro area, quarterly growth declined in the 1st and 2nd quarters of 2018. The dampening at the beginning of the year mainly reflected weak development in exports and investment. This can be attributed to the strengthening of the euro throughout 2017, among other factors. The dampening occurred across the euro area member states. The UK has seen low growth since the beginning of 2017, as rising inflation, inter alia due to weakening of the pound sterling, has undermined the purchasing power of consumers and dampened growth in private consumption. In addition, the prospect of Brexit has dampened investment.

In its most recent forecast from July, the International Monetary Fund, IMF, maintained expectations of high growth in the USA as a result of the tax reform and fiscal accommodation, cf. Chart 14, whereas the growth outlook for the euro area and the UK was adjusted downwards a little due to weaker-than-expected activity in the 1st half of 2018. Given the latest revisions, the outlook is for decreasing growth in the euro area. The IMF estimates global growth to be 3.3 per cent in 2018, the highest rate since 2010.

Growth in the euro area has declined in 2018

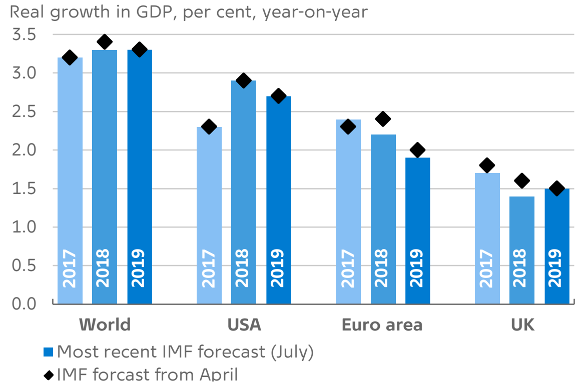
Chart 13



Source: Macrobond.

The global growth outlook is almost unchanged, but the growth outlook for the euro area has been reduced a little

Chart 14



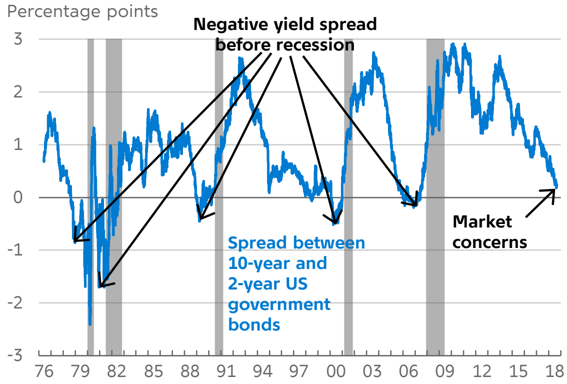
Source: IMF.

Mounting risk of weaker growth

The IMF forecast indicates a balanced boom in most of the advanced economies, where growth will subside gradually as it becomes more difficult to draw spare resources into the economy. However, various risk factors may cause an abrupt downturn in the global economy. In the short term, an escalation of the trade conflict may cause global growth to slow down. In the slightly longer term, the procyclical US fiscal policy – in the form of tax cuts and increased public spending – may lead to strong overheating of the US economy and sudden hikes in interest rates. This may prompt adjustment of the pricing of financial assets with negative derived effects on the global economy. The IMF, the OECD and the European Commission assess that the global economic forecast is subject to mounting downside risks.

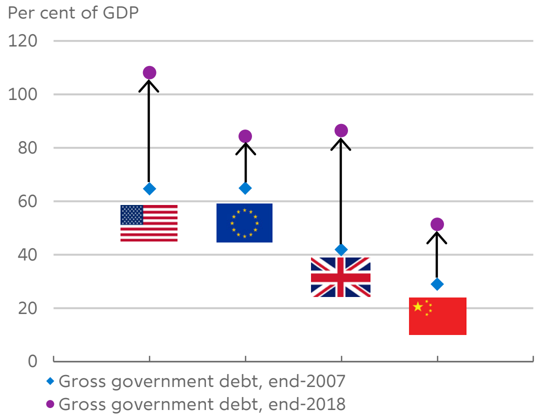
In recent months, market participants have been concerned that the spread between 10-year and 2-year US government bonds could become negative. Historically, a negative yield spread has been a strong signal of an imminent recession, cf. Chart 15, but special circumstances, e.g. the Federal Reserve's purchase programmes, contribute to keeping long-term interest rates down. The result may be erosion of the yield curve's value as a signal of recessions. If some of the risks mentioned above materialise and lead to a recession, it will be more difficult for the authorities to implement fiscal and monetary policy measures to address the negative effects than it was during the financial crisis. The reason is

A flat US yield curve may signal a recession within the next few years Chart 15



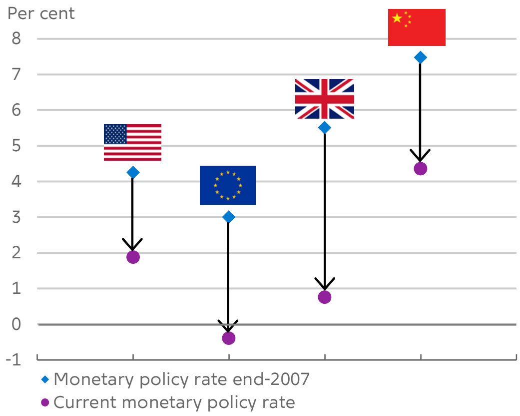
Note: The grey bars denote recession periods as defined by the National Bureau of Economic Research, NBER.
Source: Macrobond and NBER.

More limited fiscal scope than before the financial crisis ... Chart 16



Note: IMF estimates of gross government debt.
Source: Macrobond.

... and the monetary policy scope has also been reduced Chart 17



Source: Macrobond and central bank websites.

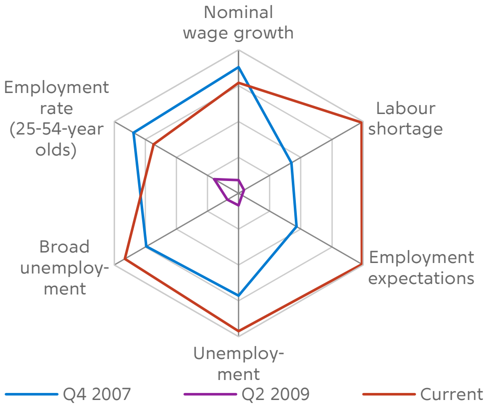
that in the largest economies the government debt is higher and the monetary policy interest rates are lower than ten years ago, which has reduced the scope for countercyclical economic policy, cf. Charts 16 and 17.

Signs of overheating in the US labour market
Several indicators for the US labour market point to signs of overheating, given the limited spare resources, cf. Chart 18. The decline in unemployment has flattened in recent months, with unemployment standing at 3.9 per cent in August. This is lower that the structural level, indicating further upward pressure on wages. The broader definition of unemployment, U6, which includes not only the unemployed but also involuntary part-time employees and those with only a marginal affiliation to the labour market, fell to 7.3 per cent in July. This is the lowest level since 2001, and US firms are increasingly reporting labour shortages. Employment has risen strongly since 2010, and the participation rate among 25-54-year-olds is now just over 79 per cent, which is close to the peak before the financial crisis. At the same time, the demographic development with more older people has contributed to reducing the potential supply of labour.

Wage developments in the USA were moderate in the years after the financial crisis, but have gained momentum over the last year. Annual wage growth in the private sector, measured by the Employment Cost Index, reached 2.8 per cent in June. The impression of increased pressure on the US labour market is underpinned by firms' increased competition for qualified labour. This is reflected in considerably higher wage growth for those who have changed jobs than for those who have not, cf. Chart 19.

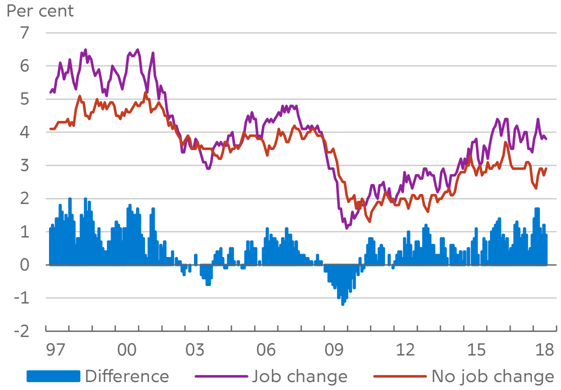
Unemployment in the euro area is approaching the pre-crisis level
Unemployment in the euro area was 8.2 per cent in July, the lowest level since November 2008. This is

Pressure on the US labour market Chart 18



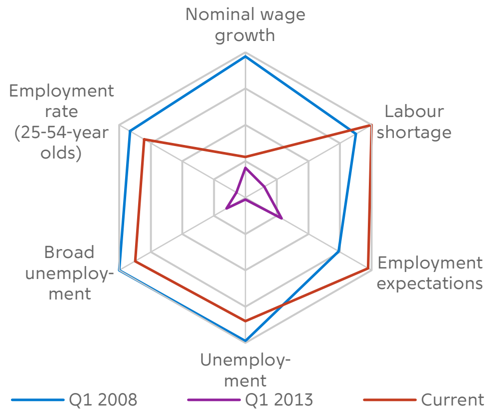
Note: The indicators have been stated as percentiles of their historical observations since 2000. The centre is the minimum and the outer edge the maximum. The unemployment measure has been multiplied by minus 1. The benchmarks are the pre-crisis peak and the bottom of the most recent recession. "Current" refers to the 2nd quarter of 2018 or the most recent observation.
Source: Macrobond.

Higher wage growth after job change indicates an overheated US labour market Chart 19



Note: Federal Reserve Bank of Atlanta Wage Growth Tracker.
Source: Macrobond.

Mounting labour market pressures in the euro area Chart 20



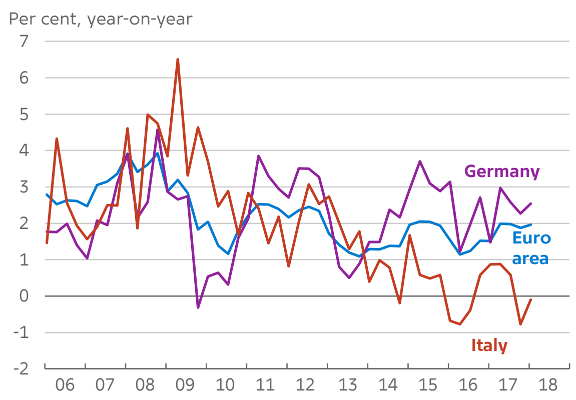
Note: The indicators have been stated as percentiles of their historical observations since 2000. The centre is the minimum and the outer edge the maximum. The unemployment measure has been multiplied by minus 1. The benchmarks are the pre-crisis peak and the bottom of the most recent recession. "Current" refers to the 2nd quarter of 2018 or the most recent observation.
Source: Macrobond.

roughly in line with the OECD estimate of structural unemployment, and the unemployment gap has de facto closed. This development is broad-based, as unemployment has declined in all euro area member states over the last year, but with considerable variation in level. Unemployment is now as low as 3.4 per cent in Germany, while it is 15.1 per cent in Spain and 10.4 per cent in Italy.

The employment rate for the euro area as a whole has risen steadily since the beginning of 2013 and is currently just over 78 per cent for 25-54-year-olds. The euro area labour market is approaching the pre-crisis level, although wage growth remains weak in the light of the other indicators, cf. Chart 20.

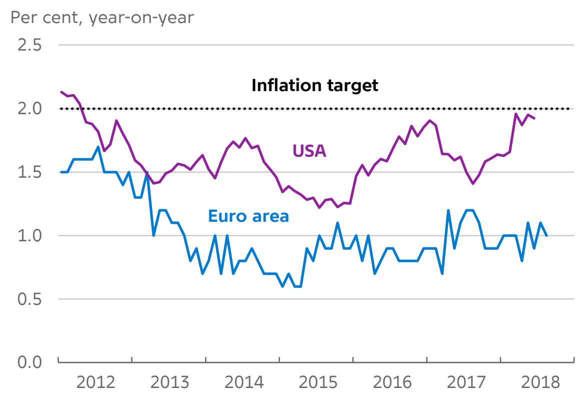
Wage growth in the euro area is rising slightly from a moderate level with an annual rate of increase of 2.0 per cent, cf. Chart 21. This covers variations across member states. Among the four largest economies, Germany accounts for the highest wage growth of 2.5 per cent, while Italy has seen an outright decrease in wages in the two most recent quarters. The variation in wage growth reflects both cyclical and structural factors, including various trends in spare capacity and productivity.

Wage growth in the euro area is rising from a moderate level Chart 21



Note: Nominal wage growth.
Source: Macrobond and own calculations.

Core inflation is rising in the USA, but is more modest in the euro area Chart 22



Note: 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.

Price pressures are mounting in the USA, but remain subdued in the euro area

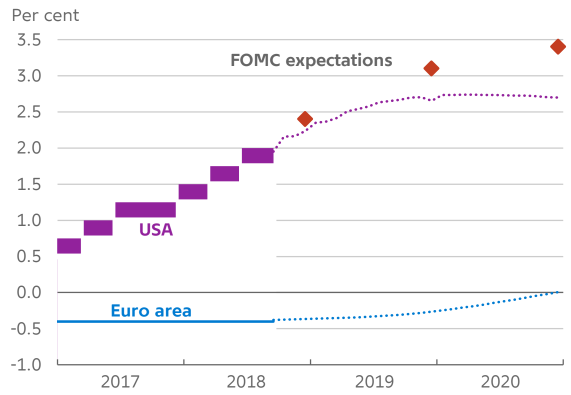
In the USA, the annual increase in the Personal Consumption Expenditures index, PCE, was 2.2 per cent in June 2018, the highest level since the spring of 2012. The Federal Open Market Committee, FOMC, expects an annual rate of increase of 2.1 per cent in both 2018 and 2019. This development reflects underlying price pressures, as core inflation has risen since mid-2017, to the current level of 2.0 per cent, cf. Chart 22.

Underlying price pressures in the euro area are low. Higher energy prices have boosted the annual rate of increase in the Harmonised Index of Consumer Prices, HICP, during 2018, to 2.0 per cent in August. Core inflation, i.e. consumer price inflation excluding energy and food, has been below 2 per cent for more than seven years and is currently 1.0 per cent. The European Central Bank, ECB, expects annual core inflation of 1.1 per cent in 2018, rising to 1.6 per cent in 2019 and 1.9 per cent in 2020, as capacity pressures gradually increase.

Monetary policy is being tightened in the USA – and the euro area is poised to follow suit

The pressures on the US labour market and rising inflation have prompted monetary policy tightening. The FOMC raised its interest rate by 0.25 percentage point at is meeting in June, cf. Chart 23. This implies an increase by 1.75 percentage points in total since December 2015, when the rate was first raised after

Interest rates are expected to rise further in the USA Chart 23



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

having remained at zero for seven years. In its latest forecast, the FOMC indicates two more interest rate increases in 2018, three in 2019 and one in 2020, which is slightly above market expectations.

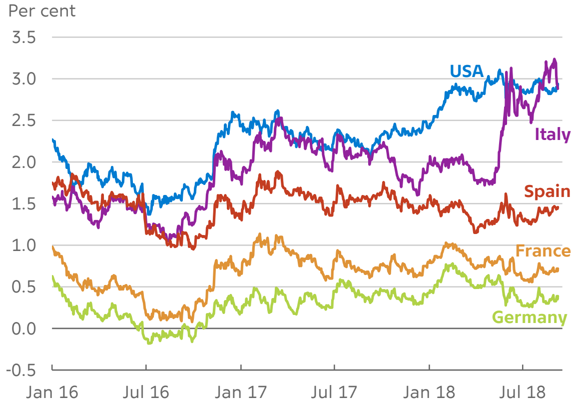
Since October, the Federal Reserve has reduced its bond holdings, which had risen substantially as a result of purchase programmes in the period 2008-14. The pace of balance sheet reduction has intensified from 10 billion dollars per month in the 4th quarter of 2017 to 40 billion dollars per month in this quarter. Overall, the Federal Reserve's balance sheet has been reduced from approximately 4,500 billion dollars to 4,250 billion dollars, while it was around 900 billion dollars before the financial crisis.

The ECB has maintained its deposit rate at -0.40 per cent since March 2016. The market does not expect the interest rate to return to positive territory until the end of 2020. At the monetary policy meeting in June, the ECB announced its plans to taper its asset purchase programme. The ECB's monthly pace of around 30 billion euro will continue until end-September and then be reduced by half to 15 billion euro. The net purchases will cease entirely at the end of the year if incoming data confirms the ECB's economic outlook. The ECB will reinvest the principal payments from maturing securities purchased under the asset purchase programme for an extended period after the end of the net purchases. The Eurosystem balance sheet has increased from 1,500 billion euro at end-2007 to currently 4,500 billion euro.

Political uncertainty has led to higher government yields in Italy

Italian government yields have risen notably since the election in March, cf. Chart 24. The reason is the difficulties in forming a government and the diverging political announcements, including about the euro cooperation, fiscal accommodation and rollback of pension reforms. After the final formation of a government in early June, the spread between Italian and German government yields has remained considerably wider than before the election. However, the current Italian government yields are far below the extraordinarily high level observed at the peak of the sovereign debt crisis in 2011. The unrest in Italy is not expected to have any impact on economic developments in other euro area member states. For example, the spread between Spanish and German government yields has been relatively stable over the last half year.

Italian government yields have risen after the election Chart 24



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

The trade conflict has affected the Chinese equity market Chart 25

Source: Macrobond.

US government yields have risen since December. This should be viewed in the light of higher interest rate expectations due to factors such as the tax reform and rising public spending.

The financial markets are affected by the trade conflict

Equity prices in the large markets have fluctuated more in 2018 than in 2017, cf. Chart 25. US equity prices dropped strongly in early February at the prospect of faster interest rate increases than previously expected. Since then, the US administration's announcements of extra tariffs on a number of products have contributed to increasing uncertainty among market participants. The rhetoric has been sharpened and softened in turns, and US equity prices have moved up and down, but reached record-high levels by late August. In China, fears of escalation of the trade conflict with the USA have affected the equity market. The leading index in Shanghai has dropped by 25 per cent from the peak in January.

The exchange rates of several emerging market economies have depreciated against the dollar since the spring, cf. Chart 26, due to investor withdrawal from these countries out of fear of how these countries will be hit by a potential trade war between the USA and China, and to rising US interest rates. The drop in exchange rates was particularly pronounced in Argentina and Turkey, which have large macroeconomic imbalances. In Argentina, the central bank has raised the monetary policy interest rate from 27 to 60 per cent to address capital flight. And in June Argentina received a 3-year IMF assistance programme with a credit line of up to 50 billion dollars.

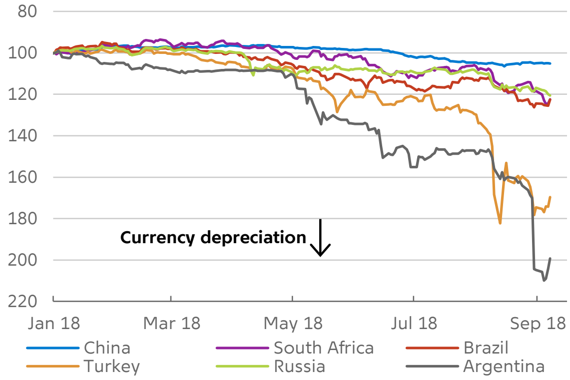
In Turkey, the currency crisis has been reinforced by a diplomatic conflict with the USA, and on 10 August the latter announced a doubling of tariffs on imports of Turkish steel and aluminium. Rising inflation, large current account deficits and substantial foreign borrowing have weakened confidence in the Turkish currency. The central bank raised the repo rate from 8 per cent to 17.75 per cent in June, but this was not enough to prevent material capital flight. The strong depreciation of exchange rates in Argentina and Turkey are mainly attributable to specific macroeconomic challenges in these two countries.

In June, the Bulgarian authorities announced that Bulgaria will apply for membership of the European Exchange Rate Mechanism, ERM2, as of July 2019 with a view to subsequent euro area membership. At the same time, Bulgaria will apply for membership of the banking union. Bulgaria will have to meet a number of conditions for membership.[1]

Substantial weakening of exchange rates in Argentina and Turkey

Chart 26

Index for local currency per dollar, 1 Jan. 2018 = 100



Source: Macrobond.

1 A detailed description can be found in the press release from the ERM2 group on 12 July (*link*).

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 preliminary quarterly national accounts for the 2nd 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 still expected to be 4.2 per cent this year in the light of the latest IMF estimates, cf. Table A1. Future growth in Denmark's export markets is expected to be 4.2 per cent in 2019 and 3.6 per cent in 2020, cf. Table A1. The growth decline in the export markets in 2020 is due, inter alia, to the IMF expecting capacity constraints to weaken growth opportunities as the upswing is taking place in the euro area and the USA.

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

Interest rates, exchange rates and oil prices
Developments in short-term and long-term interest rates in the projection are based on the expectations of future developments that can be derived from term structures in the financial markets. The money market interest rate, measured by the T/N rate, is projected by a 3-month CITA swap rate. It is expected to become positive in early 2020.

Overview of projection assumptions

Table A1

	2017	2018	2019	2020
The international economy:				
Export market growth, per cent year-on-year	4.7	4.2	4.2	3.6
Foreign price[1], per cent year-on-year	3.1	1.1	1.5	1.6
Foreign hourly wages, per cent year-on-year	2.1	2.6	2.4	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	0.8	1.1
Effective krone rate, 1980 = 100	102.1	103.7	103.7	103.7
Dollar exchange rate, DKK per USD	6.6	6.3	6.5	6.5
Oil price, Brent, USD per barrel	54.3	73.5	76.1	72.3
Fiscal policy:				
Public consumption, per cent year-on-year	0.6	0.4	0.5	0.6
Public investment, per cent year-on-year	-5.5	1.2	2.0	0.9
Public sector employment, 1,000 persons	818	822	822	822

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.

The average bond yield (average of yields to maturity for government and mortgage bonds) is expected to rise over the projection period, from 0.7 per cent initially to 1.2 per cent by the end of 2020. In the projection, the effective krone rate and the dollar rate are assumed to remain constant at the current levels.

In late August 2018, the price of oil was around 75 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 2020.

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 2018 and the updated 2025 projection.

Real public consumption is expected to rise by 0.4 per cent this year, 0.5 per cent in 2019 and 0.6 per cent in 2020. Public investment is expected to increase by 1.2 per cent this year and by 2.0 per cent in 2019 and 0.9 per cent in 2020, cf. Table A1.

Revisions in relation to the previous projection

The GDP-growth this year has been revised downward, because Statistics Denmark has registered a large patent payment in the 1st quarter of 2017. Additionally the economic development in the beginning of the year has been weaker than expected. The changed assumptions only moderately affect the projections for 2019 and 2020, cf. Table A2. The forecast for the rate of growth in consumer prices, HICP, is virtually unchanged over the forecast horizon.

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, March 2018	1.9	1.8	1.7	0.7	1.5	1.6
Contribution to revised forecast from:						
Export market growth	0.0	0.0	-0.1	0.0	0.0	0.1
Interest rates	0.0	0.2	0.2	0.0	0.0	0.0
Exchange rates	0.2	0.0	-0.1	0.0	0.1	0.1
Oil prices	0.0	0.0	-0.1	0.1	0.3	0.1
Other factors	-0.9	-0.1	0.0	-0.1	-0.6	-0.3
This projection	1.3	1.8	1.7	0.8	1.4	1.6

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.

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