### CURRENT ECONOMIC AND MONETARY TRENDS

#### **SUMMARY**

The advanced economies are moving ahead at a moderate pace. Growth is driven primarily by domestic demand, which is being boosted by low interest rates and oil prices, among other factors. Although economic growth in the euro area and the USA is moderate, employment is rising strongly and unemployment is falling. The rate of wage increase remains low, however. Growth in a number of emerging market economies, including China, is slowing down. Overall, growth in the global economy is expected to be a little higher in the coming years, but in the assessments of the international organisations the risk of more subdued growth has increased.

In the USA, the Federal Reserve has begun to raise interest rates. The background is mounting capacity pressures, e.g. in the labour market. In the euro area, monetary policy is still being eased. This should be viewed in the light of very low price inflation.

In Denmark, employment continued to increase in the first part of 2016, rising by 11,000 persons in the 1st quarter. The real gross domestic product, GDP, increased by 0.5 per cent, driven by growth in both domestic demand and exports. In the labour-intensive private non-primary sector excluding transport, there has been a reasonable balance between developments in employment and production. The rise in employment since the beginning of 2013 is therefore assessed to rest on a solid foundation.

Productivity growth is expected to recover to some extent, and growth in real GDP is forecast at 1.0 per cent in 2016, rising to 1.6 per cent in 2017 and 1.8 per cent in 2018. This is slightly weaker than

forecast in the most recent projection. From the 1st quarter of 2016 to the end of 2018, employment is expected to increase by 60,000 persons.

By the end of the projection period, the economy is forecast to be close to the highest degree of capacity utilisation that is compatible with stable price developments. Fiscal policy should therefore be planned with a view to achieving equilibrium on the structural balance within the next few years.

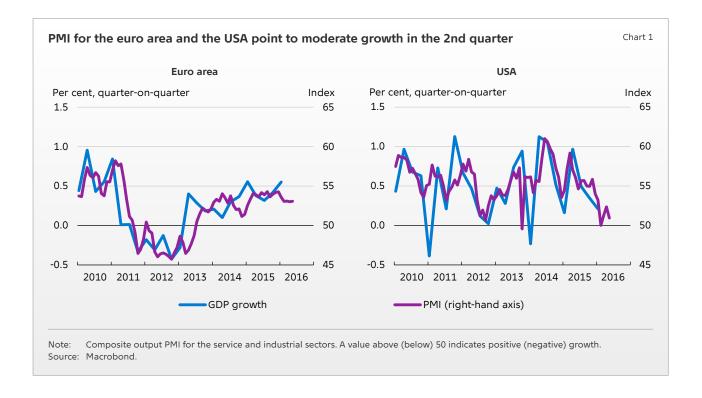
House prices have risen less steeply in recent months, while there are no signs of any dampening of the prices of owner-occupied flats in Copenhagen and other cities.

The government has announced that it will present a new medium-term fiscal policy strategy until 2025 in the autumn. Key elements of this 2025 plan should be to strengthen the automatic stabilisers in the economy and to remove asymmetry in the tax system in order to strengthen economic and financial stability and support productivity growth.

# THE INTERNATIONAL ECONOMY AND THE FINANCIAL MARKETS

### MODERATE GROWTH IN THE EURO AREA AND THE USA, DRIVEN BY DOMESTIC DEMAND

Euro area growth rose to 0.6 per cent in the 1st quarter of 2016, cf. Chart 1 (left). The recovery was broad-based across member states. Among the large euro area member states, growth in activity was strongest in Germany and Spain, at 0.7 and 0.8 per cent, respectively, while it was 0.6 per



cent in France and 0.3 per cent in Italy. The Greek economy contracted. The Purchasing Managers' Index, PMI, which provides a good indication of where the economy is heading, points to further growth in the euro area in the 2nd quarter, albeit at a slower pace.

US economic growth was weak in the 1st quarter, mainly reflecting fewer investments in the energy sector and lower exports. These two factors reduced GDP growth by 0.3 percentage point each, i.e. by a total of 0.6 percentage point. This is attributable to, inter alia, low energy prices, which reduced the volume of new investments in the energy sector. In addition, the d ollar strengthened by approximately 20 per cent against a large basket of currencies from mid-2014 until the end of 2015, which pushed up the prices of US goods and services in other countries, thereby dampening exports. However, in 2016 the dollar's appreciation was replaced by a slight depreciation from January to early June. The PMI indicator points to growth at the same level or slightly lower in the 2nd quarter, cf. Chart 1 (right).

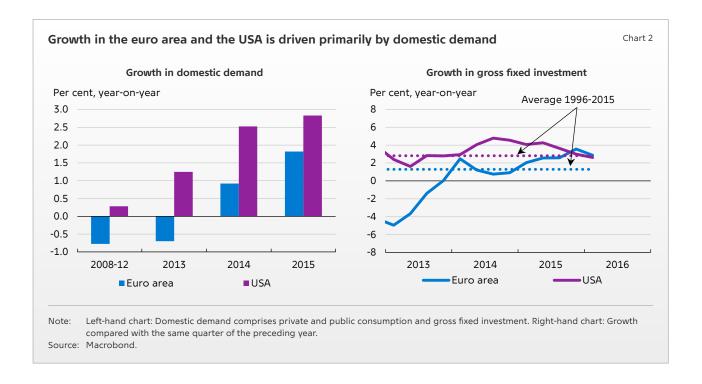
In the period 2008-13, the economies of the euro area and the USA were supported by exports to emerging market economies. In contrast, domestic demand declined or rose only a little, cf. Chart 2 (left).

Growth is currently more broad-based and driven mainly by domestic demand. In the euro

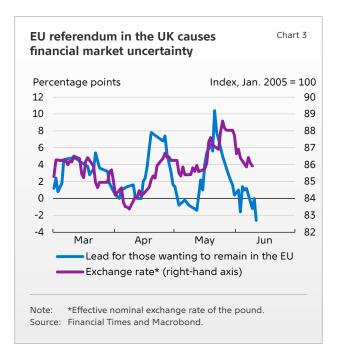
area, growth in e.g. investments has increased, cf. Chart 2 (right). It is supported by very low interest rates and easing of credit standards. In the USA, on the other hand, investment growth has declined as a result of lower energy prices, but domestic demand is being buoyed up by solid growth in private consumption.

In the UK, growth declined in the 1st quarter of 2016, but from a high level. The reasons include falling energy sector investments and increased uncertainty up to the June referendum on whether the UK should remain in the EU or leave. The uncertainty is most pronounced in the financial markets, where e.g. the exchange rate of the pound has been strongly affected by fluctuations in opinion polls in recent months, cf. Chart 3. A number of studies, including by the OECD and HM Treasury, have pointed to substantial long-term economic costs to the UK if the voters choose to leave the EU. This will have a knock-on effect on neighbouring countries, notably Ireland, but also on the rest of the EU.

The Japanese economy has not grown overall since late 2013, although activity in the 1st quarter rose by 0.5 per cent on the preceding quarter. Background factors include declining growth in China and other Asian countries and stagnant private consumption. Leading indicators point to the weak development having continued in the 2nd quarter.



In Sweden, growth is high, driven mainly by domestic demand. This is supported by accommodative fiscal and monetary policies, among other factors. Public consumption has risen considerably, partly because the number of asylum seekers has soared. In addition, residential investments are high as house prices are high and rising strongly. In 2015, nominal house prices rose by more than 14 per cent, and from 1 June 2016 an enhanced requirement has therefore been

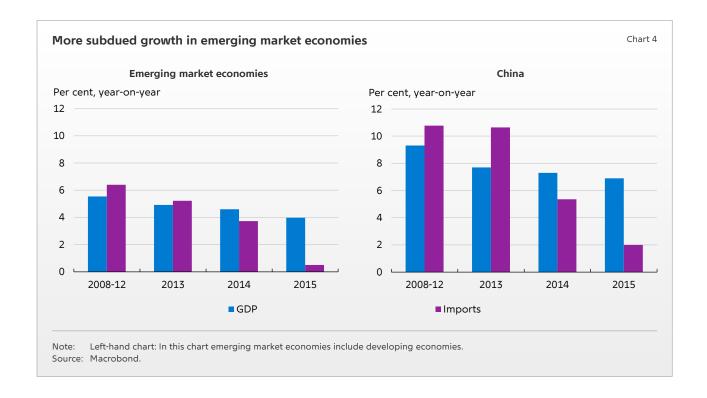


introduced so that all new housing loans must be with amortisation until the debt constitutes less than 50 per cent of the value of the home, cf. the Swedish Financial Supervisory Authority.

In Norway, economic activity decreased in the 2nd half of 2015, but the 1st quarter of 2016 saw a moderate increase of 0.3 per cent. The weak development is mainly due to low investment in the energy sector, which has spills over to the rest of the economy. But private consumption is being buoyed up by low interest rates, accommodative fiscal policy and a steady increase in house prices.

In the emerging market economies, economic growth has slowed down, cf. Chart 4 (left). One of the reasons is that commodity prices have fallen, which means that the terms of trade have deteriorated strongly for a number of commodity-producing countries, including Russia and Brazil. This reduces domestic demand and leads to substantially lower import growth.

China's production is also growing at a slower pace than previously, cf. Chart 4 (right). This is mainly because growth in investments is lower, reflecting excess capacity in a number of industries as well as an oversupply of housing in some cities. In the largest Chinese cities demand is high, however, and house prices are rising strongly, while the rate of increase is more subdued in other cities. Private consumption is growing considerably, but not quite enough to fully offset the

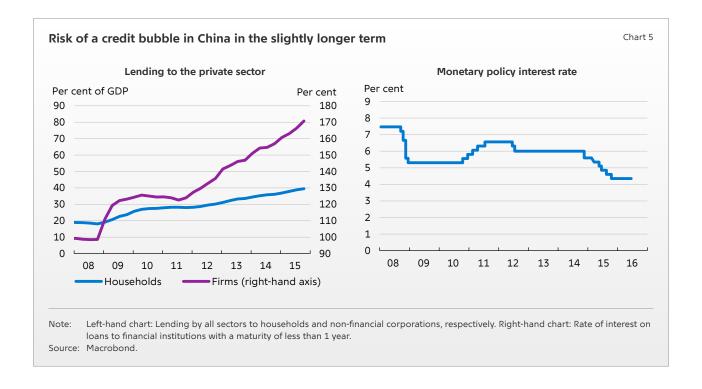


dampening of investments. These developments indicate an ongoing transition, whereby China's economic growth will gradually become less dependent on exports and investments and will

increasingly be driven by private consumption.

Besides this transition, China is challenged by high and rising debt, especially in the corporate sector, cf. Chart 5 (left), with an increasing volume

-0.2 -0.2
-0.2
-0.3
-0.2
0.0
-0.2
-0.3
-0.2
0.0
0.3
-3.
-1.2



of non-performing loans. Part of the rise in debt is attributable to firms, some of them state-owned, with low profitability. To support the real economy, the People's Bank of China in 2015 reduced its monetary policy interest rate, cf. Chart 5 (right). This has reduced the costs of debt, thereby supporting consumption and investment in the short term. But it may also cause debt to rise further, so there is a risk of a hard landing in the slightly longer term.

In the coming years, growth in the large advanced economies is generally expected to accelerate a little, cf. Table 1, but the risk of a more dampened growth scenario has risen. In most cases, growth forecasts for 2016-17 have been adjusted a little downwards since November 2015. Among the emerging market economies, China is expected to see gradually declining growth due to its transition process, while the economic downturn in Russia and Brazil will continue during 2016 and in the case of Brazil also into 2017. In contrast, India's economy is expected to continue to grow by some 7.5 per cent p.a. in 2016-17.

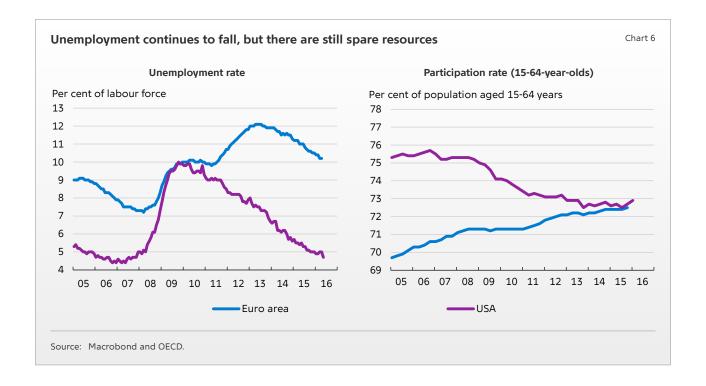
# LABOUR MARKETS IN THE ADVANCED ECONOMIES ARE IMPROVING STRONGLY

Although economic growth in the euro area and the USA is moderate, employment has risen strongly and unemployment has fallen. In the euro area, unemployment is falling at more or less the same rate as during the pre-crisis boom, but the

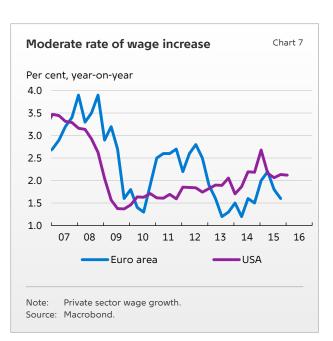
level remains somewhat higher. In the USA, unemployment has decreased steadily since early 2010, standing at 4.7 per cent in May, cf. Chart 6 (left). This is approximately what the Federal Reserve deems to be the level of structural unemployment in the USA. This strong trend in the labour markets is also seen in other advanced economies, including the UK and Japan.

Despite the recovery in the labour markets, wage growth is moderate in the USA and the euro area, cf. Chart 7. One reason is that there are still spare labour resources. A wider definition of unemployment (which - besides the number of unemployed - also includes those marginally attached to the labour market and those working part time for economic reasons) shows that in both economies it is still somewhat higher than before the crisis. Furthermore, the US participation rate (15-64-yearolds) is 2.5 percentage points lower than in 2007, cf. Chart 6 (right), but this is partly attributable to demographic changes (shifts in age groups among the 15-64-year-olds). The euro area labour force grew during the crisis and has continued to do so in recent years. This is a result of, inter alia, labour market and pension reforms.

Another reason for the low wage growth could be that the weak trend in prices has influenced wage formation via inflation expectations, cf. below. Price inflation has declined considerably in both economies since 2012, and in the euro



area it has been close to 0 per cent since mid-2014, cf. Chart 8 (left). This is mainly attributable to a strong fall in oil prices from July 2014 until the beginning of 2016. In the USA, the rate of increase in the deflator for Personal Consumption Expenditures, PCE, which is the Federal Reserve's preferred measure of inflation, has risen a little since the autumn of 2015, but remains below the inflation target of 2 per cent. Especially in the euro area, there are indications that the low level

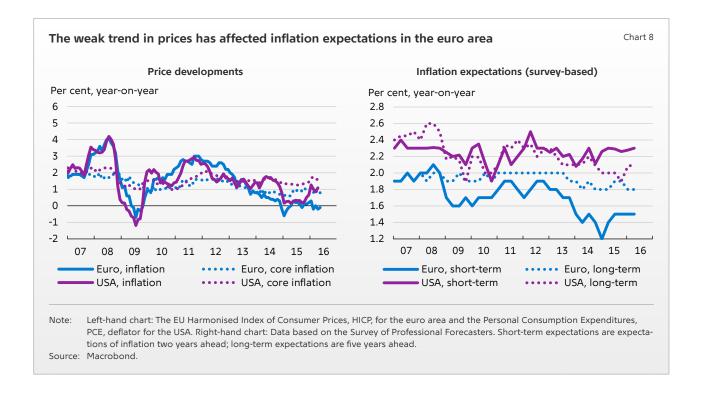


of increase has affected inflation expectations. Above all, short-term expectations have fallen in recent years, while longer-term expectations have been more stable, cf. Chart 8 (right).

If prices are expected to rise more slowly in the future, employees will typically ask for smaller wage increases. If inflation is low, even low nominal wage increases will entail higher real wages and hence purchasing power. In the euro area, collectively based contracts typically run for 1-2 years, but with considerable variations across member states. Developments in inflation expectations have given the European Central Bank, ECB, cause for concern precisely because there is a risk that they will affect wage formation, which will contribute to keeping inflation down (second-round effects).

A third potential reason for the weak wage growth is that productivity growth is low compared with previously, cf. Chart 9. This means that value added per hour is growing only slowly. Viewed in isolation, this reduces growth in firms' earnings and consequently their possibilities of offering higher wages.

Several potential explanations for the low productivity growth have been put forward. The OECD has demonstrated that the pace of knowledge dissemination from the most productive to the less productive firms has declined. In addition, a gradual transition is taking place, so that employment is shrinking in e.g. the industrial sector,

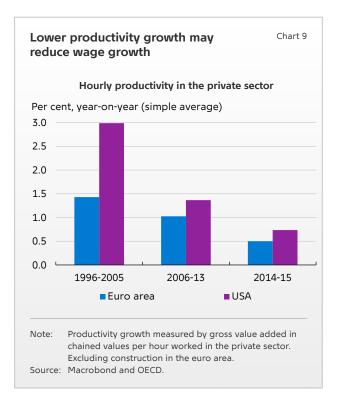


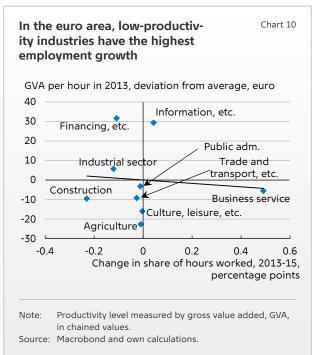
which has a high productivity level, while it is rising in the service industries, where productivity is lower. That is also the case in Denmark, cf. the article "Danish Productivity during the Upswing" in this Monetary Review. During the current upswing in the euro area, employment has risen most strongly in industries with relatively low productivity, cf. Chart 10. This has reduced average

productivity growth a little. Analyses show that the same applies in the USA.

Another reason for the weak wage growth could be that the wage level is already high.

Although the US labour market was very weak during the crisis, many firms were unable or unwilling to reduce wages, 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. Changes in the composition of the labour force could also be an explanatory factor. Analyses show that, inter alia, the flow to and from full-time employment has pushed down US wage growth because the new full-time employees earn less than typical full-time employees, while those who have left the labour market (mainly due to

Equity prices have risen again, Chart 11 especially in the USA Index, 1 Jan. 2010 = 100 200 175 150 125 100 50 2010 2011 2012 2013 2014 2015 2016 Euro area USA China Euro Stoxx for the euro area, S&P 500 for the USA and Note: Shanghai Composite for China. Source: Macrobond.

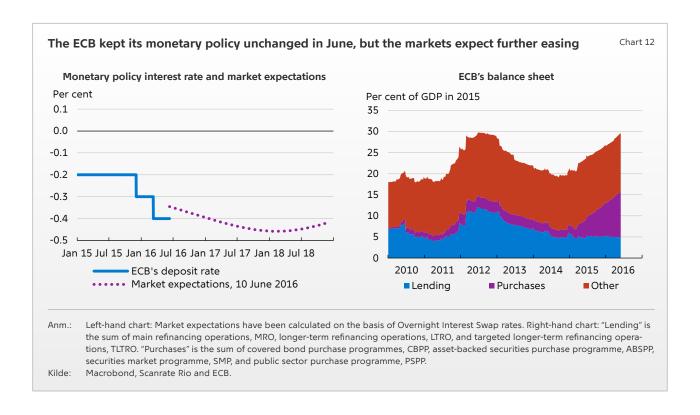
retirement) typically earned more. This effect is particularly pronounced these years, as the large post-war generations are beginning to retire.

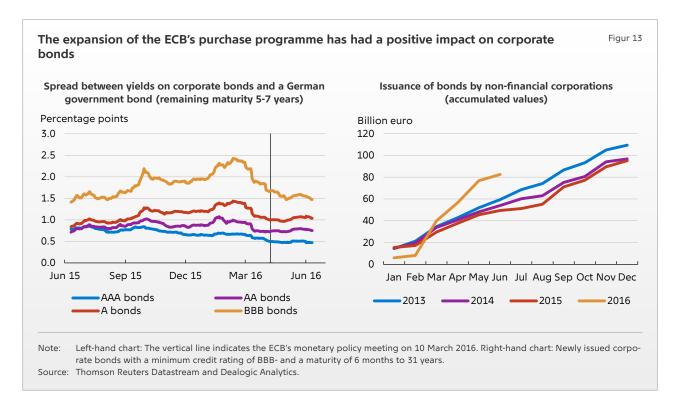
### THE ECB'S MONETARY POLICY SUPPORTS THE ECONOMY

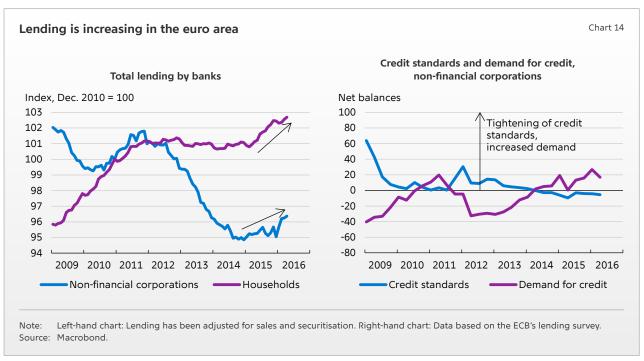
Having fluctuated strongly at the beginning of the year, the financial markets have calmed down in recent months. Equity prices have risen, and in the USA they are back at the level from the autumn of 2015, cf. Chart 11. Yields on 10-year government bonds have been more or less flat in both the euro area and the USA since early March.

At its interest rate meeting on 2 June, the ECB decided to keep its monetary policy interest rates unchanged, cf. Chart 12 (left). The programme for purchasing government and corporate bonds also remains unchanged. Hence, these purchases, amounting to 80 billion euro a month, will continue until and including March 2017. Total purchases in 2015 and 2016 until May accounted for most of the expansion of the ECB's balance sheet, cf. Chart 12 (right). The financial markets expect the ECB to reduce its interest rates further within the next year.

The ECB's purchases of corporate bonds began on 8 June, but yields on corporate bonds fell as soon as the announcement had been made on 10 March, cf. Chart 13 (left). The ECB intends to buy euro-denominated bonds issued by non-fi-







nancial corporations with remaining maturities of between 6 months and 31 years and a minimum credit rating of BBB- (i.e. Investment Grade). Yields have fallen most strongly for bonds with low credit ratings, meaning that the yield spreads for corporate bonds have narrowed. There are also signs that the expansion of the purchase programme has led firms to issue more bonds. Accumulated issuance from January to May is

somewhat above the corresponding levels in previous years, cf. Chart 13 (right).

Lending by banks to households and non-financial corporations in the euro area has also increased, the latter especially since December 2015, cf. Chart 14 (left). This reflects a combination of easing of the banks' credit standards and higher demand for credit, cf. Chart 14 (right). Furthermore, the banks have indicated that the

ECB's purchase programme and targeted longerterm refinancing operations, TLTROs, have had a positive impact on their lending, cf. the ECB's lending surveys from January and April.

In March, the Federal Open Market Committee, FOMC, of the Federal Reserve adjusted its expectations of developments in the Fed funds target rate downwards. This should be viewed against the backdrop of e.g. the strong fluctuations in the financial markets in the first months of the year. The FOMC now expects a total increase of 0.5 percentage point in the target rate by the end of 2016, rather than 1 percentage point, cf. Chart 15. Market participants have not factored in an interest rate increase of 0.25 percentage point until mid-2017. So there is a wide spread between the expectations of the FOMC and those of market participants.

The article "Scenarios for Normalisation of the Level of Interest Rates" in this Monetary Review considers various potential future interest rate paths in the USA. If long-term interest rates rise suddenly in connection with an abrupt adjustment of market expectations to match the FOMC's expectations, investors may suffer considerable losses on their bond portfolios. This underscores the need for both investors and credit institutions

The FOMC has adjusted its Chart 15 expectations of US interest rate developments downwards Per cent 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 Jan 15 Jul 15 Jan 16 Jul 16 Jan 17 Jul 17 Jan 18 Jul 18 Fed funds target rate Market expectations, 10 June 2016 FOMC, most recent expectations FOMC, expectations December 2015 The Fed funds target rate shows the upper limit for the target interval of 0.25-0.5 per cent. Market expectations have been calculated on the basis of Fed funds futures. FOMC expectations are from March 2016 and show the median of FOMC members' expectations of the middle value in the target interval. Source: Macrobond and Federal Reserve.

to focus on risk management and ensure that they are resilient against losses.

Norges Bank reduced its key policy rate by 25 basis points, to 0.5 per cent, on 17 March, citing that the growth outlook for the Norwegian economy had weakened and that inflation was expected to decline further. Norges Bank indicated that the rate of interest could be reduced further later this year. However, it was kept unchanged at the monetary policy meeting in May.

In April, Sveriges Riksbank decided to increase its purchases of government bonds by 45 billion Swedish kronor in the 2nd half of 2016, bringing total purchases to 245 billion kronor (corresponding to 6 per cent of GDP) by the end of 2016. According to the Riksbank, the aim is to reduce the risk of a too rapid strengthening of the krona and to ensure that inflation continues to rise.

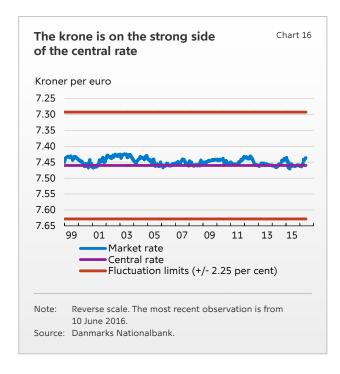
## MONETARY AND EXCHANGE RATE CONDITIONS

#### **INCREASED DEMAND FOR KRONER**

The exchange rate of the krone vis-à-vis the euro is stable and very close to its central rate in ERM2, cf. Chart 16. Danmarks Nationalbank neither bought nor sold foreign exchange for intervention purposes in March and April. The krone strengthened in late March. A contributory factor may have been that liquidity in the money market tightened a little at the turn of the quarter, when the banks' and mortgage banks' net deposits in Danmarks Nationalbank (their net position) temporarily decreased. Since then, the krone has been slightly on the strong side of the central rate. Several market participants pointed out that some foreign investors chose to purchase kroner as they expected turmoil in the euro area and the UK in connection with the June referendum on the UK's membership of the EU.

Initially, the most visible shifts in the market for kroner were seen in the forward market in late March, but later on demand also shifted to the spot market.<sup>1</sup> Consequently, Danmarks Nationalbank purchased foreign exchange for kr. 24 billion in connection with intervention in May. The foreign

In connection with a forward contract, currency is exchanged at a given future date at a predetermined exchange rate. In connection with a spot transaction, the exchange takes place immediately at the current spot rate.



exchange reserve was kr. 427 billion at the end of May 2016.

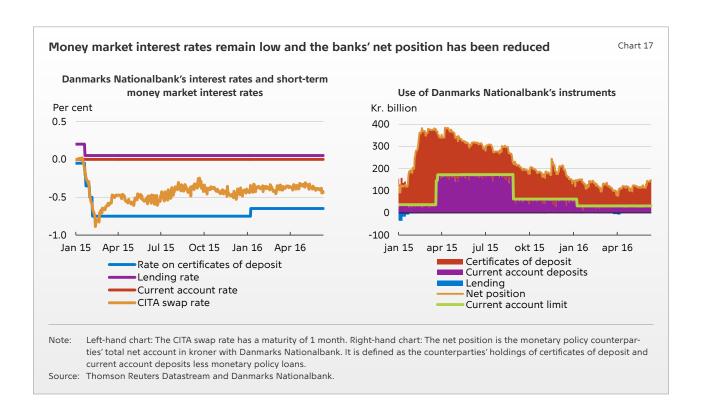
Danmarks Nationalbank has not changed the rate of interest on certificates of deposit since January. The monetary policy interest rate spread to the ECB narrowed in three stages, from -0.55 to -0.25 percentage point, from December 2015 to March 2016, and has since remained unchanged. On two occasions it narrowed because the ECB

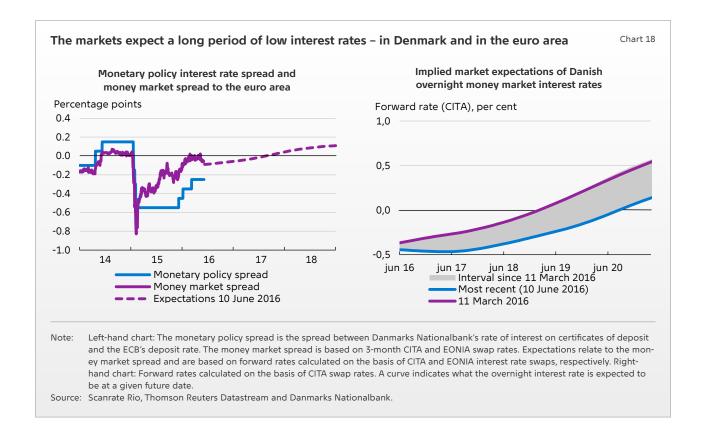
lowered its interest rates, on one occasion because Danmarks Nationalbank increased its interest rates. The narrowing should be viewed in the light of intervention sales of foreign exchange in late 2015 and early 2016.

With effect from 27 May 2016, Danmarks Nationalbank has adjusted the banks' and mortgage banks' individual current account limits at Danmarks Nationalbank, i.e. their maximum deposits when the overall limit for all institutions has been reached. The overall limit remains unchanged at around kr. 31 billion. The adjustment provides for a simpler and more objective allocation and also ensures that the individual limits to a larger extent take into account the various credit institutions' payments and liquidity fluctuations in kroner.

#### MONEY MARKET INTEREST RATES REMAIN LOW

Money market interest rates are virtually unchanged since mid-March and have been relatively stable at approximately 0.3 percentage point more than the rate of interest on certificates of deposit, cf. Chart 17 (left). The banks' net position vis-à-vis Danmarks Nationalbank has declined further this year and briefly fell below kr. 80 billion in late March in connection with VAT settlement and payment of corporate tax to the central government, cf. Chart 17 (right). This is the lowest level since November 2014.



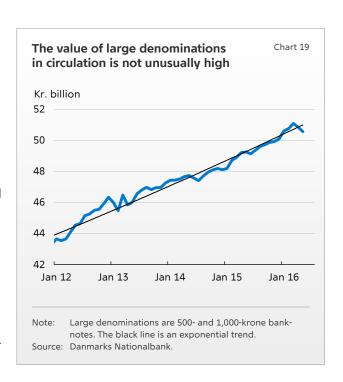


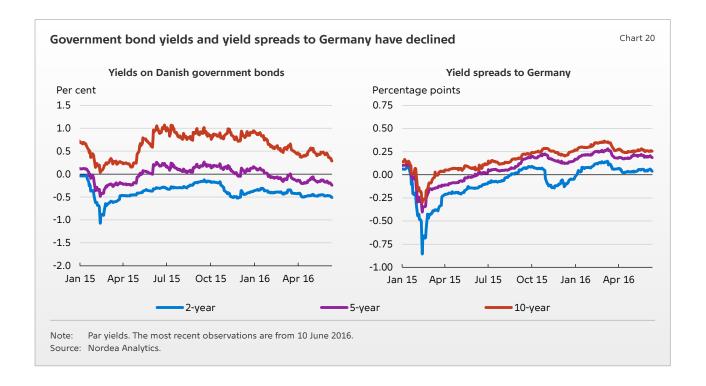
When the net position is high, so that the monetary policy counterparties need to place sizeable funds, monetary policy deposit rates determine Danish money market interest rates. When the net position is low, the usual fluctuations in government payments may at times reduce liquidity so much that money market interest rates rise. In connection with the decrease in krone liquidity in late March, very short-term money market interest rates rose. This may have contributed to the inflow of capital and the strengthening of the krone.

In the last three months, the spread between short-term money market interest rates in Denmark and the euro area has been stable at a level close to zero, cf. Chart 18 (left). Market prices for financial products and questionnaire surveys among bank analysts indicate that since mid-March there has been a slight strengthening of expectations that the ECB's monetary policy interest rates may be reduced further and will remain low for a long period. Developments in the euro area have also affected expectations of Danish money market interest rates. The markets now operate with a slower increase in the Danish overnight interest rate than they did in mid-March 2016, cf. Chart 18 (right). The implied overnight interest rate does not reach 0 per cent until in four years. That is more than one year later than indicated by market-based expectations in mid-March.

#### NO SIGNS OF EXTRAORDINARY DEMAND FOR CASH

There are still no signs that the negative interest rates have led to unusually strong demand for cash, cf. Chart 19. There does not seem to be any extraordinary demand for cash in the sectors experiencing negative rates of interest, and nor has demand for the large banknote denominations been exceptionally high.

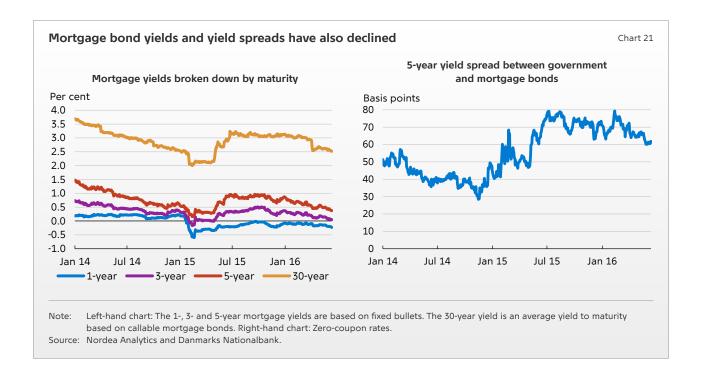


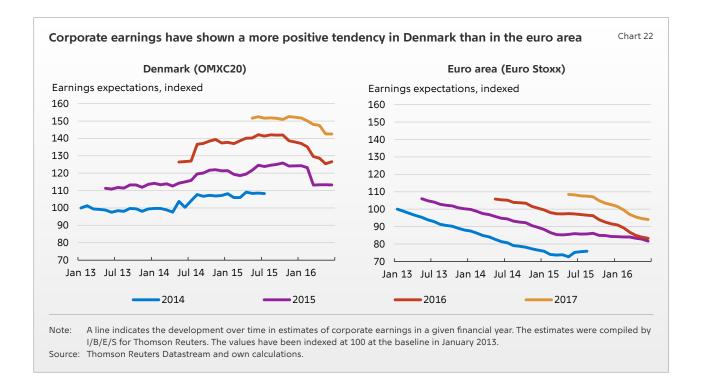


#### **BOND YIELDS HAVE FALLEN A LITTLE**

Yields on Danish government bonds have been affected by a slight decline in euro area government bond yields since mid-March, as well as a small narrowing of the spread between Danish and German government bond yields, cf. Chart 20. Developments in the euro area mainly reflect further postponement of the time when short-term interest rates are expected to begin to rise, and presumably also intensification of the ECB's mon-

etary policy purchases of government and other bonds since April. Over the last three months, the yield spread to Germany has narrowed. This should be viewed in the light of a widening after the pressure on the krone eased in the spring of 2015. Furthermore, the spread was wide seen in a longer perspective. This may have attracted both Danish and foreign investors and contributed to narrowing the spread. Moreover, a fall in mortgage yields may have pushed up demand





for long-term government bonds among pension funds. The narrowing of the yield spread to Germany has taken place in spite of the ECB's expansion of its purchase programme, which is keeping euro area yields at an extraordinarily low level.

Since March, the yield on mortgage bonds has fallen more sharply than the yield on government bonds, cf. Chart 21 (left). This is presumably because the yield spread between government and mortgage bonds is wide, cf. Chart 21 (right). There are indications that foreign investors are continuing to increase their portfolios of Danish mortgage bonds. The ECB purchases two types of mortgage-like bonds in the euro area, which has pushed down yields on these bonds, so a natural alternative for investors in those markets could be to invest in Danish mortgage bonds. Increased investor interest could have a downward impact on mortgage yields, thereby reducing the spread to government bonds.

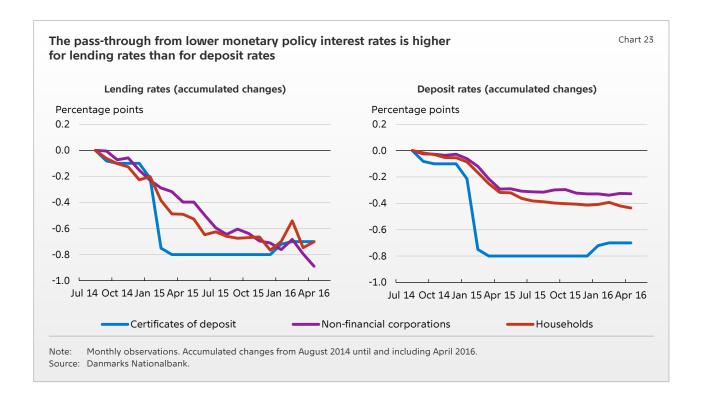
# DANISH EQUITY PRICES HAVE RISEN MORE STRONGLY THAN THOSE OF THE EURO AREA IN RECENT YEARS

The Danish equity market as a whole has risen in the last three months, thereby making up for part of the loss seen in the turbulent first two months of 2016. Overall, Danish equities have fallen by 3 per cent since the beginning of the year, com-

pared with a fall of 7 per cent in the euro area. In recent years, Danish equity prices have risen more strongly than those of the euro area. This can be explained by the development in earnings and expected earnings in Danish firms, cf. also Danmarks Nationalbank, Monetary Review, 1st Quarter 2016. The earnings of the largest Danish firms have more or less met expectations and have also been rising, cf. Chart 22 (left). This does not apply in the euro area even though a large share of Danish-based firms' revenues and earnings are generated outside Denmark. The firms in the Euro Stoxx index have not performed as expected in terms of earnings, cf. Chart 22 (right). In addition, growth in earnings has been low. These are some of the reasons why equity prices have shown a stronger trend in Denmark than in the euro area.

#### THE INTRODUCTION OF NEGATIVE INTEREST RATES HAS NOT FUNDAMENTALLY CHANGED THE TRANSMISSION TO RETAIL INTEREST RATES

The banks' interest rates on lending to households and non-financial corporations have fallen slightly in recent months, while deposit rates have been broadly unchanged. The continued fall in lending rates means that they have, overall, fallen by more or less the same as Danmarks Nationalbank's rate of interest on certificates of deposit since the pressure on the krone in January last year, cf. Chart 23 (left).



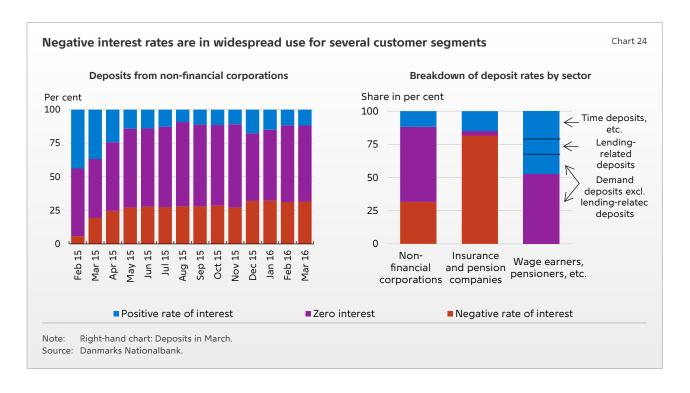
Viewed over a longer period, there has generally been close to full pass-through from the rate of interest on certificates of deposit to the banks' lending rates. This has also been the case in recent years' low interest rate environment. In connection with the financial crisis in the autumn of 2008, the pass-through decreased strongly for a brief period, however, as the banks' lending rates were slow to follow the sizeable reductions of Danmarks Nationalbank's interest rates in the following months.

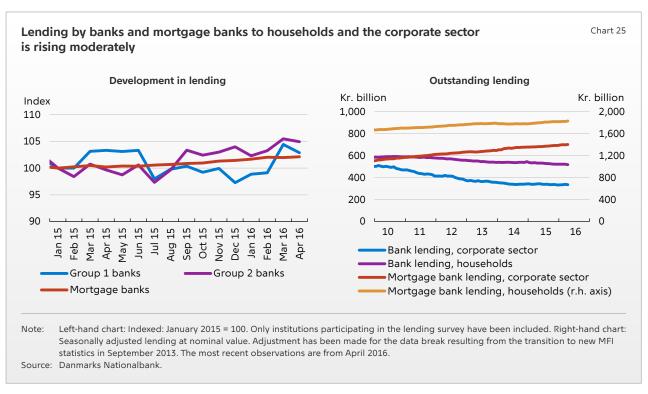
The banks set their lending rates on the basis of the costs of funding the loans and the risk on the loans. When the banks' funding costs are taken into account, the pass-through from the rate of interest on certificates of deposit to lending rates does not differ materially before and after the financial crisis. The interest rate reductions in response to the pressure on the krone in January and February last year have had a smaller impact on lending rates, cf. Chart 23 (right). The banks have been hesitant to pass on the negative rate of interest at Danmarks Nationalbank to small enterprises and especially to households. The latter have been completely exempt from negative deposit rates. The transmis-

sion from the monetary policy interest rates to the banks' retail interest rates is analysed in more detail in the article "Pass-Through from Danmarks Nationalbank's Interest Rates to the Banks' Interest Rates" in this Monetary Review.

Danmarks Nationalbank has performed a survey analysis<sup>2</sup> which shows that the share of deposits from non-financial corporations that accrue interest at a negative rate has been approximately 30 per cent since the spring of 2015, cf. Chart 24 (left). Negative deposit rates are in widespread use for insurance and pension companies, for which the alternatives to bank deposits are placement on money market-like terms, e.g. in short-term securities, likewise at negative rates of interest. The survey also shows that around half of all household deposits are at zero interest, while the rate of interest is positive for the other half, cf. Chart 24 (right). Two thirds of deposits at positive interest rates are deposits on special terms, e.g. in connection with mortgage-like bank loans or loans that are tied up for a certain period. It should be emphasised that the results in Chart 24 are based on a survey, not on all credit institutions.

<sup>2</sup> The banks included jointly account for just over 35 per cent of total deposits from Danish counterparties, and for selected sectors, e.g. non-financial corporations and wage earners, pensioners, etc., for 62 and 57 per cent, respectively, of total deposits. For insurance companies and pension funds, coverage is just over 57 per cent.



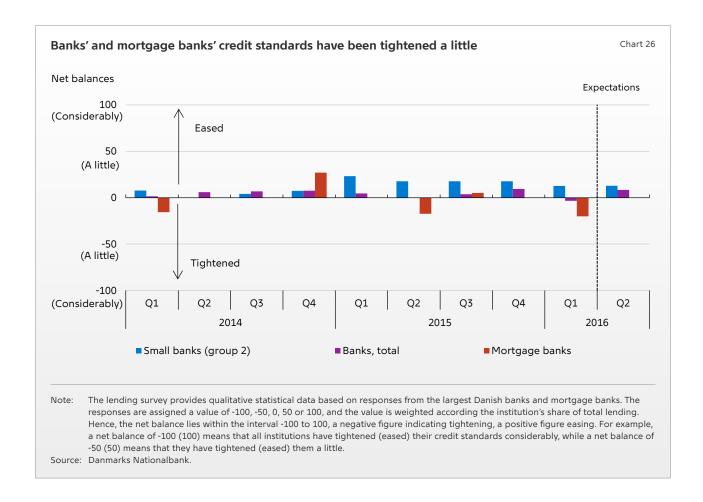


## MODERATE LENDING GROWTH AND SLIGHTLY TIGHTER CREDIT STANDARDS

The banks' and mortgage banks' aggregate lending to households and the corporate sector has increased a little in recent months, cf. Chart 25 (left). For the corporate sector, lending has risen by 1.3 per cent over the last year. This masks a continued downward trend in corporate lending by banks and an upward trend in lending by

mortgage banks, cf. Chart 25 (right). The pattern is the same for lending to households, which has risen by 0.8 per cent overall in the last year. The mortgage banks are by far the largest source of funding for both the corporate sector and households, accounting for around 75 per cent of total lending, and the banks' share is still diminishing.

In the 1st quarter of 2016, the mortgage banks tightened their credit standards, while those of



the banks were virtually unchanged, cf. Chart 26. So all in all, firms were faced with slightly tighter credit standards in the 1st quarter. One of the reasons for the tightening by mortgage banks was that the Danish Financial Supervisory Authority introduced a new Executive Order stating that loans for mortgaging of commercial rental properties require positive liquidity. The mortgage banks also tightened their credit standards a little in 2015, while they were eased in late 2014.

While the banks overall kept their credit standards unchanged, the group 1 banks tightened theirs marginally, whereas group 2 continued to ease theirs in the 1st quarter of 2016. Although 1st quarter easing was very modest, total easing by this group over the last two years is notable compared with the changes made by the large banks and the mortgage banks, respectively. The smaller banks stated that especially competitor behaviour contributed to their easing of credit standards for firms.

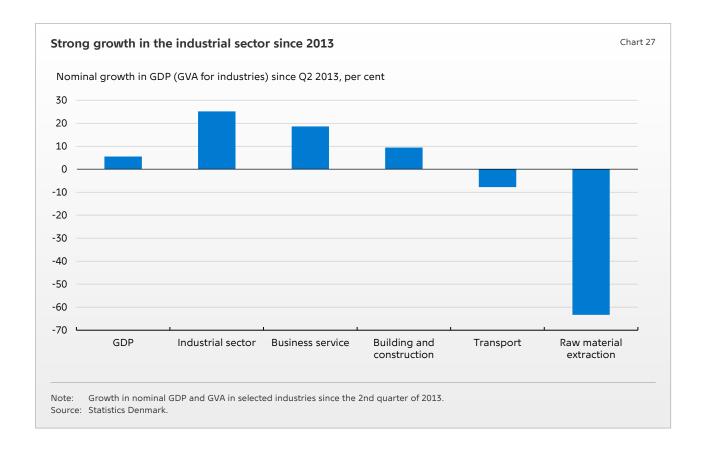
Although firms were met with tighter credit standards overall in the 1st quarter, this did not have any negative impact on lending. In March lending volumes were higher than one year earlier for both group 1 and group 2 banks and also for mortgage banks – but the increase was strongest for group 2 banks. Explanations could be that the tightening was relatively modest and that it affected particular types of firms. Mortgage lending continued to rise.

#### THE DANISH ECONOMY

#### SOLID GROWTH IN THE LABOUR MARKET

Employment continued to increase in the first part of 2016, rising by 11,000 persons in the 1st quarter. Real GDP increased by 0.5 per cent in the 1st quarter, driven by domestic demand and exports.

Over the last year, GDP has shown a relatively weak trend compared with employment. This to a large extent reflects a downturn in extraction of raw materials and in sea transport, two sectors that employ relatively few people. In contrast, there has been a strong rise in both output and employment in the industrial sector, in building and construction and in various service sectors,



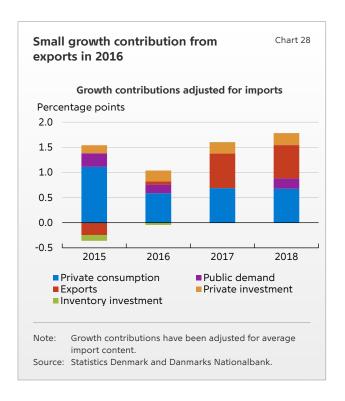
cf. Chart 27. This shows that unilateral focus on real GDP for the economy as a whole can give a very misleading picture of how the Danish economy is performing. In the labour-intensive private non-primary sector excluding transport, there is a reasonable balance between developments in employment and output<sup>3</sup>. The increase in employment since the beginning of 2013 is therefore assessed to rest on a solid foundation.

Productivity is expected to recover to some extent, and growth in real GDP is forecast at 1.0 per cent in 2016, rising to 1.6 per cent in 2017 and 1.8 per cent in 2018. This is slightly weaker than in the most recent projection. Overall, the forecast has been adjusted downwards by 0.5 percentage point over the three years. The main contributions to growth come from private consumption and to some extent private investment and exports, cf. Chart 28. Employment is expected to grow by 60,000 persons from the 1st quarter of 2016 to the end of 2018, cf. Table 2.

The output gap, which indicates the volume of spare capacity, is forecast at around -1.2 per cent of GDP in 2016. The labour market gap, which

indicates how much employment can rise without causing inflationary pressures, will narrow, and by the end of the projection period the economy will be close to a neutral level of capacity utilisation.

The expected higher growth in the coming years is closely linked to exports. In recent years,



<sup>3</sup> Cf. the article "Danish Productivity during the Upswing" in this Monetary Review.

Key economic variables							Table 2	
	2015/2016							
Real growth on preceding period, per cent	2015	2016	2017	2018	3. kvt.	4. kvt.	1. kvt	
GDP	1.2	1.0	1.6	1.8	-0.6	0.1	0.!	
Private consumption	2.1	1.8	1.8	1.9	0.7	0.3	0.0	
Public consumption	0.6	1.0	0.0	1.2	-0.3	-0.3	0.0	
Residential investment	-0.5	2.1	3.0	4.1	-1.0	-1.7	4.0	
Public investment	-1.0	-1.9	-1.3	-1.5	-0.8	1.2	-1.	
Business investment	2.6	2.3	3.7	3.2	-0.8	1.0	-0.	
Inventory investment, etc. <sup>1</sup>	-0.3	-0.1	0.0	0.0	0.4	-0.1	-0.	
Exports	-1.0	0.0	3.1	2.9	-1.4	-0.2	0.0	
Industrial exports	0.4	1.4	3.9	3.7	-3.5	-0.1	2.	
Imports	-1.4	0.7	3.0	3.1	0.7	-0.3	0.	
Employment, 1,000 persons	2,796	2,832	2,855	2,876	2,799	2,811	2,82	
Gross unemployment, 1,000 persons	124	112	103	99	122	119	11	
Balance of payments, per cent of GDP	7.0	6.3	6.5	6.5	7.3	6.5	6.0	
Government balance, per cent of GDP	-1.7	-2.0	-1.9	-1.7	-1.4	-0.6	-1.8	
House prices, per cent year-on-year	6.1	3.3	3.3	3.1	6.1	6.1	3.	
Consumer prices, per cent year-on-year	0.2	0.3	1.5	1.7	0.4	0.1	0.	
Hourly wages, per cent year-on-year	1.8	2.2	2.5	2.6	2.0	1.9	2.	

<sup>1.</sup> Contribution to GDP growth (this item comprises inventory investment, valuables and statistical discrepancy).

several emerging market economies, including China, have slowed down somewhat, while Denmark's nearest export markets are expected to grow. Overall, growth in Denmark's export markets is forecast to be a little weaker than in the March projection, cf. Appendix 1. Furthermore, the effective exchange rate of the krone rose a little in the 1st quarter of 2016, which, all else equal, weakens Denmark's competitiveness. As a result, exports will contribute very little to growth in GDP in 2016, but will pick up in the coming years.

In the 1st quarter, private consumption rose by 0.6 per cent over the preceding quarter. This follows consumption growth of 2.1 per cent in 2015, the highest annual growth rate since 2006. The underlying drivers are broadly unchanged compared with the most recent projection. Rising employment and disposable incomes continue to point to growth in private consumption, and house prices are still

rising so that the owners have more home equity. Long-term interest rates fell in the 1st quarter, thereby fuelling private consumption and residential investment. Moreover, the consumption ratio is low viewed in a longer perspective and household wealth is substantial. In other words, there is a considerable potential for growth in private consumption, as has been the case for some time. Growth in private consumption is forecast at 1.8 per cent in both 2016 and 2017, rising to 1.9 per cent in 2018. This means that the consumption ratio will rise towards 2018, but will remain at a low level.

Residential investment fell during most of 2015, but rose in the first part of 2016. Over the last year, there has been an increase in new construction, while major repairs, which account for a large share of residential investment, have also had an upward impact. Residential investment is expected to continue to increase.

Business investment declined a little in the 1st quarter of 2016. For a long time, growth has been driven by corporate investments in plant and equipment in particular, while building and construction investments have been flat. Growth in investments in plant and equipment has mirrored value added in the private sector in recent years, so that the investment ratio for plant and equipment has been practically unchanged. In contrast, the investment ratio for non-residential construction has been falling for many years. At present there are many vacant office premises, although their number has fallen a little over the last year. The combination of rising activity and capacity utilisation on the one hand and low interest rates and considerable corporate savings surpluses on the other hand is expected to boost business investment.

The projection involves both downside and upside risks. The flattening of the hourly productivity growth curve over the last year leads to uncertainty as to whether productivity growth will recover to the extent assumed in the projection.

In the short term, the UK referendum on continued EU membership on 23 June 2016 creates considerable uncertainty. Furthermore, there is general uncertainty linked to the strength of the international upswing, as growth in many emerging market economies, including China, has slowed down.

On the other hand, the very low level of interest rates and oil prices could have a more expansion-

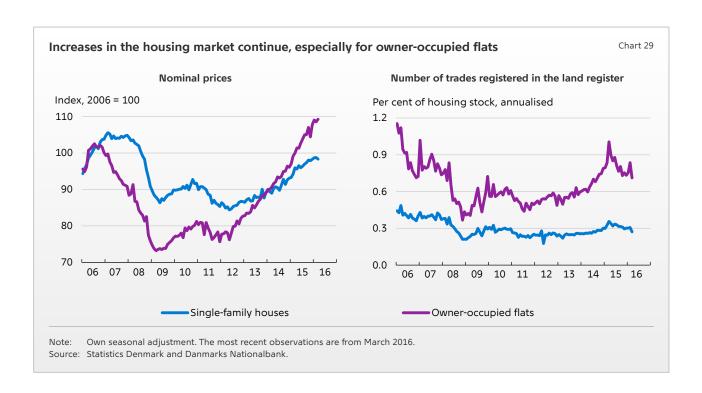
ary effect on the economy than predicted. And finally both the consumption and investment ratios are well below their historical averages and have been for some years, and savings in the corporate sector remain high.

### THE PRICES OF OWNER-OCCUPIED FLATS ARE STILL RISING STRONGLY

House prices have risen less steeply in recent months, while there are no signs of any dampening of the prices of owner-occupied flats in Copenhagen and other cities, cf. Chart 29 (left). In the first months of this year, the price of single-family houses rose by around 4 per cent year-on-year, while the rate of increase for owner-occupied flats was more than 10 per cent, as it has been since late 2012. The highest increases have been seen in the Copenhagen area.

The number of sales of owner-occupied flats registered in the land register is high, cf. Chart 29 (right). Activity was extraordinarily high in the first part of 2015, when interest rates dived in connection with the upward pressure on the Danish krone. Since then, trading activity has fallen back a little. For houses, the number of trades has been more constant.

Combined with enhanced solvency requirements for home buyers in the cities, the Danish Financial Supervisory Authority's recommendation that the down payment should constitute at least 5 per cent of the purchase price is expected to curb demand



for new homes. But this is not yet reflected in the households' expectations of future house prices.

House prices for Denmark overall are forecast to grow by approximately 3 per cent p.a. in 2016 and the following years. This is a lower growth rate than in the previous years. The sustained increase in prices should be viewed in the light of the very low interest rates, which fell further at the beginning of this year, and the general economic recovery. The households' continued high expectations of future house price rises also play a role. But in many parts of Denmark there is a backlog of houses for sale, which exerts downward pressure on prices in those areas.

### DECLINE IN EXPORTS – OF SEA FREIGHT IN PARTICULAR

The value of both imports and exports of goods fell slightly in the first four months of 2016, especially for fuel on account of lower oil prices. At the same time, exports of sea transport continued to fall for the fourth consecutive quarter. This should be viewed against the backdrop of lower growth in China and reduced freight rates. However, other services also have a downward impact, while industrial exports, on the other hand, rose in both value and volume terms, cf. Chart 30 (left). This is in line with the overall tendency in recent years, i.e. industrial output, employment and exports have grown at a sound pace.

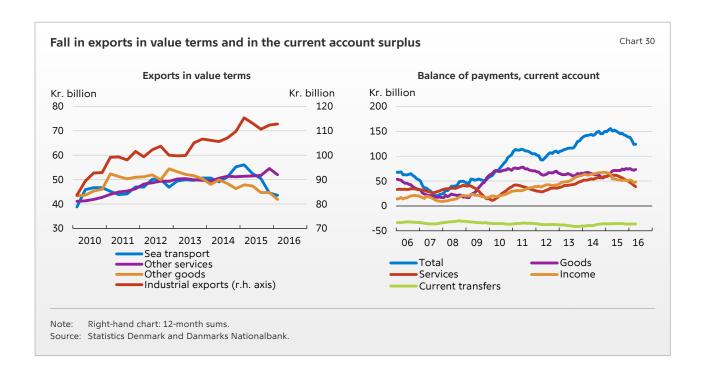
The current outlook provides a good basis for growth in Danish exports. Although it rose in the

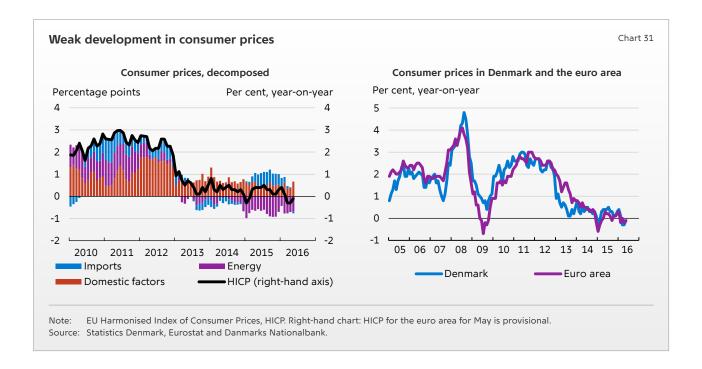
first part of 2016, the effective exchange rate of the krone is still relatively low in a 10-year perspective, and from the financial crisis in 2008 until the end of 2015, wage increases were lower in Denmark than abroad. This is reflected in an improvement of Denmark's competitiveness. Exports are expected to grow more or less in step with the increase in global trade and the export market recovery. But energy exports will continue to have a downward impact on exports of goods. Extraction of North Sea oil and gas is decreasing, and due to the low oil prices it is not profitable to invest in new extraction facilities.

The current account surplus was kr. 17 billion lower in the first four months of 2016 than in the corresponding period of 2015. This is mainly attributable to lower exports of services, especially sea transport. In the 12 months up to and including April 2016, the current account surplus was kr. 124 billion, corresponding to 6 per cent of GDP. This is a decrease of kr. 25 billion compared with the preceding 12-month period, cf. Chart 30 (right). The large current account surpluses are expected to continue in the coming years.

#### PRICE PRESSURES REMAIN LOW

Price inflation is still very low, cf. Chart 31 (left). The annual rate of increase in the EU Harmonised Index of Consumer Prices, HICP, was negative in March, April and May, mainly due to falling oil prices. But in recent months the price of oil has risen a little, to just under 50 dollars per barrel in early June.





Core inflation, i.e. prices excluding energy and unprocessed food, was 0.4 per cent in May. It has fallen in step with the lower prices for imported consumer goods. The lower price of oil exerts downward pressure on core inflation as energy prices ripple through to consumer goods and services in general. Especially the prices of goods, including clothing, have shown a weak trend.

Consumer prices in Denmark generally develop more or less in line with those of the euro area. For a while around the turn of the year, the rate of increase in consumer prices was a little higher in Denmark than in the euro area, but in March and April it was slightly lower, cf. Chart 31 (right). Core inflation has also been lower in Denmark than in the euro area in recent months.

Import prices have fallen in the last half year, reflecting factors such as an increase of almost 4 per cent in the effective exchange rate of the krone since the spring of 2015. Domestic market-determined inflation, IMI, was 1.2 per cent in May. In the longer term, IMI is determined by developments in the level of costs in the economy, including wages. In the short term, IMI often moves in the opposite direction of import prices, indicating that rising import prices are not fully passed on to domestic prices at once, but squeeze profit margins – and vice versa when import prices rise.

All in all, the levels of both IMI and core inflation show that domestic price pressures are modest. Consumer expectations of price developments in the next 12 months have, however, been virtually unchanged for the last five years, and wage growth is accelerating. Hence, inflation expectations are well-anchored and consumers do not expect more sustained price falls and resultant deflation.

In April, the price index for the domestic supply of goods excluding energy was at the same level as one year earlier. This means that overall price pressures from the wholesale link are limited. Producer prices for Danish goods for the domestic market excluding energy are also showing a weak trend.

The low price of oil will dampen price inflation throughout 2016, with HICP expected to rise to 0.3 per cent year-on-year. In 2017 and 2018, the pass-through from the low oil prices will no longer have any impact, and at the same time the economy will be approaching its capacity limit. Therefore, consumer prices are expected to grow by 1.5 and 1.7 per cent, respectively, cf. Table 3.

### MODERATE WAGE GROWTH AND IMPROVED COMPETITIVENESS

Private sector wage growth remains moderate. In the 1st quarter of 2016, the annual rate of increase was 1.8 per cent according to Statistics Denmark. Private sector wage growth has been highest in the service sectors, but also within building and construction, where it was around 2 per cent higher in the 1st quarter than one year earlier. The same applied to wages in manufacturing, much of which is for exports, cf. Chart 32

Consumer pric	es										Table 3
								2016	õ		
Per cent, year-on-year	Weights <sup>1</sup>	2015	2016	2017	2018	Q1	Q2	Q3	may	june	jul
HICP		0.2	0.3	1.5	1.7	0.1	-0.2	0.2	-0.1	-0.1	-0.
Index of net retail											
prices	100.0	0.7	0.6	1.8	1.9	0.6	0.3	0.5	0.4	0.5	0.
Exogenous:											
Energy	6.9	-9.9	-5.6	4.2	2.7	-8.5	-9.0	-4.6	-8.9	-8.4	-7.
Food	4.8	2.6	2.3	1.8	1.4	2.3	2.5	2.1	2.8	2.5	2.
Adm. prices	4.1	0.9	2.2	2.8	2.7	2.3	2.1	2.0	2.0	2.1	2.
Rent	26.0	2.1	1.9	1.8	2.5	2.2	2.0	1.9	2.1	2.0	2.
Excl. exogenous:	58.2	1.3	0.7	1.5	1.5	0.8	0.7	0.5	0.7	0.7	0.
Imports	18.7	2.4	0.2	1.1	1.3	1.5	-0.3	-0.3	-0.5	-0.6	-0.
IMI	39.5	0.9	0.9	1.7	1.7	0.6	1.0	0.8	1.2	1.3	0.

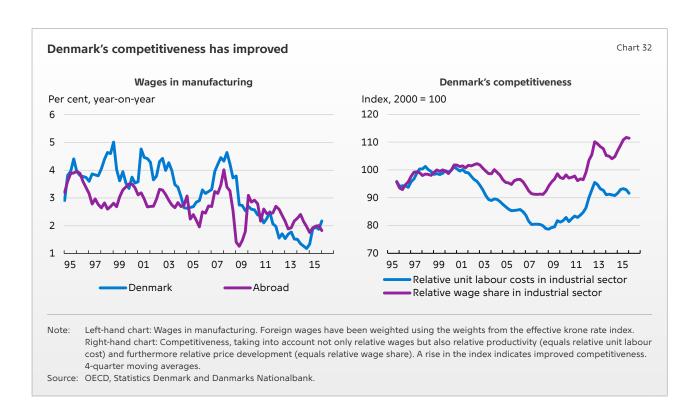
Note: The most recent actual figures are from May 2016.

(left). In contrast, wage growth in e.g. business service and trade and transport is lower.

Annual wage growth in the manufacturing industries is expected to be around 2.5 per cent p.a. in the coming years, i.e. a little higher than in recent years. Combined with the current weak

trend in consumer prices, this will boost real wages considerably.

A broader measure of competitiveness includes not only wages, but also relative productivity growth and the prices at which Danish firms' products can be sold relative to the prices of



<sup>1.</sup> Weight in the index of net retail prices, per cent. The weights are from January 2016.

imports, i.e. the terms of trade. Both these factors are captured by developments in the relative wage share. According to this measure, the Danish industrial sector has improved its wage competitiveness in recent years, cf. Chart 32 (right). Irrespective of the measure applied, Denmark's competitiveness is good, which contributes to the sizeable surpluses on both the balance of trade and the current account.

Public sector wage growth is subdued. Wage growth is affected by developments since 2008, when wages for a while rose at a faster pace than in the private sector. However, they are regulated so that they move in parallel with private sector wages in the long run. This means that public sector wage growth will be relatively low in the coming years, especially for central government employees as their agreed wage increases will come at the end of the collective agreement period, i.e. in 2018.

### EMPLOYMENT IS RISING AND UNEMPLOYMENT IS FALLING

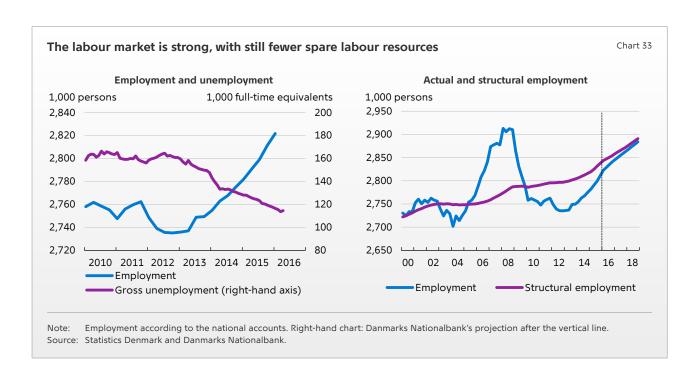
According to the national accounts, employment was up by 11,000 in the 1st quarter of 2016. It has been rising constantly since the 4th quarter of 2012, by a total of 86,000 persons, cf. Chart 33 (left). Growth has solely taken place in the private sector, where employment has increased by 94,000 persons. The increase has been broadbased, but most pronounced within a number of

service sectors and in building and construction. Conversely, employment in public administration has decreased.

Since the turn of the year, gross unemployment has decreased by almost 5,000 persons, to 115,000 in April, or 4.3 per cent of the labour force. This means that unemployment is close to its structural level, which has been estimated at around 110,000. By the end of the projection period, gross unemployment will be below the cyclically neutral level.

The labour shortage indicators point to increasing capacity utilisation in the labour market. This is particularly true within construction, where 15 per cent of firms (weighted by number of employees) indicate that shortage of labour impedes production. For the other sectors, the indicator has been more flat.

The labour market gap, which indicates how much employment can rise without causing inflationary pressures in the economy, is estimated at approximately 20,000 at present. From the 1st quarter of 2016 to the end of 2018, employment is expected to increase by 60,000 persons. This means that a substantial share of the expected employment growth must come from people currently outside the labour force. The projection assumes that the structural labour force will rise in the coming years, reflecting measures such as the retirement reform from 2011, which will increase the participation rate in the older age groups. Just



under half of the total increase in employment is attributable to cyclical improvements, while the rest can be attributed to the rise in structural employment, cf. Chart 33 (right).

### GOVERNMENT BUDGET DEFICITS ARE WITHIN THE LIMITS

Public consumption is forecast to grow by 1.0 per cent in 2016, followed by zero growth in 2017 and a rise of 1.2 per cent in 2018. This is in line with the government's projection in the Economic Survey from May 2016.

In recent years, public investment as a share of GDP has been at a historically high level and there have been repeated budget overruns, cf. Chart 34 (left). The government has announced an adjustment of the level of investment. Hence, public investment is expected to fall by approximately 5 per cent over the projection period.

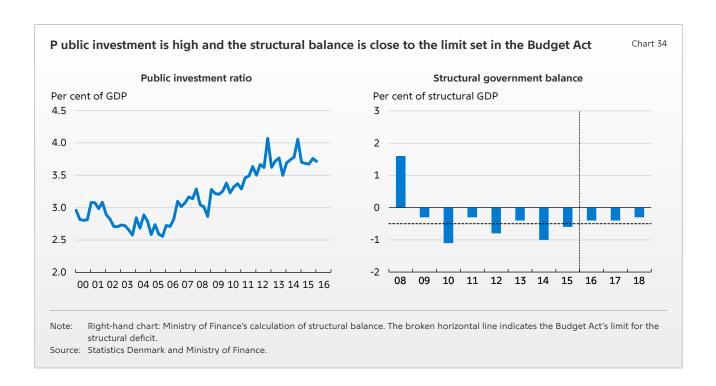
A government deficit of 2.0 per cent of GDP is forecast for this year. That is 1.2 percentage points better than in the March projection, reflecting, inter alia, higher proceeds from pension yield tax as a result of lower bond yields. The deficit is expected to shrink further to 1.9 per cent of GDP in 2017 and 1.7 per cent in 2018, mainly as a result of a stronger cyclical position and subdued growth in spending. So it looks as if the government deficit will remain within the 3 per cent limit set in the Stability and Growth Pact with a

relatively wide margin, but there have previously been large fluctuations relative to the projection, especially due to uncertainty about the proceeds from pension yield tax – and currently about costs related to asylum seekers.

In the Economic Survey from May 2016, the government forecasts the structural deficit at 0.4 per cent of GDP this year, corresponding to fiscal tightening of 0.2 percentage point relative to 2015, cf. Chart 34 (right). The structural balance is also expected to show a deficit of 0.4 per cent of GDP next year, but will then gradually converge towards equilibrium in 2020 according to the government's convergence programme from April. The size of the structural deficit does not leave much room for meeting unexpected expenses before the Budget Act's limit is exceeded.

#### **ECONOMIC POLICY**

The labour market is strong, with rising employment and falling unemployment. This reflects growth in production, especially in the industrial sector, building and construction and business service. The projection forecasts gradually stronger growth in real GDP over the next couple of years, and the output gap is expected to close towards the end of 2018. Given the cyclical outlook, fiscal policy should be aimed at achieving equilibrium on the structural balance within the next few years.



Over the last decade, a number of reforms have been introduced with a view to increasing the supply of labour so as to ensure sustainable public finances. Looking ahead, the greatest potential for strengthening the supply of labour lies in enhancing integration efforts and upgrading the skills of the labour force. If the level of prosperity in Denmark is to continue to rise is step with levels in comparable countries, focus must also be on increasing productivity.

Although it is important to boost productivity growth, higher real GDP growth should not be the only focus area. A broader comparison with e.g. Sweden, where growth in real GDP has been higher than in Denmark for some years, shows that Danish prosperity per capita has developed in line with that of Sweden, reflecting factors such as continuous improvement of Denmark's terms of trade and a high return on foreign assets. Growth in Sweden has been driven mainly by strong domestic demand, due to e.g. pressures on the housing market and high population growth, while exports in the two countries have moved more or less in tandem since the financial crisis in 2008. Conversely, Sweden's industrial output has risen far less than Denmark's since 2008.

Given the moderate trend in real GDP, the strong rise in employment in Denmark has entailed low growth in productivity, particularly over the last year. The projection assumes that productivity growth will recover to some extent so that it will be closer to its historical level. As pointed out by the Danish Productivity Commission, a number of levers may be adjusted with a view to boosting productivity growth. Above all, competitiveness must be strengthened. This requires open markets, both domestically and vis-à-vis other countries. There are sectors in Denmark where competition is low, and this is reflected in high price levels. An adjustment of the educational system so that students are encouraged to enrol for programmes with good employment prospects could also contribute to strengthening productivity growth. The low level of interest rates is buoying up demand in the economy, but also keeping low-productivity firms afloat that would sink in normal circumstances. That reduces overall productivity growth in Denmark.

The government has announced that it will present a new medium-term fiscal policy strategy until 2025 in the autumn, including the 2nd phase of the job reform initiated in 2015 (tax reform). Key elements of this 2025 plan should be to strengthen the automatic stabilisers in the economy and to remove asymmetry in the tax system in order to strengthen economic and financial stability and support productivity growth.

# APPENDIX 1: ASSUMPTIONS IN THE PROJECTION FOR THE DANISH ECONOMY

The projection has been prepared using the macroeconomic model MONA<sup>4</sup> and is based on the available economic statistics, including Statistics Denmark's preliminary quarterly national accounts for the 1st quarter of 2016. The projection involves a number of assumptions concerning the international economy, financial conditions and fiscal policy.

#### THE INTERNATIONAL ECONOMY

The international economy and most of Denmark's trading partners are picking up steam. The international growth outlook is supported by continued low oil prices and interest rates. Compared with the previous projection, growth forecasts have been adjusted a little downwards, especially for 2016. This is mainly attributable to weaker import growth in the emerging market economies, including China, and weaker-than-expected growth in the USA in early 2016. Overall, growth in the markets for Danish industrial exports is assumed to increase by 3.1 per cent this year, 4.3 per cent in 2017 and 4.2 per cent in 2018, cf. Table 4.

Foreign wage growth is expected to be modest, but will rise a little towards 2018 as the labour markets improve. Lower oil prices this year than last year contribute to a fall in export prices this year among most of Denmark's key trading partners. Moderate foreign export price increases are expected next year and in 2018.

### INTEREST RATES, EXCHANGE RATES AND OIL PRICES

Developments in short-term and long-term interest rates in the projection are based on the expectations of future developments that can be derived from the interest rate curves in the financial markets. The 3-month money market interest rate, measured by the CITA swap rate, is expected to be negative throughout the projection period, at approximately -0.4 per cent in 2016 and 2017, rising to -0.2 per cent by the end of 2018.

The average bond yield is an average of the yields to maturity on outstanding government and mortgage bonds. It is expected to rise slightly over the projection period, from 0.8 per cent initially to 1.4 per cent by the end of 2018.

US interest rates are no longer expected to rise in the immediate future, which has made the euro appreciate a little vis-à-vis the dollar. Furthermore, the turmoil in connection with the UK referendum on continued EU membership on 23 June has made the pound depreciate. Both these factors have strengthened the effective exchange rate of the krone relative to the point of departure for the last projection; it is expected to remain at this level throughout the projection period. In the projection, the dollar rate is also assumed to remain unchanged at the current level.

In early June 2016, the price of oil was just under 50 dollars per barrel. The oil price is assumed to develop in line with futures prices, rising to just under 55 dollars towards the end of 2018. This is an upward adjustment of 5-10 dollars throughout the period compared with the most recent projection.

#### **FISCAL ASSUMPTIONS**

The projection is based on the planned fiscal policy in the Economic Survey from May 2016, including the agreement on the Finance Act for 2016, local and regional government budgets and Denmark's Convergence Programme 2016.

Real public consumption is assumed to rise by 1.0 per cent this year and by 0.0 and 1.2 per cent in 2017 and 2018, respectively, while public investment is assumed to fall by 1.9 per cent this year and by 1.3 and 1.5 per cent in 2017 and 2018, respectively, cf. Table 4.

<sup>4</sup> The model is described in Danmarks Nationalbank, MONA – a quarterly model of the Danish economy, 2003.

	2015	2016	2017	201
aternational economy:				
Export market growth, per cent year-on-year	3.8	3.1	4.3	4.
Export market price <sup>1</sup> , per cent year-on-year	-2.7	-1.5	1.4	1.
Foreign price <sup>2</sup> , per cent year-on-year	-2.7	-1.5	1.4	1.
Foreign hourly wages, per cent year-on-year	1.9	1.7	2.3	2.
inancial conditions, etc.:				
3-month money market interest rate, per cent p.a.	-0.4	-0.4	-0.4	-0.
Average bond yield, per cent p.a.	1.0	0.9	1.0	1.
Effective krone rate, 1980 = 100	99.2	100.6	100.7	100.
Dollar exchange rate, DKK per USD	6.7	6.6	6.6	6.
Oil price, Brent, USD per barrel	52.4	45.1	52.1	54.
iscal policy:				
Public consumption, per cent year-on-year	0.6	1.0	0.0	1.
Public investment, per cent year-on-year	-1.0	-1.9	-1.3	-1.
Public sector employment, 1,000 persons	815	811	813	81

#### APPENDIX 2: REVISIONS IN RELATION TO THE PREVIOUS PROJECTION

Compared with the March projection, the forecast for GDP growth in Denmark this year has been revised downwards by 0.3 percentage point. This is partly due to lower-than-expected exports for 2016, reflecting lower export market growth and a higher effective krone rate, and partly to a revision of the quarterly national accounts so that the point of departure for 2016 is lower.

Lower export market growth and a higher effective exchange rate of the krone are also the reasons for the 0.2 percentage point downward adjustment of GDP growth in 2017. Bond yields have been adjusted downwards and are now assumed

to rise less steeply. Viewed in isolation, this points to lower capital costs and higher GDP growth.

The HICP inflation forecast has been adjusted downwards relative to the March projection despite rising oil prices in the spring. For 2016, this is because both domestic market-determined inflation and imported inflation were substantially lower than expected in February-April 2016, which will also reduce the rate of increase in 2017 due to a lower point of departure for 2016. For 2017 and 2018, the higher effective krone rate and downward adjustment of import prices point to lower domestic consumer prices.

Revisions in relation to the previous p	rojection					Table 5
Per cent, year-on-year		GDP	Consumer prices, HICP			
	2015	2016	2017	2015	2016	2017
Projection, March 2016	1.3	1.8	1.8	0.6	1.8	1.9
Contribution to revised forecast from:						
Export market growth	-0.1	-0.1	0.0	0.0	0.0	0.
Interest rates	0.0	0.2	0.1	0.0	0.0	0.
Exchange rates	-0.1	-0.1	0.0	0.0	-0.1	-0.
Oil prices	0.0	0.0	0.0	0.2	0.1	0.
Other factors	-0.2	-0.2	-0.1	-0.5	-0.5	-0.
This projection	1.0	1.6	1.8	0.3	1.5	1.

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