

CURRENT ECONOMIC AND MONETARY TRENDS

SUMMARY

Among the advanced economies, growth has picked up in the euro area, while it has slowed down a little in the USA and the UK, albeit from high levels. Activity is supported by low oil prices and interest rates. In the euro area, the currency has also depreciated, and fiscal policy is neutral after recent years' consolidation. In the emerging economies, the pace of growth has subsided a bit.

Yields on euro area government bonds rose from mid-April to mid-June, reflecting the improved growth outlook, among other factors. The rise followed a prolonged period during which interest rates had fallen, partly as a result of the European Central Bank, ECB, having eased monetary policy. In the USA, the Federal Reserve has begun to normalise monetary policy, and market participants expect interest rates to be raised in the 2nd half of 2015.

The upswing seen in the Danish economy in 2014 has continued in the first part of this year. The real gross domestic product, GDP, was 1.1 per cent higher in 2014 than in the preceding year. The upswing is expected to gain strength in the coming years. Growth in real GDP is forecast at 2.0 per cent this year and 2.1 per cent next year. A slightly lower growth rate of 1.8 per cent is expected in 2017, when the economy reaches its normal capacity. The output gap, which is the difference between actual and potential output, was approximately 1.5 per cent of GDP in early 2015. The gap is forecast to close during 2017.

Consumer price inflation remains moderate, but has accelerated in the first months of the year.

Even with small price increases in the rest of the year, the annual rate of increase will become higher towards the end of 2015. For 2016 and 2017, when the effect of the oil price fall is eliminated, inflation is forecast at just under 2 per cent.

The fall in interest rates in the first part of the year boosted house prices in the spring. The level of interest rates remains low, thereby supporting house prices. Consequently, there is still reason to exert caution in relation to house prices, especially in Copenhagen, where there is a risk that price increases are self-reinforcing.

Interest rates are set to remain low throughout the projection period, and combined with developments in oil prices and the effective exchange rate of the krone over the last year this will add strong momentum to the upswing. This tightens the requirements of fiscal and structural policy. Since the downturn in 2008-09, fiscal policy has supported activity in the Danish economy. However, growth in the private sector economy is now so strong that the expansionary measures can gradually be rolled back completely. Fiscal policy should be tightened and restored to a neutral level so that the structural balance reaches equilibrium over the next couple of years. The requirements for fiscal and structural policy will sharpen if the economy grows at a faster and stronger pace than assumed in the projection.

There will be a considerable need for labour in the coming years. Unemployment is only slightly above its structural level, so much of the increase in the labour supply must come from those who

are currently outside the labour force or who choose to remain in the labour market a little longer instead of retiring. In addition, there will be a need for labour from abroad. Over a number of years, a series of important structural reforms have been implemented, including of the unemployment benefit and pension systems, and this will contribute to higher structural employment. It is important – and a precondition for the central growth scenario in the projection – that these reforms are not rolled back in full or in part and that other policies curbing the supply of labour are not introduced.

THE INTERNATIONAL ECONOMY AND THE FINANCIAL MARKETS

ECONOMIC DEVELOPMENT AND GROWTH OUTLOOK

Especially the advanced economies are beginning to pick up steam, while the pace of growth in the emerging economies has subsided a little. Growth has accelerated in the euro area, while it has slowed down slightly in the USA and the UK, albeit from high levels.

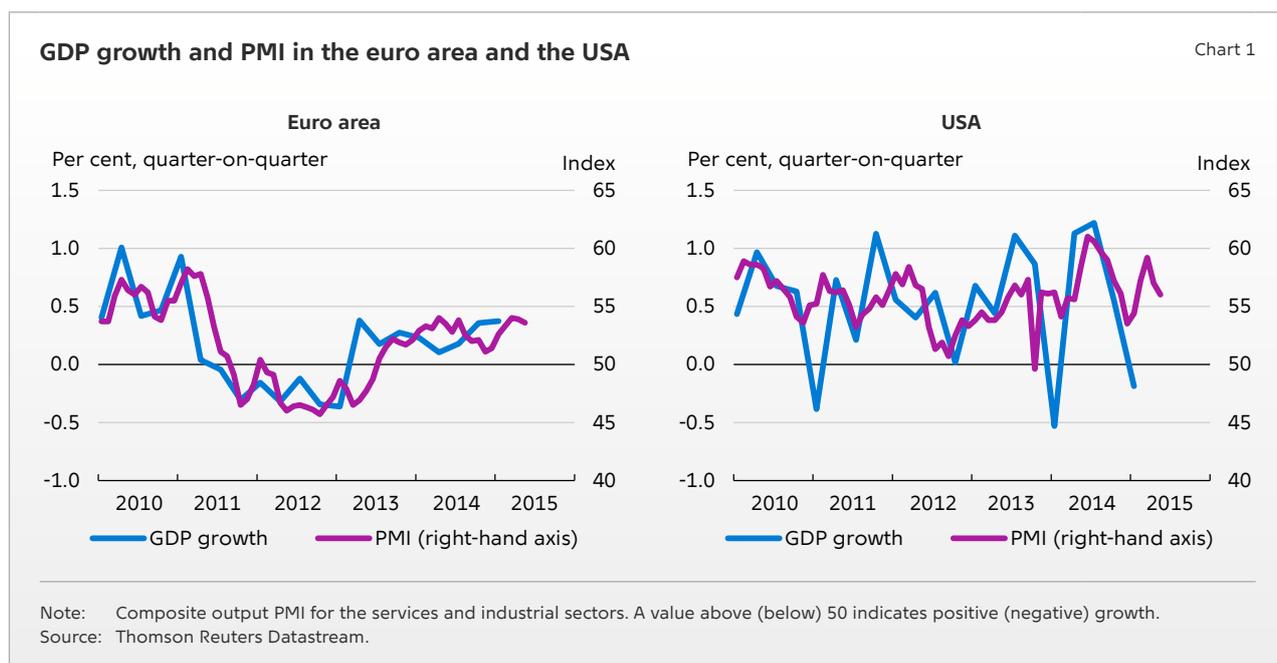
Euro area GDP grew by 0.4 per cent in the 1st quarter, cf. Chart 1 (left). The improvement was broad-based across member states. Growth picked up in Spain, France and Italy, while it

slowed down a little in Germany. Greece was among the few member states where the economy contracted. The Purchasing Managers' Index, PMI, which provides a good indication of where the economy is heading, points to further growth in GDP in the euro area overall in the 2nd quarter.

Activity in the euro area is currently supported by low interest rates and a weakened euro, cf. Chart 2 (left). This is partly a result of the ECB's expanded asset purchase programme, which was launched in March. Moreover, the price of oil is still very low, although it has risen since mid-January, cf. Chart 2 (right).

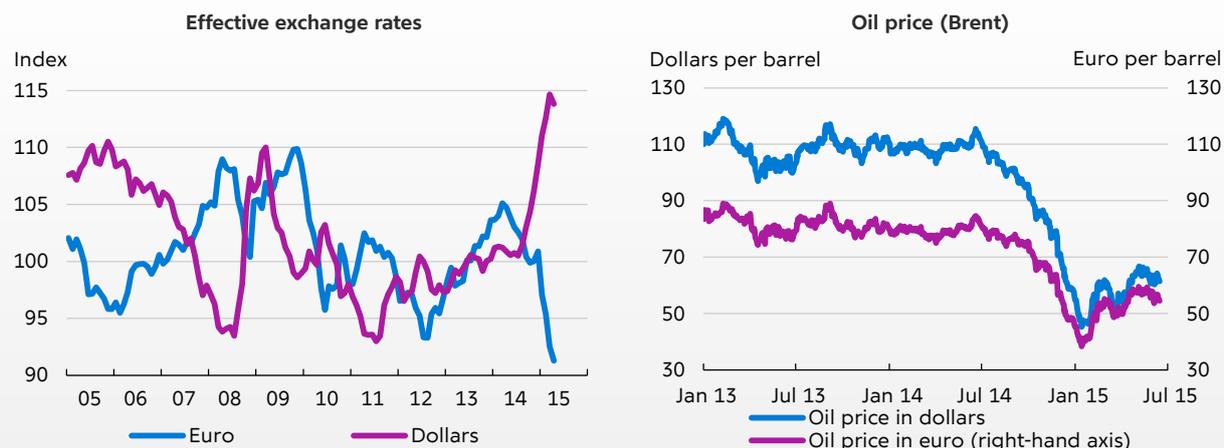
The low oil price and interest rates have boosted real disposable income. The falling interest rates and rising equity and house prices have led to greater private sector wealth. This is reflected in consumer confidence, which is back at the 2007 level. These factors support private consumption, which has been the main driver of growth in the euro area in recent years. Growth in private consumption will accelerate as unemployment declines and disposable income rises.

The 13 per cent fall in the effective exchange rate of the euro since March 2014 has had a positive impact on exports, while investment has shown a weak trend because demand is subdued. As demand rises, investment is expected to pick up, cf. the article "Why is investment so weak?" in this Monetary Review. In addition, fiscal policy for the euro area taken as one is expected to be



Effective exchange rates and oil price

Chart 2



Note: Left-hand chart: The broad nominal index of the Bank for International Settlements, BIS, has been applied.
Source: Thomson Reuters Datastream.

practically neutral (measured by the change in the structural balance) in both 2015 and 2016 after having been tightened in recent years.

In the USA, GDP fell by 0.2 per cent in the 1st quarter, and industrial production fell in the first five months of the year. However, robust growth was seen in the preceding quarters, and in previous years there has also been a tendency for growth in seasonally adjusted GDP to be weak in the 1st quarter. An analysis by the Federal Reserve Bank of San Francisco, FRBSF, points to seasonally adjusted quarterly GDP not fully taking into account seasonal fluctuations in economic activity these years.¹ If separate adjustment is made for this factor, quarterly growth would have been approximately 0.4 percentage point higher according to the FRBSF. However, this is still below the average quarterly growth rate of 0.5 per cent seen since the economic reversal in 2009.

The Federal Reserve and the international organisations highlight temporary factors such as the severe winter and labour disputes in the west coast ports as the primary reasons for the slowdown in the USA. Furthermore, the effective exchange rate of the dollar has appreciated by 13 per cent since the summer of 2014, which dampens exports. All the same, labour market growth is robust, and US private consumption is also

supported by low interest rates and oil prices. Consumer confidence is high and the PMI indicator points to rising activity over the year.

UK growth has declined a little. GDP grew by 0.3 per cent in the 1st quarter after having averaged 0.7 per cent per quarter in 2014. In Japan, growth accelerated to 1.0 per cent in the 1st quarter following weak growth in 2014, partly as a result of a VAT increase. The Swedish economy is growing at a robust pace, but slowed down a little to 0.4 per cent in the 1st quarter, from an average of 0.6 per cent per quarter in 2014. In Norway, which is an oil-producing country, growth has declined due to the fall in oil prices, and GDP rose by 0.2 per cent in the 1st quarter.

Among the emerging economies, India in particular is performing well. India has implemented a number of reforms, and this has boosted investment. Growth has increased since 2012 and is expected to exceed that of China in 2015 and 2016. However, India's contribution to global GDP at market prices is a mere 3 per cent compared with China's 13 per cent.

The combination of low interest rates and oil prices and the depreciation of the euro has led the OECD to adjust its growth forecast for the euro area overall upwards for 2015 and 2016, cf. Table 1. The forecast for the USA has been adjusted downwards, reflecting factors such as the appreciation of the dollar and the weak 1st quarter. According to the Federal Reserve's economic model,

¹ Federal Reserve Bank of San Francisco, *Economic Letter*, 18 May 2015.

GDP growth forecasts for selected economies

Table 1

Per cent				Change relative to November 2014	
	2014	2015	2016	2015	2016
USA	2.4	2.0	2.8	-1.1	-0.2
Euro area	0.9	1.4	2.1	0.3	0.4
Germany	1.6	1.6	2.3	0.5	0.5
France	0.2	1.1	1.7	0.3	0.2
Italy	-0.4	0.6	1.5	0.4	0.5
Spain	1.4	2.9	2.8	1.2	0.9
UK	2.8	2.4	2.3	-0.3	-0.2
Japan	-0.1	0.7	1.4	-0.1	0.4
China	7.4	6.8	6.7	-0.3	-0.2
India	7.2	6.9	7.6	0.5	1.0

Source: OECD, *Economic Outlook*, June 2015.

the strengthening of the effective exchange rate of the dollar by 13 per cent could reduce growth by 0.5 percentage point after one year.

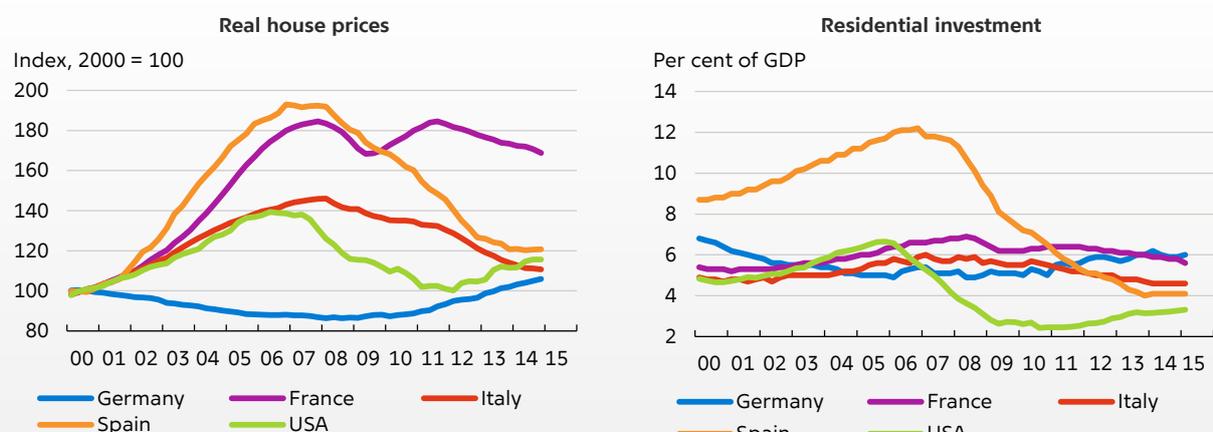
HOUSING MARKETS

There are signs of moderate growth in the euro area housing markets. Real house prices for the euro area overall have risen slightly over the last four quarters, following a downward trend since

the 3rd quarter of 2007. However, the markets vary considerably across member states. German house prices have been rising since early 2009, and since 2011 the annual rate of increase has been 4-5 per cent, cf. Chart 3 (left). House prices have stabilised in Spain, while they are still falling in e.g. France and Italy. Low interest rates and rising incomes are expected to support developments in the housing markets in the coming years.

House prices and residential investment in the euro area and the USA

Chart 3



Note: Right-hand chart: Gross investment. Data for the USA is from the Bureau of Economic Analysis; data for the euro area is from Eurostat.
Source: Bureau of Economic Analysis, Eurostat and OECD.

The substantial fall in house prices in connection with the crisis is reflected in residential investment, cf. Chart 3 (right). But since the housing markets have stabilised, investment as a ratio of GDP is no longer falling for the euro area overall. In its spring forecast, the European Commission expects euro area residential investment to rise slightly in 2015.

In the USA, the rate of increase in house prices has decreased after a period of large price increases. However, it is expected to rise in 2015 as employment is picking up and interest rates remain low. Residential investment has shown a weak trend in recent years, reflecting factors such as the excess capacity accumulated in the pre-crisis years and a smaller increase in the number of new households. All the same, several indicators point to higher building activity in the near term. For example, the number of households has risen considerably and the supply of existing houses for sale and rental housing has reached a low level.

GLOBAL BALANCES OF PAYMENT

Global balance of payments imbalances have been reduced in recent years, cf. Chart 4 (left). The current account surplus of the euro area overall rose to 0.6 per cent of global GDP in 2014, and the US deficit decreased to 0.5 per cent of global GDP. These tendencies are countered by lower

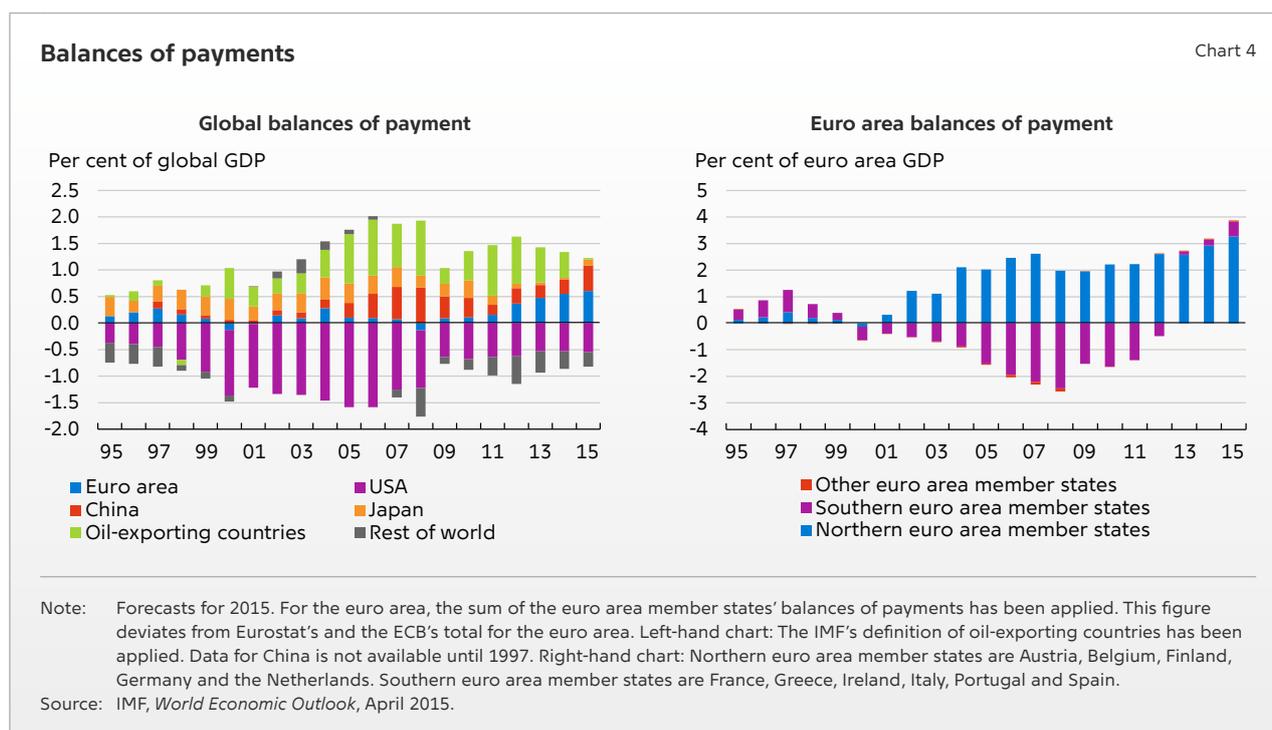
surpluses in e.g. China and Japan. Given that oil prices have fallen, the surpluses of the oil-exporting countries are expected to have been virtually eliminated in 2015.

For both the euro area and the USA, developments are to a large extent driven by higher private sector savings, primarily because households and firms have reduced their investments. The increased private sector savings are partly offset by higher public sector deficits than before the crisis.

The higher current account surplus for the euro area overall is mainly attributable to improved balances of payments among the southern member states, cf. Chart 4 (right). This development has been driven by weakened domestic demand combined with improved competitiveness as a result of low wage increases and structural reforms. In addition, the low oil price has reduced the price of net oil imports notably. This also applies in the USA, but is offset by e.g. the effects of the stronger dollar, so that the US current account deficit is expected to be more or less unchanged in 2015 compared with 2014.

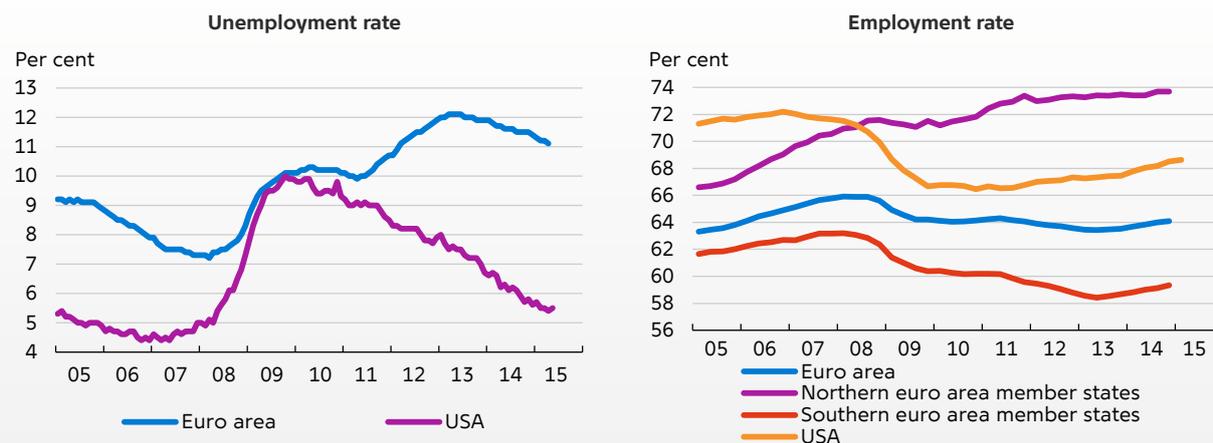
LABOUR MARKET AND INFLATION

The euro area labour markets have improved since the economy began to grow again in 2013. Unemployment had fallen to 11.1 per cent in April



Unemployment and employment in the euro area and the USA

Chart 5



Note: Left-hand chart: Unemployment as a percentage of the labour force. Right-hand chart: Employment as a percentage of 15-64-year-olds. Northern euro area member states are Finland, Germany and the Netherlands. Southern euro area member states are France, Italy, Portugal and Spain.
Source: OECD.

from 12 per cent in September 2013, cf. Chart 5 (left).

Although unemployment soared during the crisis, the employment rate for the euro area overall has fallen only slightly, cf. Chart 5 (right). This reflects an increase in the labour force in the same period, so that the participation rate (15-64-year-olds) has risen by 2 percentage points to 73 per cent. Especially the southern euro area member states contributed to the reduction of the employment rate. In the northern euro area member states, it has been rising slightly over a long period, including during the crisis.

Unlike that of the euro area, the US labour force decreased during the crisis. As a result, the participation rate (15-64-year-olds) has fallen by 3 percentage points, to 73 per cent, since 2007, so that it is now at the same level as in the euro area. As employment has risen sharply in the same period, unemployment was down to 5.5 per cent in May, i.e. close to its structural level. But since employment growth has not kept pace with population growth, the employment rate is still below the pre-crisis level.

Wage growth is subdued in the euro area, reflecting considerable spare capacity in the labour markets. US wage growth is also moderate, but increased in 2014. One reason could be that wage levels are already high. Although the labour market was very weak during the crisis, many

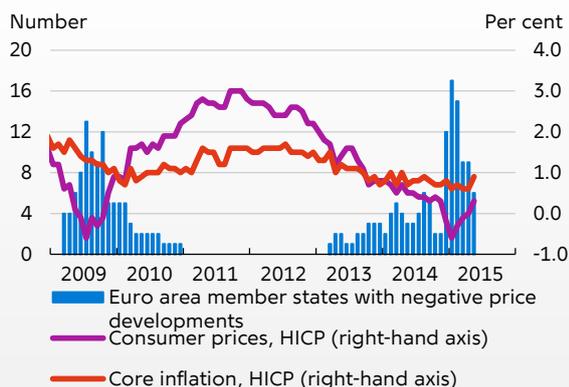
firms were unable or unwilling to reduce the wage level, according to Janet Yellen, Chair of the Board of Governors of the Federal Reserve System. Subsequently they have therefore been able to attract labour without raising wages. Another reason could be that there is still spare capacity in the labour market, but it is shrinking fast. Planned wage increases point to accelerating wage growth in 2015. A broad-based measure of labour market pressures, the Labor Market Conditions Index calculated by the Federal Reserve Bank of Kansas City, also indicates that the rate of growth will increase in the near term.

Although wage growth has accelerated in the USA, this has not been reflected in a higher rate of increase for the overall consumer price index. On the contrary, it has been falling since mid-2014 and has been marginally negative since the turn of the year. This is mainly because the price of oil has fallen and the dollar has strengthened. However, the exchange rate has a smaller impact on domestic prices in the USA than in other countries as many goods are settled in dollars and the USA is a relatively closed economy.

In the euro area, the rate of increase in the consumer price index was 0.3 per cent in May after having been negative or zero for five months in a row, cf. Chart 6. Although it is negative in several euro area member states, there are no signs of deflation in the euro area. Deflation would re-

Euro area inflation

Chart 6



Source: Eurostat.

quire an extended period of very weak wage developments and falling inflation expectations. Inflation has been negative for just a short period, and only 3 out of 12 overall goods categories had a downward impact on the rate of increase in the consumer price index in May. These were

primarily energy-related categories, including transport and heating of housing. Furthermore, market-based inflation expectations, measured by inflation swaps, have risen to 1.8 per cent after having fallen below 1.5 per cent in early 2015, cf. Box 1. This is close to the ECB's inflation target.

Prices in the euro area are also strongly affected by the fall in oil prices and exchange rate developments, but in the euro area these two factors have opposite effects: the fall in oil prices reduces prices, while the depreciation of the euro increases them because imports become more expensive. According to the ECB and the European Commission, the oil price fall since June 2014 will, viewed in isolation, reduce euro area inflation by 1.6-1.9 percentage points over a 1-year horizon, cf. Table 2. The European Commission's and the OECD's analyses also show that the depreciation of the effective exchange rate of the euro since March 2014 could push up consumer prices by 0.4-0.8 percentage point over a 1-year horizon. Overall, these two factors point to lower inflation. From late 2015, the oil price fall will no longer have a direct impact (base effect) on inflation,

Inflation expectations in the euro area

Box 1

continues next page

There are generally two ways of measuring inflation expectations. One method is to use surveys. In the euro area, the ECB prepares a Survey of Professional Forecasters, SPF, in which professional economists are asked about their expectations of future inflation. The other method is to derive inflation expectations from financial market instruments such as inflation-linked swaps, which are contracts between two parties, where one party pays an agreed fixed rate and the other party a variable rate corresponding to the rate of inflation during the term of the contract. The survey-based expectations are measured on a quarterly basis and are available with a certain lag, while the market-based expectations can be observed on a daily basis and are more volatile as they are also affected by general conditions in the financial markets. The ECB uses both measures to monitor inflation expectations.

In late 2014 and early 2015, inflation expectations fell considerably in the euro area. The decline was more pronounced for the market-based than the survey-based expectations, cf. the chart below. This is partly because the two measures do not necessarily express the same actual expectations, partly because the market-based expectations also include a risk premium, which may affect the derived expectations. The risk premium comprises, inter alia, an

inflation risk premium, which is the extra return required by investors for taking on a risk that inflation will not develop as expected. The ECB has assessed that, on average, the inflation risk premium has historically been positive in the euro area.¹ This is presumably because there has been high demand for hedging of the inflation risk in order to ensure purchasing power. In addition, the risk premium includes a liquidity risk premium, which reflects liquidity in the market, and a credit risk premium, which reflects the risk that the counterparty is unable to meet its obligation. The latter can to some extent be managed via collateral requirements.

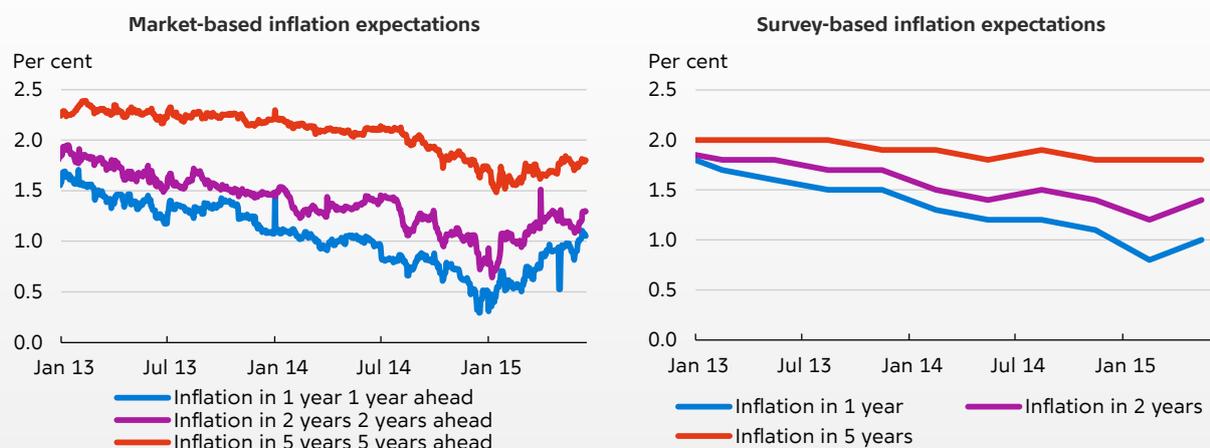
The ECB, among others, has pointed out that a negative inflation risk premium was one of the reasons why inflation expectations derived from financial market instrument were lower than the survey-based expectations in the period under review.² According to the ECB, this may occur in a situation where market participants believe that lower future inflation is more likely than higher inflation, and hence demand for hedging the risk of upward surprises in inflation is low.

Since the introduction of the ECB's expanded asset purchase programme, both market-based and survey-based inflation expectations have risen, and in mid-June both showed expected inflation of 1.8 per cent in the medium term.

1. Cf. ECB, *Monthly Bulletin*, July 2012.

2. Cf. ECB, *Economic Bulletin*, no. 2, 2015.

Market-based and survey-based inflation expectations



Note: Left-hand chart: Inflation expectations in 5 years, 5 years ahead is the implied forward rate derived via the 5- and 10-year inflation-linked swap rates and can be interpreted as the expected average inflation 5-10 years into the future.

Source: Bloomberg and Thomson Reuters Datastream.

Effects of exchange rate and oil price developments on inflation in the euro area

Table 2

	Change	First-year effect on inflation (percentage points)	Change 2014 to 2015	Calculated effect after one year (percentage points)
Effect of oil price fall				
European Commission	-20 dollars	-0.6	-54 dollars	-1.6
ECB	-10 per cent	-0.4	-47 per cent	-1.9
Effect of depreciation of nominal effective euro rate				
European Commission	-10 per cent	0.6	-13 per cent	0.8
OECD	-10 per cent	0.3	-13 per cent	0.4

Note: Change in oil price from 19 June 2014 to 15 June 2015 and change in nominal effective euro from March 2014 to April 2015. The points of departure are the respective dates in 2014 when the oil price peaked and the euro was strongest.

Source: ECB, European Commission, OECD and Thomson Reuters Datastream.

while the weaker euro is expected to continue to exert upward pressure on prices in the coming years.

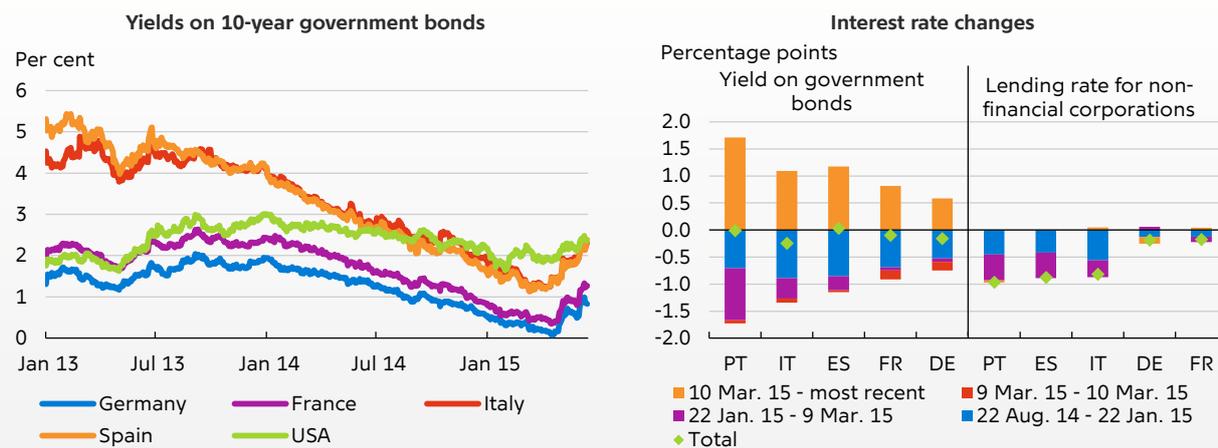
FINANCIAL CONDITIONS

Yields on 10-year government bonds rose in both the euro area and the USA from mid-April until mid-June. Developments in the euro area should

be seen in the light of higher inflation expectations and upward adjustment of the growth outlook, among other factors. At the same time, yields were so low that some market participants may have seen the risk of capital losses in connection with rising yields as greater than the probability of capital gains from a further fall in yield, and consequently demand fell.

Yields on 10-year government bonds and lending rates for non-financial corporations

Chart 7



Note: Right-hand chart: Changes in yields on government bonds are measured from 22 August 2014, when the ECB's President, Mario Draghi, in a speech at the conference in Jackson Hole first indicated that the ECB might introduce quantitative easing. The most recent observations are from 15 June 2015. Changes in lending rates are measured from August 2014 to January 2015, from January to March 2015 and from March to April 2015.

Source: Thomson Reuters Datastream.

The recent increase follows a prolonged period of falling yields in the euro area, cf. Chart 7 (left). The strong fall in yields during the autumn of 2014 and the winter is partly attributable to the ECB's expanded asset purchase programme. Yields fell in the months leading up to the announcement of the purchase programme on 22 January 2015 as there were increasing expectations that the ECB would begin to purchase government bonds, cf. Chart 7 (right). Yields continued to fall after the announcement, presumably because the size of the programme took the market by surprise. After the ECB began its purchases on 9 March, yields also fell. Especially the yields on long-term bonds fell, and hence the yield curve flattened.

In step with the falling government yields, the occurrence of negative yields has increased in the euro area. In April, German government bonds traded at negative yields up to a maturity of around eight years, compared with four years at the turn of the year, cf. Chart 8 (left). At the same time, French and Irish government bonds traded at negative yields up to maturities of three and five years, respectively. The fall in yields also meant that more member states could issue bonds at negative yields. In recent months, Spain and Portugal, among others, have issued short-term government securities at negative yields.

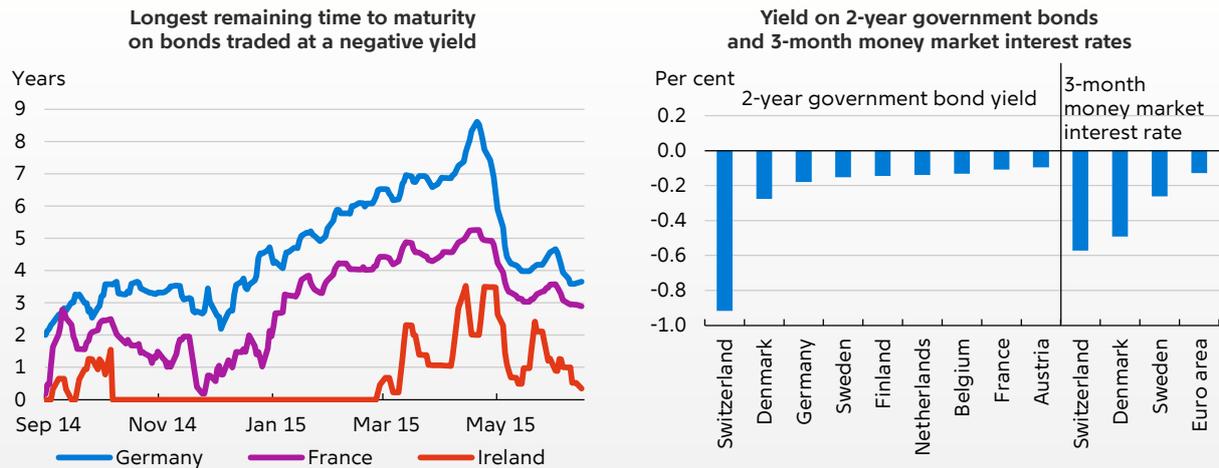
Outside the euro area yields have also dived. In Denmark, Sweden and Switzerland, 2-year government bonds traded at yields of between -0.2 and -0.9 per cent in mid-June, cf. Chart 8 (right). In early April, Switzerland sold 10-year government bonds with a negative yield of 6 basis points.

The rates of interest on bank loans to non-financial corporations in the euro area have also fallen, cf. Chart 7 (right). According to the ECB, this could point to a strengthening of the monetary policy transmission mechanism. The sharpest decline has been seen in the southern euro area member states, so that interest rate spreads have narrowed. All the same, the spread to the monetary policy interest rate remains wider than before the crisis in a number of member states.

In the last few months, growth in bank lending to households in the euro area has accelerated, cf. Chart 9 (left). Furthermore, lending to non-financial corporations has increased since the turn of the year. The latter reflects a combination of higher demand for loans among firms, partly due to the low level of interest rates, and easing of the banks' credit conditions, cf. Chart 9 (right). In the banks' assessment, the ECB's asset purchase programme has had a positive impact on both the volume of lending and credit conditions, cf. the ECB's lending survey.

Negative yields on government bonds and money market interest rates

Chart 8



Note: Left-hand chart: The maturity of the bond with the least negative yield is shown. This illustrates how far along the yield curve bonds are traded at negative yields. 5-day moving averages. Right-hand chart: The chart shows the yield on the 2-year benchmark government bond and 3-month money market interest rates on 15 June 2015.

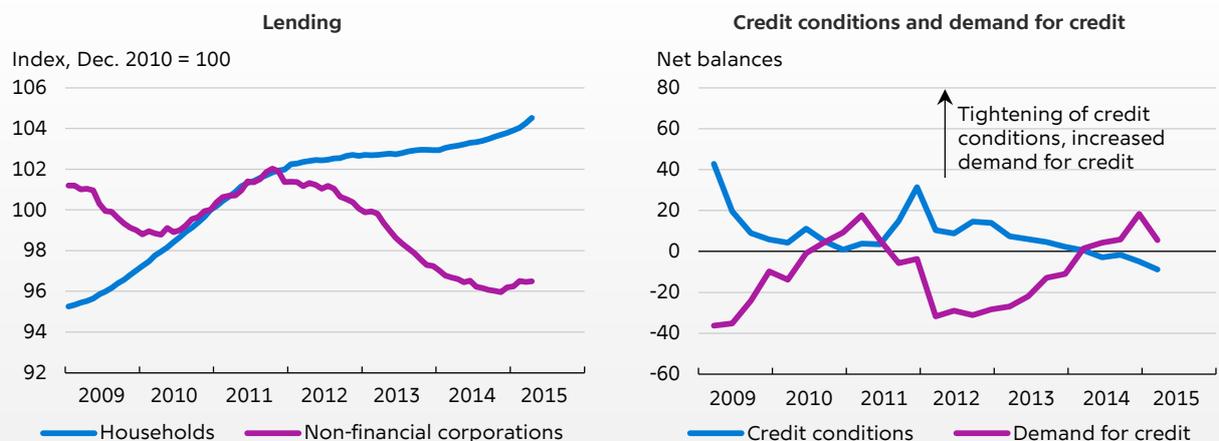
Source: Thomson Reuters Datastream, Bloomberg and own calculations.

Until 12 June 2015, the ECB had purchased bonds issued by euro area member states and selected institutions for approximately 170 billion euro. The ECB may purchase bonds with a remaining time to maturity of 2-30 years and a yield which is higher than -0.2 per cent (the ECB's current deposit rate). Including purchases of covered bonds and asset-backed securities, ABSs, the

ECB has purchased for approximately 60 billion euro per month as announced. The ECB plans to continue its purchase programme until September 2016 and will thus increase its balance sheet by a total of 1,140 billion euro (approximately 12 per cent of GDP). Broken down by issuer state, the purchases match the euro area member states' capital subscriptions to the ECB (the ECB's capital

Lending and credit conditions and demand for credit in the euro area

Chart 9

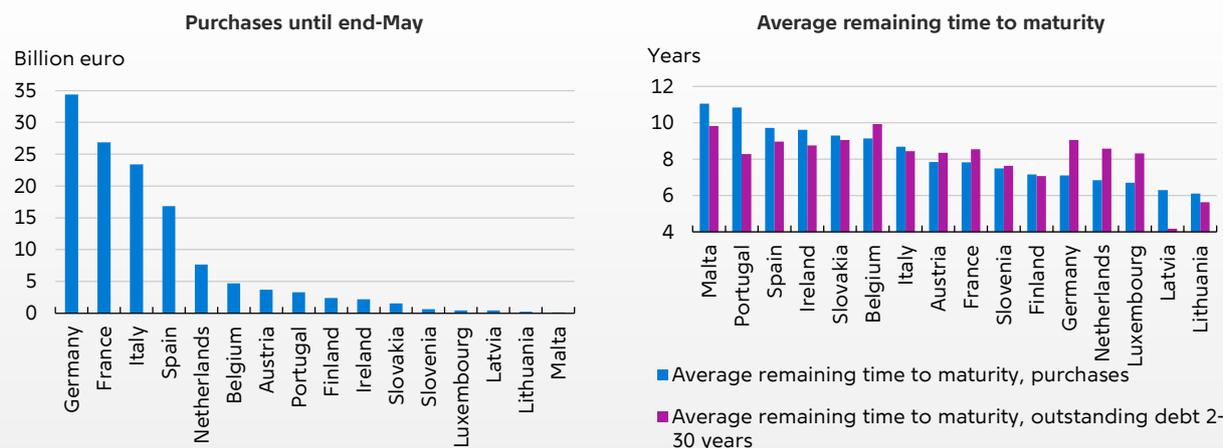


Note: Left-hand chart: Total lending by banks (adjusted for sales and securitisation) to households and non-financial corporations. Right-hand chart: Credit conditions and demand for credit according to the ECB's lending survey.

Source: Thomson Reuters Datastream and ECB.

The ECB's purchases of government bonds broken down by member states and maturities

Chart 10



Source: ECB.

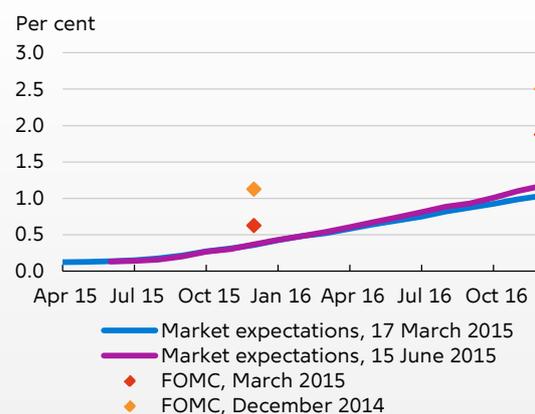
key), meaning that more bonds have been bought in the large than in the small member states, cf. Chart 10 (left). In most member states, the average remaining time to maturity of the ECB's purchases is close to that of the outstanding debt. But in Portugal and Latvia the remaining time to maturity of the bonds purchased is a little longer, while it is a little shorter in Germany, the Netherlands and Luxembourg, cf. Chart 10 (right).

Besides the downward pressure on government yields, the ECB's quantitative easing has contributed to a lower exchange rate of the euro against the dollar and other currencies and rising equity prices in the euro area, cf. above. Equity prices rose by approximately 18 per cent from the announcement of the expanded purchase programme until mid-April.

While market participants expect the ECB to maintain its low interest rates for a long period, the Federal Reserve is expected to raise its interest rate in the 2nd half of 2015. On 18 March, the Federal Open Market Committee, FOMC, ceased to apply forward guidance to the target range for the federal funds rate, emphasising that future changes in the target range would depend on developments in economic data. At the same time, the members of the FOMC lowered their expectations of the level of interest rates in the coming years so that they approached market expectations, which had been significantly lower than the FOMC's expectations for some time, cf. Chart 11.

Expectations of monetary policy interest rates in the USA

Chart 11



Note: FOMC members' expectations of interest rate developments were published on 17 December 2014 and 18 March 2015.

Source: Federal Reserve and Thomson Reuters Datastream.

The announcement from the FOMC and disappointing economic indicators subsequently led market participants to reduce their expectations of the level of interest rates further, thereby postponing the anticipated date of the first increase. Market participants expect the Bank of England to begin to raise interest rates in early 2016.

Sveriges Riksbank reduced its repo rate to -0.25 per cent on 18 March. This means that it has been reduced on four occasions within the last year,

by a total of 1 percentage point. The Riksbank's expectations of the level of interest rates in the coming years have also been lowered, and the Riksbank has begun to purchase government bonds for approximately 90 billion Swedish kronor (2.3 per cent of GDP). In this context it should be noted that Swedish inflation has been lower than the monetary policy target in the last three years.

In December 2014, Norges Bank reduced the rate of interest to counter the negative effects of the low oil price on economic activity and inflation. The negative effects have also been offset by a weakening of the Norwegian krone in step with the falling oil price. At its meeting on 7 May, Norges Bank kept the key policy rate unchanged at 1.25 per cent. However, market participants expect Norges Bank to reduce the rate of interest later this year.

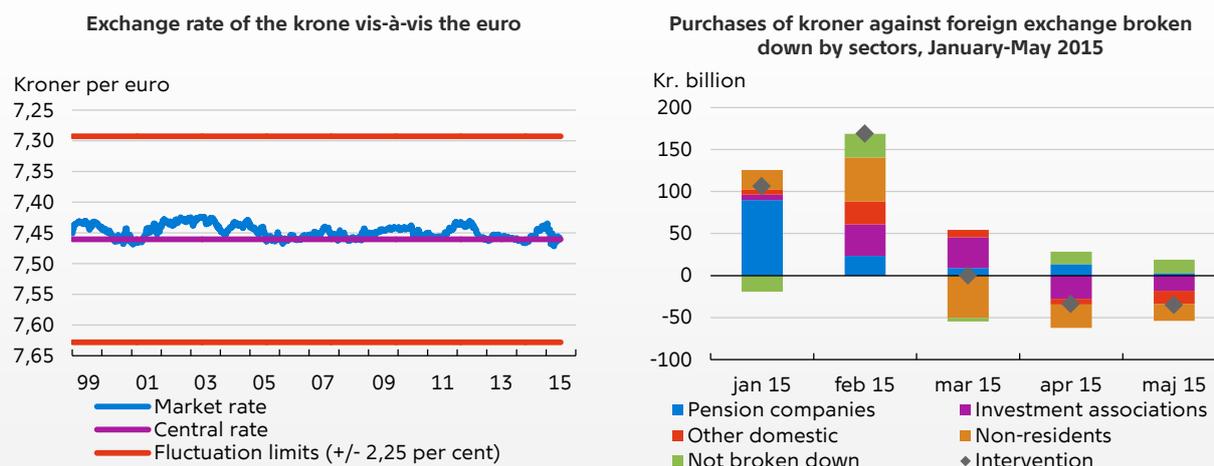
MONETARY AND EXCHANGE RATE CONDITIONS

In recent months, the krone has been stable vis-à-vis the euro, cf. Chart 12 (left). Demand for Danish kroner has been lower than in the first months of

the year, when it rose sharply in response to the decision by Schweizerische Nationalbank, SNB, no longer to cap the exchange rate of the Swiss franc against the euro. After having purchased kroner for large amounts in the first two months of the year, non-resident investors began to sell kroner from March, cf. Chart 12 (right). On an overall net basis, non-residents have sold kroner this year. Domestic investors continued the tendency from the first two months, buying kroner for considerable amounts in March. In April and May, most domestic investors sold kroner on a net basis. Insurance companies and pension funds (hereinafter pension companies) still seem to be buying kroner. Their demand for kroner has been a major factor behind the development in the market for kroner this year. Overall, the sector has increased its hedging of exposures in euro and has therefore purchased kroner. But the behaviour of the pension companies varies considerably. Just over half of the sector has reduced exposures in euro since the beginning of the year, while just under half has increased exposures in euro, cf. Box 2. Investment associations contributed to the demand for Danish kroner in February and March. Demand was concentrated on very few managers of investment associations.

Exchange rate of the krone vis-à-vis the euro and selected sectors' net purchases of kroner against foreign exchange

Chart 12



Note: Left-hand chart: Reverse scale for the exchange rate of the krone. The most recent observation is from 16 June 2015. Right-hand chart: Data for the period January-April is based on reporting to the MFI, securities, investment association and balance of payments statistics. Data for May is based on reporting by the seven most active banks in the foreign exchange market for kroner. "Not broken down" includes e.g. purchase and sale of foreign exchange by MFIs. It also includes the central government's transactions in foreign exchange. Interventions are Danmarks Nationalbank's intervention purchases of foreign exchange.

Source: Danmarks Nationalbank.

Overall the pension sector went against the krone – but with considerable variation

Box 2

Domestic investors and firms accounted for just over two thirds of the inflow of foreign exchange in January and February. A considerable portion of the demand for Danish kroner reflects increased hedging of the exchange rate risk by Danish pension companies taken as one, especially via forward purchases of Danish kroner.

The Danish pension sector is very large

The pension companies are important actors in the Danish financial market and by e.g. restructuring their portfolios and hedging foreign exchange positions, they can have a marked impact on demand for kroner. Their significance is illustrated by the fact that, relative to the size of the economy, this sector is larger than in any other OECD country. The

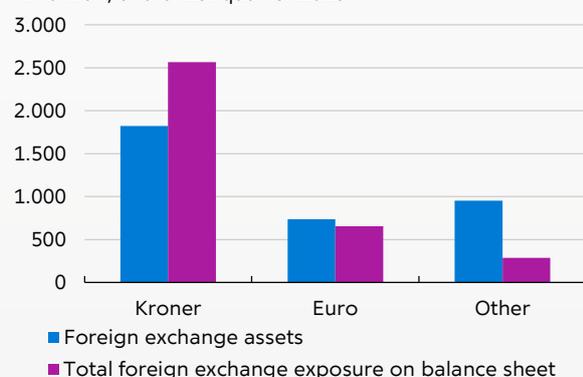
pension companies' financial assets total more than kr. 3,000 billion, corresponding to just over 150 per cent of GDP.

When their investments via investment associations are included, the pension companies own 44 per cent of the outstanding volume of Danish government securities and 26 per cent of the outstanding volume of mortgage bonds. The sector's investment need has increased considerably in recent years and it has a substantial need also to invest outside Denmark as the domestic financial markets are not sufficiently large to fully absorb the sector's need. Around half of the sector's financial assets are foreign exchange assets. Of these, euro-denominated assets account for around 40 per cent, cf. the left-hand chart below.

Pension companies' assets, exposures and hedging

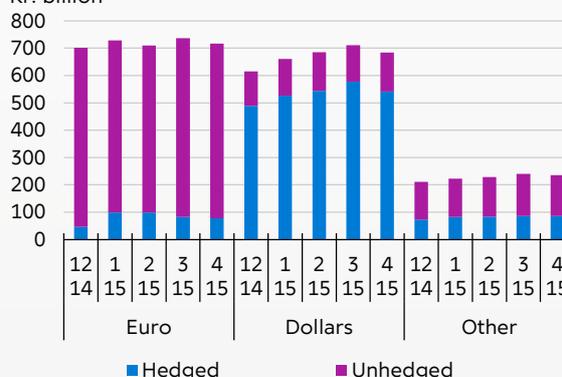
Aggregate holdings of assets and ultimate exposures in kroner, euro and other currencies

Kr. billion, end of 1st quarter 2015



Foreign exchange exposure and hedging

Kr. billion



Note: Left-hand chart: Holdings of assets denominated in foreign exchange are calculated as the sum of "hedged" and "unhedged" in the right-hand chart.

Source: Danmarks Nationalbank.

The pension companies' management of foreign exchange risk

The pension companies have an obligation to hold sufficient assets to meet their commitments to customers. Regulation of the sector means that the companies' investment strategies must reflect the benefits promised to customers in the form of guarantees.¹ Among other things, this means that the assets used to cover these obligations must be invested in a manner that is suitable in relation to the nature and duration of the commitments.

Due to the fixed exchange rate policy, the companies hold considerable unhedged exposures in euro.² However, by far the largest share, namely around 70 per cent, of their ultimate exposure is in Danish kroner. Exposures to other currencies than the krone and the euro are limited. At the end of 2014, around 7 per cent of the pension companies' euro investments had been hedged, but this figure rose to around 11 by the end of April, cf. the right-hand chart above. The increase mainly took place in January and contributed significantly to the pressure on the krone. Furthermore,

the pension companies have increased their hedging of exchange rate risk in dollars. The degree of hedging by the pension companies varies considerably. Some hedge practically no positions linked to investments in euro, while others hedge them fully.

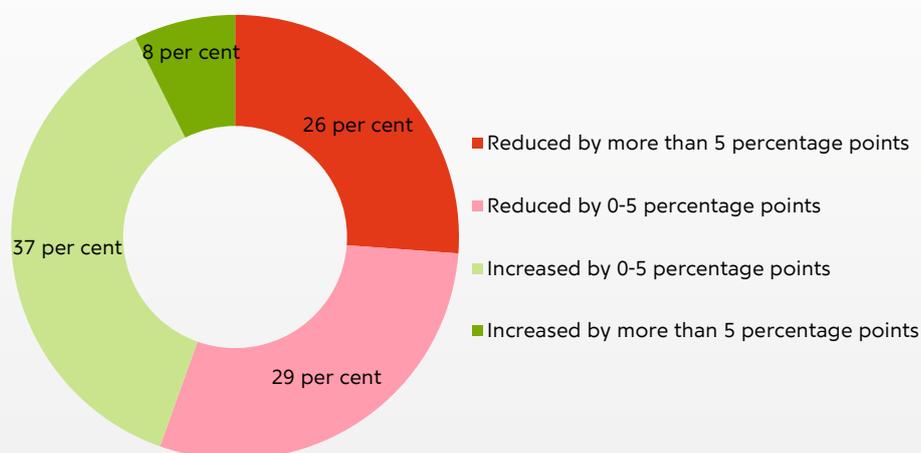
Considerable variation in how much the companies changed their exposures during the pressure on the krone

Taken as one, the companies have reduced their exposure in euro, which has contributed to the pressure on the krone. However, the degree to which the pension companies have changed their exposures in euro in 2015 varies considerably. Measured by the balance sheet total, just over half of the sector chose to reduce the exposure in euro, cf. the chart below. Conversely, just under half increased the exposure to euro. In general, companies with relatively high exposures in euro reduced their exposures slightly less than those which already had a relatively low exposure. Hence, the spread between the companies' euro exposures has widened.

1. The "prudent person" principle, cf. the Danish Financial Supervisory Authority's Christmas letter: Prudent person-principippet (the prudent person principle – in Danish only), 18 December 2014.

2. The potential fluctuation in the exchange rate of the euro in the calculation of the capital requirement for the companies is 2.39 per cent. It is limited by the fluctuation band in ERM 2. For most other currencies, the potential fluctuation in the exchange rate against the krone is 25 per cent.

Changes in the companies' euro exposures from December 2014 to April 2015 in per cent of their balance sheet totals – weighted by the size of the balance sheet



Note: Euro exposure means exposure to euro after any hedging transactions. Weighted by the balance sheet total at end-2014.
Source: Danmarks Nationalbank.

Danmarks Nationalbank intervened in the foreign exchange market, selling foreign exchange against kroner for a total of kr. 69 billion in April and May. This was considerably less than the purchases of foreign exchange against kroner in January and February, which totalled kr. 275 billion.

Danmarks Nationalbank kept its monetary policy interest rates unchanged after the four reductions in January and February. So throughout the period the lending rate and the rate of interest on certificates of deposit were 0.05 and -0.75 per cent, respectively, while the discount and current account rates were 0.00 per cent. The temporary suspension of sales of government bonds continued. It was introduced in late January in an attempt to curb the inflow of capital into Denmark at a time when demand for kroner was strong. The suspension of sales of government bonds works by reducing the supply of government bonds, thereby pushing down long-term yields. Danmarks Nationalbank's intervention in the market for kroner went hand in hand with a strong increase in the banks' need to deposit funds at Danmarks Nationalbank in January and February,

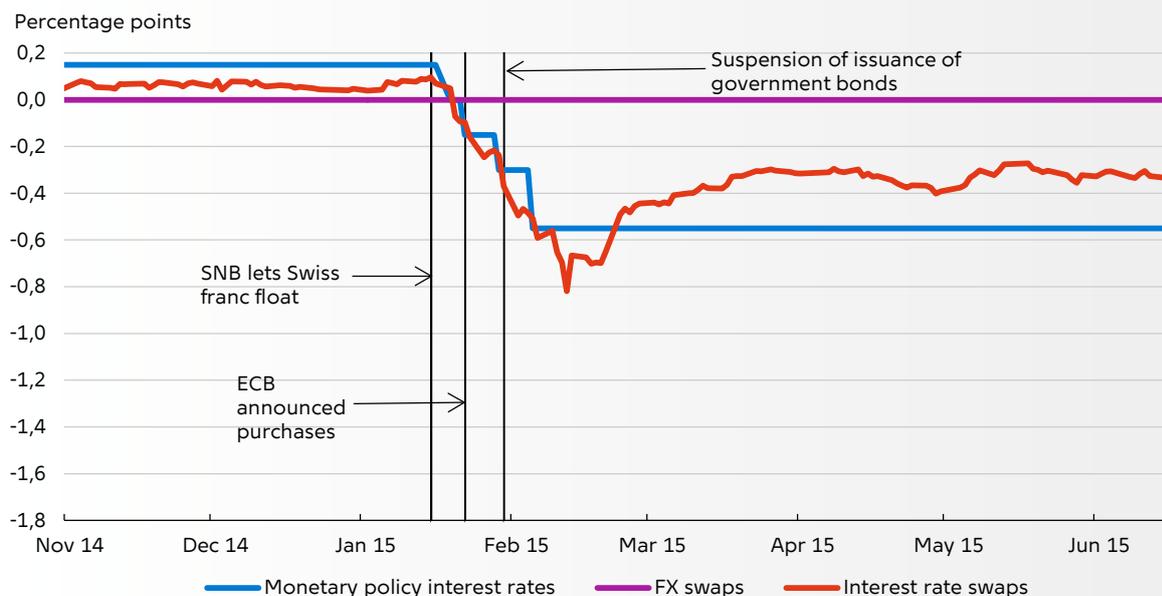
and consequently the overall current account limit of the monetary policy counterparties was raised substantially, from kr. 37 to 173 billion, in March.

Short-term Danish money market interest rates stabilised in April and May at a level slightly above the rate of interest on certificates of deposit. The spread between short-term money market interest rates in Denmark and the euro area was more or less constant and slightly above the monetary policy spread, cf. Chart 13. The implied interest rate spread based on FX swaps, which declined considerably in January and February due to demand for kroner in forward transactions, increased and once again approached the monetary policy spread.

Longer-term money market interest rates give an indication of market participants' expectations of future short-term money market rates. The level of these interest rates suggests that market participants expect the very short-term money market spread between Denmark and the euro area gradually to narrow over the next around 18 months, cf. Chart 14.

Interest rate spreads between Denmark and the euro area

Chart 13

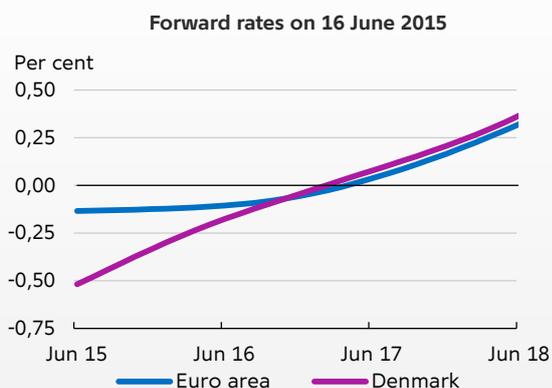


Note: The monetary policy spread is the spread between Denmark's Nationalbank's rate of interest on certificates of deposit and the ECB's deposit rate. The interest rate swap spread is the spread between the 3-month EONIA and CITA swap rates. The FX swap spread is the 3-month interest rate spread implied from FX swaps and is an expression of the costs of borrowing kroner against euro as collateral. The most recent observations are from 16 June 2015.

Source: Thomson Reuters Eikon, ECB and Danmarks Nationalbank.

Expectations of money market interest rates in Denmark and the euro area

Chart 14



Note: The curves are instantaneous forward interest rate curves based on CITA and EONIA interest rates swaps, respectively. Forward interest rate curves indicate what the rate of interest is expected to be at a given future date if any risk premia are disregarded.

Source: Scanrate Rio.

The level of money market interest rates also indicates that market participants expect the short-term money market interest rates to remain negative for another two years or so in both the euro area and Denmark.

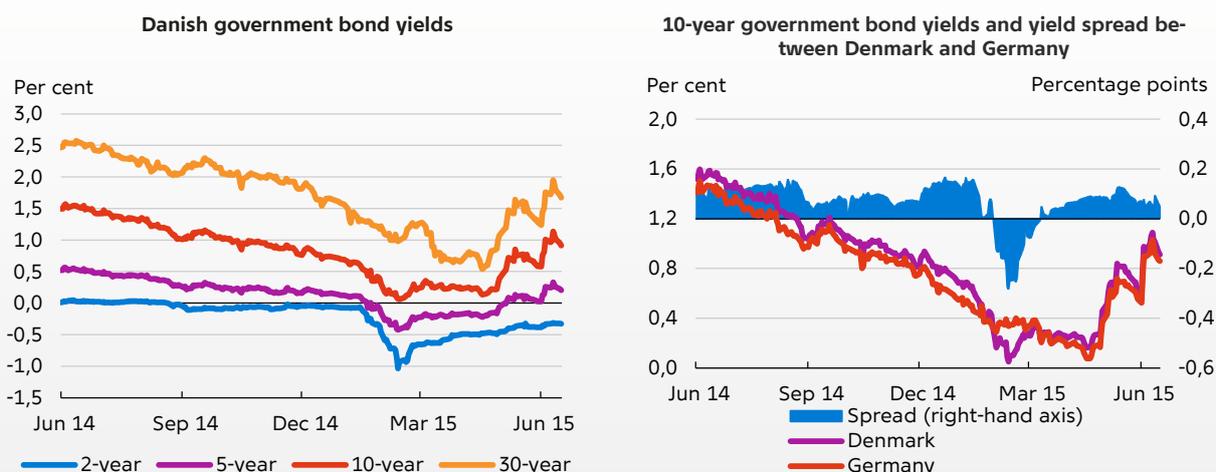
DEVELOPMENTS IN THE CAPITAL MARKET

Yields on Danish government bonds have risen substantially since the second half of April, cf. Chart 15 (left). The increase has been strongest for bonds with longer maturities. Nevertheless, yields are still considerably below the 2014 average. Short-term yields rose only slightly and are still lower than before the pressure on the krone started in January 2015.

The rise in long-term government bond yields was a little stronger in Denmark than in the euro area, cf. Chart 15 (right). This meant that the zero coupon spread between 10-year government bond yields in Denmark and Germany widened to around 10 basis points after having been negative from mid-January to mid-March. The spread widened against the background of easing pressure on the krone market.

Government bond yields in Denmark and Danish and German government bond yields and yield spread

Chart 15



Note: Zero coupon yields, i.e. calculated yields for maturities of exactly 2, 5, 10 and 30 years. The most recent observations are from 16 June 2015.

Source: Scanrate Rio and Nordea Analytics.

The Danish government sold T-bills in five of the seven auctions from the beginning of March until mid-June. On several occasions the volumes allotted were well below the bid volumes. In the first auctions in March and May, no T-bills were sold, as was also the case in the February auctions. The low sales of T-bills reflect bid prices that in several cases were not sufficiently attractive relative to market prices. The suspension of sales of government bonds has reduced liquidity in the Danish government bond market. Therefore the government and Danmarks Nationalbank have jointly launched a number of measures to support liquidity in the market, including by reintroducing switch auctions.

The yields on mortgage bonds developed more or less in parallel with government bond yields. Yields on the shortest-term mortgage bonds remain negative, but have risen a little from the levels seen in January and February, cf. Chart 16 (left). Yields on long-term fixed rate bonds rose strongly from the end of April and are back at the level from the autumn of 2014, but remain well below the average for 2014. The duration of the outstanding mortgage bonds has risen considerably, but from a low level. This reflects a substantial volume of remortgaging into loans based on fixed rate bonds, as well as the rising level of interest rates in recent months.

Over the last year, non-resident investors and domestic pension companies have increased their holdings of Danish mortgage bonds by kr. 111 and 82 billion, respectively. A substantial share of the purchases were made in the first four months of the year, when non-resident investors increased their holdings by kr. 44 billion, and pension companies increased theirs by kr. 88 billion.²

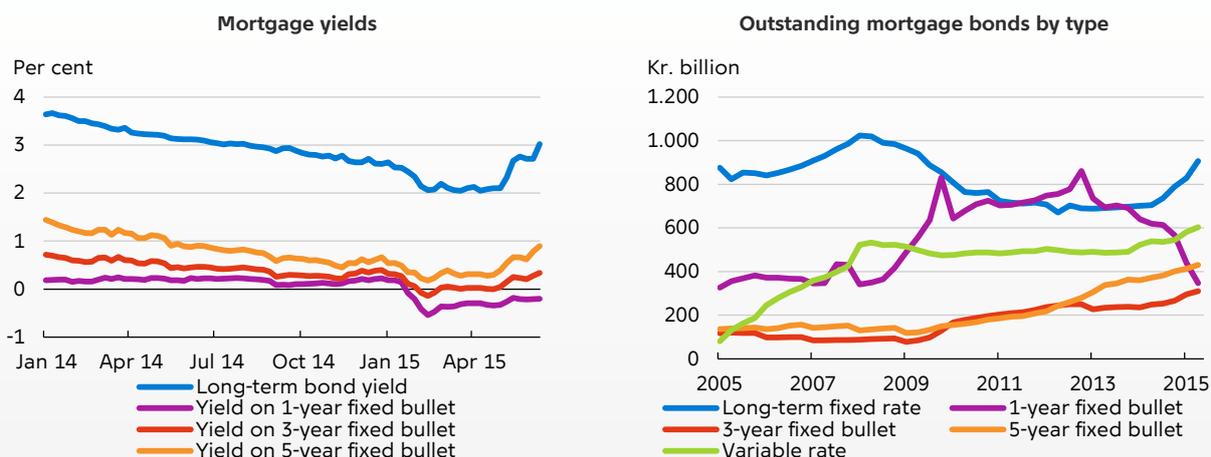
The tendency for borrowers to remortgage from 1-year adjustable rate loans to e.g. loans with interest rate adjustment every three or five years or fixed rate loans continued, cf. Chart 16 (right). The outstanding volume of 1-year fixed bullets has approximately halved since 2011-12. The low level of interest rates has made it possible for borrowers to lock the rate of interest at a low level for a longer period. Furthermore, the mortgage banks have changed their price structures over a number of years, making it more attractive for borrowers to switch away from 1-year fixed bullets.

Up to the termination deadline at the end of April, callable loans totalling slightly more than kr. 100 billion were terminated. In other words, the level of remortgaging remained high. 3 and 3.5 per cent loans each contributed around kr. 30 bil-

² Approximately half of the net addition by the pension companies is attributable to a single company's restructuring from indirect ownership via investment associations to direct ownership.

Mortgage yields and outstanding mortgage bonds

Chart 16



Note: Left-hand chart: The long-term bond yield is a weighting of yields on 30-year fixed rate bonds. Yields on fixed bullets are yields on bonds for financing adjustable rate loans on the last trading day of the week in question. The most recent observations are from calendar week 24 2015. Right-hand chart: The outstanding value is stated at nominal value at month-end. The value of long-term fixed rate bonds rises, partly because the calculation does not take into account premature redemptions on the due date that have taken place in connection with remortgaging in the 1st quarter. The calculations for October 2009 and 2012 are affected by early registration of bonds at VP Securities for subsequent refinancing. The distribution of short-term fixed rate bonds on loans with different refinancing frequencies has been estimated on the basis of changes in the nominal outstanding volumes in various intervals for remaining time to maturity. "5-year fixed bullet" has been calculated as the change in the nominal outstanding volume 5.5-3.5 years before the maturity of the bonds, "3-year fixed bullet" has been calculated for the interval 3.5-2.5 years, and "1-year fixed bullet" for the interval 1.5-0 years. Variable rate bonds are bonds with indexation of the yield more frequently than they are refinanced and where the reference interest rate follows a market-based rate, e.g. a CITA swap rate. The most recent observations are from April 2015.

Source: Association of Danish Mortgage Banks, Nordea Analytics and Danmarks Nationalbank.

lion, while 4 per cent loans contributed just over kr. 20 billion. Borrowers with 3.5 and 4 per cent loans were most inclined to remortgage. New issuance in April and May was mainly in 30-year 2 per cent bonds.

The negative rates of interest on some mortgage loans raised a number of issues in relation to the practical, contractual and tax-related handling of negative interest rates. Consequently, the Minister for Business and Growth in February 2015 set up a rapid task force to identify potential issues in relation to negative rates of interest on mortgage loans. The task force published its report in April 2015. The report concludes that negative rates of interest do not cause any significant problems in relation to adjustable rate loans, but may constitute a challenge in relation to loans based on variable rate bonds with and without amortisation. As regards existing loans, it is up to the individual mortgage bank to determine how it handles negative interest rates. For new loans, various models are outlined for handling negative rates of interest on loans financed via variable rate bonds, cf. Danmarks Nationalbank, Financial stability, 1st half 2015. At the same time, the task

Equity prices in Denmark and the euro area

Chart 17



Note: Datastream indices. Health care accounts for approximately 50 per cent of the market value of the total index in Denmark. The most recent observations are from 16 June 2015.

Source: Thomson Reuters Datastream.

force assesses that there is no immediate need for legislation in this area as the individual mortgage bank is free to choose the model that matches its business model best.

Equity prices have risen strongly since the turn of the year, cf. Chart 17. Since the beginning of 2014, Danish equities have performed better than those of the euro area. The Danish figures are boosted by very positive equity price developments for pharmaceutical companies.

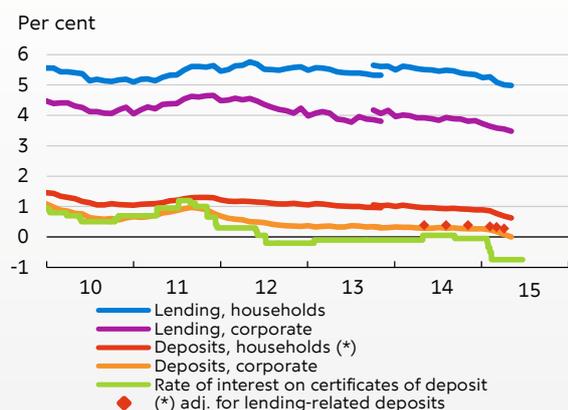
INTEREST RATE AND CREDIT DEVELOPMENTS IN RELATION TO HOUSEHOLDS AND THE CORPORATE SECTOR

The banks' lending and deposit rates for households and the corporate sector have fallen over the last year, cf. Chart 18. The rates of interest on outstanding loans to the households and the corporate sector fell by 0.4 and 0.3 percentage point, respectively, from the end of October 2014 to the end of April 2015. In the same period, deposit rates for both categories fell by 0.3 percentage point. The fall in interest rates was most pronounced in the first months of the year when monetary policy interest rates were reduced.

Adjusted for lending-related deposits³, the average rate of interest on household deposits was 0.3 per cent in March, which is only slightly higher than the corporate deposit rate. The rate of interest on the households' ordinary demand deposits, such as salary accounts, is zero, cf. the chapter "Negative interest rates and their impact on credit institutions' earnings" in Danmarks Nationalbank, Financial stability, 1st half 2015. Many large corporate deposits and deposits from e.g. institutional investors on conditions resembling those in the money market accrue interest at a negative rate.

The banks' and mortgage banks' lending to households and the corporate sector has increased a little over the past six months, cf. Chart 19. From October 2014 to April 2015, lending by banks was virtually unchanged, while lending by mortgage banks increased by almost kr. 21 billion. In relative terms, the rise was most pronounced for corporate lending, in that lending to households and the corporate sector rose by 0.6 and 0.8 per cent, respectively. This means that lending growth remains limited despite the low level of interest rates.

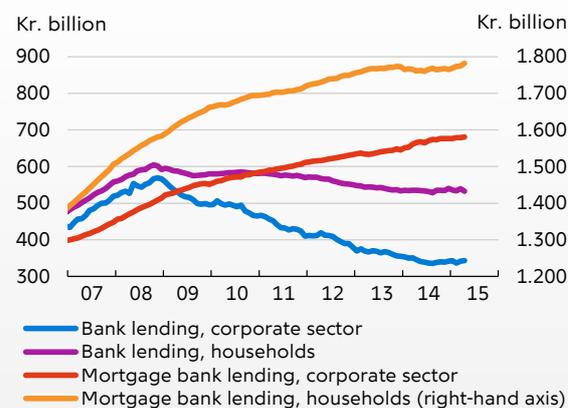
The banks' lending and deposit rates for households and the corporate sector and Danmarks Nationalbank's rate of interest on certificates of deposit Chart 18



Note: Monthly averages of effective interest rates on outstanding business. Changes in Danmarks Nationalbank's rate of interest on certificates of deposit are shown on a daily basis on the day of the announcement. The most recent observations are from April 2015 for bank interest rates and from 16 June 2015 for the rate of interest on certificates of deposit. The most recent observation for the deposit rate for households adjusted for lending-related deposits is from March 2015.

Source: Danmarks Nationalbank.

Lending by banks and mortgage banks to households and the corporate sector Chart 19



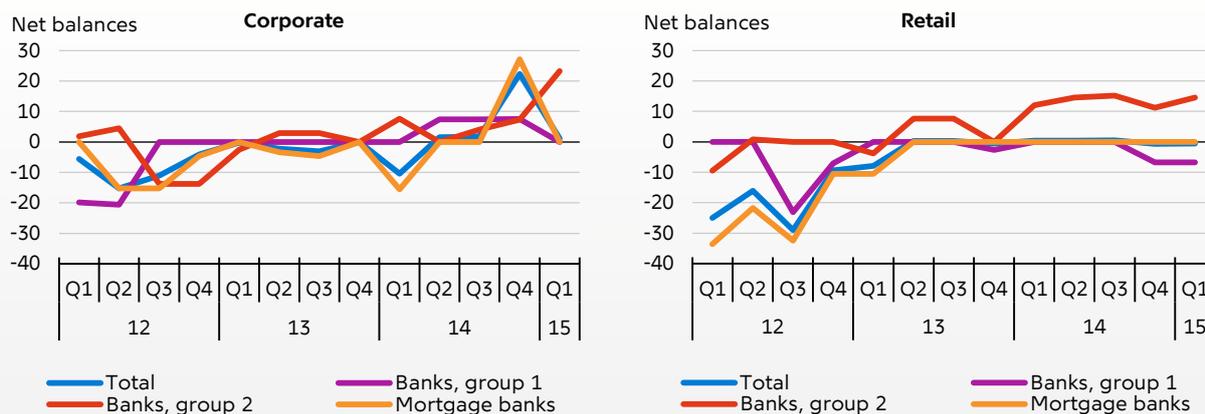
Note: Seasonally adjusted lending at nominal value. Adjustment has been made for the break resulting from the transition to new MFI statistics in September 2013. The most recent observations are from April 2015.

Source: Danmarks Nationalbank.

³ Some of the households' demand deposits are combined with bank mortgage loans so that in practice deposits reduce the mortgage loan. Hence the rate of interest on the deposit matches the somewhat higher lending rate. As a result, the overall average rate of interest on demand deposits is somewhat higher than zero.

Change in credit standards vis-à-vis corporate and retail customers

Chart 20



Note: Retail customers are households excluding farms. The net balance lies within the interval -100 to 100. A negative net balance means that credit managers of the credit institutions in question have, overall, stated that credit standards have been tightened relative to the preceding quarter. Conversely, a positive net balance indicates easing of credit standards. The banks have been divided into groups 1 and 2 in accordance with the Danish Financial Supervisory Authority's size groups for 2015.

Source: Danmarks Nationalbank.

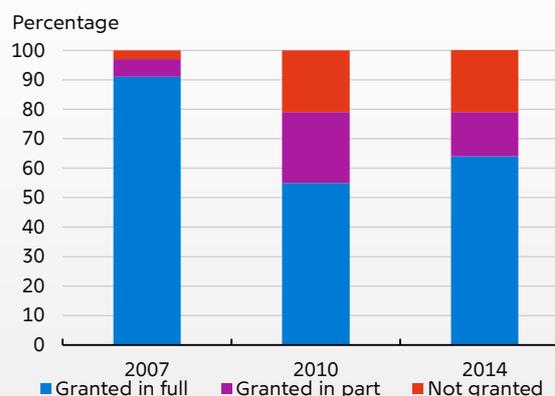
According to Danmarks Nationalbank's lending survey, overall credit standards for retail and corporate customers were virtually unchanged from the 4th quarter of 2014 to the 1st quarter of 2015, cf. Chart 20. However, competition has contributed to further easing of conditions by the banks. As regards corporate customers, all types of institutions stated that competitor behaviour had contributed to easing. For the banks this has mainly been effected via prices. Conversely, some mortgage banks continue to tighten credit standards via prices as seen in recent years.

The responses to the lending survey point to a small rise in demand for loans from both existing and new corporate customers in the 1st quarter of 2015. Demand from both existing and new retail customers also increased in the 1st quarter of 2015. Overall, the banks and mortgage banks expect demand for loans from all customers segments to rise in the 2nd quarter of 2015.

In April, Statistics Denmark published the results of a survey of small and medium-sized enterprises' access to funding in 2014. The last survey of this type was conducted in 2009-10. The survey indicates that there has been a small improvement in access to funding. The proportion of firms that obtained the full loan funding applied for had risen a little compared with the previous survey, cf. Chart 21. However, fewer firms applied for loan funding. Three out of four

Outcome of applications from firms seeking loan funding from banks and savings banks

Chart 21



Source: Statistics Denmark.

firms that did not apply in 2014 stated that they did not need to do so.

THE DANISH ECONOMY

DOMESTIC ACTIVITY

The upswing seen in 2014 has continued in the first part of this year. Adjusted for price developments and seasonal fluctuations, GDP was 0.4 per cent higher in the 1st quarter than in the preceding quarter, cf. Chart 22 (left). Growth was driven mainly by exports and public and private consumption, cf. Table 3. Unemployment and employment figures also point to an economy that is strengthening.

Real GDP was 1.1 per cent higher in 2014 than in the previous year. In the coming years, the economic upswing is expected to gain momentum, and growth in real GDP is forecast at 2.0 per cent this year and 2.1 per cent next year. A

slightly smaller increase of 1.8 per cent is expected in 2017, when the economy reaches its normal capacity.

The output gap, which is the difference between actual and potential output, was approximately 1.5 per cent of GDP in early 2015. The gap is calculated with some uncertainty, but is forecast to close in 2017, cf. Chart 22 (right). Given the limited labour resources available, there is a genuine risk that capacity pressures increase over a short-term horizon if the rise in activity is stronger than forecast in the projection. This may lead to an extensive shortage of labour, cf. the article "Risks associated with the current upswing in the Danish economy" in this Monetary Review.

The reason why the output gap will close fairly soon, even if growth in demand is limited, is that growth in the underlying potential output

Key economic variables

Table 3

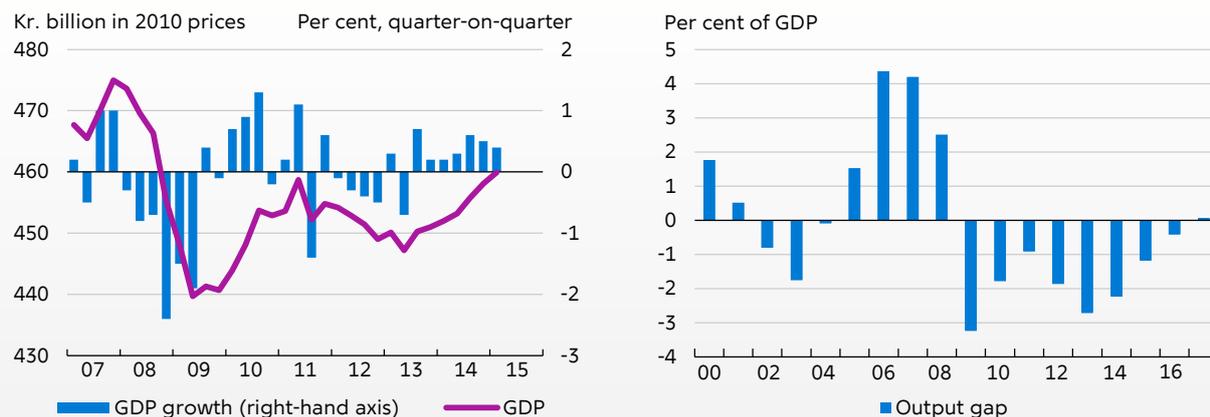
Real growth on preceding period, per cent					2014/2015		
	2014	2015	2016	2017	Q3	Q4	Q1
GDP	1.1	2.0	2.1	1.8	0.6	0.5	0.4
Private consumption ¹	0.5	2.2	2.2	2.1	-0.1	1.3	0.7
Public consumption	1.4	0.8	0.4	0.8	0.6	0.1	0.6
Residential investment	6.5	0.5	4.1	3.5	0.3	-1.2	-2.2
Public investment	8.6	-0.7	-0.6	-0.9	0.0	9.2	-8.3
Business investment	1.0	4.3	6.9	5.4	1.4	0.7	-0.5
Inventory investment, etc. ²	0.3	-0.1	0.0	0.0	0.5	-0.5	-0.4
Exports	2.6	3.3	3.5	3.3	0.6	-0.4	2.0
Industrial exports	1.0	5.5	3.9	4.2	-1.0	1.2	3.4
Imports	3.8	2.8	3.9	4.0	1.0	-0.5	0.4
Employment, 1,000 persons	2,768	2,800	2,835	2,872	2,770	2,777	2,784
Gross unemployment, 1,000 persons	135	122	112	105	133	131	128
Balance of payments, per cent of GDP	6.3	7.3	6.6	6.3	7.0	6.9	7.1
Government balance, per cent of GDP	1.8	-1.0	-2.4	-1.8	3.2	2.8	-1.0
House prices, per cent year-on-year	3.4	5.9	3.1	3.5	3.7	3.5	5.5
Consumer prices, per cent year-on-year	0.3	0.5	1.8	1.9	0.3	0.1	0.0
Hourly wages, per cent year-on-year	1.3	2.0	2.8	2.8	1.3	1.2	1.3

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).

GDP in volume terms (left) and output gap (right)

Chart 22



Note: Seasonally adjusted data. Right-hand chart: The output gap is the difference between actual and potential GDP. For a more detailed description of the calculation method, see Asger Lau Andersen and Morten Hedegaard Rasmussen, Potential output in Denmark, Danmarks Nationalbank, *Monetary Review*, 3rd Quarter 2011, Part 2. The output gap shown has been estimated on the basis of gross unemployment.

Source: Statistics Denmark.

in Denmark is relatively low. This has been the case for many years and is attributable to demographic trends, among other factors. However, this does not mean that income generation, and hence prosperity development, has been weaker in Denmark than in many neighbouring countries, including Sweden, cf. Box 3.

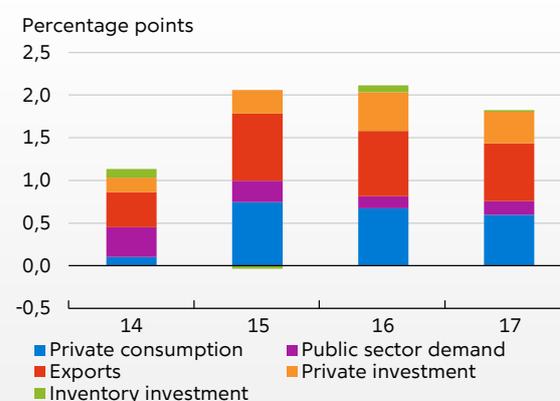
The most important driver of GDP growth in the coming years is expected to be exports, cf. Chart 23. Demand is rising in many of the key export markets, including the euro area, and at the same time Danish wage competitiveness has improved considerably in recent years. Industrial exports are forecast to grow by an annual average of 4.5 per cent in 2015-17, while total exports will grow by an average of around 3.5 per cent in real terms.

Domestic demand is driven by e.g. private consumption, which is expected to grow by just over 2 per cent this year and the next two years. This development is supported by high consumer confidence and could potentially be even stronger than forecast in the projection if the consumption ratio normalises rapidly. The reason is that household income is rising. Real disposable income is forecast to grow by an average of 2 per cent p.a. in the coming years as a result of rising wages and employment. The fall in interest rates has reduced the households' net interest expenses a little, thereby boosting disposable income. Over

the last year, this decline has been moderated via remortgaging from variable to fixed rate loans; however, the latter provide greater certainty about future interest expenses. Developments in private consumption should also be viewed in the light of rising household wealth, especially due to higher house prices and hence home equity for those who own their homes. This is expected to increase the consumption ratio, which is currently low, a little towards 2017.

Contributions to GDP growth

Chart 23



Note: Growth contributions adjusted for imports.
Source: Statistics Denmark and own calculations.

Comparison of prosperity developments in Denmark and Sweden

Box 3

Real growth in GDP, which is often used as a measure of growth in prosperity development in a country, has been substantially lower in Denmark than in several neighbouring

countries, including Sweden, since the mid-1990s. This also applies in the period since the financial crisis, cf. the table below.

Prosperity developments in Denmark and Sweden

	Denmark	Sweden	Denmark	Sweden
	1995-2014		2007-2014	
Annual growth rate				
Real GDP	1.2	2.4	-0.5	0.8
Terms of trade effect	0.2	-0.3	0.3	-0.1
Income from abroad	0.4	0.1	0.6	-0.2
Prosperity	1.9	2.1	0.5	0.6
- Population aged 20-64 years	0.1	0.5	0.0	0.6
Prosperity per 20-64-year-old	1.7	1.6	0.5	0.0

Anm.: Prosperity has been calculated per capita for the age groups from which the labour force is recruited in order to focus on productive input in the two countries. Alternatively, the entire population could have been applied. This does not change the overall pattern.

Source: Statistics Denmark and Statistics Sweden.

The lower growth in real GDP in Denmark reflects lower potential growth due to factors such as demographic trends, with fewer people of working age, and furthermore growth in productivity in the economy overall has for a long period been lower than in e.g. Sweden. But in recent years industrial productivity in Denmark has risen considerably. However, high productivity growth often goes hand in hand with deteriorating terms of trade¹, i.e. the relationship between export and import prices. This is because high productivity is typically passed on to consumers in the form of lower producer prices. This reduces value added and hence generation of income in the producer country. For some years, this effect has been pronounced in Sweden, where the industrial sector is more dominated by e.g. IT and communication companies, where productivity is high and prices are falling, than the Danish industrial sector is. On the other hand, Denmark has a large pharmaceutical industry, where downward price pressures have been smaller. In general, Danish firms have been good at selling their products at high prices, thereby supporting high income generation, which may be distributed on wages or gross profits.

In addition, Denmark's net foreign assets have increased to currently approximately 40 per cent of GDP; the return on these assets makes a positive contribution to domestic pur-

chasing power. In 2014, this return accounted for just over 3 per cent of GDP. This should also be taken into account when comparing prosperity developments across countries. Overall, the development in real GDP does not necessarily provide a true and fair view of prosperity development in a country. If real GDP is adjusted for these two factors – terms of trade and return on net foreign assets – prosperity development, and hence purchasing power, in Denmark and Sweden have moved more or less in parallel over the last 20 years. Nevertheless, prosperity development in Denmark would have been stronger if growth in productivity had been higher and if the Danish economy had avoided the bubble in 2005-07 and the subsequent long recession.

Moreover, if it is taken into account that the population of working age has risen notably faster in Sweden than in Denmark, the picture changes, and the development in prosperity measured by the real gross national disposable income per 20-64-year-old, adjusted for terms of trade, was highest in Denmark. The conclusion is that despite the relatively moderate growth in real GDP, which can be assumed to continue, prosperity development in Denmark keeps abreast with that of neighbouring countries. This also applies if the group of countries is increased.

1. Adjustment of real GDP for terms of trade is done by adding an element whereby exports deflated by export prices are deducted from exports deflated by import prices. If import prices rise by less than export prices, i.e. the terms of trade improve, there will be a positive contribution to household consumption opportunities. If the population increases, this will, all else equal, reduce consumption opportunities per capita as the value generated in society must be distributed on more people.

As the Danish economy has picked up, building and construction activity has risen, cf. Chart 24. The expiry of the tax deductibility of home repairs

and improvements at the turn of the year may to some extent have brought forward construction activity, but the rise in employment continued in

the 1st quarter of 2015. This is reflected in a fall in unemployment in the sector, which has been highly cyclical over the last decade, from more than 11 per cent in mid-2010 to 4.7 per cent in March this year.

Both residential investment and business investment in building and construction are expected to contribute to further growth in construction in the coming years. Moreover, investments in plant and equipment are expected to increase

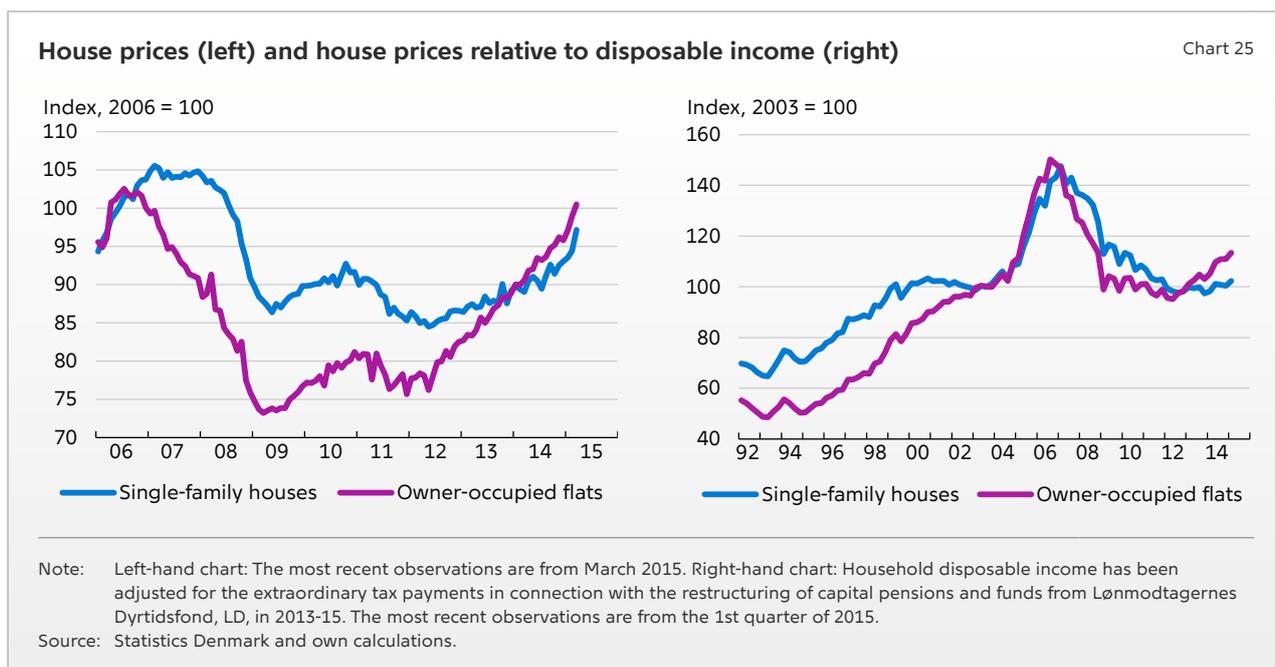
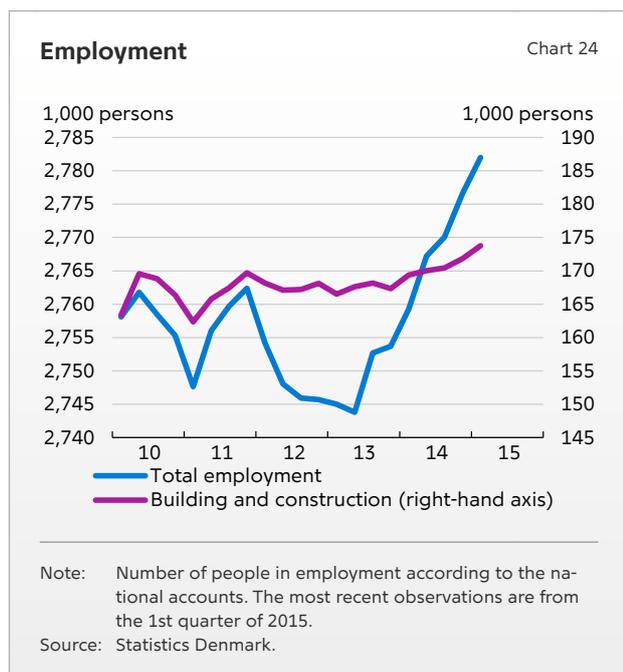
slightly faster than added value in the non-agricultural sectors, supported by the low level of interest rates and higher capacity utilisation. Hence, the investment ratio is expected to rise a little from its current low level. The savings surplus of the non-financial corporations was more than 10 per cent of GDP in the 4th quarter of 2014 and could potentially boost business investment substantially.

THE HOUSING MARKET

The housing market is improving and there are signs that the fall in interest rates in the 1st quarter of the year accelerated the increase in house prices, cf. Chart 25 (left). Prices are not rising at the same pace in all parts of Denmark, but annual growth in house prices was positive in all parts of the country in the 4th quarter of 2014.

For Denmark overall, house prices were approximately 6 per cent higher in the 1st quarter of 2015 than one year earlier. For owner-occupied flats, annual growth has been constant at around 8-9 per cent over the last couple of years. Relative to household disposable income, prices of both houses and owner-occupied flats are, however, some 40 percentage points below the peak in 2007, cf. Chart 25 (right).

Trading activity, measured by the number of sales registered in the land register, has risen, the supply of homes for sale has declined, price reductions are smaller than previously and the time



on market has decreased in recent quarters. The level of trading activity remains comparatively low and time on market is still high for houses, as is the number of homes for sale. This indicates that in many areas a stock of houses has accumulated, and as turnover is rising, these houses are now being put on the market. As long as this continues, it will dampen price increases in the areas where there are many houses for sale.

There is particular reason to exert caution in relation to price developments for owner-occupied homes in Copenhagen. Here supply is low, demand is high and there are widespread expectations that prices will continue to rise. This is reflected in e.g. developments in project sales, where people are buying before construction has been completed. Prices in this sector have soared in recent quarters. Besides the low level of interest rates, a number of factors support the relatively high rate of price increase. Firstly, the population of Copenhagen is growing rapidly, and secondly, incomes are rising at a faster pace than in other parts of Denmark. Prices can to some extent be explained by the development in interest rates and incomes, but it is assessed that there is a considerable risk of self-reinforcing price increases. High demand relative to supply could trigger an unsound development whereby prices are increasingly driven by expectations of higher prices rather than by the underlying supply and demand factors. There are indications that recent developments in the Copenhagen market for project sales resemble the situation prior to the housing bubble in 2005-07 somewhat. But statistics for this area are poor, so the indicators are subject to uncertainty.

The rise in trading activity and the relatively large price increases for owner-occupied flats seem to be rippling through to other parts of the market, which will presumably help to dampen price increases in the cities. Most owner-occupied flats are located in the cities, while houses are to a greater extent located in suburbs and in the rest of the country. Copenhagen city accounts for approximately half of the value of the stock of owner-occupied flats, but only approximately 5 per cent of the total Danish housing stock, which includes owner-occupied flats, single family houses and terraced houses. So far the rise in activity has spread only to the suburbs of the cities. Higher growth in the rest of the country is to a

large extent linked to a general improvement of the economy.

The current level of interest rates remains low, which supports further increases in house prices. However, the rise in interest rates will presumably curb the strong price development seen recently. Against that background and in view of the general economic upswing, growth in house prices is forecast at approximately 6 per cent this year and slightly less in 2016 and 2017.

FOREIGN TRADE AND BALANCE OF PAYMENTS

Measured at current prices, exports and imports of goods grew in the first part of 2015, cf. Chart 26 (left). Export prices and volumes both rose, cf. Chart 26 (right). In the first four months of the year, the seasonally adjusted value of exports of goods, excluding ships and aircraft, was just over 6 per cent higher than in the corresponding period of 2014. Highest growth was seen in exports to the USA and China, which rose by 35 and 25 per cent, respectively, compared with the first four months of 2014, driven by e.g. higher sales of pharmaceuticals and also of mink furs to China. Exports of goods to Germany, which is Denmark's largest market, grew by almost 8 per cent. In general, the increase was broadly distributed on goods categories.

Imports also rose in the first four months of the year, albeit less than exports, so that the trade surplus landed at almost kr. 30 billion, which is somewhat above the 2014 level.

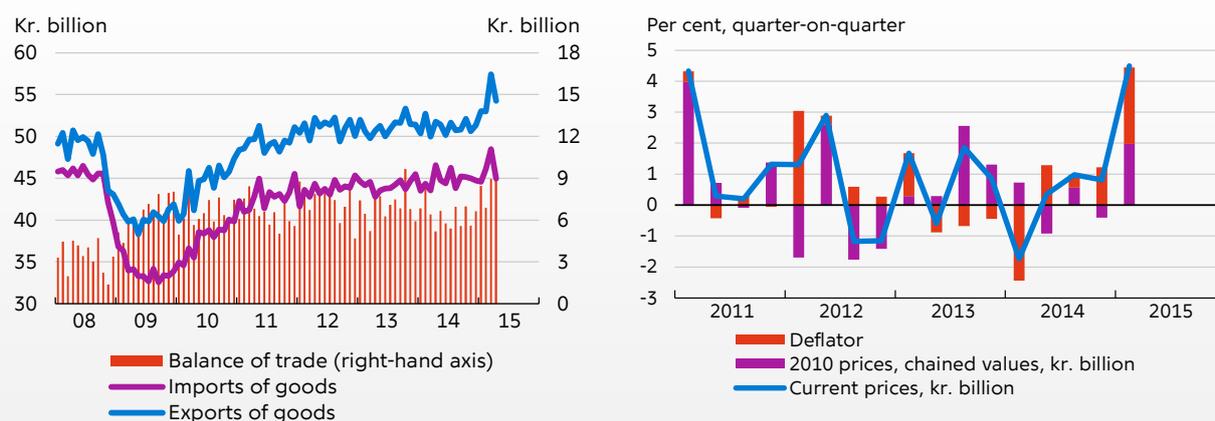
Exports of services, especially sea freight, also picked up in the first months of the year, and again the USA and China accounted for the largest increases. Exports of sea freight have grown despite declining freight rates and contracting world trade in the first part of 2015.

Growth in exports to the USA and China in particular should be viewed against the backdrop of a strengthening of the dollar since last spring, but in general demand in Denmark's export markets is growing steadily. Looking ahead, exports of goods, especially industrial exports, are expected to boost total exports. However, growth in Denmark's export markets this year is expected to be slightly lower than anticipated in the March projection, cf. Appendix 1. Exports of services are also expected to rise.

The falling tendency in the current account surplus in 2014 was reversed in the first part of

Trade in goods at current prices (left) and exports of goods decomposed by price and volume (right)

Chart 26



Note: Left-hand chart: Seasonally adjusted current prices. The most recent observations are from April 2015. Right-hand chart: Quarterly figures from the national accounts. The most recent observations are from the 1st quarter of 2015.
Source: Statistics Denmark.

this year. Stated as the sum of the 12 months up to April, the surplus was more or less the same as in the preceding 12 months. However, the surplus was lower in April 2015 than in April 2014. This was attributable to higher dividend payments to non-resident owners of Danish equities than in previous years. Dividend payments by Danish firms are typically concentrated in the spring, while dividend payments to Danish owners of foreign equities are more evenly distributed across the year.

In the projection, the current account surplus is forecast at approximately 7 per cent of GDP this year, which is slightly more than in 2014. It is expected to remain at this high level in the coming years due to factors such as investment income from foreign assets. Last year, such income accounted for just over 3 per cent of GDP.

LABOUR MARKET AND CAPACITY

The labour market continued to improve in the first part of 2015 as activity rose. According to the national accounts, employment was up by 5,500 in the 1st quarter and has now risen by more than 35,000 since the 2nd quarter of 2013. Growth has taken place in the private sector, while public sector employment has declined.

From 2014 to 2017, total employment is expected to rise by approximately 100,000. Of these, 45,000 relate to normalisation of the cyclical position, while higher structural employment, i.e.

the structural labour force less structural unemployment, accounts for the rest. The rise in structural employment is primarily attributable to the retirement reform, which will boost the structural participation rate in the coming years. In addition, there will be net immigration of people of working age.

Danmarks Nationalbank forecasts the labour market gap⁴, which indicates how much employment can rise without causing inflationary pressures, at approximately 35,000 in 2015. In the projection, the gap is expected to close during the next couple of years.

Higher employment has also led to lower unemployment. As a result, the downward trend in gross unemployment seen since the summer of 2012 continued in the 1st quarter. Gross unemployment was approximately 125,000 in April, corresponding to 4.8 per cent of the labour force. Towards the end of 2017, gross unemployment is expected to fall to 105,000, which means that the unemployment gap will be negative by 5,000.

WAGES

Private sector wage growth is slowly increasing, but from a low level. At the beginning of 2015, the

⁴ The projection operates with new definitions of the unemployment and labour force elements in the estimation of the output gap. The unemployment gap is now estimated for gross unemployment rather than net unemployment. This does not change the overall view of the cyclical position and capacity pressures in the economy.

annual rate of increase was 1.4 per cent according to Statistics Denmark. Wage growth was highest in the construction sector and within business service, while industrial wages were more flat.

In the last five years, the average rate of wage increase has been 0.5 percentage point higher among Denmark's trading partners than in Denmark. This should be viewed in the context of a long preceding period when wage growth was higher in Denmark than abroad. In the projection, the moderate wage increases are expected to adapt to the capacity situation. Wage growth is forecast at 2.0 per cent this year, rising to 2.8 per cent year-on-year in 2016-17. So wage growth remains relatively subdued, but it is normal for wages to react to increased capacity pressure with a considerable lag. With the higher wage growth in Denmark, it is not likely that the improvement in wage competitiveness seen in recent years will continue.

Public sector wage growth is also low. Public sector wages are regulated relative to those of the private sector, so in the long term they move in parallel. In 2015-16 wages for local and regional government employees are expected to rise by 1.5-2.0 per cent. For central government employ-

ees, the rate of increase is expected to be a little lower. Especially for central government employees, a substantial share of the wage increase included in the collective agreements for the public sector will take place at the end of the agreement period, i.e. at the end of 2017. The relatively low wage increases in the public sector in the coming years should be seen in the light of stronger wage growth in the public than in the private sector since 2008.

PRICES

Consumer price inflation remains moderate, but accelerated a little in the first months of the year, cf. Table 4. The annual rate of increase in the EU Harmonised Index of Consumer Prices, HICP, which was marginally negative in January, had risen to 0.4 per cent in April and May, cf. Chart 27.

The fall in oil prices since last summer and the abolition of the security of supply tax from the turn of the year have a downward impact on the annual rate of increase in consumer prices. Oil prices determine the price of e.g. petrol and fuel oil, which are included in the weight basis for consumer prices. The price of a barrel of crude oil has risen in recent months, but was still approximately

Consumer prices

Table 4

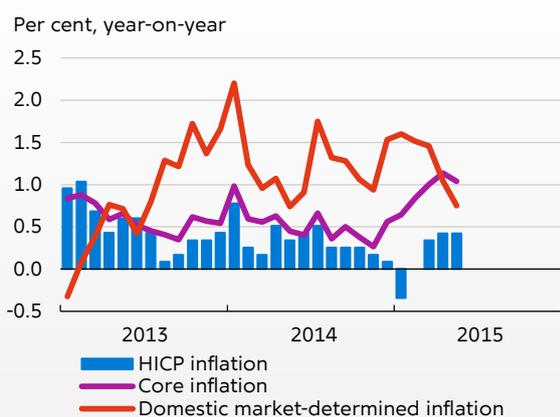
Per cent, year-on-year	Weights ¹	2014/2015									
		2014	2015	2016	2017	Q1	Q2	Q3	May	June	July
HICP		0.3	0.5	1.8	1.9	0.0	0.4	0.7	0.4	0.4	0.4
Index of net retail prices	100.0	0.7	0.9	1.8	1.9	0.5	0.7	0.9	0.8	0.8	0.8
Exogenous:											
Energy	7.8	-2.8	-7.5	2.0	1.1	-10.3	-8.6	-6.9	-8.0	-9.0	-8.1
Food	4.6	-1.5	2.5	1.8	1.8	1.5	3.3	2.8	3.3	3.3	2.9
Adm. prices	4.2	1.4	1.0	2.3	3.0	-0.1	0.1	1.4	0.2	0.4	0.3
Rent	26.1	2.5	1.9	1.9	2.2	2.2	2.0	2.0	2.1	2.0	2.3
Excl. exogenous:	57.2	0.7	1.4	1.6	1.8	1.4	1.3	1.3	1.4	1.5	1.2
Imports	18.1	-0.9	2.5	1.6	1.4	0.8	2.7	3.3	2.9	3.2	3.3
IMI	39.2	1.2	1.0	1.7	2.0	1.6	0.8	0.6	0.7	0.7	0.3

Note: The most recent actual figures are from May 2015.

¹ Weight in the index of net retail prices, per cent. The weights are from January 2015.

Consumer prices and underlying inflation

Chart 27



Note: HICP inflation is the increase in the EU Harmonised Index of Consumer Prices. Core inflation is HICP excluding energy and unprocessed food. The most recent observations are from May 2015.

Source: Statistics Denmark and own calculations.

40 per cent lower in mid-June than last summer. The prices of unprocessed food and imported goods have also risen in recent months. The latter is attributable to factors such as the lower effective exchange rate of the krone since the autumn.

Domestic price pressures remain moderate. Core inflation, i.e. the consumer price index excluding energy and unprocessed food, has risen by around 1 per cent year-on-year in recent months, while the increase in domestic market-determined inflation, IMI, has been around 1.5 per cent. This is close to the average since 1997. Normally, there is a clear negative relationship between oil prices and IMI because firms initially absorb part of the fluctuation in oil prices via profits, so in view of the sharp drop in oil prices a higher level of IMI could have been expected. The reason why this is not the case is that domestic price pressures remain limited. Import prices have risen strongly as the effective exchange rate of the krone has declined. Excluding energy, prices of imported goods were 3.8 per cent higher in May than one year earlier. Producer prices for Danish goods for the domestic market have not risen correspondingly, but all in all, developments in producer prices now indicate positive price pressures for the first time in almost two years. The overall price index for the domestic supply of goods, previously known as wholesale

prices, has risen by 0.6 per cent over the last year; excluding energy the increase was 2.5 per cent. In the projection, HICP is expected to rise by 0.5 per cent this year. This is in line with the forecast in the previous projection. Although price inflation remains subdued for the rest of this year, it will accelerate towards the end of the year due to the oil price fall in the 2nd half of 2014, i.e. a base effect. For 2016 and 2017, when the effect of the oil price fall is eliminated, annual inflation is forecast at 1.8 and 1.9 per cent, respectively. The increase in the HICP index is currently a little higher in Denmark than in the euro area, where it is expected to be 0.3 per cent in 2015 according to the ECB's June projection and to accelerate next year.

PUBLIC FINANCES

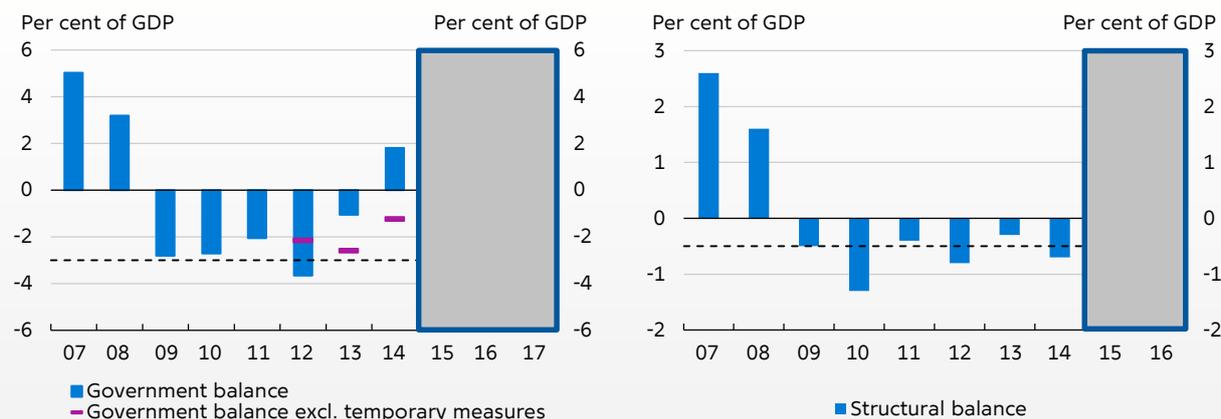
The level of public sector demand is high in a long-term perspective. This year, real growth in public consumption is expected to be 0.8 per cent, partly due to higher asylum costs. Next year it will fall to 0.4 per cent. The level of public investment is also very high. For several years, the government has been planning to reduce the level of investment, but this has proved to be difficult in practice. Danmarks Nationalbank's projection assumes that public investment will gradually decline in the coming years.

The government budget balance showed a surplus of 1.8 per cent of GDP last year, cf. Chart 28 (right). This was the first surplus in five years and was mainly attributable to one-off revenue, partly from the restructuring of the taxation of capital pensions, partly from extraordinarily high pension yield taxes. In other words, there was no underlying improvement. The extraordinary revenue is expected to fall this year so that the government budget balance will deteriorate and show a deficit of 1.0 per cent of GDP. The government deficit is forecast at 2.4 per cent of GDP in 2016 and 1.8 per cent in 2017. So Danmarks Nationalbank expects the actual balance to remain within the fiscal framework throughout the projection period.

The compilation of the structural balance made by the Ministry of Finance still indicates that fiscal policy will be very close to the limits, cf. Chart 28 (right). The forecast structural deficit for this year has deteriorated from 0.5 per cent of GDP when the Finance Bill for 2015 was presented in August 2014 to 0.6 per cent of GDP.

Government budget balance (left) and structural balance (right)

Chart 28



Note: Left-hand chart: The temporary measures are repayment of early retirement contributions in 2012 and revenue from restructuring of capital pensions in 2013 and 2014. 2015 figures have been adjusted for temporary revenue from the Pension Package. Right-hand chart: The structural balance according to the Ministry of Finance shows the fiscal balance adjusted for the cyclical position and special items, including temporary revenue.

Source: Ministry of Finance.

ECONOMIC POLICY

Denmark's monetary policy is aimed at keeping the krone stable against the euro. The fixed exchange rate policy has been a cornerstone of Danish economic policy since 1982. Denmark's Nationalbank countered the very large capital inflows from mid-January to the second half of February 2015 by e.g. reducing interest rates and intervening in the foreign exchange market for considerable amounts. Subsequently the demand for kroner lessened and Denmark's Nationalbank sold foreign exchange for kroner for a total of kr. 69 billion net in April and May. By comparison, Denmark's Nationalbank purchased foreign exchange for kroner for a considerably higher amount, kr. 275 billion, in January and February.

In connection with the pressure on the krone at the beginning of the year, the insurance and pension companies overall increased their hedging of the exchange rate risk on investments in euro. However, the degree of hedging varied considerably across the companies. Measured by the balance sheet total, just over half of the sector has reduced exposures in euro since the beginning of the year, while just under half has increased exposures in euro. Due to the fixed exchange rate policy, a very large share of the pension companies' exchange rate risk on euro-denominated investments is not hedged.

In early February, Denmark's Nationalbank reduced the rate of interest on certificates of deposit to -0.75 per cent. This is a historically low level, and – together with Switzerland – Denmark now has the world's lowest monetary policy interest rates.

The fact that interest rates are now negative has not weakened the transmission to money market interest rates, which determine the exchange rate of the krone vis-à-vis the euro. However, the negative interest rates do affect Denmark's Nationalbank's reaction function in that emphasis is on intervention rather than adjustment of interest rates. Denmark's Nationalbank can sell unlimited quantities of kroner, while the possibilities of reducing interest rates are more limited. Denmark's Nationalbank's unlimited possibilities of countering upward pressure on the krone are also underscored by the fact that the very low level of interest rates in Denmark gives Denmark's Nationalbank a positive return on the foreign exchange reserve.

So far, only MFIs, the insurance and pension sector and other financial institutions and large firms receive negative interest on deposits. In principle, economic agents can circumvent the negative rates of interest by demanding cash, which always offers a nominal return of zero. However, there are substantial costs related to

e.g. safe storage and transport of large cash amounts, and it is cumbersome to settle large transactions in cash. There are no indications that the negative rates of interest have led to unusually high demand for cash.

At present, interest rates are set to remain low throughout the projection period, and combined with developments in oil prices and the effective exchange rate of the krone this will add strong momentum to the upswing. This tightens the requirements of fiscal and structural policy.

Since the downturn in 2008-09, fiscal policy has supported activity in the Danish economy, e.g. by way of higher public investment. However, growth in the private sector economy is now so strong that the expansionary measures can gradually be rolled back completely. Fiscal policy should be tightened and restored to a neutral level so that the structural balance reaches equilibrium within the next couple of years.

Over a number of years, a series of important structural reforms have been implemented, including of the unemployment benefit and pension systems, and this will contribute to higher structural employment in the coming years. It is important – and a precondition for the central growth scenario in the projection – that the reforms are not rolled back in full or in part and that other policies curbing the supply of labour are not introduced.

The requirements of fiscal and structural policy will sharpen if the economy grows at a faster and stronger pace than assumed in the projection. Strong upswings have previously been seen in connection with the booms in the 1980s, 1990s and 2000s, and the current situation could also lead to strong growth. If there are signs of a more powerful growth scenario, it is not realistic that structural policy will have time to contribute to stabilising the cyclical position. Hence, it is particularly important to exert due caution by tightening fiscal policy more and faster. Experience from the mid-2000s shows that the costs can be high if the warning signs of overheating, in the form of e.g. high, self-reinforcing house price increases and extensive shortage of labour, are disregarded and focus is purely on wage growth as a measure of labour market pressures. Wages normally react with a considerable lag and this may be particularly pronounced in the current situation as wage formation is likely still to be

affected by the crisis sentiment after the sharp downturn in 2008-09.

There will be a considerable need for labour in the coming years. Unemployment is only slightly above its structural level, so much of the increase in the labour supply must come from those who are currently outside the labour force or from those who choose to remain on the labour market a little longer instead of retiring. In addition, there will be a need for labour from abroad. Foreign labour, particularly from Eastern Europe, already plays an important role in the Danish labour market, and the future challenge will be to attract further qualified labour from abroad.

Tightening of fiscal policy can be effected either by reducing public investment and spending or by raising direct and indirect taxes. All types of tightening involve challenges, but it is important to have access to the full range of economic instruments and not to make a firm decision beforehand as to whether to reduce expenditure or increase revenue in order to rein in the economy.

In previous upswings, the housing market has been a source of macroeconomic instability and overheating of the economy. The reason has been the absence of sufficient automatic stabilisers in the housing market. Hence, there is a need as quickly as possible to establish a system whereby the value of houses is taxed at a fixed percentage so that the tax payable increases when house prices rise and decreases when house prices fall. Other measures can also contribute to stabilising the housing market. This could be a statutory limit to households' access to deferred amortisation loans or use of other macroprudential instruments, but such measures cannot stand alone. Therefore the absence of countercyclical housing taxes increases the requirements of fiscal policy. With the current outlook for parts of the housing market, it is risky just to wait and see.

Danmarks Nationalbank finds that Denmark should participate in the banking union. Overall, Danish participation is expected to make a positive contribution to financial stability in Denmark. Participation will entail enhanced supervision of the largest Danish credit institutions compared with today. At the same time, Denmark will participate in the banking union's Resolution Mechanism, where a central authority, the Single Resolution Board, guarantees credible and consistent application of the rules saying that creditors bear

the losses of distressed banks. Common standards and practices across national borders will also provide a basis for enhanced competition in the market for financial services in Denmark – to the benefit of households and the corporate sector. If Denmark opts out of the banking union, this decision should be followed up by a renewed assessment of whether to increase capital requirements for the largest credit institutions.

The Danish Financial Supervisory Authority has introduced a Supervisory Diamond for mortgage banks, comprising five indicators. One of the indicators relates to deferred amortisation on loans to private individuals and must be met from 2020. The Supervisory Diamond's indicator does not relate to the mortgage bank's individual loans, but to its overall portfolio. The Supervisory Diamond is a good supervisory tool that will help to reduce risks within the mortgage credit system. However, in Danmarks Nationalbank's assessment, offering borrowers deferred amortisation at high loan-to-value, LTV, ratios still involves too high risks for the mortgage banks. So in order to safeguard the mortgage credit system, Danmarks Nationalbank recommends that the Supervisory Diamond be supplemented by a lower deferred amortisation limit for the individual borrowers. The reduction should apply to deferred amortisation loans underlying covered bonds, covered mortgage bonds or mortgage bonds issued by banks and mortgage banks.

APPENDIX 1: ASSUMPTIONS IN THE FORECAST FOR THE DANISH ECONOMY

The forecast has been produced using the macro-economic model MONA⁵ and is based on available economic statistics, including Statistics Denmark's preliminary quarterly national accounts for the 1st quarter of 2015. The projection is based on a number of assumptions concerning the international economy, financial conditions and fiscal policy.

THE INTERNATIONAL ECONOMY

Favourable winds are blowing across the international economy and most of Denmark's trading partners. Euro area GDP rose by 0.4 per cent in the 1st quarter of the year and growth was broad-based. The fall in oil prices, the low exchange rate of the euro against e.g. the dollar and low interest rates are currently supporting the European economy. In Sweden and the UK growth remained robust in the 1st quarter. Despite a small dip in growth in the USA in the 1st quarter, the US labour market is still picking up. Growth in the markets for Danish industrial exports is assumed to increase by 4.3 per cent this year and by 5.4 per cent and 4.7 per cent in 2016 and 2017, respectively, cf. Table 5.

Inflation is currently low among most of Denmark's major trading partners – partly due to the fall in oil prices until the beginning of 2015. Against that background, prices in Denmark's export and import markets are expected to fall this year. Moderate foreign price increases are expected in 2016 and 2017. Given that the labour markets are set to remain weak in several countries, foreign wage growth is assumed to be modest in the projection period.

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 the interest rate curves in the financial markets. The 3-month money market interest rate, measured by the CITA swap rate, was slightly

below -0.5 per cent in early June 2015 and is expected to rise by 0.75 percentage point towards the end of 2017.

The average bond yield is an average of the yields to maturity on outstanding government and mortgage bonds. It was 1.0 per cent at the beginning of June and is expected to rise to 1.6 per cent by the end of 2017.

At the beginning of June, the effective exchange rate of the krone was at more or less the same level as in early March. In the projection, the dollar rate and the effective krone rate are assumed to remain constant at the level from early June.

The price of oil fell sharply from the summer of 2014 until January 2015, but has subsequently risen to approximately 65 dollars per barrel in early June. In the projection, the oil price is assumed to develop in line with futures prices, rising to just over 70 dollars towards the end of 2017.

FISCAL ASSUMPTIONS

The projection is based on the planned fiscal policy in the Economic Survey from May 2015, including the agreement on the Finance Act for 2015, local and regional government budgets and Denmark's convergence programme from March 2015.

For 2015, revenue of kr. 15 billion is expected from the government's Pension Package, which provides for a tax reduction not only on capital pensions but also on pension disbursements from Lønmodtagernes Dyrtidsfond.

Real public consumption is assumed to rise by 0.8 per cent this year, cf. Table 5. Consumption growth is forecast at 0.4 and 0.8 per cent in 2016 and 2017, respectively. Public investment is expected to fall by 0.7 per cent this year and by 0.6 and 0.9 per cent, respectively, in 2016 and 2017.

⁵ The model is described in Danmarks Nationalbank, *MONA – a quarterly model of the Danish economy*, 2003.

Overview of projection assumptions

Table 5

	2014	2015	2016	2017
International economy:				
Export market growth, per cent year-on-year	2.8	4.3	5.4	4.7
Export market price ¹ , per cent year-on-year	-0.6	-3.6	1.1	1.5
Foreign price ² , per cent year-on-year	-0.6	-3.6	1.1	1.5
Foreign hourly wages, per cent year-on-year	2.3	2.2	2.4	2.5
Financial conditions, etc.:				
3-month money market interest rate, per cent p.a.	0.0	-0.4	-0.1	0.1
Average bond yield, per cent p.a.	1.3	1.0	1.3	1.6
Effective krone rate, 1980 = 100	103.3	99.0	99.0	99.0
Dollar exchange rate, DKK per USD	5.6	6.7	6.7	6.7
Oil price, Brent, USD per barrel	99.6	63.2	69.1	71.3
Fiscal policy:				
Public consumption, per cent year-on-year	1.4	0.8	0.4	0.8
Public investment, per cent year-on-year	8.6	-0.7	-0.6	-0.9
Public sector employment, 1,000 persons	816	819	820	823

1. Weighted import price for all countries to which Denmark exports.

2. Weighted export price for all countries from which Denmark imports.

APPENDIX 2: REVISIONS IN RELATION TO THE PREVIOUS PROJECTION

The growth outlook for Denmark is basically unchanged compared with the previous projection and, as in the March projection, GDP growth is forecast at 2.0 per cent this year and 2.1 and 1.8 per cent in 2016 and 2017, respectively. There have been relatively small changes in external factors since the previous projection was made.

Growth in Denmark's export markets this year is assumed to be slightly lower than expected in March. On the other hand, the effective exchange rate of the krone has been adjusted downwards a little, and overall these two – small – effects cancel out each other.

On average, interest rates are more or less at the level predicted in March, and the agreed rate

on bonds, which is included in the projection, is unchanged over the projection period compared with the previous projection. The price of oil has been adjusted marginally downwards in 2016 and 2017, but not enough to affect output or prices.

The forecast rate of HICP inflation is also unchanged compared with the March projection. The price of imports has risen more strongly at the beginning of this year, which could be a delayed effect of the lower effective krone rate. However, this is partly offset by a weaker development in domestic prices, possibly because firms have to some extent absorbed the higher import prices via profits rather than passing them on to consumers immediately.

Revisions in relation to the previous projection

Table 6

Per cent, year-on-year	GDP			Consumer prices, HICP		
	2015	2016	2017	2015	2016	2017
Projection, March 2015	2.0	2.1	1.8	0.5	1.8	1.9
Contribution to revised forecast from:						
Export market growth	0.0	0.0	0.0	0.0	0.0	0.0
Interest rates	0.0	0.0	0.0	0.0	0.0	0.0
Exchange rates	0.0	0.0	0.0	0.0	0.0	0.0
Oil prices	0.0	0.0	0.0	0.0	-0.1	0.0
Other factors	0.0	-0.1	0.0	-0.1	0.0	0.0
This projection	2.0	2.1	1.8	0.5	1.8	1.9

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

