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# Economic Developments and Outlook

DeNederlandscheBank

EUROSYSTEEM



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December 2017, number 14

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## Summary

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Economic growth in the Netherlands remains vigorous. Growth in gross domestic product (GDP) is expected to peak at 3.3% in 2017, predominantly reflecting the upswing in world trade. For 2018 and 2019 we project growth at a gradually slowing but still above-trend rate of 3.1% and 2.3%, respectively. GDP growth in 2018 and 2019 will be fuelled mainly by domestic expenditure. Household consumption will increase markedly over the next two years, at 2.2% a year on average. Disposable income should improve on the back of higher gross compensation of employees, lower income tax and a strong pick-up in employment. Reflecting the slowdown in GDP growth, corporate investment growth is set to decelerate in the years ahead, from 7% in 2017 to an average of 4.5%. Nevertheless, the outlook for firms is favourable, supported by improved financial conditions, higher utilisation rates and filled order books. Unemployment as a percentage of the labour force should continue its downward trend, to reach 3.9% in 2018 and 3.5% in 2019. The economy will clearly enter a boom phase.

The upswing in house prices has thus far contributed significantly to economic growth through higher household wealth, risen consumer confidence and increased housing investment. Our projections show a gradual easing of house price growth. Housing investment climbs 11% in 2017. Projected growth will be less exuberant in 2018 and 2019 but still robust at 8.5% and 7.0%, respectively, as construction firms will increasingly near the limits of their capacity.

Inflation remains subdued in the medium term, at 1.3% in 2017 and 1.4% in 2018. It should veer up to 2.3% in 2019, mainly on the back of planned increases in energy tax rates and in the lower VAT rate, from 6% to 9%. Seen against the highly improved labour market, the rise in contractual wages is still moderate in 2017, at 1.6%, but it is projected to be 2.1% in 2018. In 2019, the rise in contractual wages will accelerate further to 2.5%, reflecting the tight labour market and higher inflation. Dutch government finances should be in good shape over the projection horizon, with budget surpluses each year and public debt falling to 50.8% of GDP.

An alternative scenario shows the potential adverse effects that a global rise in capital market rates will have on the Dutch economy. If these rates were to rise abruptly by one percentage point, this would depress GDP growth by an average of 0.4 percentage points a year over the first four years. The impact on growth would be the greatest in the first two years and subsequently wane.

# 1 The Dutch economy in 2017-19

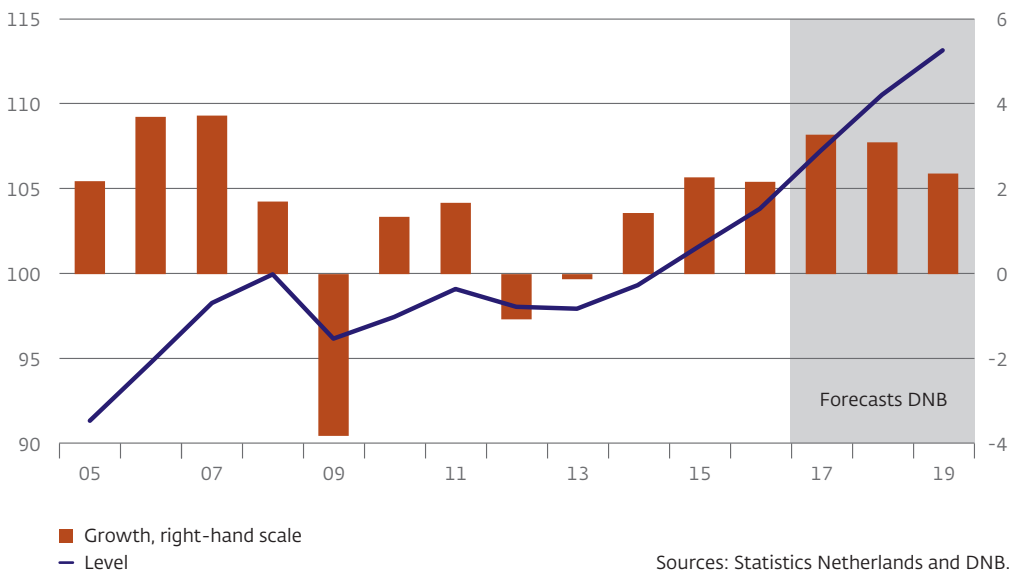
## Economy grows at a rapid pace

The Dutch economy is developing favourably for the fourth consecutive year. GDP growth is again higher in 2017. At 3.3%, projected growth is at a rate unseen in the past decade. For 2018 and 2019 we project growth at gradually slowing but still above-trend rates of 3.1% and 2.3%, respectively (Chart 1).

The economy performs well in 2017 on the back of the upswing in world trade, which shows the highest growth in six years. From 2018 onwards, world trade should grow a notch slower, and the same applies to housing investment, which progressed at an exceptionally fast pace in the past three years. Part of this will be compensated by budgetary stimuli in 2018 and 2019, as government spending is set to rise under the coalition agreement, notably in 2018, and direct taxes will be cut from 2019 onwards. These incentives will boost economic growth.

### Chart 1 Gross domestic product

Volume; 2008 = 100 and year-on-year percentage changes



## 6 Volatile quarterly growth and upward momentum in 2017

The first three quarters of 2017 showed a volatile growth pattern. The first quarter showed above-average 0.6% GDP growth from the fourth quarter of 2016, followed by a very high outlier by historical standards of 1.5%. Subsequently, the slowdown to 0.4% in the third quarter was larger than expected. This correction had been foreseen to an extent, however, so it did not indicate weaker growth momentum. Firms are very confident about the future, with producer confidence in November 2017 almost at the highest level in 30 years.

## The international economic assumptions underlying our projections

Global growth currently shows upward momentum, broadly based across advanced and emerging economies. The ECB projects global growth (excluding the euro area) to accelerate from 3.7% in 2017 to 3.9% in 2018 and roughly to flatten out at 3.8% in 2019.<sup>1</sup> The improved situation of emerging economies benefits above all from the strong recovery seen in Brazil and Russia and robust growth in China. Chinese growth should gradually abate due to measures that curb credit growth and tax incentives. Growth in the United States is expected to pick up, supported by improved consumer and business confidence, a tighter labour market and a weaker US dollar. The ECB projects euro area GDP growth of 2.4% in 2017, 2.3% in 2018 and 1.9% in 2019. Factors underpinning growth include accommodating monetary policy, quickly rising employment and robust foreign demand. The upturn in the world economy also accelerates growth in world trade relevant to the Netherlands. Average growth for the 2017-2019 period is now projected at 4.6% per annum, whereas we assumed 4.1% in June 2017.

The benign outlook for the world economy is affected by several uncertainties. We have not yet incorporated the macroeconomic effects of the new US tax plan into our projections. In addition, a Chinese hard landing cannot be excluded as the country transitions towards a path of more subdued and sustainable growth. The key downward risk for the Netherlands is a hard Brexit. Although a transitional period commencing in 2019 would seem to be the most likely scenario, this requires fruitful negotiations between the United Kingdom and the EU. Lastly, the risk of intensifying protectionism seems to have eased somewhat. Although such tendencies are still present in the United States, witness difficult NAFTA negotiations and its tense relations with China, various other countries are working out new trade agreements.

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<sup>1</sup> The assumptions underlying the development of relevant world trade, exchange rates, international commodity prices and interest rates are based on information available on 22 November 2017.



Both the euro exchange rate expressed in US dollars and oil prices have gone up sharply since our previous forecast of June 2017. The rise in oil prices reflects stronger than anticipated demand in 2017 and compliance with recently agreed production limits. Further rises will be dampened by the expected additional supply from the United States if prices should rise further. The appreciation of the euro reflects the relatively robust economic development in the euro area, eased political uncertainties and the anticipation of European monetary policy tightening among investors.

## Domestic spending lifts growth

Table 1 lists the key data in the forecast for the Dutch economy for 2016-2019. The growth acceleration projected for 2017 is broadly based: both exports and domestic spending grow more rapidly in 2017 than in 2016. Benign income developments allow private consumption growth to gain speed, from 2.3% in 2017 to 2.5% in 2018. In 2019, inflation will have an oppressive effect, due to which consumption growth will edge down again, to 2.0%. The past three decades only occasionally saw consumption growth exceed 2% in consecutive years.

At just over 11% in 2017, housing investment gradually returns to a normal, if above-average, rate of expansion. The construction sector increasingly faces capacity constraints. Almost one-third of all construction firms experience obstacles in production due to shortages in staff or production inputs, against less than 10% a year earlier. Corporate investment (excluding houses) rebounded sharply in 2017 (6.9%), following disappointing 2.2% growth in 2016. In the next few years, businesses will continue to expand investment, with growth figures projected to exceed the 3.5% annual long-term average.

Helped in part by above-average growth in consumption and investment, GDP growth will be largely driven by domestic spending in the next few years (Chart 2). The contributions of private consumption to growth are large and increasing, from 0.3 percentage points in 2016 to 0.7 percentage points in 2017 and 2018. 2007 aside, growth contributions of 0.7 percentage points or more have not been witnessed since the turn of the century. A further key domestic contributor to growth is investment. The contribution of housing investment will gradually decrease over the projection horizon after having peaked in 2016. A notable feature is the large contribution to growth from government spending in the next few years, which is related to additional expenditure under the coalition agreement.

8 **Table 1 Key data in forecast for the Dutch economy**

Percentage changes, unless stated otherwise

	2016*	2017	2018	2019
<b>Volume of expenditure and output</b>				
Gross domestic product	2.1	3.3	3.1	2.3
Private consumption	1.5	2.3	2.5	2.0
Public expenditure	1.0	0.6	3.4	2.8
Business investment	2.2	6.9	5.1	3.8
Housing investment	19.0	11.4	8.5	7.0
Exports of goods and services	4.1	5.8	4.9	4.1
of which domestically produced	2.9	4.9	3.5	3.0
of which re-exports	5.6	6.7	6.4	5.3
Imports of goods and services	3.9	5.4	5.7	4.9
of which domestically used	2.5	4.1	5.1	4.5
<b>Wages and prices</b>				
Negotiated wages, private sector	1.6	1.6	2.1	2.5
Compensation per employee, private sector	0.9	1.3	2.2	3.2
Unit labour costs	0.5	0.5	1.3	2.1
Prices of domestically produced exports	-2.3	2.5	0.7	1.0
Harmonised consumer price index	0.1	1.3	1.4	2.3
House prices, existing own homes	5.1	7.5	7.1	5.2
<b>Labour market</b>				
Employment (persons, growth)	1.1	2.2	2.0	1.4
Labour supply (persons, growth)	0.2	1.0	1.1	1.0
Unemployment (persons x 1,000)	538.8	438.3	357.7	322.6
Unemployment (% of labour force)	6.0	4.9	3.9	3.5
<b>Public sector and financial</b>				
EMU balance (% of GDP)	0.4	0.5	0.5	0.9
EMU debt (% of GDP)	61.8	58.0	54.5	50.8
Current account (% of GDP)	8.7	9.0	8.1	7.3
Mortgage loans (based on end-of-period)	1.9	1.4	4.0	4.9
Bank lending to NFC (based on end-of-period**)	-2.2	-2.5	0.0	1.6
<b>International assumptions</b>				
Volume of relevant world trade	3.6	5.1	4.7	4.0
Volume of GDP				
US	1.5	2.3	2.5	2.2
euro area	1.8	2.4	2.3	1.9
emerging markets	4.0	4.4	4.7	4.7
Short-term interest rate in the euro area (%)	-0.3	-0.3	-0.3	-0.1
Long-term interest rate in the Netherlands (%)	0.3	0.5	0.6	0.9
Euro exchange rate (USD)	1.11	1.13	1.17	1.17
Competitor prices	-3.0	2.0	0.4	2.0
Oil price (UK Brent in USD per barrel)	45.1	54.8	61.6	58.9
Commodity prices excluding energy (USD)	-3.9	7.9	3.3	3.4

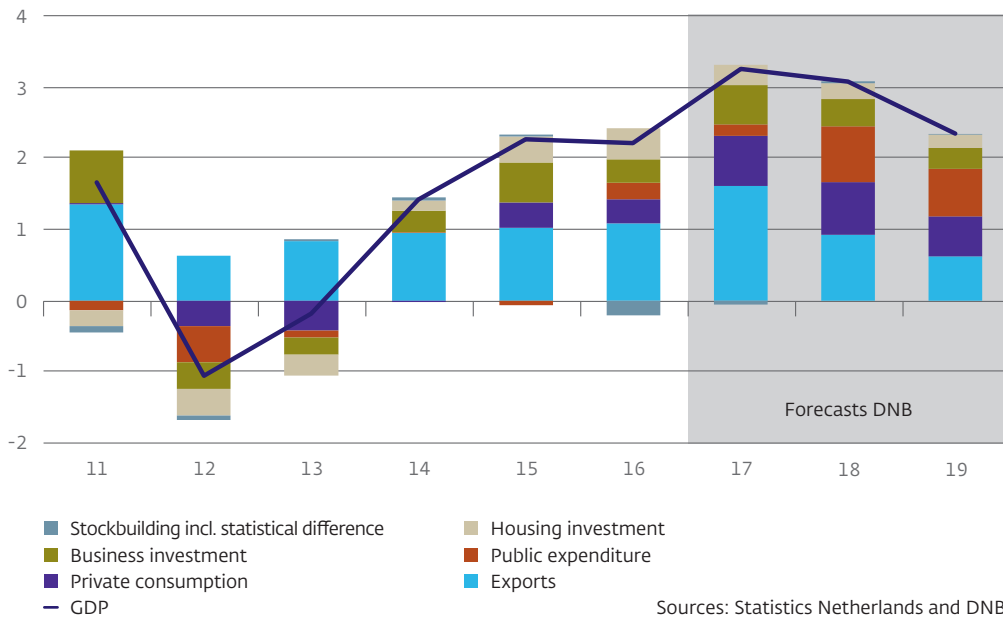
Sources: DNB and ECB.

\* Annual figures have been calculated based on seasonally adjusted quarterly figures and may therefore deviate marginally from the most recent National Accounts.

\*\* Excluding cash pooling, adjusted for securitisations and breaks.

## Chart 2 Sources of GDP growth

Percentage changes and contributions in percentage points



Note: Net contributions to GDP growth. The final and cumulative intermediary imports have been deducted from the related expenditure categories.

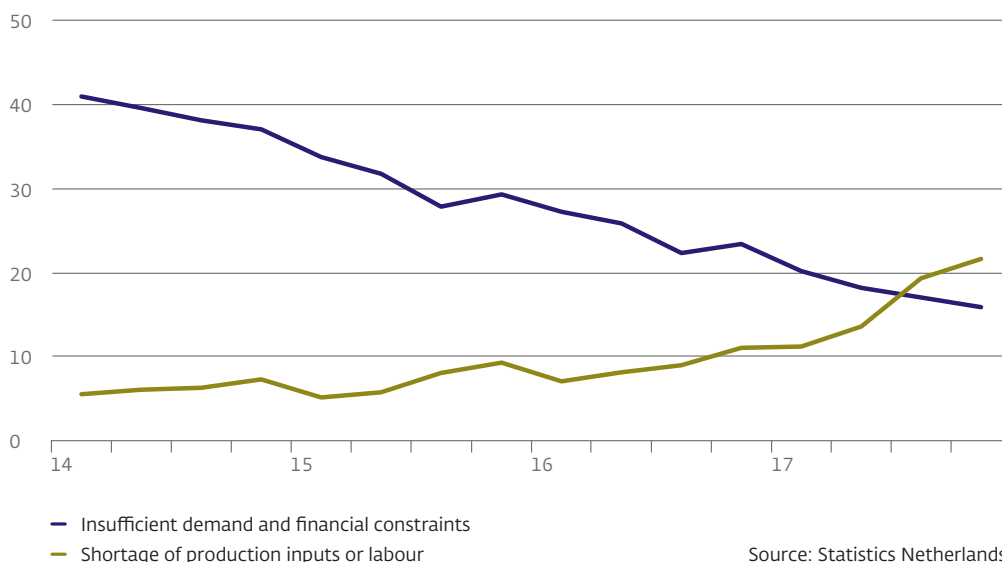
## Economy is going at full speed

As in the past few years, GDP growth in 2017 exceeds projected potential growth of around 1.7% a year. This improves the output gap, which has been negative almost without interruption since 2008, indicating that available production capacity is utilised more. The recent acceleration in growth already caused the output gap to turn positive in 2017, confirming that the Dutch economy is going at full speed. Our projections assume further improvement of the output gap to 1.6% in 2018 and 2.2% in 2019, as the economy clearly enters a boom phase. Although this gradually increases tension in the labour and product markets, the recovery period witnessed since the cyclical trough has still been relatively short (see Box 1).

Business surveys also show that, on average, the production capacity of the economy is now fully utilised. A decreasing number of firms say they experience obstacles in production such as insufficient demand or financial constraints (Chart 3). At the same time, the number of firms facing shortages is rising rapidly. At year-end 2016, 10% of the surveyed firms said they had a shortage of production inputs or staff, doubling to 20% by November 2017.

### Chart 3 Production obstacles to economic boom

Percentages



Note: Total corporate sector (excluding financial institutions and utility companies).

#### Box 1 The economic recovery viewed in historical and international perspectives

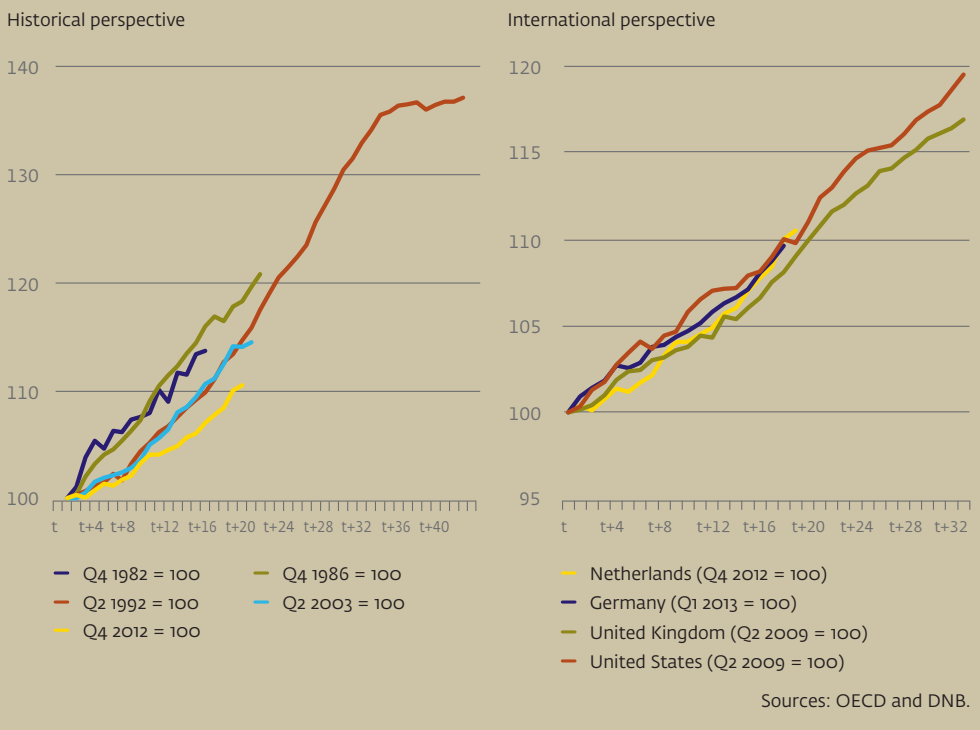
How much potential does the current economic recovery have in terms of duration and strength? We compare the cumulative real GDP growth seen since 2012 with that in the four preceding recovery periods. This shows that the current upswing is relatively young (Chart 4, left). The third quarter of 2017 is the 19th without a recession (defined as two successive quarters of negative growth) since the trough was reached. Only the upswing that started in the fourth quarter of 1982 proved to be shorter-lived than 19 quarters, with recovery periods averaging 25 quarters. In volume terms, the current recovery has shown relatively less strength so far. This is due in part to the fact that trend GDP growth was higher in previous decades. In addition, the current recovery follows on from a balance sheet recession and a financial crisis, whose effects are typically more drawn out and far-reaching.

When set against other countries, too, the duration of the current recovery period has been short so far.<sup>2</sup> Recovery in the United Kingdom and the United States has been ongoing for 33 quarters (Chart 4, right). Unlike these countries, however, the Netherlands sunk into recession again in 2012, due to the European sovereign debt crisis and falling house prices. The same goes for Germany, which is in its 18th quarter without a recessionary period. This caused the current recovery period in the Netherlands and Germany to start only in 2013, whereas in the United Kingdom and the United States it started in 2009. The pace at which the Dutch economy is recovering, however, is similar to that seen in Germany, the United Kingdom and the United States (Chart 4, right). From the fourth quarter of 2012 to the third quarter of 2017, Dutch real GDP expanded by 10.5%.

Looking ahead, the current recovery period seems to have upward potential. This is in line with our projections, in which the current economic upswing does not stop before the end of 2019.

### Chart 4 Recovery of the Dutch economy

Cumulative real GDP growth, trough = 100



2 Strictly speaking, allowance must be made for the trends in population size, which diverge across countries. An analysis based on per capita GDP leads to the same conclusion, however.

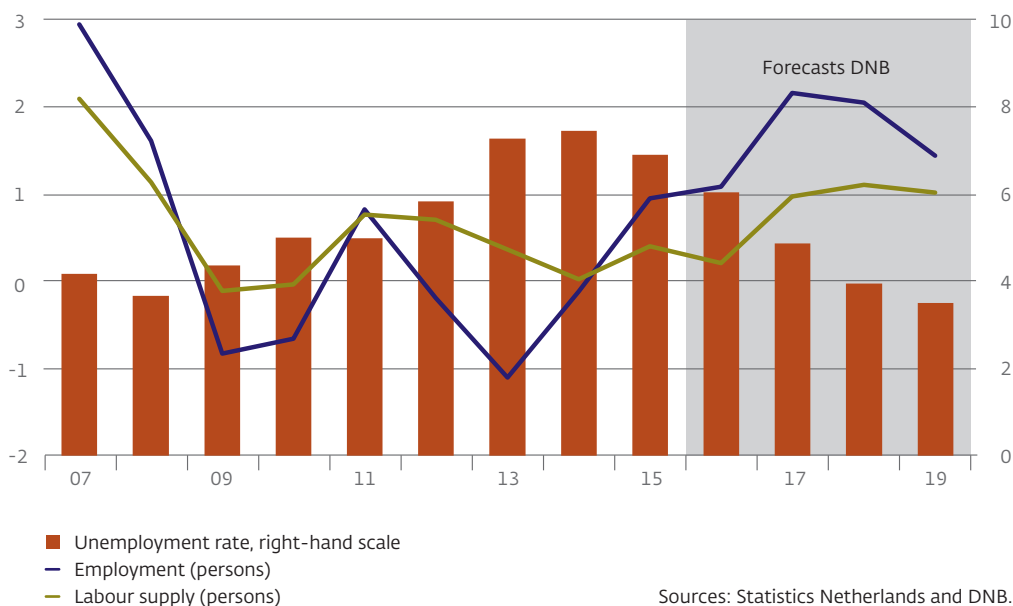
## Strongest employment growth since 2007

Employment growth is expected to peak at 2.2% in 2017 (Chart 5), which is the strongest growth in the working population seen since 2007. More than 50,000 jobs were created each quarter since the final quarter of 2016. Employment increases in step with economic growth and will therefore also expand throughout 2018, by 2.0%. Likewise, employment growth is set to slow down somewhat in 2019, mainly reflecting slightly lower economic growth. In addition, firms will find it increasingly difficult to hire suitably qualified staff.

Better prospects encourage more people to enter the labour market. Labour supply increases by 1.0% in 2017, whereas it hardly grew at all during the preceding three years, averaging 0.2%. In 2018 and 2019 labour supply growth will also be around 1%. Nevertheless, the growth in labour supply will lag behind that in employment. Projected unemployment falls to 4.9% of the working population in 2017, dropping further to 3.9% in 2018 and 3.5% in 2019. This would bring unemployment below the figure for 2008. The increasing tension in the labour market is reflected in the upward pressure on wages that appears from our projections.

### Chart 5 Labour market supply and demand

Year-on-year percentage changes and percentage of labour force



Tightness in the labour market is already emerging, even if there were roughly 100,000 more unemployed than in 2008. Increasingly, Dutch firms are having difficulties finding suitably qualified staff. Between October 2016 and October 2017, the number of firms experiencing obstacles in production due to staff shortages doubled. This makes staff shortages the key bottleneck for firms, more so than a shortage of materials or financing, or insufficient demand. Staff shortages are most keenly felt among firms in business services (employment and job placement agencies), IT firms, logistics and the construction sector. A recent survey held by the Employee Insurance Administration Agency (UWV) shows the same picture. Dutch firms say one-third of their vacancies are difficult to fill, the most cited reasons being a lack of suitable qualifications and insufficient respondents.

### Is flexible employment falling off?

The sustained growth in employment and the ever tighter labour market are reflected in a rising number of permanent jobs. Having dropped sharply since the credit crisis by over 500,000 on a cumulative basis, the number of employees on permanent contracts has rebounded since 2016. At the same time, however, the number of self-employed persons and employees on flexible contracts is rising more rapidly, causing the number of permanent contracts as a proportion of total employment to drop.

Chart 6 breaks down growth in the active working population on flexible contracts by type of employment contract. Remarkably, growth in the number of employees on flexible employment contracts with the prospect of a permanent contract has accelerated rapidly since end-2016. If these temporary contracts are actually converted into permanent ones, the number of employees on permanent contracts could go up sharply in 2018 and 2019. The extent to which this will happen is uncertain, however. In the third quarter of 2016 the number of permanent jobs also went up sharply, but growth slowed down in subsequent quarters. The previous period of economic expansion (2004-2007) showed a clearer pattern than the current upswing. Back then, employment growth was initially supported by employees on temporary contracts without the prospect of a permanent contract, temping agency staff, on-call workers and workers on a zero-hour contract. Subsequently, the number of contracts with the prospect of a permanent contract went up, after which ultimately the number of permanent contracts increased.

### Chart 6 Growth in active working population by type of employment relationship

Thousands of persons; year-on-year changes



Source: Statistics Netherlands.

### Wage increases accelerate

Wage developments have been moderate so far. Growth in compensation per employee is moderated first and foremost by restrained growth in negotiated wages. After the 2008-2009 crisis, negotiated wages rose on average by 1.3% per annum, which is one percentage point below the long-term average (1980-2016). As in 2016, growth in negotiated wages lands at 1.6% in 2017. This seems limited at first sight, but it is in line with fundamentals such as inflation, labour productivity growth and unemployment. Negotiated wage rises will increase from 2018 onwards only, to reach 2.1% in 2018 and 2.5% in 2019, driven among other things by the tighter labour market and rising inflation.

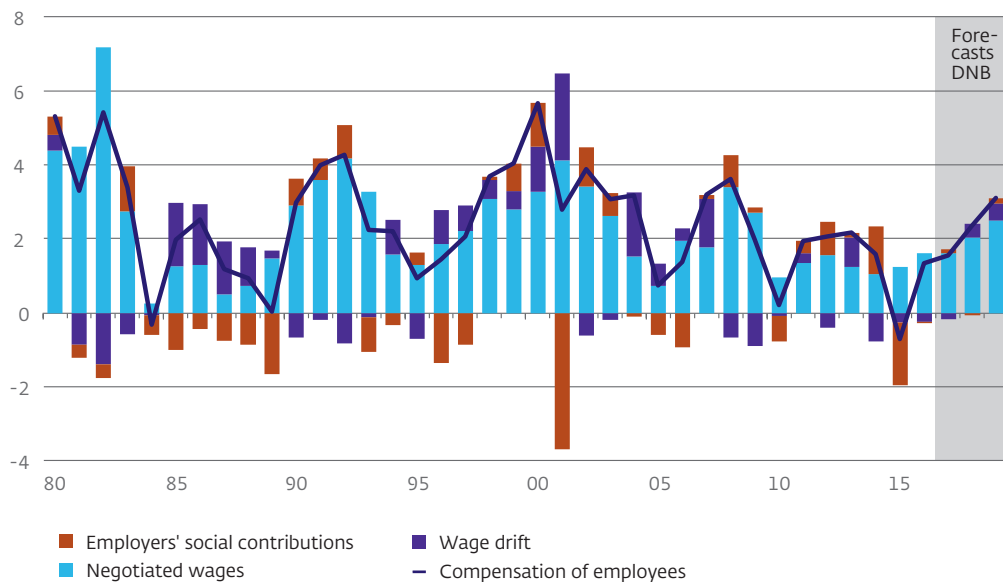


Compensation per employee is also determined by wage drift, which has been negative for the past four years (Chart 7). Besides incremental salary increases, bonuses and the like, wage drift also depends on the composition of employment. Growth in employment is uneven among groups of employees, causing average compensation to change due to variations in remuneration between these groups. Unlike the employment growth seen in the previous economic growth period (2004-2007), half of that growth is accounted for by workers who are young and lower-paid on average. Wage drift is expected to start contributing somewhat to growth in compensation per employee again from 2018 onwards.

The higher wage growth in 2018 and 2019 will also nudge up the labour income share (LIS) of businesses, which is projected to increase by around one percentage point, from 72.3% to 73.4%. This is because growth in real compensation per employee is set to outstrip growth in labour productivity in both 2018 and 2019. It will nevertheless remain below the long-term average of 74.6% (1978-2016).

### Chart 7 Breakdown of wage developments in the private sector

Wage developments based on number of persons; year-on-year percentage changes



Sources: Statistics Netherlands and DNB.

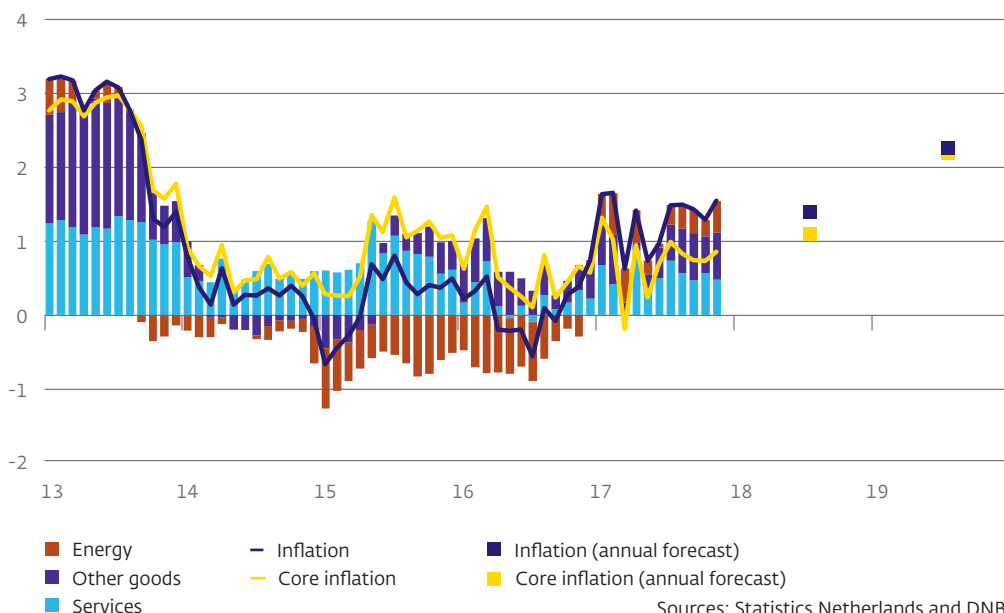
## Inflation to peak in 2019, driven by VAT increase

Average inflation is expected to land at around 1.3% for 2017, against 0.1% for 2016, largely owing to higher food and energy prices (Chart 8). Core inflation, which excludes food and energy prices, is only 0.7% in 2017. Higher core inflation is expected for 2018. The increase in the wage and salary bill will outstrip labour productivity growth, mainly due to the tightening labour market, thereby pushing up unit labour costs. Producers will pass on these higher costs with some delay, meaning core inflation is expected to top 1% in 2018. Headline HICP inflation, however, will remain well below 2% in 2018, ending at 1.4%.

2019 will see inflation rise above 2% for the first time since 2013, with 2.3% projected for that year. This will be largely driven by higher indirect taxes, with the increase of the low VAT rate from 6% to 9% having the largest impact. In addition, unit labour costs will be given another boost (2.1%) in 2019 as increases in negotiated wages and wage drift outpace virtually unchanged growth in labour productivity.

### Chart 8 HICP inflation

Year-on-year percentage changes and contributions in percentage points



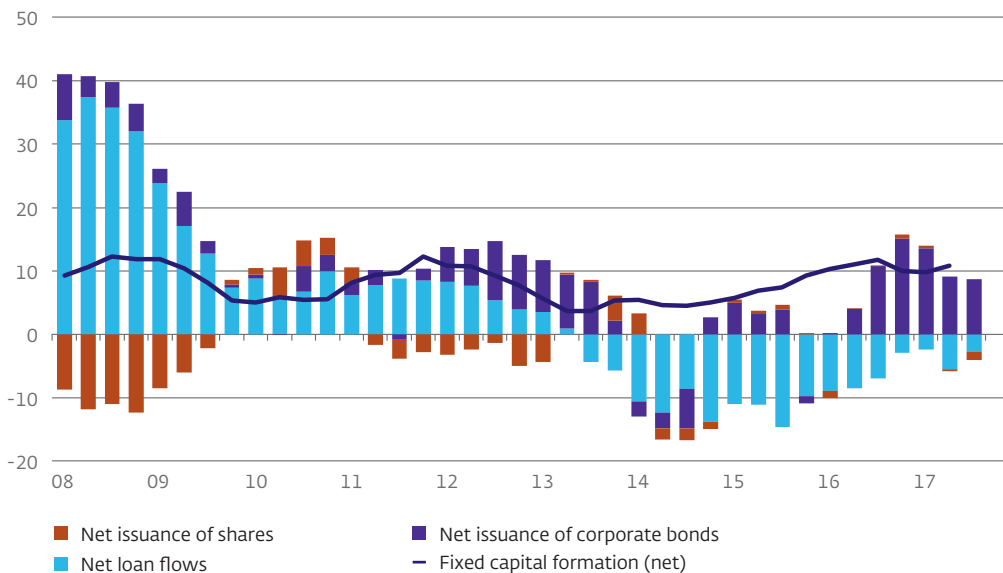
Note: Core inflation = total excluding food and energy.

## Improved funding options for the corporate sector

Net bank lending to non-financial corporations has been receding on balance since 2013, meaning that the amount in newly granted loans has remained below the amount in repayments of previously granted loans. Chart 9 shows that net lending has slowly climbed again since mid-2015, as corporate investment and thus companies' need for financing are also increasing. Larger firms, in particular, also issue shares and bonds to finance investments. Since end-2016, net bond issuance has been going up rapidly. Small and medium-sized enterprises (SMEs), however, continue to depend mainly on bank loans for their external financing. Survey data show that SMEs experience fewer and fewer obstacles when applying for bank loans. The percentage of rejected applications is falling, although many applications are still rejected among micro businesses and small businesses, at 34% and 24%, respectively, against 20% for all SMEs. Between April and September 2017, more than half of the SMEs surveyed said they had not applied for new loans because they had sufficient resources. Average profits have strongly improved since 2014, among large enterprises and SMEs alike.

### Chart 9 External financing for non-financial corporations

In EUR billion; four-quarter sums



Sources: Statistics Netherlands and DNB.

## 2 A closer look at spending and public finances

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### Exports growth outpaces world trade in 2017

Dutch exports profit from the favourable trend in world trade growth, which grows by 5.1% in 2017, the highest level in six years (Table 2). At 5.8%, exports slightly outpace world trade growth, with a significant expansion of domestically produced exports (4.9%). Excluding energy, this was even 6.7%; the most robust growth seen since 2000. This resulted in a considerable expansion of market share. World trade growth is expected to slow down slightly in the years ahead, which will translate into weakening growth of all components of exports. The proportion of products "made in Holland" will also fall off slightly in the coming years, entirely in line with the historical trend seen in advanced countries.

The improving price-competitive position in 2017 has made an important contribution to exports growth and thereby also to the expansion of market share. The competitive position is expected to continue contributing positively to exports growth in the coming projection years, be it only marginally in 2018 (Chart 10).

**Table 2 Dutch exports and competitiveness**

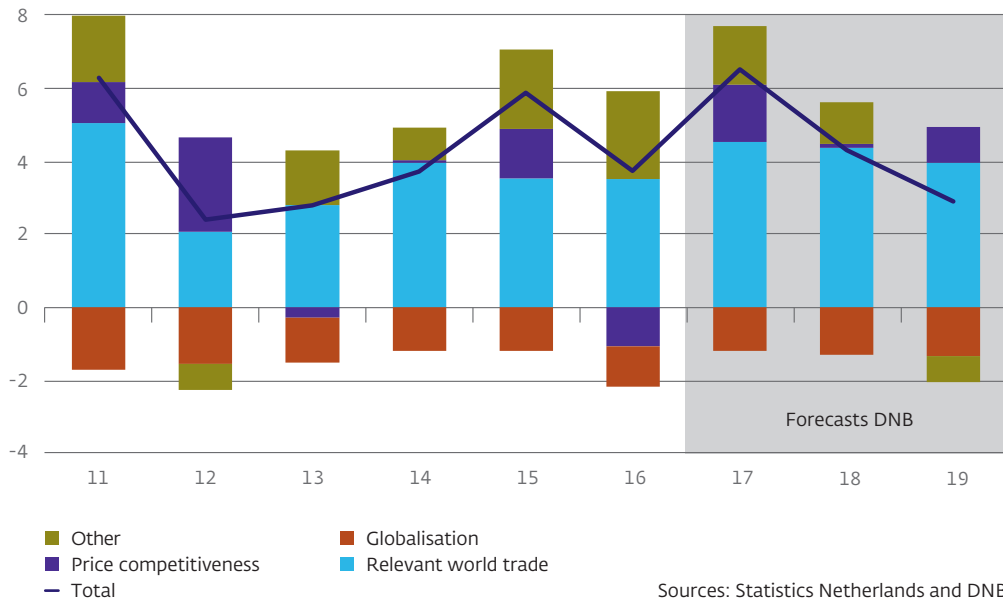
Percentage changes, unless stated otherwise

	2016	2017	2018	2019
<b>Volume</b>				
Relevant world trade (1)	3.6	5.1	4.7	4.0
Exports of goods and services (2)	4.1	5.8	4.9	4.1
domestically produced	2.9	4.9	3.5	3.0
re-exports	5.6	6.7	6.4	5.3
Trade performance (2-1)	0.6	0.6	0.2	0.0
Exports of goods and services excl. energy	4.4	6.7	5.3	4.0
domestically produced (3)	3.8	6.7	4.4	2.9
re-exports	5.2	6.7	6.4	5.3
Market performance (3-1)	0.2	1.6	-0.3	-1.1
<b>Price</b>				
Competitor prices (4)	-3.0	2.0	0.4	2.0
Exports of goods and services	-2.6	3.3	1.3	1.3
domestically produced, excl. energy (5)	-1.1	-0.2	0.8	0.9
Price competitiveness (4-5)	-2.0	2.2	-0.4	1.0

Sources: DNB and ECB.

### Chart 10 Sources of export growth

Percentage changes and contributions in percentage points



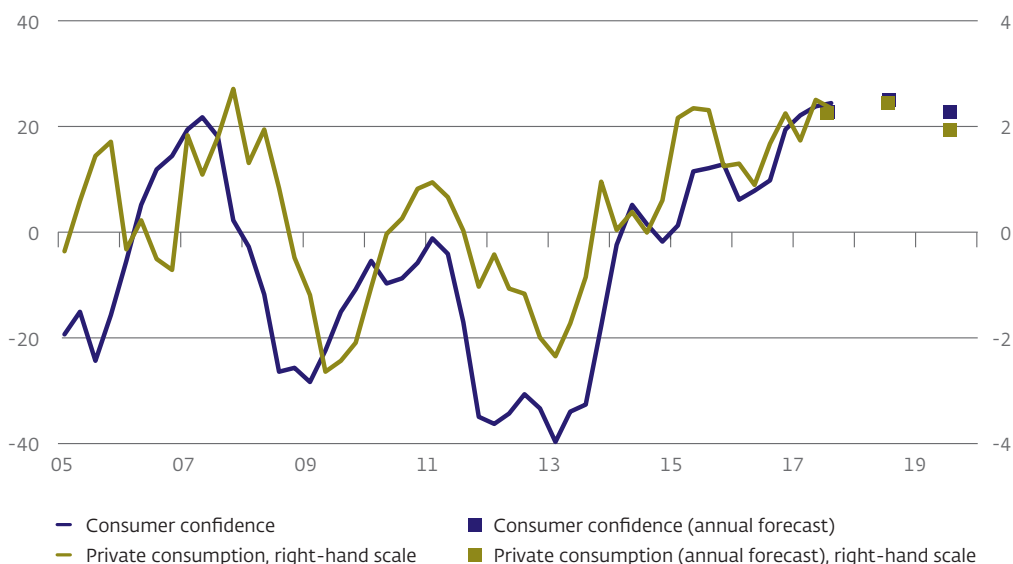
Note: Estimated contributions to growth in domestically produced exports, excluding energy.

### Stable and robust private consumption growth...

Private consumption has shown a volatile quarterly pattern in the past two years, also because of exceptional weather conditions, which are particularly relevant for natural gas consumption. Year-on-year private consumption growth has nevertheless remained robustly above 2% since the end of 2016, its pre-crisis growth rate (Chart 11). Our projections show ongoing stable quarter-on-quarter growth of 0.5% in 2018 and 2019. In the longer term, private consumption meets the empirical truth that income shocks are initially largely cushioned by savings, and spending takes some time to react. This “consumption smoothing” will for instance ensure that the tax cuts planned for 2019 will not induce a great consumption shock in our projections.

### Chart 11 Consumer confidence and private consumption

Balance of positive and negative answers and year-on-year percentage volume changes; seasonally adjusted



Sources: Statistics Netherlands and DNB.

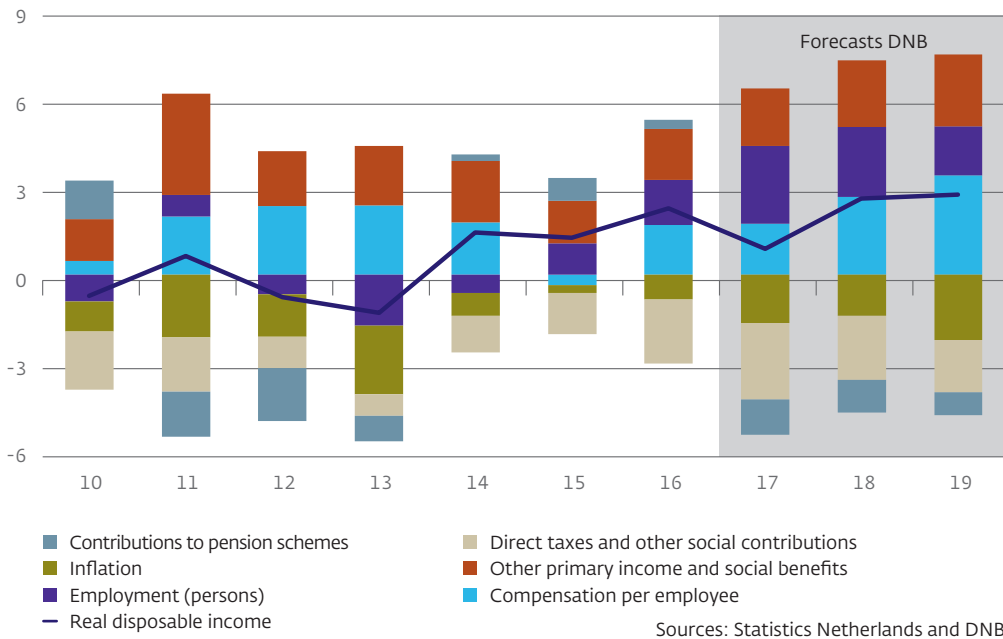
Chart 11 depicts the uptrend in consumption growth and consumer confidence. Consumer confidence hovered around an exceptionally high level in 2017, which almost matches the peak seen shortly before the credit crisis. The recovery of consumption growth that started in 2013 is largely related to the housing market recovery. Without the housing market recovery, average annual consumption growth would have been one percentage point lower on average (see Box 2). In the coming years, this effect will be less pronounced as house price rises and the increase in housing investment are projected to flatten.

#### ...partly owing to strong income growth in 2018 and 2019

Disposable household income is the key determinant of private consumption (Chart 12). After shrinking for some years, household income has been recovering since 2014. Growth will fall off slightly this year (0.9%), followed by vigorous increases of 2.6% and 2.7% respectively in 2018 and 2019. These are the highest growth figures recorded since 2001. In 2019, real disposable income will have risen over 9% on its 2009 level.

## Chart 12 Real disposable household income

Year-on-year percentage changes and contributions in percentage points



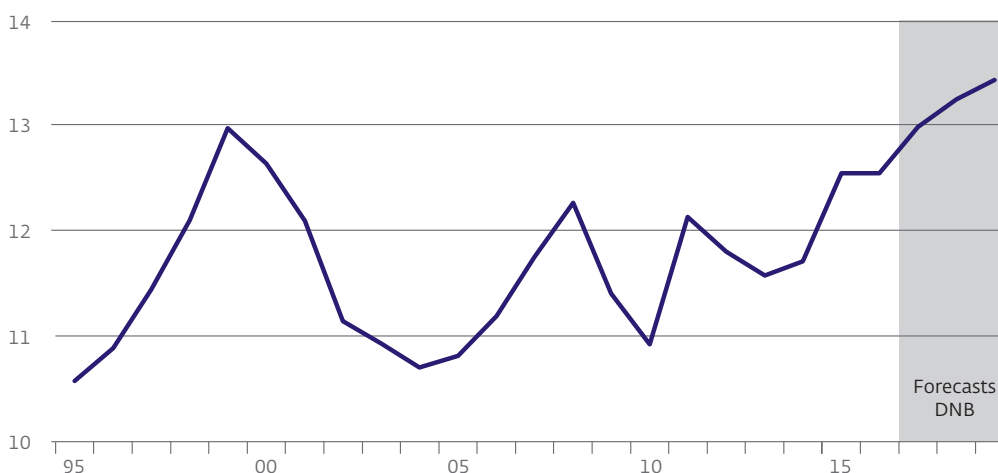
This year, disposable income growth is dominated by the contribution of employment. In the later years of the projection horizon, wage rises will take over from employment. Other primary income will continue contributing, owing the rising number of self-employed people. Real gross income is depressed not only by inflation, but also by direct taxes, pension contributions, and other social insurance contributions. Our projections do not assume index-linking for pension benefits, nor macroeconomically significant curtailments.

## Solid growth in corporate investment

Corporate investment growth (excluding housing) shows a somewhat more volatile trend than other spending components. This is partly due to non-recurrent components like investment in aeroplanes. Following 2.2% expansion in 2016, 6.9% growth is projected for 2017. Amid slightly slowing economic growth, investment growth will also fall off slightly to 5.1% in 2018 and 3.8% in 2019. Despite these lower projected growth figures, the investment ratio - the ratio of real corporate investment to real GDP - will edge up from 12.6% in 2016 to 13.4% in 2019 (Chart 13). This is the highest level since 1977. A large number of businesses need to expand their production capacity. Industrial capacity utilisation stood at 83.1% in October, which is above the level observed just before the outbreak of the credit crisis.

## Chart 13 Business investment

Percentage of GDP; volume



Sources: Statistics Netherlands and DNB.

Moreover, the conditions for increasing corporate investment are favourable. In November, industrial producer confidence was almost on a par with the highest level observed in the past thirty years, which was recorded in early 2008. The corporate sector's financial and economic situation has improved sharply on average in the past few years. In the third quarter of 2017, 9.4% of businesses on balance reported improved profitability, against 5.8% in the comparable period of 2016. The proportion of businesses that reported constraints in their business operations fell to 6.5% at the start of the fourth quarter of 2017, half the level recorded four years ago. Funding costs are still low with interest rates on new bank loans for all maturities having almost halved since 2011.

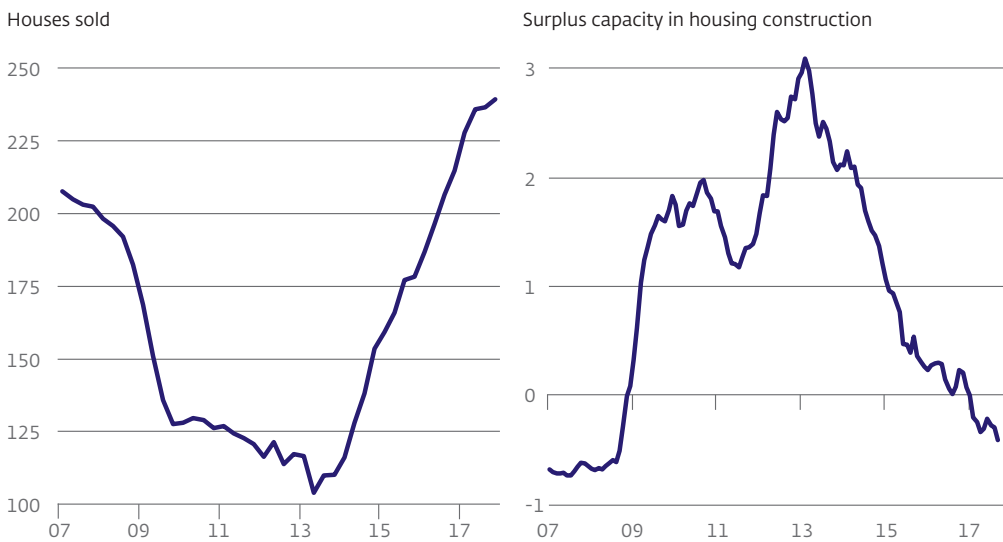
## Housing market is going full steam ahead

In the twelve months to October, 239,000 houses were sold - the highest number seen since 1992 (Chart 14, left-hand scale). The previous peak dates from 2006 and was around 10% lower. The Dutch housing market is running at full steam, which is not surprising in light of the upbeat economy, declining unemployment and low mortgage interest rates. Remarkably, the biggest transaction increases are now seen in regions where the housing market recovery lagged behind the average for a long time. Conversely, the number of transactions dropped in Amsterdam and Utrecht, where markets have become so overheated in the past year that a turnaround was unavoidable.



## Chart 14 Housing market: transactions and surplus capacity

Four-quarter sum in thousands and normalised percentage, three-month average



Sources: European Commission and Statistics Netherlands.

Note: Houses sold in Q4 2017 represents twelve-month sum through October 2017. Surplus capacity concerns subquestion ("insufficient demand") in confidence survey in construction sector. Normalised over historical length of series.

In October 2017, average house prices had risen 8.2% relative to October 2016. It has been almost 16 years since price rises were above 8% (in January 2002). Up to and including the third quarter of 2017, average house prices had risen by over 22% from their 2013 low. This is almost the same as the price drops seen between 2008 and 2013, which came to 21.5%. In the big cities, prices have been above their 2008 peak for some time, though: over 25% in Amsterdam and 13% in Rotterdam.

Mortgage debt outstanding is expected to grow by 1.4% this year, which at first glance seems rather modest in light of the buoyant housing market. Outstanding debt is the resultant of newly issued mortgage loans and redemptions on existing loans, however. This latter component showed particularly strong growth in the past years. In a climate of realised income growth and low interest rates it is attractive for home owners to make extra repayments on their mortgage loans. This applies specifically for home owners who are paying high fixed mortgage interest rates, whose loans are difficult to refinance, or can only be refinanced at high costs. This depressed mortgage growth by an estimated two percentage points per year between 2013 and 2016. Partly due to this, the ratio of total mortgage debt to household income fell to 209% in 2016, from 228% in 2009. We project a gradual further drop to 206% in 2019. Growth of mortgage debt is expected to edge up in the years ahead.

We project house prices to rise by 7.5% in 2017, slowing down slightly to 7.1% and 5.2% in the next two years. In addition to factors stimulating housing demand, like mortgage interest rates, consumer confidence and income levels, the ongoing price rises are attributable to supply-side shortages. On a national level, the ratio between houses put up for sale and houses sold is currently around five. In 2013, this was still 30 (source: Rabobank). The number of new build houses is far below the level seen before the crisis. Although significant growth may be expected in the coming years, the construction sector is being faced with capacity limits. Surveys show that the prolonged period of spare capacity in the construction sector ended in late 2016 (Chart 14, right-hand scale). Although business sentiment in the building sector is very upbeat, it declined somewhat in October, possibly due to production restraints and rapidly shrinking spare capacity.

## Government budget surplus and rapidly declining government debt

Dutch government finances are developing favourably. Budget surpluses of 0.5%, 0.5% and 0.9% are projected for 2017, 2018 and 2019, respectively, in spite of the fiscal stimulus that is part of the coalition agreement. The new government plans to increase spending on education and defence. On balance, public spending as a percentage of GDP will, however, decline to 42.9%, from 43.2% (Table 3). This is attributable to the effects of previously initiated policies, robust economic growth and the lower interest burden.

**Table 3 Public sector key data**

Percentage of GDP

	2016	2017	2018	2019
Public expenditures	43.5	43.2	43.1	42.9
Taxes and social security contributions	38.9	38.8	38.9	39.1
Other income	5.0	4.9	4.7	4.7
Primary balance	1.4	1.5	1.5	1.8
EMU balance	0.4	0.5	0.5	0.9
Structural balance (EC method)	1.0	0.4	-0.1	0.1
EMU debt	61.8	58.0	54.5	50.8

Source: DNB.

From 2019 onwards, income tax will be lowered, but this will be offset by higher indirect taxes like VAT and energy tax. Tax revenues will increase owing to previously initiated policies, e.g. measures relating to self-administered pensions, and the favourable economic climate. On balance, the burden of taxes and social security contributions will increase to 39.1% in 2019, from 38.8% in 2017.

As a result, government debt is set to shrink to 50.8% of GDP in 2019, from 61.8% in 2016. The sharp decline is driven by budget surpluses and robust economic growth, and some additional factors including the further reduction of the government holding in ABN AMRO. This is expected to push government debt below the European threshold of 60% of GDP this year. The structural general government balance and the EMU balance will remain below the European criteria during the projection horizon.

## Box 2 The importance of the housing market recovery for economic growth

The Dutch economy began recovering in the second quarter of 2013. Since then, real GDP has been rising again and the negative output gap is gradually closing. The housing market is showing a comparable trend. Average prices of existing homes fell to a low in the second quarter of 2013, and rose again thereafter, picking up pace gradually. Housing transactions, housing investment and construction sector activity also saw a turnaround in mid-2013. This raises the question to what extent the economic upturn can be attributed to the housing market recovery.

Realised house prices, thanks to the increased value of owned homes and consumer confidence, have had an upward effect on private consumption and GDP. Housing investment – consisting of new buildings, renovations and transaction costs of home sales – has also had a beneficial effect on production. This impetus has also driven up employment and corporate investment, which have had a positive effect on consumption and GDP. We have compiled an alternative economic scenario in order to quantify the contribution of the housing market recovery to the current economic upswing. Our alternative scenario assumes that house prices rise in tandem with consumer prices from the second quarter of 2013 onwards and real housing investment grows at the same pace as real GDP. In the first four quarters of this alternative scenario, house prices and housing investment largely develop in line with realisations, after that they lag further and further behind (Chart 15, upper plane). In this scenario, housing investment rises by a total of 7.5% to the third quarter of 2017, instead of the realised 73.4%. House price rises remain limited to the inflation rate of 3.2%.

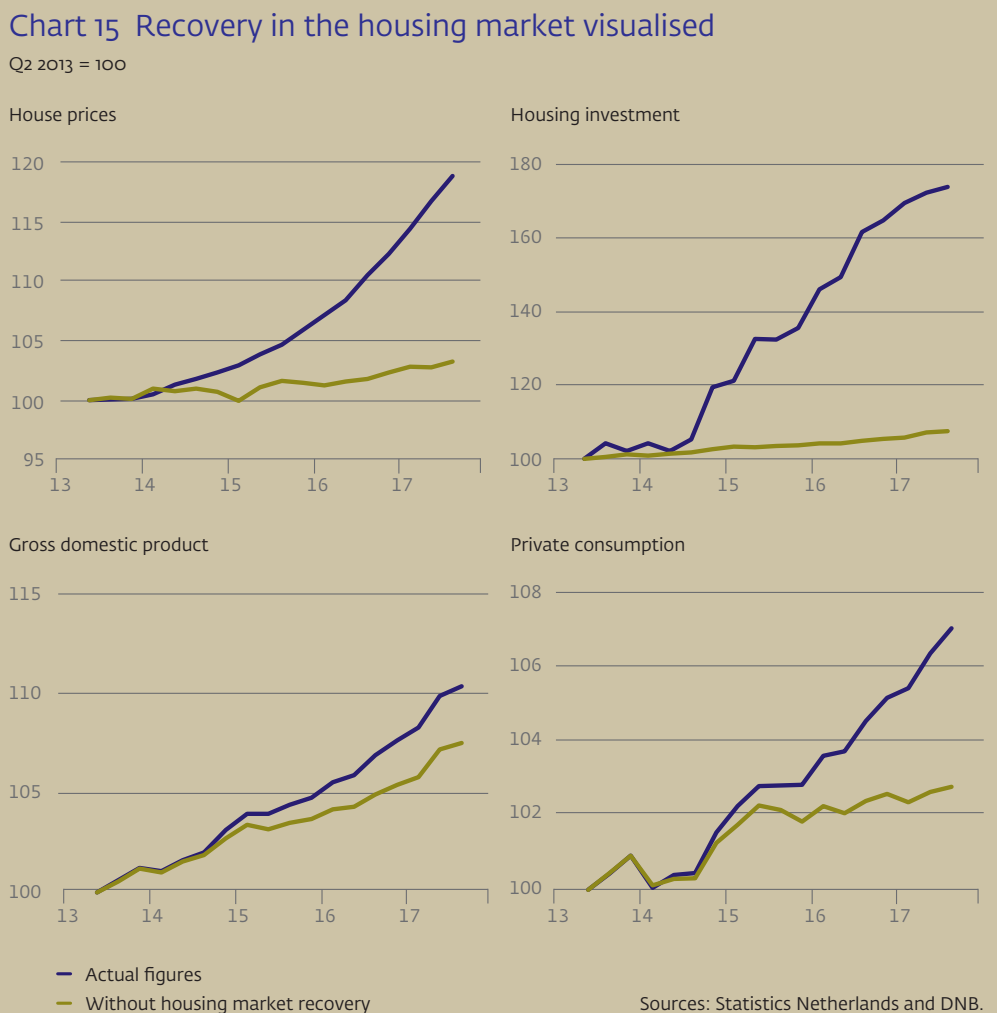


Table 4 shows the actual development for the various components between the second quarter of 2013 and the third quarter of 2017, and the development in the alternative scenario. Our analysis shows that a little over one quarter of the cyclical upswing of GDP realised to date can be contributed to the housing market recovery. Its influence on consumption growth is considerably bigger: without the housing market recovery, private consumption would have increased by 60% less (Chart 15, lower plane). The housing market recovery has had a comparable influence on real disposable income. Consumer confidence would have risen sharply also without the housing market recovery, but would have ended up over 15 points lower in the third quarter of 2017. The less robust economic recovery would have caused employment to rise less sharply, and the reduction of the unemployment rate would have been lower by half. In the third quarter of 2017, unemployment would have been 6.0% rather than 4.7%, while the EMU balance would have ended up at -0.4% of GDP rather than +0.4% of GDP.

**Table 4 Impact on the Dutch economy of the housing market recovery**

Percentage changes, unless stated otherwise

	Total growth in Q2 2013 - Q3 2017	
	Actual figures	Without housing market recovery
Gross domestic product (volume)	10.4	7.5
Private consumption (volume)	7.0	2.8
Business investment (volume)	25.7	20.6
Real disposable household income	7.3	3.1
Consumer confidence ( $\Delta$ )	58.7	43.5
Employment (persons)	4.4	2.5
Unemployment (% of labour force) ( $\Delta$ )	-2.4	-1.2
EMU balance (% of GDP) ( $\Delta$ )	2.9	2.1

Source: DNB.

### 3 Rising interest rates: an alternative scenario

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While global economic growth is currently gaining momentum, many developed economies have been seeing low interest rates for some considerable time. Chart 16 illustrates the low level of three-month and ten-year interest rates in Germany and the United States. Low interest rates are generally good news for public authorities, households and businesses in debt. At the same time, prolonged periods of low market interest rates increase the risk that households and businesses base their decisions on the faulty assumption that interest rates will continue to be low also in the future.

Interest rates are likely to begin rising again sometime in the future, although it is unclear when and at which pace this will happen. Our alternative scenario explores the economic impact of abruptly rising interest rates. As the impact of a sudden interest rate rise cannot be viewed separately from the underlying causes, this scenario has a partial character and the effects calculated are surrounded by a good deal of uncertainty. Higher market interest rates can be caused by increased uncertainty among financial market parties repricing their risk exposure. Increasing market uncertainty may for instance be induced by a changing perception of monetary policy, economic growth, or the geopolitical situation.

Chart 16 Three-month and ten-year interest rates in Germany and the United States

Percentages



This alternative scenario simulates an exogenous rise in capital market rates.<sup>3</sup> Relative to the baseline projection, this scenario assumes global interest rates to be 100 basis points higher for a longer period of time. This will be accompanied by a downward effect on world trade and global equity markets. Table 5 shows that world trade relevant for the Netherlands will end up over 3% lower in the second year than in the baseline projection, and equity prices will drop by over 15%.<sup>4</sup> We used our macroeconometric model DELFI to calculate the resulting effects on the Dutch economy.

Rising interest rates will cause corporate sector capital charges to increase, dampening business investment. Lower equity prices will have an additional negative effect on investments. Lower profitability and waning demand for investment goods will depress production and labour demand. Lower employment and (in the longer term) lower real wages will dampen real household income, which in turn puts pressure on private consumption. Declining economic activity will also depress the price level. Higher interest rates will also push up mortgage interest rates, which will cause mortgage lending and house prices to fall substantially. The cooling housing market will be accompanied by declining residential investments. Lower house prices will also bring pressure to bear on household wealth, causing private consumption to decline even further. Lower expenditure will fuel unemployment. As expenditure and wealth effects take some time to filter through, the most pronounced effects roughly occur in the fourth year. In line with the analysis depicted in Box 2, this alternative scenario illustrates that the housing market constitutes an important domestic channel for the Dutch economy. In the fourth year, real GDP and consumption will be 1.6% and 3.6% below the baseline projections respectively, which will be accompanied by a 5% decline

### Table 5 Assumptions underlying interest rate scenario

Percentage deviations from baseline scenario, unless stated otherwise

	year:	1	2	3	4
Capital market rate (bps)		+100	+100	+100	+100
Volume of relevant world trade		-1.6	-3.2	-2.8	-1.9
Equity prices		-14.9	-15.8	-16.0	-16.1

Source: DNB.

Note: World trade effects and equity prices are based on calculations using NiGEM.

<sup>3</sup> As the projection does not look further ahead than two years and the impact of an interest rate hike resonates for a longer period of time, the effects of the alternative scenario have been set against a realised historical baseline projection (counterfactual) for the Dutch economy.

<sup>4</sup> We used the NiGEM model to simulate the international assumptions for the Netherlands with respect to world trade and the equity markets. The alternative scenario assumes that budgetary and monetary policy remain unchanged, and economic agents adapt their expectations.

in house prices. The ongoing economic cooldown will have pushed up the unemployment rate by 1.1 percentage point after four years. The deteriorating labour market and the economic slowdown will cause the EMU balance to end up 1.4 percentage points of GDP lower than in the baseline projection. The decline in relevant world trade will heavily impact exports. Imports will decline even quicker than exports as they also respond to decreased domestic spending. Exports and imports will end up 1.6% and 2.9% lower in the fourth year of this scenario than in the baseline projections. This will cause the current account balance to grow (Table 6).

Although the analysis is surrounded by a good deal of uncertainty, this alternative scenario illustrates that an abrupt international interest rate rise would cause the Dutch economy to slow down considerably. Roughly speaking, GDP growth would fall short by around 0.4 percentage points annually on average, with the effects being more pronounced in the first two years. In view of the GDP projections for the next two years, which assume 2.7% growth on average, we may expect economic expansion to remain amply above its potential also in our alternative scenario.

### Table 6 Outcomes of interest rate scenario

Percentage deviations from baseline scenario, unless stated otherwise

	year: 1	2	3	4
Gross domestic product	-0.5	-1.3	-1.7	-1.6
Private consumption	-0.5	-1.5	-2.7	-3.6
Business investment	-0.4	-1.6	-3.5	-5.1
Housing investment	-0.8	-3.1	-4.3	-3.6
Exports of goods and services	-1.2	-2.6	-2.4	-1.6
Imports of goods and services	-1.1	-2.8	-3.2	-2.9
Negotiated wages, private sector	0.0	-0.3	-0.8	-1.4
Harmonised consumer price index	0.0	-0.1	-0.4	-0.8
House prices, existing own homes	-0.6	-1.8	-3.7	-5.2
Employment (persons)	-0.1	-0.7	-1.4	-1.7
Unemployment (% of labour force)	0.1	0.6	1.0	1.1
EMU balance (% of GDP)	-0.2	-0.8	-1.3	-1.4
Current account (% of GDP)	0.0	0.5	1.2	1.6
Mortgage loans	-0.1	-1.3	-2.9	-3.8
Bank lending to NFC	0.3	0.0	-0.6	-1.2

Source: DNB.









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