



Introduction

A visual snapshot of the Dutch economy

In more than a hundred charts, the ING Dutch Economy Chart Book provides an overview of recent economic developments in the Netherlands as well as insights in structural characteristics of the Dutch economy. Our chart book covers a wide range of economics topics divided over eight chapters. This version mainly focuses on the chapters export and non-financial business, providing a visual snapshot for a broad audience.

Our updating cycle

To keep the publication up-to-date, we release a new version about every four months. Each time, a selected number of chapters – including our forecasts – is updated. In this chart book the chapters on GDP, exports, nonfinancial businesses and government are updated (cut-off date June 24th 2019). For the remaining chapters about consumers, inflation, labour market and the housing market, both the data and conclusions will be updated in the releases later this year.

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^{*} Chapters updated on June 24th. The bulk of the other chapters updated on January 18th 2019.

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Highlights

- Dutch <u>export</u> volumes of domestically produced goods fell considerably in the last quarter of 2018 and the first of 2019. This happened despite the fact that the price competitiveness of the Netherlands was roughly stable in the past six months. The slowdown in growth (prospects) of the eurozone, which contains The Netherlands' most important European trading partners, may be at the root of this. Re-exports performed better than domestically produced exports in the last two quarters.
- Despite the fact that the contribution of re-exports (3.8%) to GDP has nearly doubled in twenty years, the contribution of domestically produced goods (16.6%) is still four times as large. If this recently disappointing development of domestically produced goods' exports continues, GDP-growth may slow down considerably in the period ahead.
- So far, Dutch exporters are still rather neutral about their export outlook. However, our projections for world trade for 2019 haven't been this bleak since the financial crisis. In addition, labour costs are projected to rise faster because of further tightening in the labour market. This may worsen price competitiveness of Dutch exporters. Accordingly, we project total exports to expand by a meagre 1.4% in 2019. To compare: between 1996-2018 export growth was 4.7% on average.
- The profitability of <u>non-financial businesses</u> has been stagnating since 2016. And this is happening while overall profitability is already substantially lower than during the previous boom (2006-2008) for quite a while. Nominal pre-tax profits of non-financial

- businesses are high. In fact, domestic nominal profits were a record high in the first quarter of 2019. However, once we relate profits to the size of the economy gross operating surplus as a ratio of value-added both of non-financial firms that profitability appears to be stagnating and even fell in the first quarter of 2019. Now that labour market strains are increasing, further labour cost will continue to increase, leading to our expectation that profitability is more likely to decline rather than increase in the near future.
- The share of the oil and gas industry has halved since 2012. For many years, this industry represented almost 3% of the Dutch economy (similar to the current share of temporary job agencies). With the gradual reduction of gas production in the Northern Province of Groningen, the share of oil and gas in total value added fell to 1.3% in 2018. This means that this industry now has a similar share in value added as the automotive sector.
- Last year the Netherlands, for the first time, imported more natural gas than it exported. This meant an end to a long history of being a net gas exporter. When Dutch gas production is limited further in the years to come, the share of the oil and gas industry will yet again be halved.

Forecast table - The Netherlands

per cent change unless otherwise noted	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Demand and output*										
Gross domestic product	1,5	-1,0	-0,1	1,4	2,0	2,2	2,9	2,6	1,7	1,6
Private consumption	0,1	-1,1	-1,0	0,4	2,0	1,1	2,1	2,3	1,3	1,8
Government spending	-0,4	-1,2	0,0	0,6	-0,1	1,3	0,9	1,6	2,0	2,7
Investment	4,9	-6,3	-1,6	-2,4	29,2	-7,3	4,2	3,2	6,0	2,7
of which private	6,5	-5,9	-1,1	-2,2	35,3	-8,8	4,8	4,1	5,9	2,7
Net exports (%-point contribution to GDP)	1,2	1,0	0,4	1,3	-3,9	2,9	0,9	0,7	-0,8	-0,2
Labour and housing market										
Employment (in hours worked)	0,7	-0,6	-0,6	0,4	1,2	2,2	2,3	2,2	2,1	0,5
Unemployment (% of labour force)	5,0	5,8	7,3	7,4	6,9	6,0	4,9	3,8	3,4	3,4
House prices	-2,4	-6,5	-6,6	0,9	2,9	5,0	7,6	9,0	6,5	2,9
Existing home sales (in 000s)	121	117	110	154	178	215	242	218	212	196
Government finances										
Government budget (% of GDP)	-4,2	-3,8	-2,3	-2,2	-2,0	0,4	1,1	0,8	0,6	0,8
Government debt (% of GDP)	60,9	65,5	67,0	67,1	64,0	61,3	56,4	53,1	50,3	47,3
Prices and rates										
Inflation (HICP)	2,5	2,8	2,6	0,3	0,2	0,1	1,3	1,6	2,6	1,7
Euribor, 3 month (% eop)	1,4	0,2	0,3	0,1	-0,1	-0,3	-0,3	-0,3	-0,4	-0,4
Dutch gov't bond yield, 10yr (% eop)	2,2	1,5	2,2	0,7	0,8	0,4	0,5	0,4	0,2	0,3

^{*} Not adjusted for working days

Forecasts as of 24 June 2019



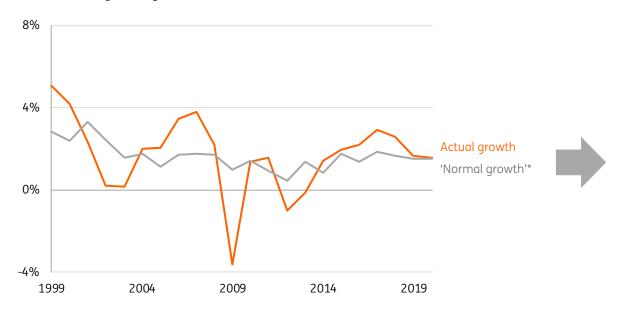
- Between 2013 and now, the Dutch economy has become the growth leader in comparison to euro area core economies, especially during the years when the fiscal drag faded and the housing market recovered. From 2008-2013, Netherlands was the growth laggard in comparison to Belgium, Germany and France due to its severe housing market dip, large fiscal consolidation and the funded pension system.
- But now, Dutch GDP is 11% above the level seen in 2008 and GDP per capita 5%. The economy is in state of overheating, but compared to previous booms the extent is limited and translates only into moderate wage and price pressures. Growth is currently still slightly above potential, but quickly normalising from its peak in 2017 and 2018.
- In recent years, both private and public domestic demand were the main growth drivers and are expected to continue to be so in 2019 and 2020. We project a slowdown of GDP-growth from 2.6% in 2018 to 1.7% in 2019 and 1.6% in 2020.

Chapter updated on June 24th

A positive output gap, but limited overheating

Recently, the Dutch growth rate is higher than "normal"...

Growth of GDP, year-on-year

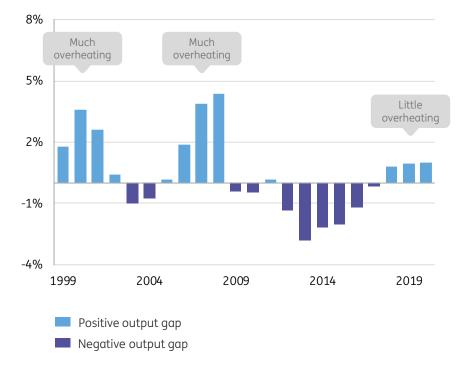


* 'Normal growth' refers to model estimates of potential growth, which is the sustainable speed at which the economy can growth using labour and capital efficiently at the current level of technological development. This is consistent with a state of constant inflation. In the medium term, actual GDP converges to potential GDP. In the short run, it may deviate either positively or negatively.

Source: CBS via Macrobond, CPB, ING forecasts

...which caused overheating of limited extent

Difference between actual and potential GDP level, in % of potential GDP

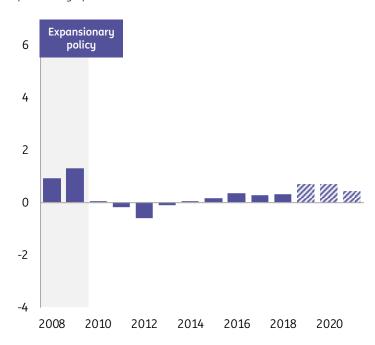


Source: CBS via Macrobond, CPB, ING forecasts

Private domestic demand is currently the key growth engine

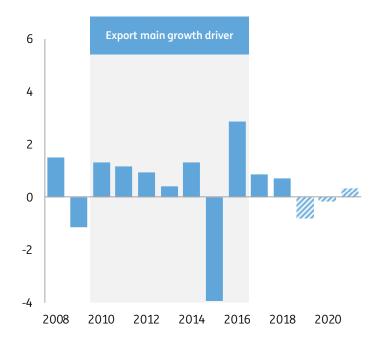
Government stimulus in 2008 and 2009

Contribution of government expenditures to GDP growth, in percentage points



Net export delivered a positive contribution from 2010

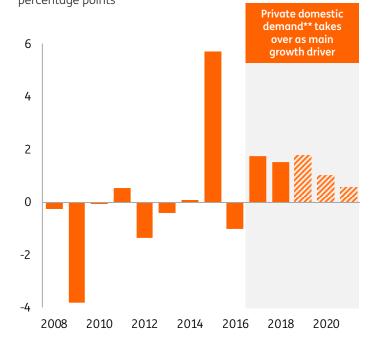
Contribution of net exports (exports – imports)* to GDP growth, in percentage points



*Extreme deviations in private investment and net exports in 2015 and 2016 are caused by a large one-off purchase of foreign intellectual property by a Dutch multinational in the commercial service sector

Private domestic demand taking over from 2017

Contribution of private domestic demand** to GDP growth, in percentage points*



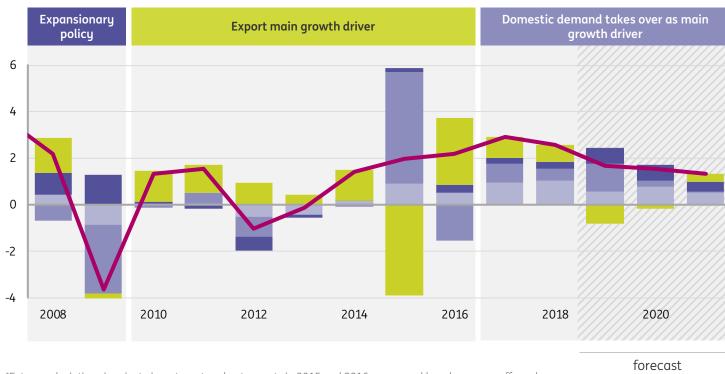
^{**}Private consumption + private investment including inventories

Source: CBS via Macrobond, CPB, ING forecasts

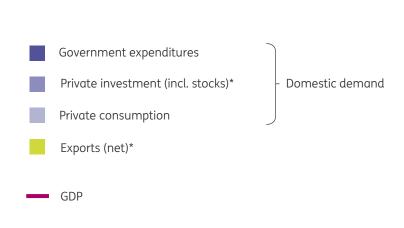
Domestic demand is and remains the main growth engine

Domestic demand was the main growth engine in recent years and is forecast to remain so in the next years

GDP-volume growth (in %) and contributions to GDP-volume growth (in %-points)



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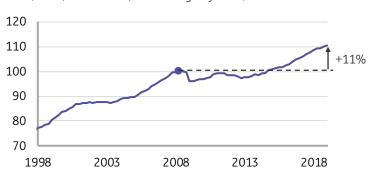


*Extreme deviations in private investment and net exports in 2015 and 2016 are caused by a large one-off purchase of foreign intellectual property by a Dutch multinational in the commercial service sector Source: CBS via Macrobond. CPB. ING forecasts

GDP per capita left pre-crisis level behind

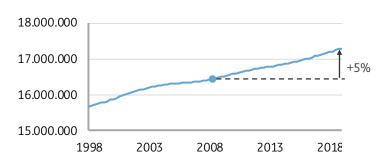
GDP almost 11% above 2008 level

GDP (index, 2008 = 100, seasonally-adjusted)



While population grew by 5% since 2008

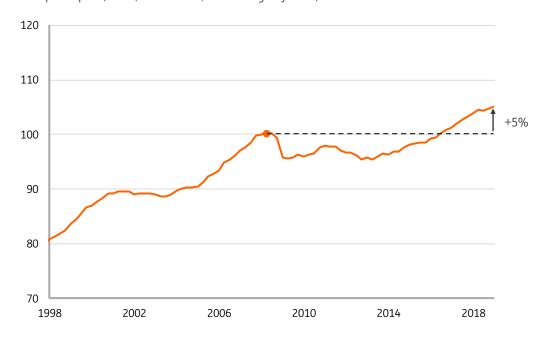
Population size



Source: CBS via Macrobond

Leaving GDP per capita 5% above 2008 level

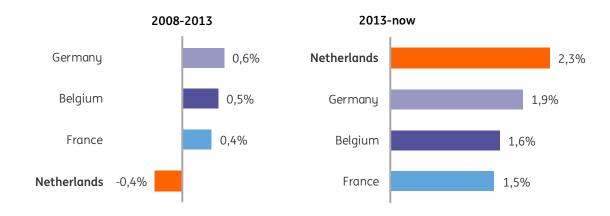
GDP per capita (index, 2008 = 100, seasonally-adjusted)



Dutch economy outpaced euro area 'core' in recent years

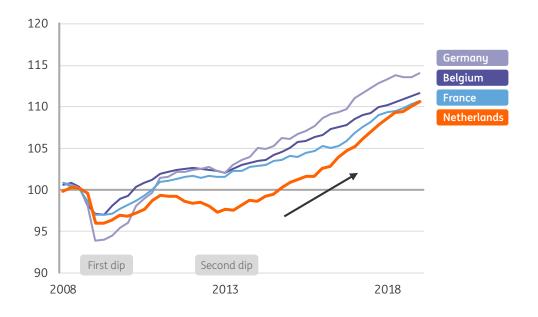
The Netherlands from growth laggard to leader

Average annual change of GDP (in constant prices, year-on-year, based on seasonally adjusted quarterly data)



GDP development since 2008 of the Netherlands is catching up to the neighbours

GDP (index, 2008 = 100, in constant prices, seasonally adjusted)

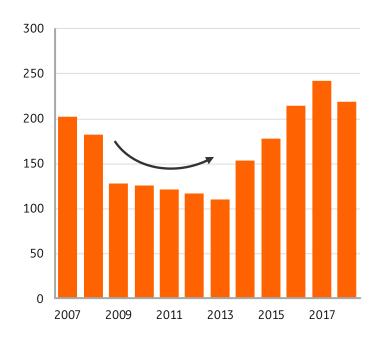


Source: CBS via Macrobond Source: Eurostat and CBS via Macrobond

Three factors contributed to second dip in economic growth and lag with peers

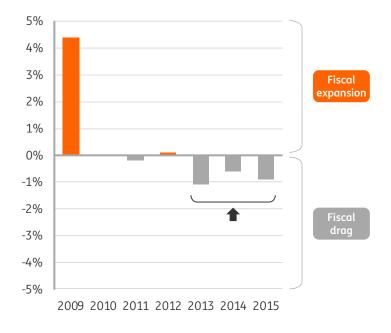
Factor 1: fewer home sales in 2009-2013

Existing housing sales in thousands



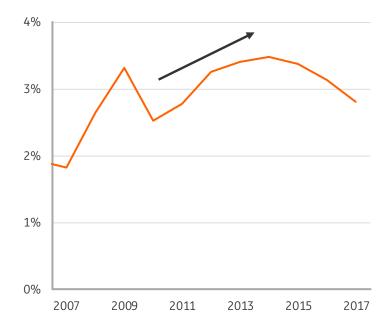
Factor 2: fiscal drag especially in 2013-2015

Net fiscal expansion* as share of GDP



Factor 3: higher net pension contribution in 2010-2014

Net pension contributions as share of GDP



Source: CPB (Van Es, Lukkezen & Van Tilburg, 2016)

Source: CBS

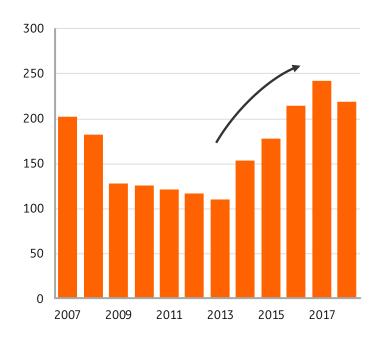
ING Economics Department

^{*} Actual spending/revenue-to-GDP ratio – counter factual with constant spending/revenue-to-GDP ratio

Three factors contributing to catch up in GDP-development

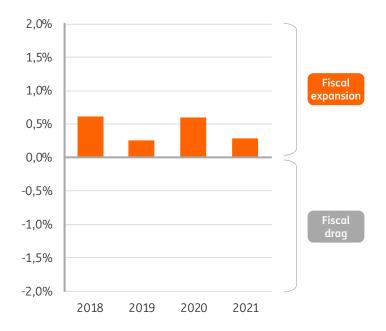
Factor 1: more home sales from 2014

Existing home sales in thousands



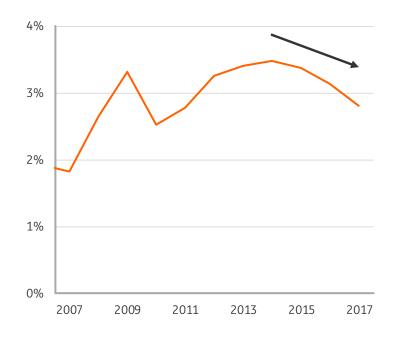
Factor 2: fiscal expansion in each year in 2018-2021

Net fiscal expansion of current coalition agreement, with respect to existing baseline, as share of GDP



Factor 3: lower net pension contribution from 2014

Net pension contributions as share of GDP



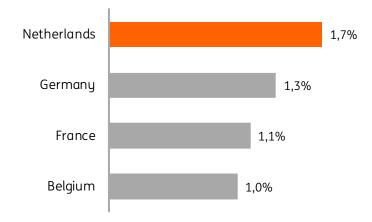
Source: CBS via Macrobond

Source: <u>CPB (2017) Actualisatie middellangetermijnverkenning 2018-2021</u> (<u>verwerking Regeerakkoord</u>)

Dutch economy continues to outpace euro area 'core' for one more year

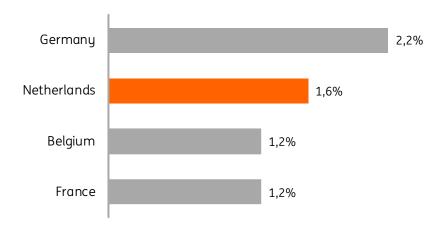
The Netherlands remains growth leader among euro area core in 2019

Projections of change of GDP in 2019 (in volumes, year-on-year)



The Netherlands' growth rate will be taken over by Germany in 2020

Projections of change of GDP in 2020 (in volumes, year-on-year)



Source: ING Monthly Economic Update / ING Forecasts

Exports

- A strong setback to trade growth at the end of 2018 and the damage from the trade war
 will make 2019 the worst year for world trade since the financial crisis, with only 0.4%
 growth projected by ING.
- The Netherlands mainly exports services and high-tech goods. As a result, and due to geographical proximity, exports from the Netherlands are mainly focused onto developed markets in Europe and the US. Given that European trading partners have shown a slowdown in growth (prospects), this has resulted in Dutch export volumes of domestically produced goods falling in recent quarters.
- Price competitiveness of the Netherlands was roughly stable in the last six months. In nominal terms, the export growth was a bit better than volume growth. While chemical and energy export were weak in recent months, agro, high- and medium tech were the better performing goods in terms of export growth.
- About one third of the Dutch economy depends on foreign demand, either directly or via
 inputs in the exports of other economies. Hence, the bleak world trade outlook worsened
 the export outlook for the Netherlands. Export order positions worsened, but on average
 businesses are still moderately optimistic for further growth in the coming months. Industry,

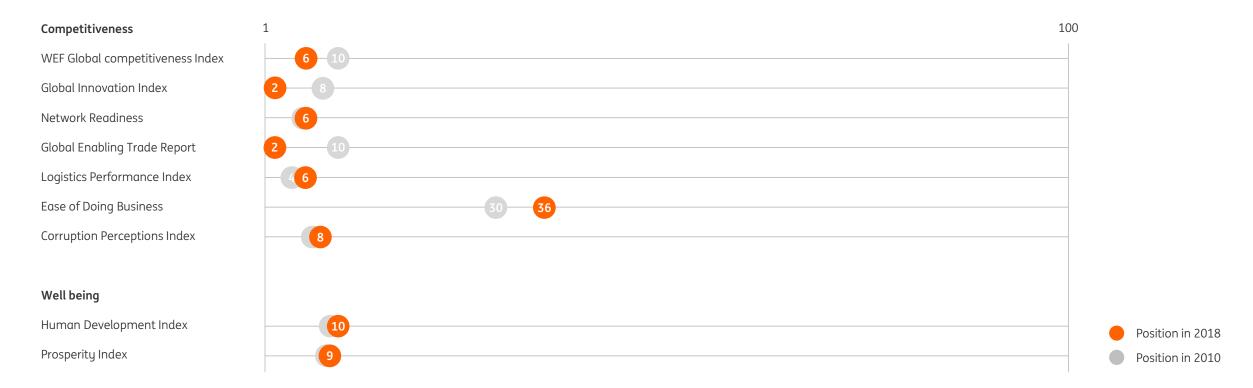
- however, judges order books to signal export stagnation rather than growth.
- For 2019, we forecast total Dutch export volume growth to be just 1.4%, far below historical averages. The main risk for the Dutch market is still a hard Brexit and an escalating trade war, especially if the US turns its attention to EU trade. This is partly incorporated in our projections. In fact, the depreciation of the Sterling has already affected Dutch nominal export to the UK considerably in the past two years. In value added terms, the UK accounts for 8% of Dutch exports and more than 3% of Dutch GDP. So, a further slowdown of the British economy won't go unnoticed. At the same time, demand from the US accounts for a small 4% of Dutch GDP.
- The Netherlands has recently become a natural net gas importer from a net gas exporter. However the current account surplus is still expected to remain around 10% of GDP in the coming years. Imports (2.7% growth) are likely to outpace exports in 2019. All in all, we project the net contribution of foreign trade to be substantially negative this year.

Chapter updated on June 24th

Dutch economy ranks consistently high on competitiveness

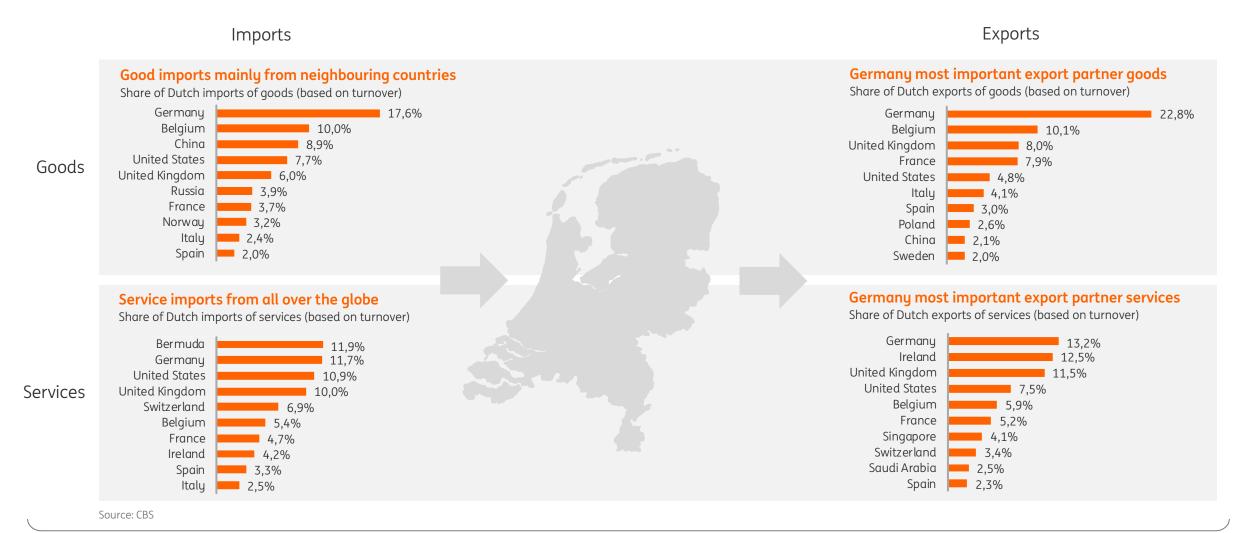
Dutch economy ranks high on competitiveness

Dutch economy rank on nine leading competitiveness indicators, among the first 100 economies



Sources: World Economic Forum, Global Innovation Index, World Bank, Transparency International, Human Development Index, The Legatum Prosperity Index

Goods: Germany main trading partner in two directions

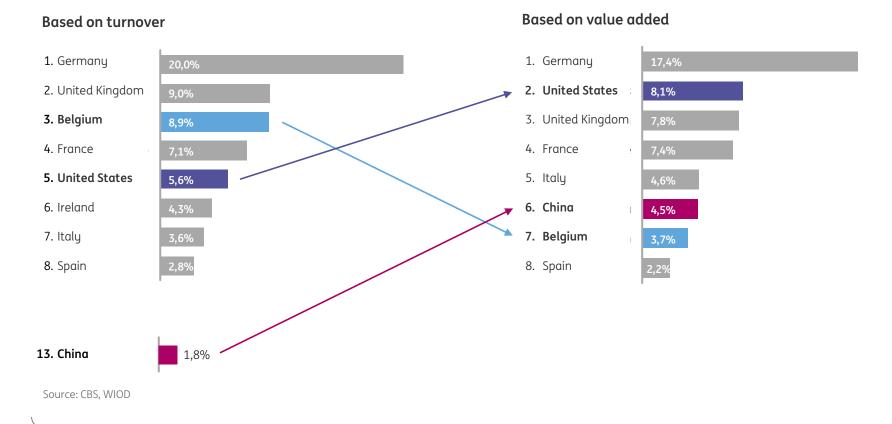


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Total exports: Value added view makes Belgium less important while US and China more

If we move from a traditional perspective on the importance of trade partners to a modern view, especially Belgium is less important for the Netherlands while the US and China become more relevant

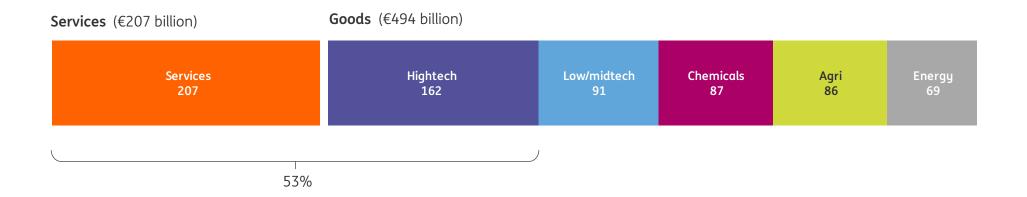
Share of total Dutch exports in 2018 (turnover) and 2014 (value added)



Dutch exports are mainly services and high tech goods

Most Dutch exports are services and hightech goods

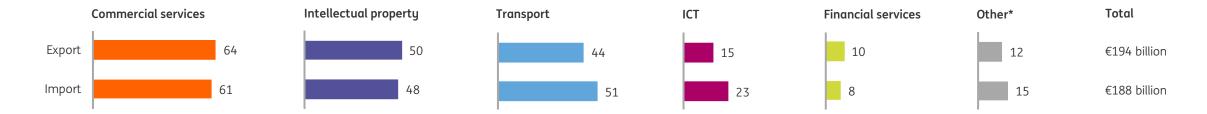
Nominal export turnover in 2018, in billions of euro (based on seasonally adjusted monthly (goods) and quarterly (services) data)



Services: export and imports look alike

Composition of Dutch service exports and imports quite similar

Dutch export and import of services in 2018, in billions of euro

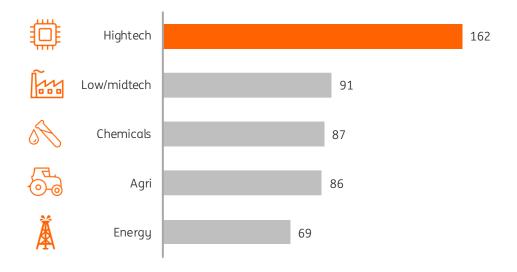


^{*} Other (e.g. government services, construction, industry)

High-tech most important export good, but much is re-exports

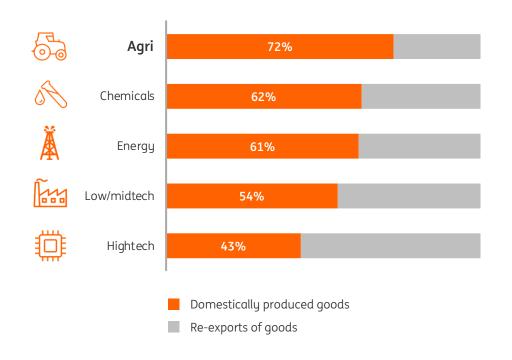
High-tech with 162 billion turnover largest share in Dutch goods export

Dutch export turnover in 2018, in billions of euro (based on seasonally adjusted monthly data)



Agricultural exports are dominated by domestically produced goods, while hightech exports are mostly re-exports

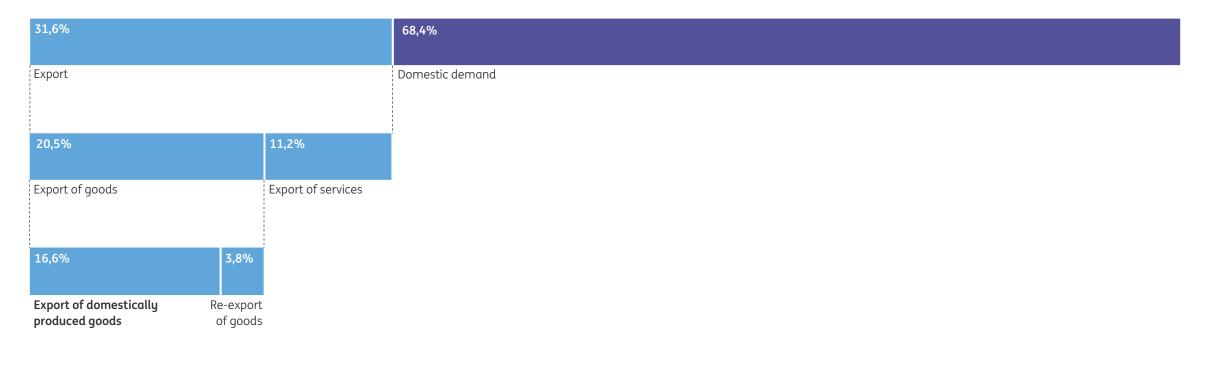
Share in Dutch goods export turnover, 2018



One third of the Dutch economy depends on exports

One third of the Dutch economy depends on exports, of which domestically produced goods are still most important

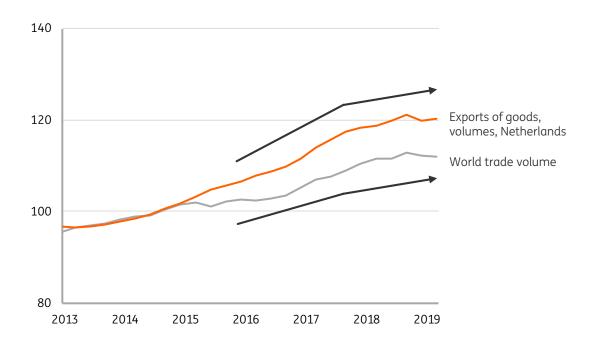
Share of Dutch value added originating from foreign final demand, 2015



Dutch exports are falling stronger than world trade

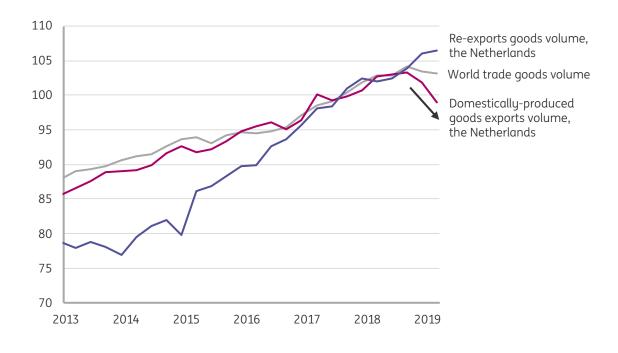
Dutch goods exports stopped growing faster than world trade volume

Index, 2010 = 100, seasonally-adjusted



Because domestically produced goods exports fell strongly

Index, 2017 = 100, seasonally-adjusted



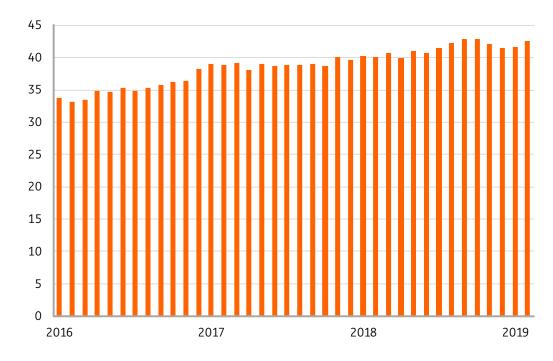
Source: CPB World Trade Monitor, CBS, Macrobond

Source: CPB World Trade Monitor, CBS, Macrobond

Nominal exports growing with ups and minor downs

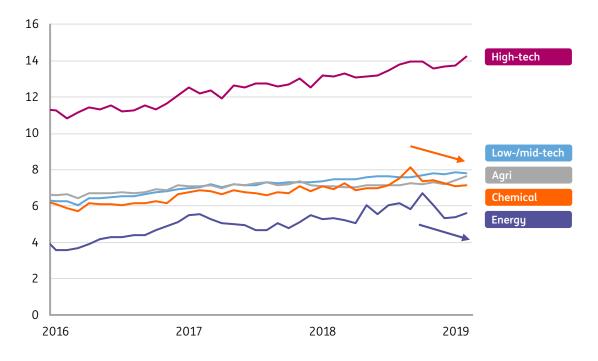
Nominal export growth continuing upward trajectory with ups and downs

Nominal goods exports turnover per month, in billions of euro, seasonally-adjusted



... but some weakness in exports of chemicals and energy in recent months

Nominal goods export per month, in billions of euro, seasonally-adjusted

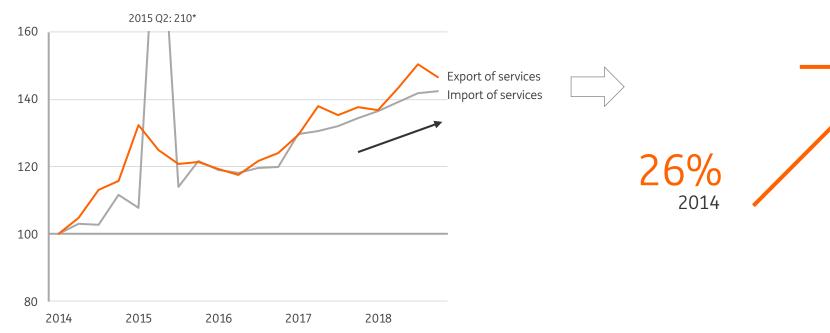


Source: CBS Source: CBS

Service trade is becoming more important with continuing growth

Upward trend in service trade

Dutch service import and export turnover (index, 2014 Q1 = 100, seasonally adjusted)



Share of services in export turnover increasing

Share of services in Dutch export turnover

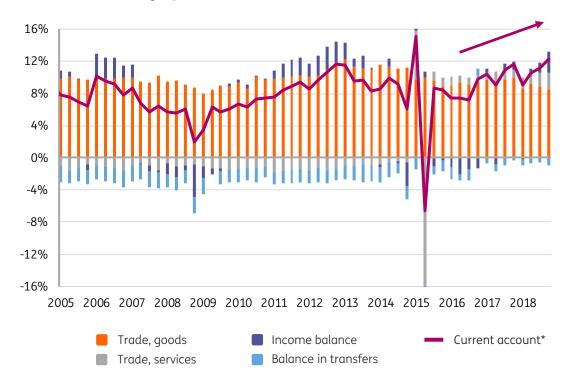
29% 2018

^{*}Extreme deviation in import of services in 2Q2015 is caused by a large one-off purchase of foreign intellectual property by a Dutch multinational in the commercial service sector Source: CBS

Large current account increasing due to services and income balance

Current account surplus larger and larger...

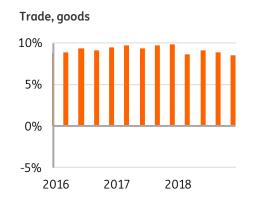
Share of GDP, seasonally-adjusted

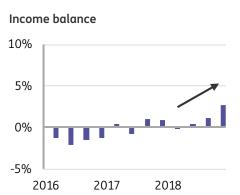


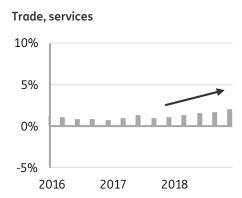
^{*}Extreme spike in current account in 2015 is caused by a large one-off purchase of foreign intellectual property by a Dutch multinational in the commercial service sector Source: CBS via Macrobond, DNB....

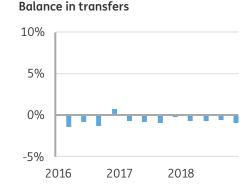
... because of increase in service trade and rising income balance

Share of GDP, seasonally-adjusted volumes





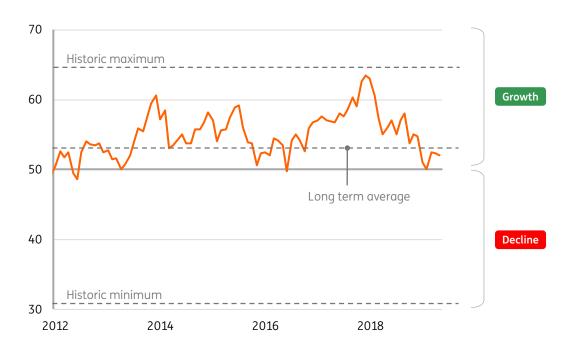




For now, exporters are still moderately positive on outlook

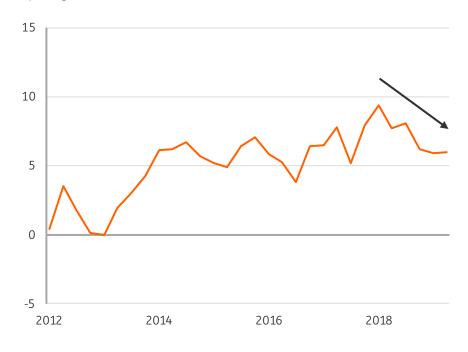
Industrial export order books are continuing to grow, but at slow pace

NEVI/Purchasing Managers' Index – new industrial export orders



Businesses less optimistic about export orders in nearby future

Judgement about export orders next 3 months, net % non-financial businesses (excluding utilities) reporting increase minus decrease

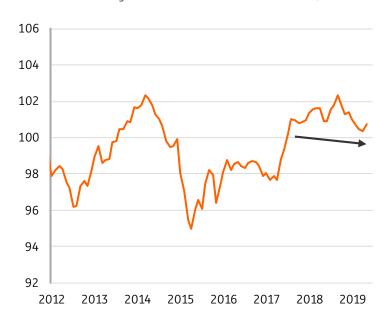


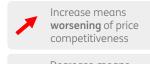
Source: NEVI PMI Source: CBS, EIB, KvK, MKB Nederland and VNO-NCW, (COEN survey)

Despite slightly weaker euro, price competitiveness recently stable

Slight depreciation of trade weighted euro

Nominal trade-weighted euro index for the Netherlands, 2010 = 100





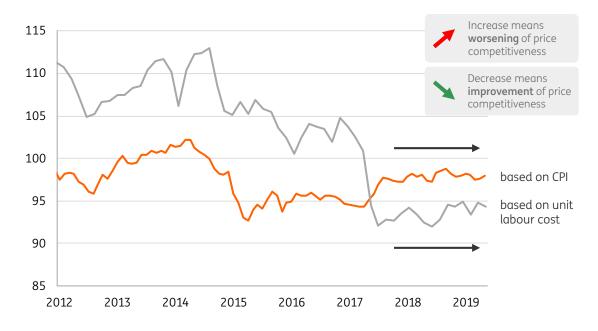


*The indicator weights nominal euro exchange rates with Dutch export and import weights, where the time-varying weights are derived from manufacturing trade flows and capture both direct bilateral trade and third-market competition

Source: BIS via Macrobond

Dutch price competitiveness stable

Real ECB Harmonised Competitiveness Index** for the Netherlands (1999 Q1 = 100)

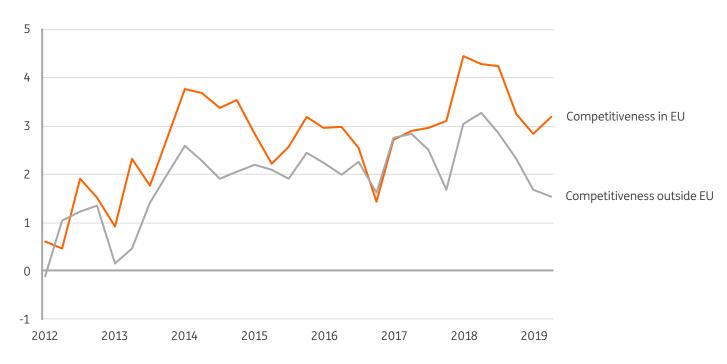


^{**}The indicators use a similar methodology as the BIS nominal trade weighted index but add deflating by either the CPI or unit labour cost, in order to reflect a real competitiveness

Businesses less confident about export position outside the EU

Non-financial businesses indicate more optimism about their competitiveness with respect to the EU than outside EU

Net % non-financial businesses (excluding utilities) reporting improvement minus worsening with respect to competitiveness

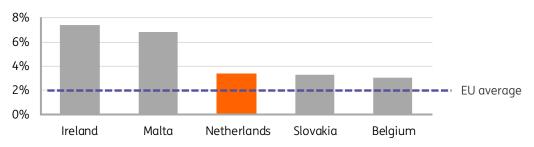


Source: CBS, EIB, KvK, MKB Nederland and VNO-NCW, (COEN survey)

Risk: NL could be hit relatively hard by Brexit

Sensitivity to UK: NL ranks third within EU

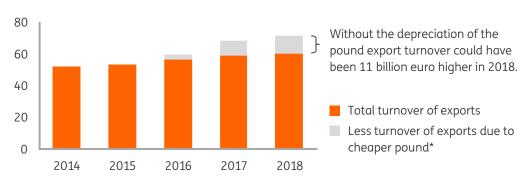
Share of total added value dependent on demand from UK



Source: WIOD

Brexit already had a substantial effect on export turnover via sterling deprecation

Turnover of direct exports of goods and services from the Netherlands to the UK, in billions of euro



Source: CBS, estimates ING Economics Department

Growth in Dutch exports to UK is lagging behind

Growth in turnover of Dutch exports, 2018 compared to 2016



Source: CBS, ** excluding UK

Agriculture, transport and industry are the Dutch sectors most exposed to the UK



1. Agriculture



2. Industry



3. Transport

Source: CBS, EIB, KvK, MKB Nederland and VNO-NCW, (COEN survey)

Non-financial businesses

- Throughout 2018, all major Dutch market sectors increased their production levels further. Especially construction, industry and retail were growing at a fast speed in 2018. Most sectors are currently above pre-crises levels but some policy-sensitive sectors lag in value added. Consequently, the number of bankruptcies is close to record lows
- Multiple earthquakes in the north of the Netherlands induced he Dutch government to
 phase out gas production at one of the largest gas fields of Europe by 2030, significantly
 reducing last years' mining/gas sector output. The maximum production for gas year
 2018/2019 is set for 19.4 billion cubic meters compared to the recent maximum of 53 billion
 cubic meters in 2012/2013. As a result, the Netherlands turned from a structural net
 exporter of natural gas into a net importer in 2018.
- The financial situation of non-financial businesses is nominally still improving, but firms lowered their sentiment concerning future profits. While domestic nominal pre-tax profits of non-financial companies recently hit a record high in the first quarter of 2019, their total profit fell from a record high in the fourth quarter of 2018 due to lower profits from foreign affiliates. An alternative macro indicator for profitability, more related to production, is gross

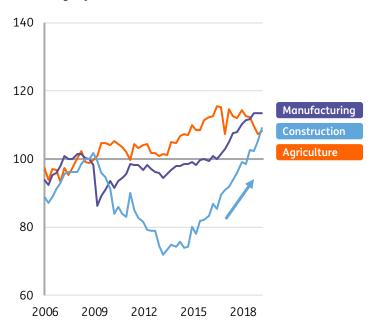
- operating surplus as a percentage of valued added. This indicator has been stable in the last few quarters and is far below the boom levels seen in 2006-2008.
- Investment as a percentage of GDP is nearing the level seen in 2007-2008. The business investment rate is above the pre-crisis boom level. Given that we are into the late business cycle, investment in commercial property is accelerating. Investment in ICT & intangibles remains popular regardless of the phase of the business cycle.

Chapter updated on June 24th

Size of almost all sectors back on pre-crisis level

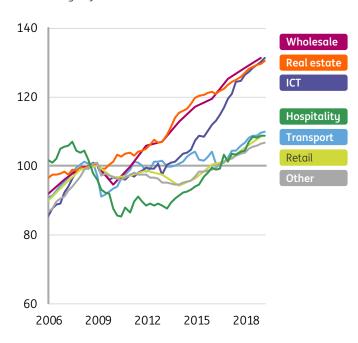
Goods: construction catching up

Value added (index, 2008 = 100, in volumes, at basic prices, seasonally adjusted)



Commercial services: all trending up

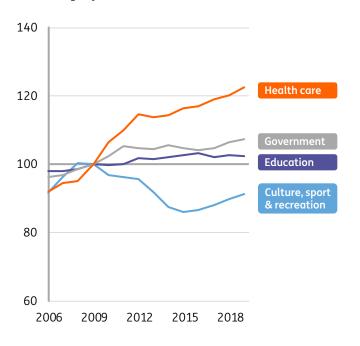
Value added (index, 2008 = 100, in volumes, at basic prices, seasonally adjusted)



31

Public services: cultural services still below 2008 level

Value added (index, 2008 = 100, in volumes, at basic prices, seasonally adjusted)

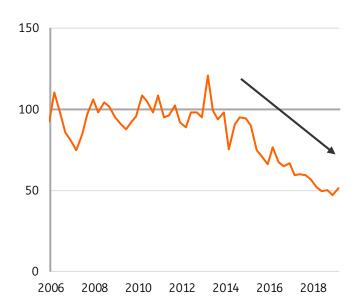


Source: CBS via Macrobond Source: CBS via Macrobond Source: CBS via Macrobond

Netherlands became net gas importer because production fell hard

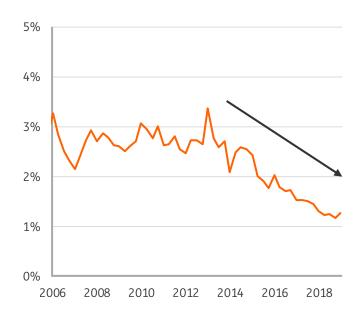
Gas production fell considerably

Value added mining* (index, 2008 = 100, in volumes, at basic prices, seasonally adjusted)

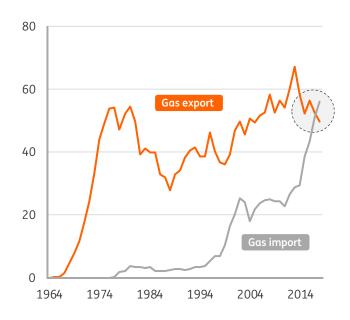


As a result, gas share in economy is much lower

Share of mining industry in value added (at basic prices, seasonally adjusted volumes)



After years of being a net exporter of gas, the Netherlands has become a net gas importer in 2018 Gas trade in billion m³ (both natural gas and lng)



Source: CBS via Macrobond

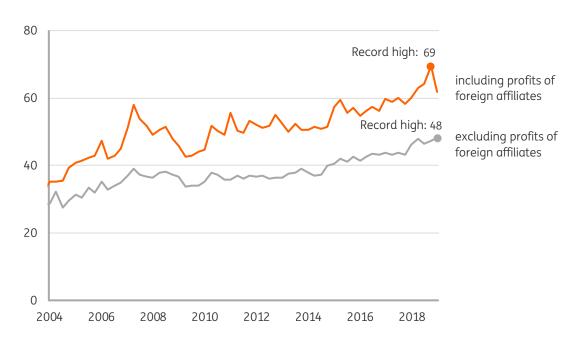
^{*}Mining includes production of oil and gas and the provision of related services. Quantitatively it mainly concerns gas production.

Source: CBS via Macrobond

Profitability of non-financial companies stagnating at moderate level

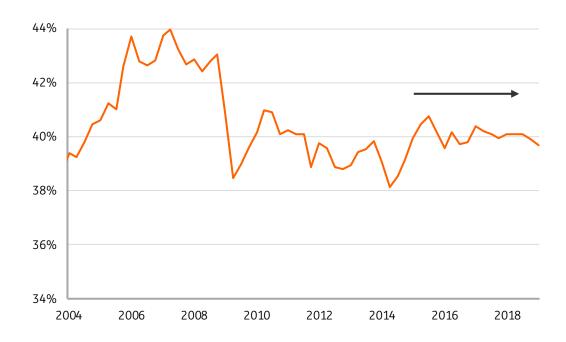
While total nominal profits fell back from record level, domestic profits are currently at all time high

Nominal Pre-tax profits of Dutch non-financial companies, in billion euros, seasonally adjusted



Profit ratio remains moderate

Gross operating surplus as percentage of gross value added at basic prices*, seasonally adjusted

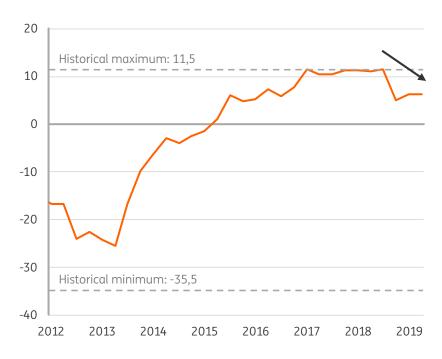


^{*}Macro profitability indicator, non-financial corporations (excluding small unincorporated businesses) Source: CBS

Firms still optimistic about profitability, but gradually less

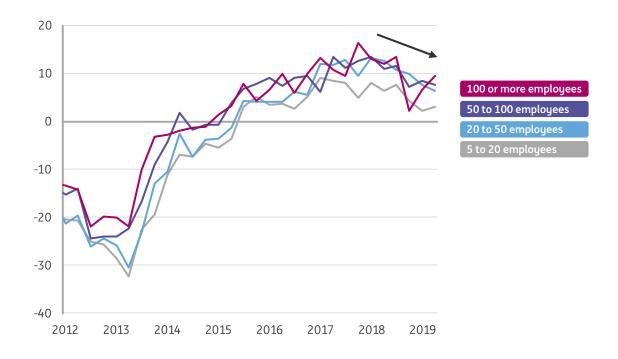
Decreasing trend in sentiment about profitability....

Net % of all firms with 5 or more employees reporting higher (+) or lower (-) profitability in last 3 months, seasonally adjusted



...visible among small, medium and large enterprises

Net % of firms reporting higher (+) or lower (-) profitability in last 3 months, seasonally adjusted



Investment rate only slightly below pre-crisis level due to businesses

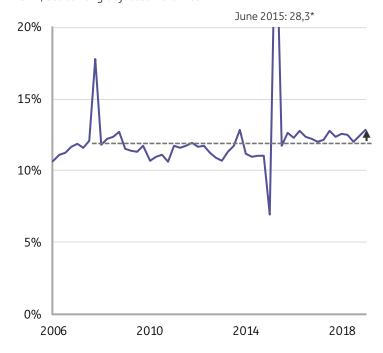
Total investment rate at considerable level...

Total investments as share of GDP, seasonally adjusted volumes



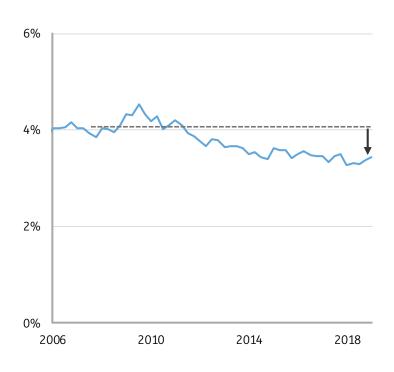
...thanks to strong business investment...

Business investment (private excluding dwellings) as share of GDP, seasonally adjusted volumes



...while public investment is below pre-crisis levels

Public investment as share of GDP, seasonally adjusted volumes

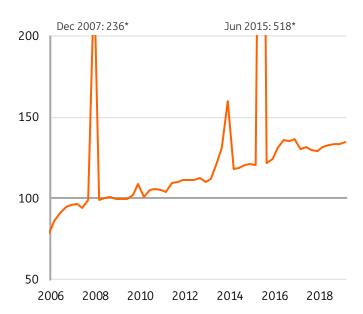


^{*}Extreme spikes in investments in 2015 and 2016 are caused by a large one-off purchase of foreign intellectual property (and divestment) by a Dutch multinational in the commercial service sector

Investment in commercial property accelerating, ICT & intangibles popular throughout the cycle

ICT & intangibles stubbornly continued growing during the crisis and seems nowhere done

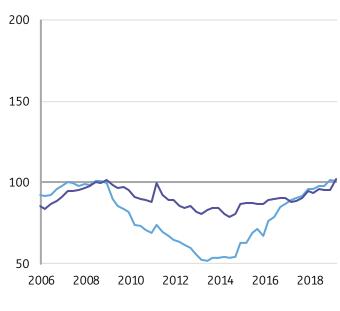
Gross investment in ICT, R&D and other intellectual property



*Extreme spikes in investments in 2015 are caused by a large one-off purchase of foreign intellectual property by a Dutch multinational in the commercial service sector

Housing investment only recently recovered back to pre-crisis level

Gross investment (index, 2008 = 100, in volumes, seasonally adjusted)

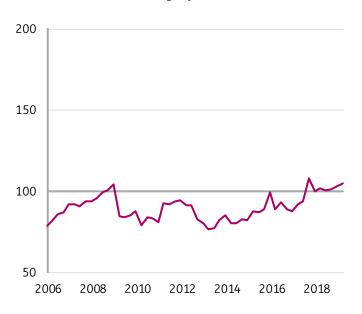


Dwellings

 Other buildings (including commercial property and infrastructure)

Machinery and transport equipment back at precrisis level after long period of flatness

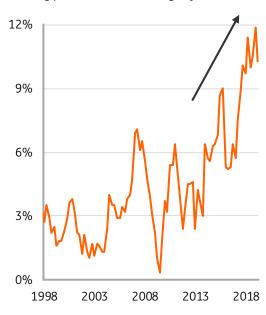
Gross investment in machines and transport vehicles, (index, 2008 = 100, in volumes, seasonally adjusted)



Further investment growth expected in industry and com. services

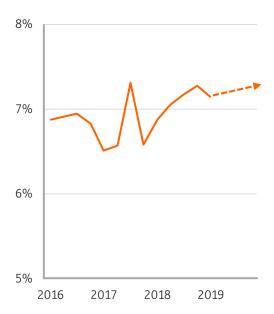
Because industry more often reports capacity constraints...

Share of industrial firms reporting shortage of materials and/or equipment as main factor limiting production, seasonally adjusted



...we expect investment in industry to continue to grow moderately

Gross investment in industry at 2015 prices, seasonally adjusted



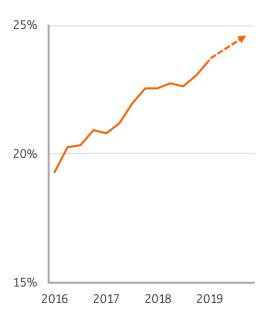
Because confidence is still solid in commercial service...

Confidence indicator of commercial services as deviation from LT-average



...we expect decent investment growth in commercial service

Gross investment in commercial services at 2015 prices, seasonally adjusted



Source: DG ECFIN via Macrobond

Source: CBS via Macrobond

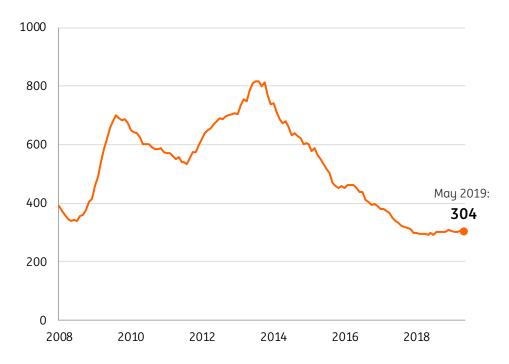
Source: DG ECFIN via Macrobond

Source: CBS via Macrobond

Number of bankruptcies bottomed out

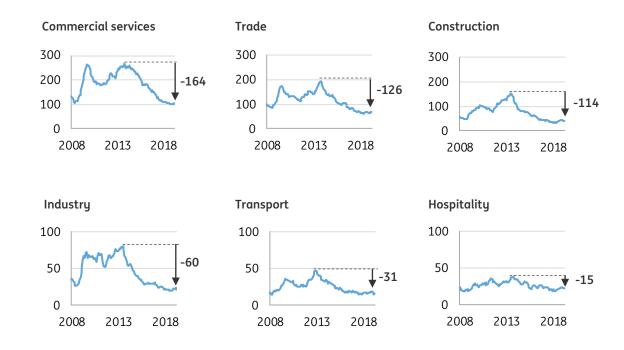
Number of bankruptcies bottomed out at multi-year lows

Number of bankruptcies per month, six month moving average, seasonally-adjusted and adjusted for number of court days



Bankruptcies declined in many sectors, most in commercial services and trade

Number of bankruptcies per month, six month moving average, seasonally-adjusted and adjusted for number of court days

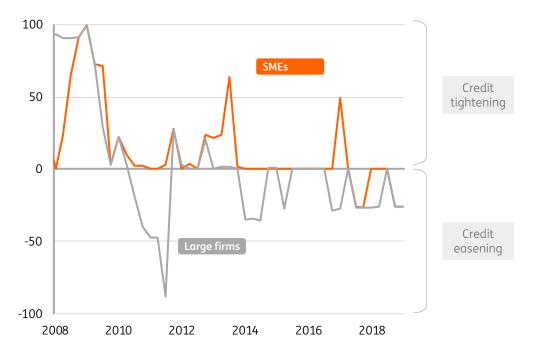


Source: CBS Source: CBS

Demand for bank credit is increasing further

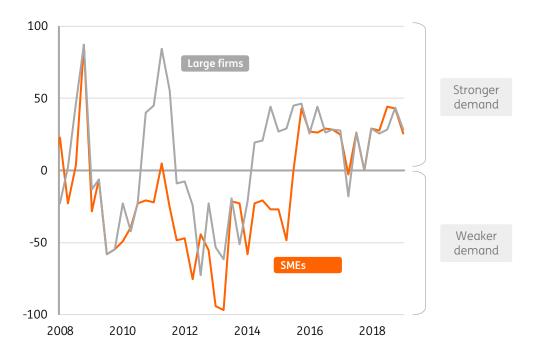
Credit standards have eased for both SMEs and large firms

Net percentage of banks reporting tighter (+) or eased (-) standards



Credit demand from both large firms and SMEs are continuing to grow

Net percentage of banks reporting stronger (+) or weaker (-) demand



Source: DNB via Macrobond Source: DNB via Macrobond

Consumers

- During 2008 -2018, household consumption development in the Netherlands fell behind other eurozone economies, but Dutch households are now in the process of catching up.
- During this period, service consumption developed more positively than consumption of goods. Last year, goods consumption increased faster than the consumption of services, especially durable goods.
- Overall household consumption increased by 2.3% in 2018- the highest pace since 2000. Electronics did particularly well, with volumes increasing by almost 10%. Consumption benefitted from strong employment growth, high confidence and low inflation (which offset the weakness of wage growth) in 2018.
- While static purchasing power was close to stable in 2017 and 2018 for the median household, it is increasing considerably in 2019 and 2020 due to accelerating wages and fiscal stimulus. The improvement is widespread: more than nine out of ten households are expected to experience an improvement in purchasing power in the years ahead.
- Confidence among consumers has fallen considerably since mid-2018, although sentiment currently seems to be stabilising. So far, the fall in confidence has not yet translated into a surge in precautionary savings: the (free) savings rate has remain rather stable between

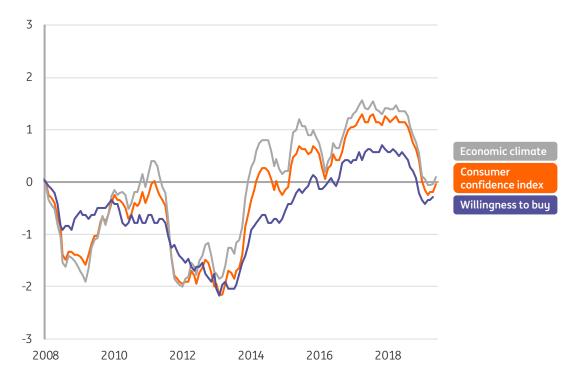
- 2017 and 2018. The level of consumer confidence is still only slightly below historical averages, supporting more moderate yet still positive growth in household consumption (1.3%) in 2019.
- Household debt is rising again, but at a much lower rate than before the crisis. Total net
 wealth of households hit the highest level ever recorded in 2017. Most of the increase
 comes from illiquid housing and funded pension wealth. Accumulated pension wealth has
 never been higher. Due to the lower interest rate environment, some pension funds are still
 struggling with their coverage ratios, which may affect current and/or future disposable
 income in some occupations.

Bulk of chapter updated on January 18th 2019

Consumer confidence fell strongly to normal level

Consumer confidence has declined strongly, but is still around long-term average

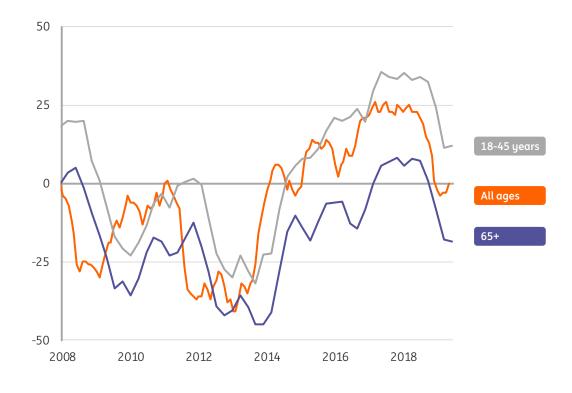
Standardised index with 0 = long term average, net % of positive and negative answers, seasonally adjusted



Source: CBS via Macrobond

Younger people still decently confident, elderly much less

Consumer confidence index, net % of positive and negative answers, seasonally adjusted*



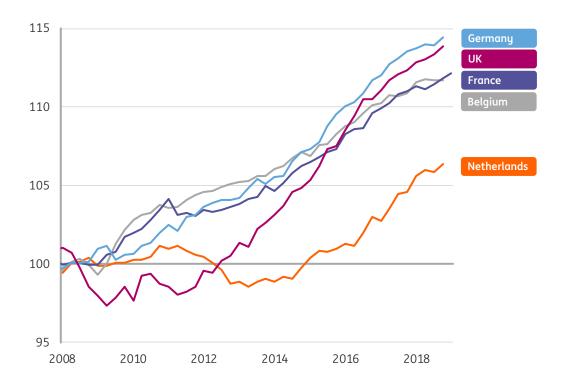
Source: CBS via Macrobond

*Time series contains a structural break in 2017 Q1

Consumption development lagged, but the Netherlands is catching up

Dutch consumption growth since 2008 is lagging behind, but slowly catching up

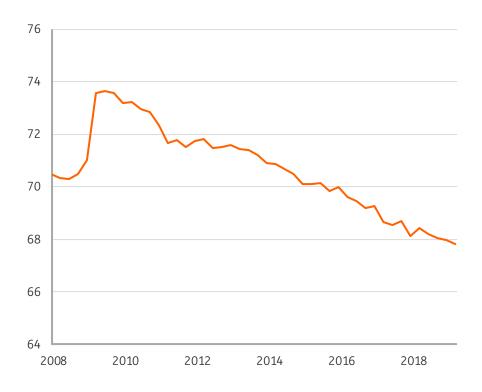
Actual individual consumption of households, seasonally adjusted volume index, 2008 = 100



Source: CBS and Eurostat via Macrobond

Total consumption as share of GDP is still falling

Consumption of households and government as share of GDP, seasonally adjusted volumes

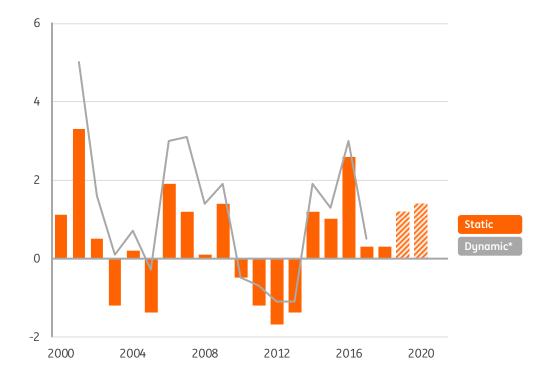


Source: CBS via Macrobond

More spending power on the back of recovery and public spending

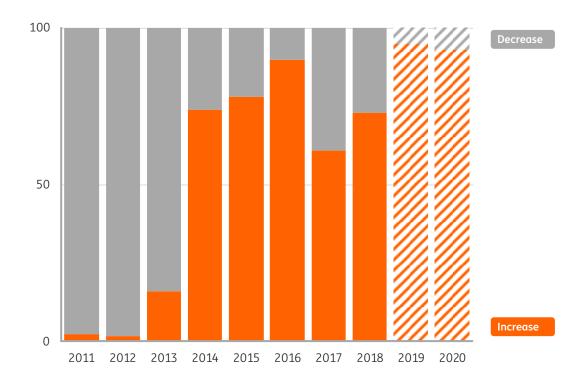
Purchasing power is rising due to economic growth and policy

Change year on year in purchasing power of households, in %



Source: CPB, CBS

Share of households with increase in static purchasing power expected above 90% Share of households with change in purchasing power in %

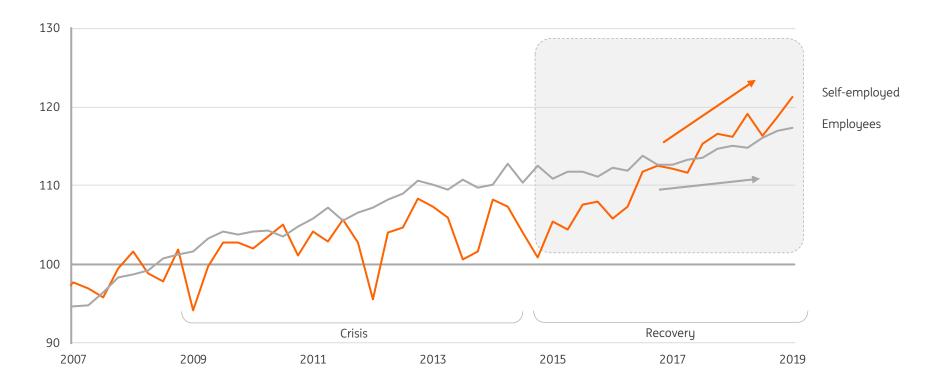


^{*} takes into account changes in type of income and household composition

Hourly income of self-employed is outpacing employee income

Hourly income of self-employed more volatile than income of employees and rising faster in recent years

Average gross remuneration per hour worked (mixed income for self-employed, seasonally adjusted index, 2008 = 100

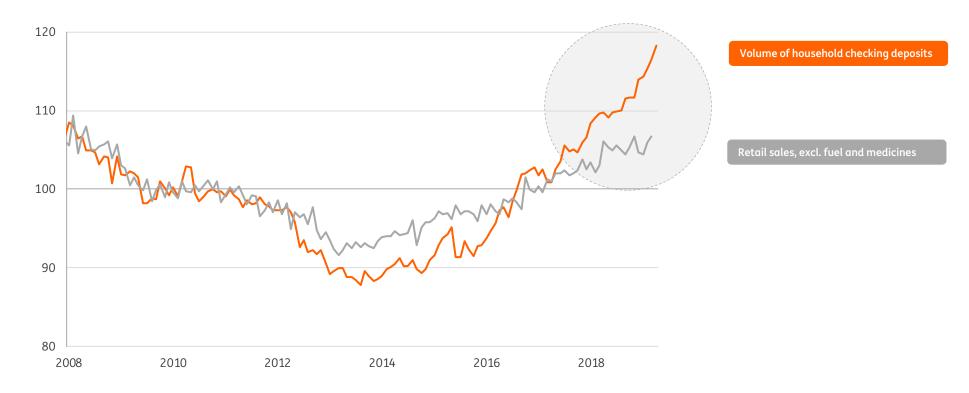


Source: CBS, ING

Volume in checking deposit accounts at record high

Increase in overnight deposits points to higher spending by households

CPI-inflation-adjusted index overnight deposit balance of households and volume index for retail, both 2010 = 100 and seasonally adjusted

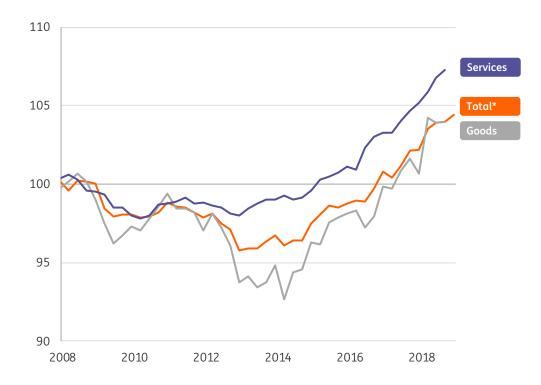


Source: DNB, Eurostat via Macrobond, ING calculations

Private consumption of services is continuing growth trajectory

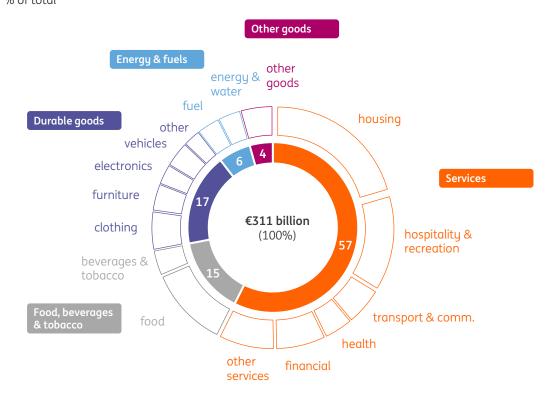
Increased household consumption of both goods and services

Private consumption by type, seasonally adjusted volume index, 2008 = 100



Source: CBS via Macrobond * Total deviates from the sum of goods and services due to the seasonal adjustment

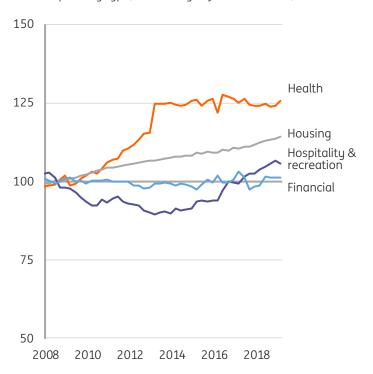
Breakdown of consumer spending in 2016: mostly housing % of total



Consumer spending trends: more electronics and more services

Services: all above pre-crisis peak, especially health care and even financials

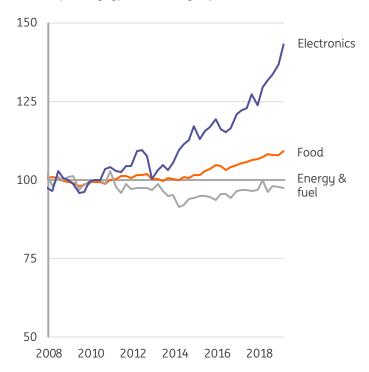
Consumption by type, seasonally adjusted volumes, index 2008 = 100



Source: CBS via Macrobond

Electronics surge, while energy and fuel consumption is lower

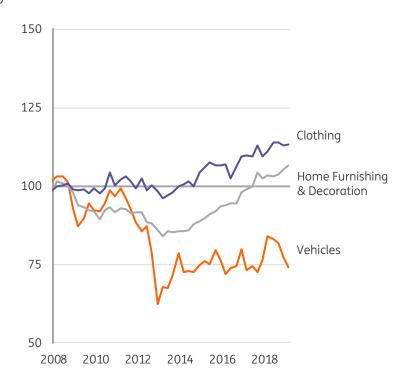
Consumption by type, seasonally adjusted volumes, index 2008 = 100



Source: CBS via Macrobond

Durables: vehicles still 25% below previous peak

Consumption by type, seasonally adjusted volumes, index 2008 = 100

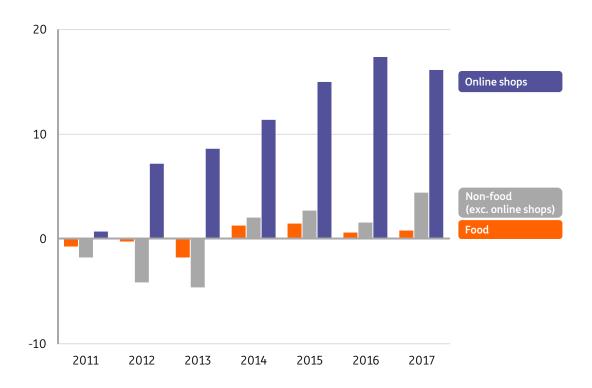


Source: CBS via Macrobond

More and more online shopping

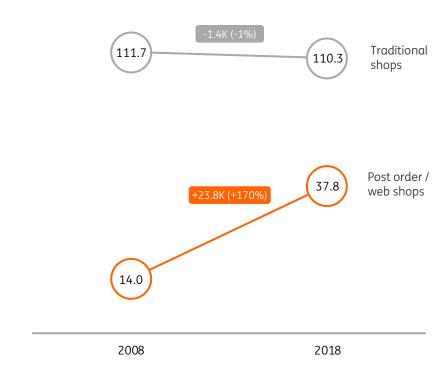
Double-digit rise in online sales volumes

Retail sales volume, change year-on-year, in %



High growth in the number of online shops at the expense of main street

Number of shops in thousands, at 1st of January

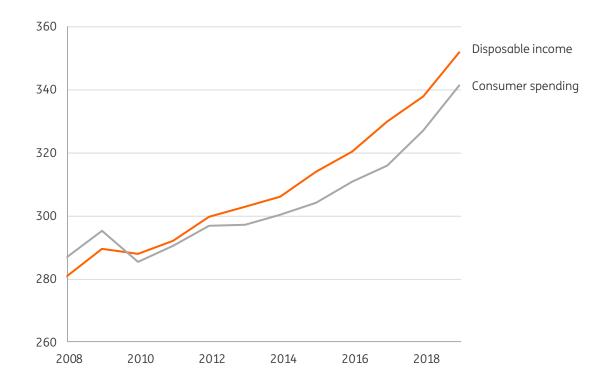


Source: Eurostat via Macrobond Source: CBS

Savings stable at considerable level

Household income higher than consumption

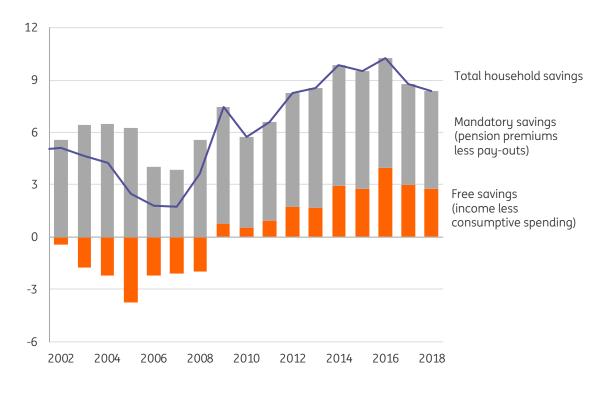
In billions of euros



Source: CBS via Macrobond

'Free' and mandatory of households savings rate stable and positive

% of net disposable income of households (including pension premiums less pay-outs)

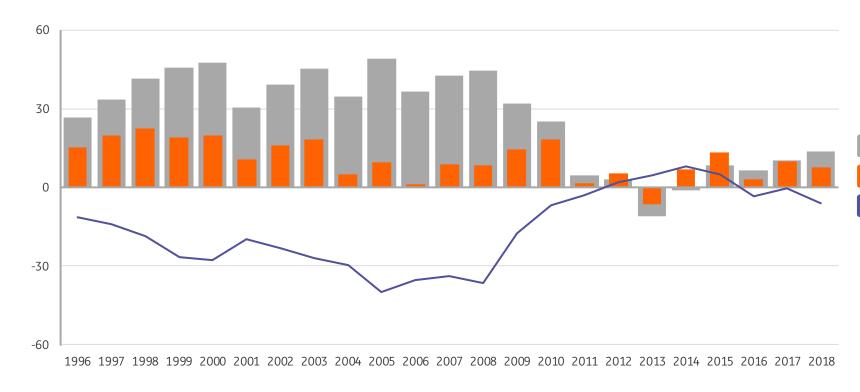


Source: CBS via Macrobond

Households are taking up a bit more debt again

Debt of households increased faster than liquid assets again, but not yet at pre-crisis rates

Changes due to financial transactions (price and evaluation effects are excluded) of households, in billions of euros



Debt (mostly mortgages)

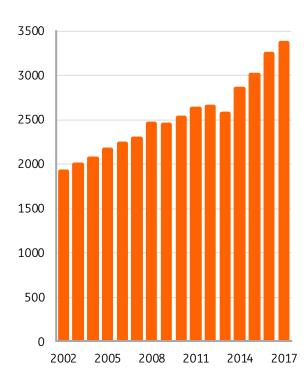
Financial assets, excl. pensions (mostly deposits, stocks, bonds)

Net financial wealth excluding pensions

Total net wealth increased further

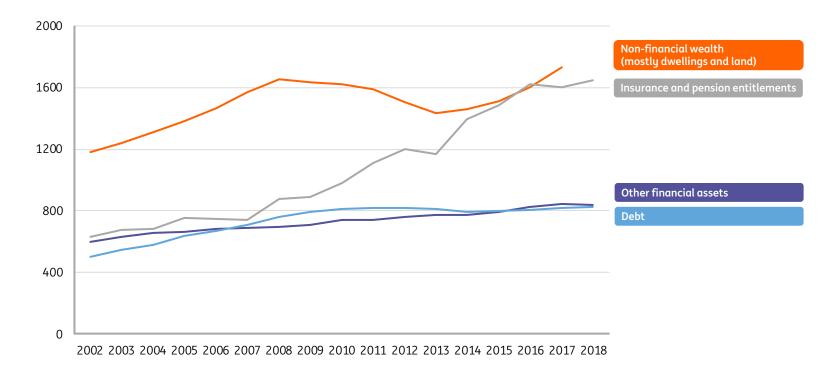
Total net wealth at record high

Financial and non-financial assets, in billions of euro



Most substantial increases in pension and housing assets

Wealth and debt components in billions of euros



Source: CBS Source: CBS

Labour market

- Employment growth has maintained a surprisingly high pace in recent quarters, sometimes at the expense of (negative) productivity growth. The number of people employed has never been higher. In terms of total hours worked, the labour market has bounced up even further above the 2008 level.
- The unemployment rate has dropped near record lows. It has been stable at 3.3% between March and May 2019 because the labour participation rate increased, among discouraged workers and the elderly, who face a higher pension age than before the reforms. All age groups experienced a declines towards very low unemployment rates, although youth unemployment remains structurally higher than average.
- Sector-wise, temporary job agencies are no longer providing the most additional job. The public sector (especially health care) and commercial services have taken over this role. In contrast with a weaker production outlook, industry is also still providing an increasing number of jobs.
- Clearly, most segments of the labour market are quite tight. Unfilled vacancies now at record high level 278.000 in the first quarter of 2019, also when compared to the number of unemployed (1.1 in the first quarter of 2019, while 7 in 2013).

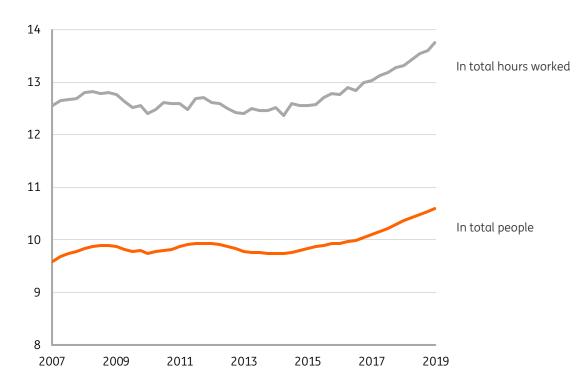
- The share of businesses reporting a shortage of workers as factor limiting activity has started to increase. A quarter (26%) of Dutch non-financial companies indicate that it is difficult to find sufficient suitable employees, resulting in limits to production. The shortages are particularly high in transportation, construction and in IT.
- As a result, wages are accelerating, but given the current stage of the business cycle, wage growth is considered moderate. More bargaining power for workers also translated into the share of fixed contracts growing for nine quarters consecutively up to the first quarter of 2019.

Bulk of chapter updated on January 18th 2019

Employment continues to rise

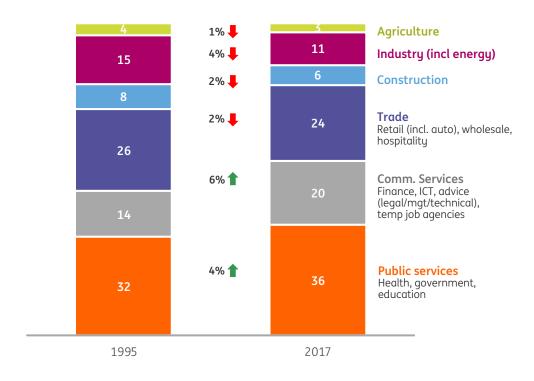
Number of jobs and hours worked are strongly increasing

Total of employees and self-employed, in millions, seasonally adjusted



Breakdown of jobs by sector: since 1995 more jobs in services

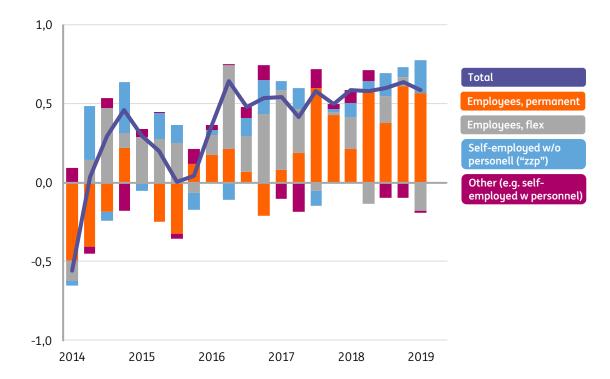
Share in total employment (hours worked), in %



More work in permanent contracts

Permanent contracts largest contributor again to growth in employed labour force

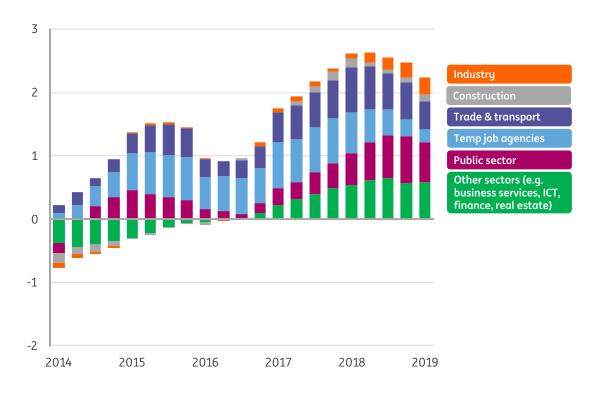
Contribution to quarterly change in employed labour force, in percentage (points), seasonally adjusted



Source: CBS, ING

Job growth driven by commercial, but also public services again

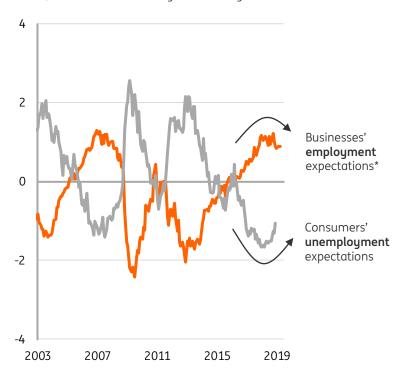
Contribution to <u>yearly</u> change in employment, in percentage points, seasonally adjusted



Leading indicators point to slightly weaker job growth

Consumers and firms have bit less positive labour market expectations

Index, standardized with long term average=0

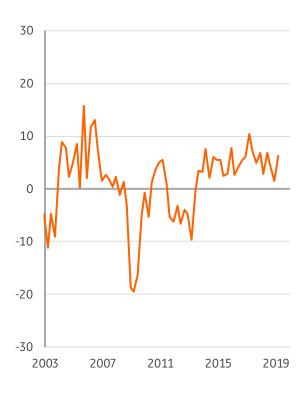


Source: DG ECFIN, Macrobond

* Weighted average of manufacturing, construction, retail and services

Number of unfilled vacancies still growing

Change quarter-on-quarter, in % seasonally adjusted



Source: CBS

Unfilled vacancies now at record high level

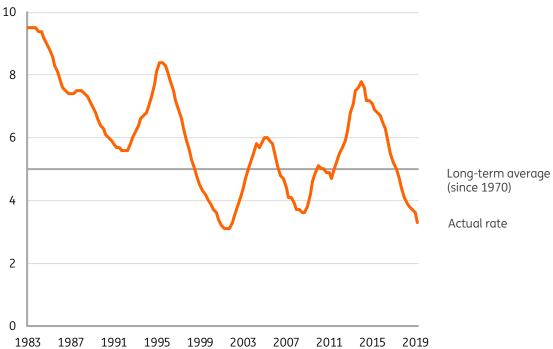
Number of unfilled vacancies, in thousands, seasonally adjusted



Unemployment drop slows down; level below long term average

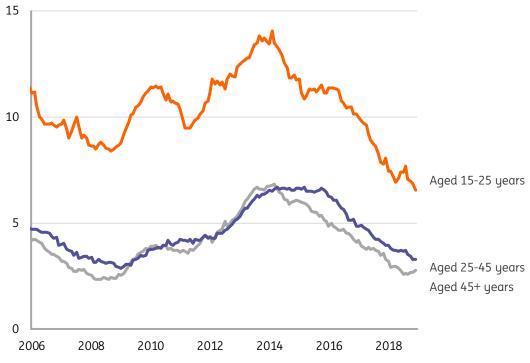
Unemployment is nearing previous lows

Share of unemployed (15-74yr) in labour force, in %, seasonally adjusted



Source: CBS via Macrobond

Unemployment low in most age groups, while recently slightly rising among 45+ Share of unemployed in labour force, in percentage, seasonally adjusted

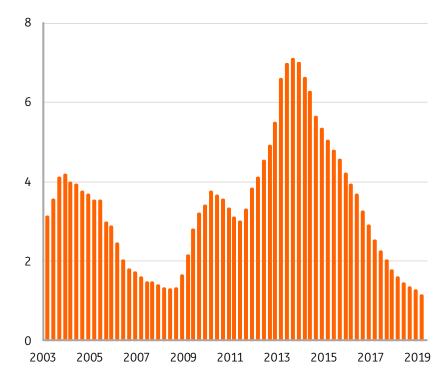


Source: CBS via Macrobond

In very tight labour market, over 25% of firms struggle to fill vacancies

Number of unemployed persons per open vacancy has hit new low

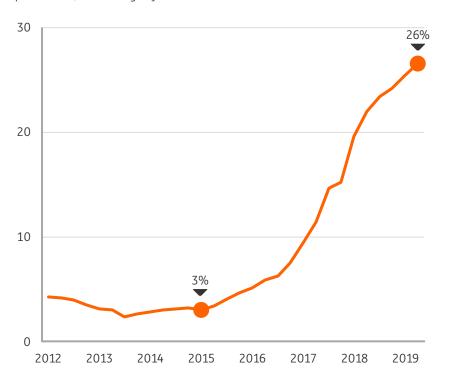
Ratio of number of unemployed persons and number of unfilled vacancies



Source: CBS via Macrobond

Share of Dutch companies struggling to find suitable employees has risen quickly

% of non-financial companies in the market sector indicating labour shortages as a factor limiting production, seasonally adjusted

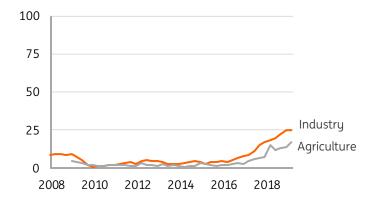


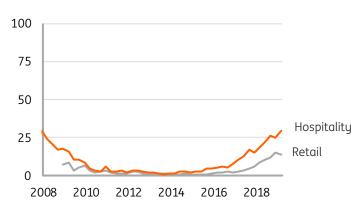
Source: CBS, EIB, KvK, MKB Nederland and VNO-NCW, (COEN survey)

Labour shortages increasing across the board

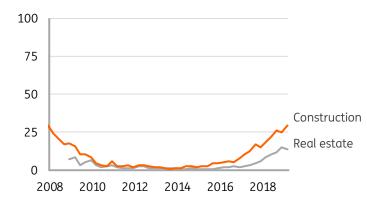
Shortage of labour is limiting production in more and more industries

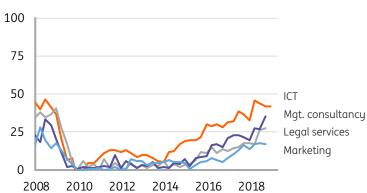
Percentage of firms reporting shortage of workers, seasonally adjusted

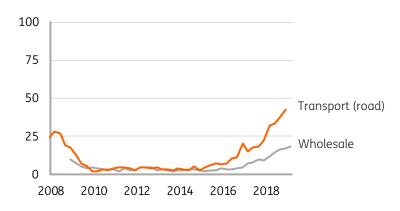


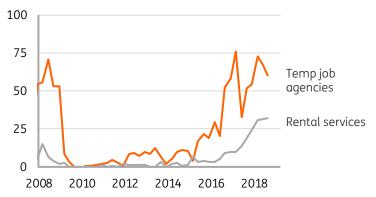


Source: CBS and European Commission DG ECFIN, Macrobond





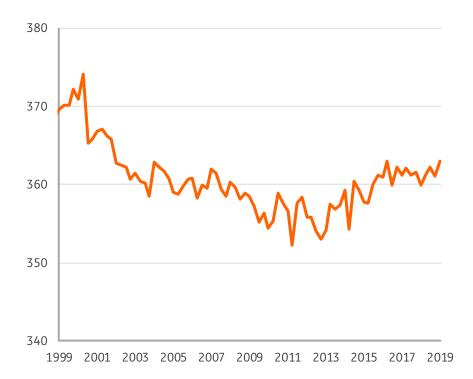




Potential to work more hours not fully-utilised

While the number of hours worked per employed person recovered and stabilised...

Average number of hours worked per worker, seasonally-adjusted



Source: CBS

...there is still potential for more hours to be worked among more than 150K workers

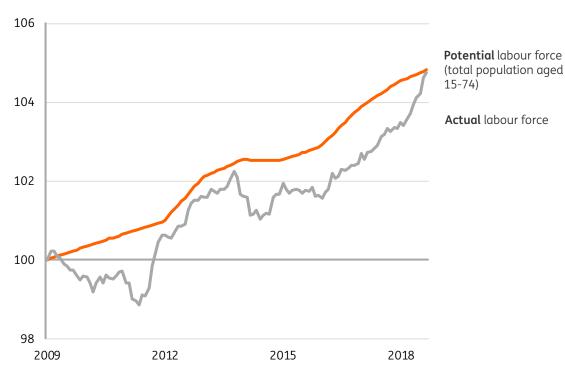
Number of workers who want to work more hours as share of the total population of 15-74yrs, seasonally-adjusted



Participation suggests limited cyclical potential in labour supply

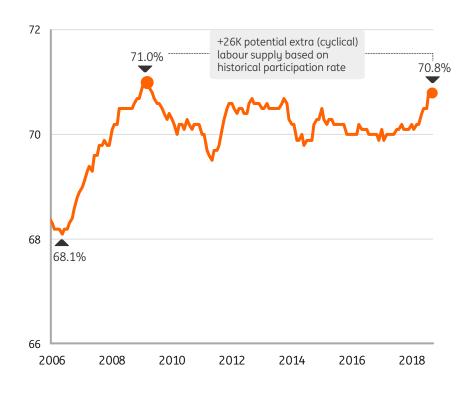
Deveplopment of *actual* labour force has almost caught up with *potential* labour force

Index, 2009 Q1 = 100



Participation rate is getting close to pre-crisis record

Actual labour force as percentage of potential labour force aged 15-74



Source: CBS via Macrobond

Source: CBS via Macrobond

Getting back to upward trend in participation unlocks 210k people

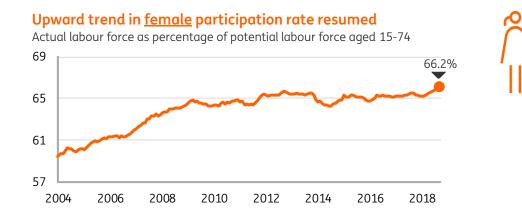
Male participation rate rising but still far from peak Actual labour force as percentage of potential labour force aged 15-74 79 77.0% 75.5%

2012

2014

2016

2018



111K extra men if participation returned to high level of 77%

Number of males active (and potential) on the labour market, in millions

2010

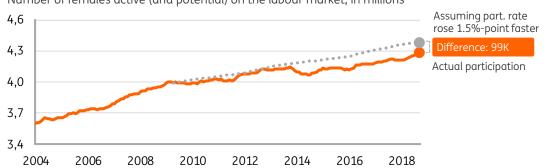
2008

2006



99K extra <u>females</u> if participation rises 1.5%-points

Number of females active (and potential) on the labour market, in millions



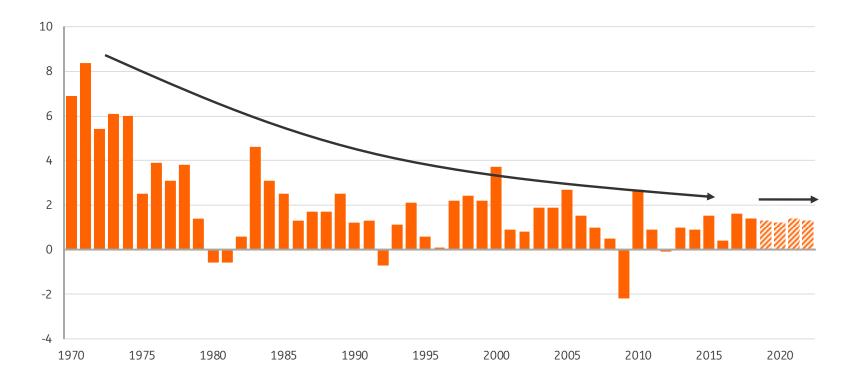
73

2004

Downward trend in labour productivity growth, but important growth driver going forward

Steady labour productivity growth in coming years, after declining trend in recent decades

Change in GDP volume per hour* year-on-year, in %



Source: CPB

*GDP-volume per hour equals labour productivity growth

Inflation

- Headline consumer price inflation (CPI) jumped, as the result of an increase of the reduced VAT rate and higher energy taxes, from a moderate 1.7% (year-on-year) in 2018 to a significant 2.4% in April 2019.
- Wage growth and the corresponding inflationary pressure has been on the rise but is still
 rather moderate for the maturity of the business cycle. Hourly wage costs in commercial
 services, which historically is important indicator for labour induced inflationary pressure,
 only slowly increased to (year-on-year) in the first quarter of 2019. The nationwide average
 hourly wage rate is expected to accelerate from 2.0% in 2018 to more than 3% in 2019.
- Among businesses, inflation expectations for the next three months have fallen after the increase in the low-VAT rate from 6% to 9% in January 2019, but still remain at a considerable higher level than before. The same holds for consumers' price expectations in the twelve months ahead.
- We forecast headline consumer price to rise to 2.5% in 2019, and expect it to fall back to 1.7% in 2020 due to the base effect of the VAT-hike. Food, housing, hospitality services and

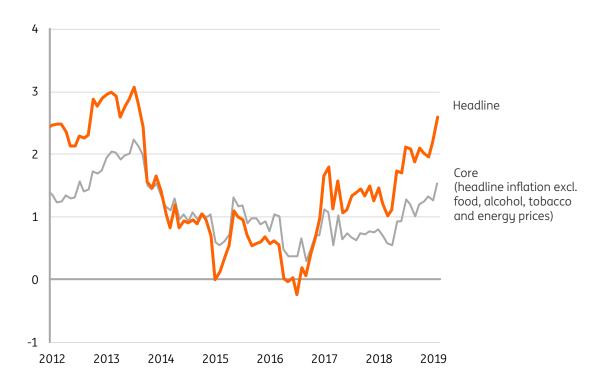
energy are responsible for the bulk of the increase in 2019. We forecast core CPI inflation (excluding volatile energy and food prices) to increase from a subdued 1.0% in 2018 to a very moderate 1.4% in 2019.

Chapter updated on May 28th 2019

Inflation much higher due to policy

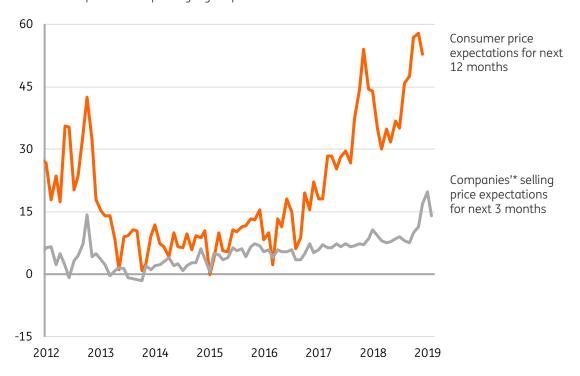
Consumer price inflation above 2%, partly driven by higher core inflation

Consumer price inflation % year-on-year according to national definition



Most consumers expect inflation to stay high after VAT-hike, while businesses less often expect prices to increase further

Net % of respondents expecting higher prices



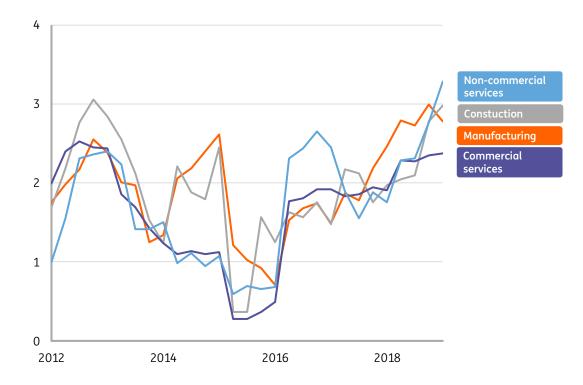
Source: DG ECCFIN via Macrobond

^{*} weighed average of industry, retail and services sector

Inflationary pressure is modestly building up via wage cost

Hourly wage costs rising at increasing pace, but still modestly

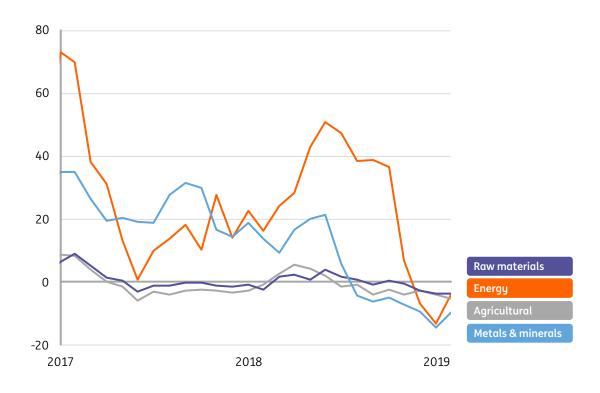
Change, year-on-year, in %



Source: CBS via Macrobond

Commodity prices could put downward pressure on inflation in 2019

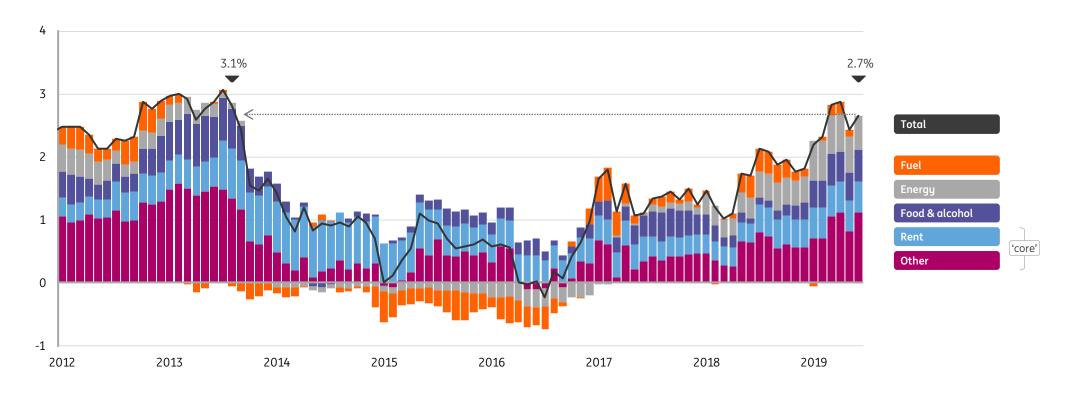
Change, year-on-year, in %



Source: Worldbank via Macrobond

Consumer price inflation months above 2.5% for first time in over 5 years

Rising core inflation pushes headline inflation above 2.5%, while VAT-affected energy and food also contribute positively Contribution to consumer price inflation, in percentage points



Source: CBS via Macrobond

Housing market

- The housing market has been an important driver of economic growth in recent years. The
 housing market catch-up explains over a quarter of the GDP growth between the thirds
 quarter of 2017 and the through of 2013. Investment in dwellings has surged, benefitting
 builders, industry and DIY stores. Increasing home sales have also favoured people like
 estate agents, surveyors and lenders.
- However, home buying volumes are currently stagnating, after normalising to 218k sales in 2018 from a record high sales of 242k in 2017. ING expects home sales to come down to 210k in 2019 and 195k in 2020. Since 2013, households with postponed moving plans have pushed up home sales. Six years later, we expect this catching-up effect to be marginal. Tight supply of homes will also push home sales further downwards.
- Overall, we expect house prices to increase on average by 6.5% in 2019 (9% in 2018). House
 price rises are persisting in response to a tight supply of homes. Growth of the housing stock
 is expected to fall short of household growth until 2020. And despite the easing of housing
 market supply after this year, the housing market will remain tight in the next decade.
 Omitting catching-up demand will flatten price increases somewhat compared to previous
 years.

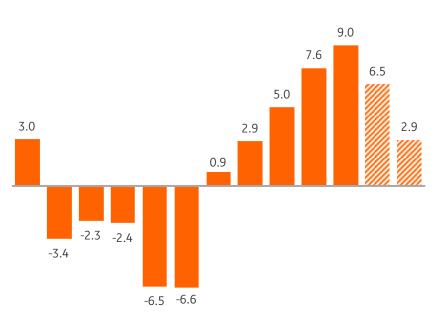
- Despite the similarity of steep price increases, today's housing market differs from that of 2008. Housing affordability is on average still better, partly explained by low interest rates. Although prices in the last five years have increased significantly, the stock of mortgage debt has grown at a much lower pace. The house price to income ratio is still below 2008 level.
- Regional differences are large. Nationwide, house prices have passed pre-crisis level (8% above in May 2019). In the four major cities (Amsterdam, Rotterdam, Utrecht and The Hague) prices have increased much faster. In Amsterdam, the average price is already tens percentage points above the previous peak, but here the foundation for further significant price increases is eroding. In most, mainly peripheral provinces, house prices only just recently recovered to the pre-crisis level.
- Individual investors are increasing the difference between major cities and the rest of the Netherlands. In the top three cities, the share of individual investors is above 20% of transactions (11% nationwide). Tighter credit measures introduced in 2013 are putting home movers and investors ahead of first-time buyers.

Bulk of chapter updated on January 18th 2019

House prices are increasing, pushing down home sales further in 2019

House price increase expected to slow down

Average house price, change year-on-year (%)

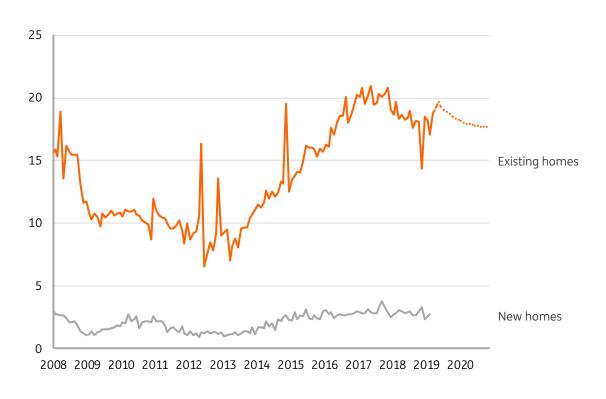


2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Source: CBS, ING forecasts

Sales are declining further, after record high home sales in 2017

Homes sales in thousands, seasonally-adjusted

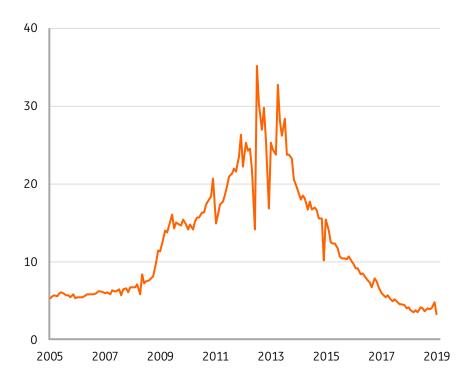


Source: Kadaster, NVB-Bouw, ING forecasts

Supply of homes is becoming tighter

Unsold existing home supply at record low

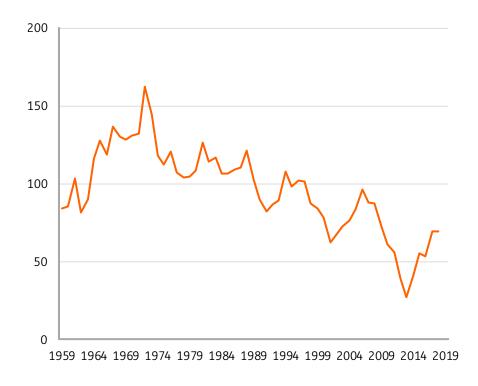
Supply divided by monthly number of sales



Source: Huizenzoeker.nl, CBS, ING

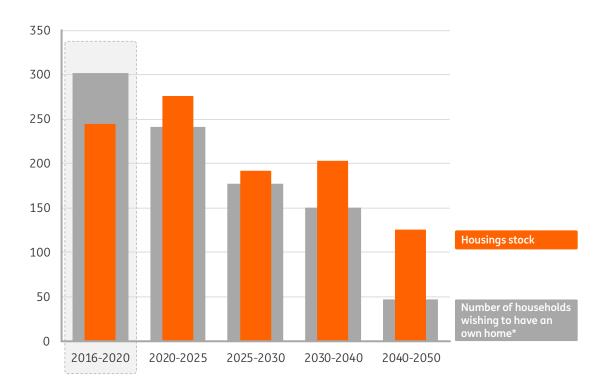
New supply has picked up from record lows

Building permits for dwellings, in thousands



In short term, housing supply is getting tighter

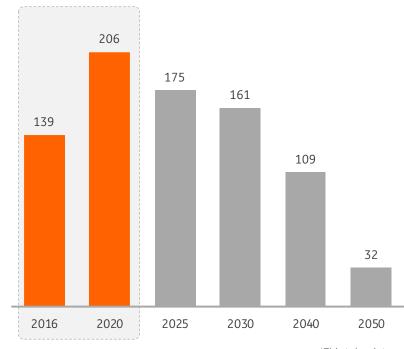
Growth in number of households will exceed housing stock growth until 2020... Change per 5-year period, in thousands



Source: ABF Research, Primos prognosis 2017

...causing the housing market strain* to rise in the short term

Difference between estimated number of households* and housing stock, in thousands

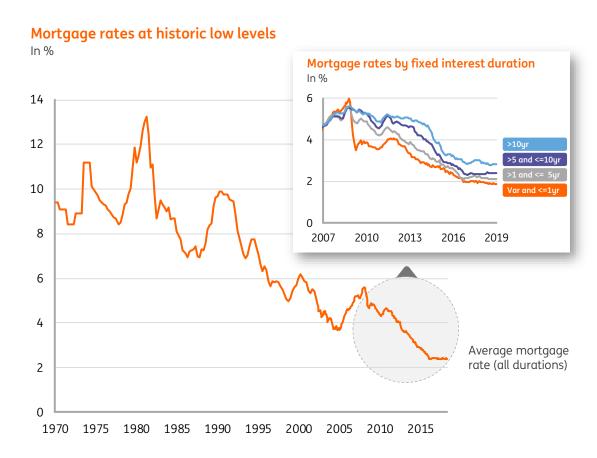


Source: ABF Research, Primos prognosis 2017

*This takes into account that a share of the stock is not suitable for living and that a particular vacancy rate is needed for a well-functioning housing market.

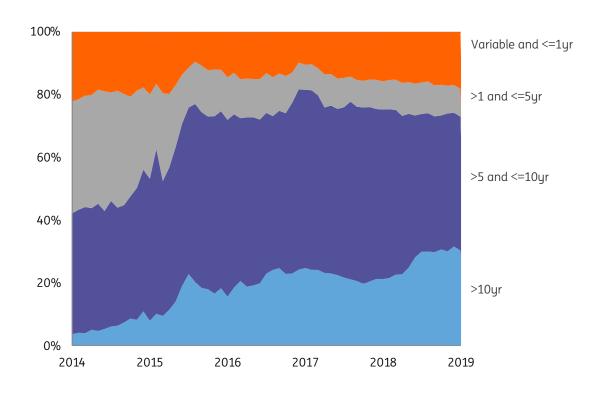
^{*} Estimates based on, among other things trend analysis over the years 2009 – 2016 and population projections by CBS.

Home buyers opt for long-term fixed rate mortgages



Home buyers choose long-term fixed interest rate periods

Mortgage production (banks only) per fixed interest rate period, share in total

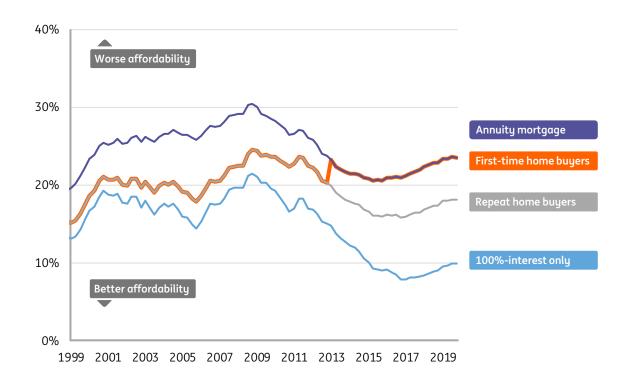


Source: DNB Source: DNB

Affordability has started to weaken, but is still better than in 2008

Housing affordability has deteriorated somewhat

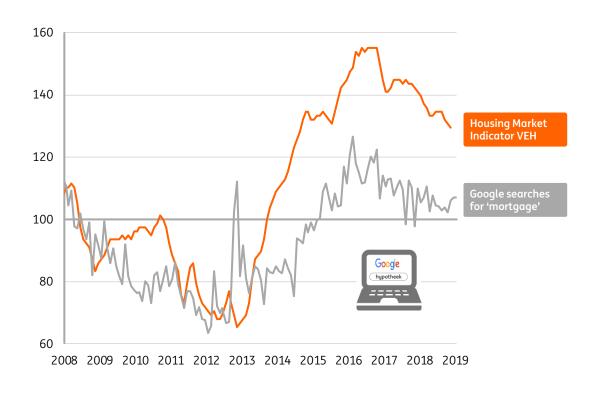
After-tax mortgage cost as % of income, directly after purchase*



* Using average ho Source: CBS via Macrobond, DNB, ING interest on new morta

Housing market sentiment is beyond the peak

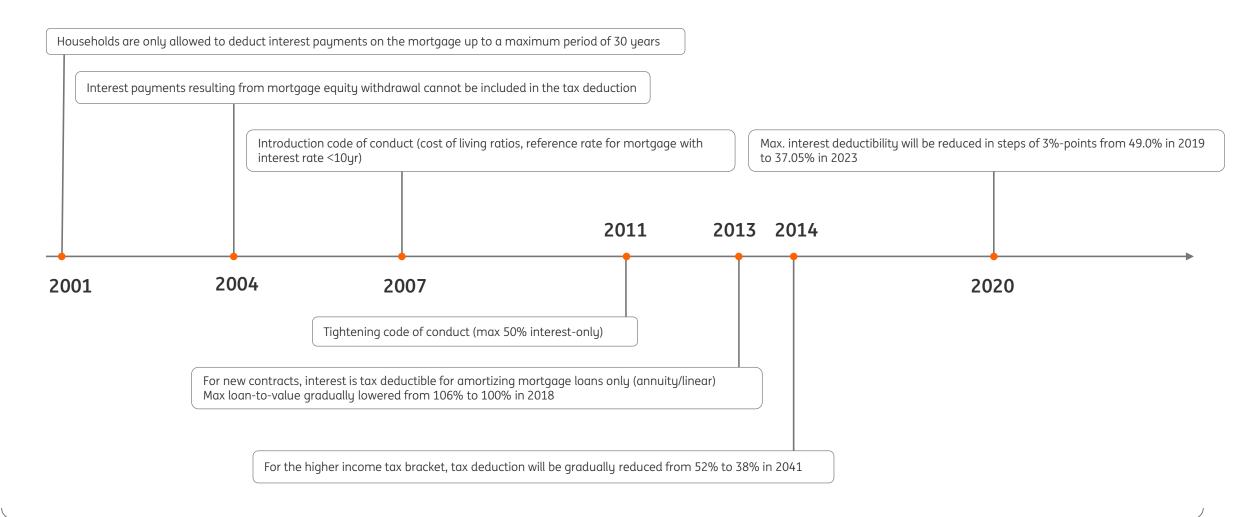
Index, 2008 = 100



Source: VEH (homeowners' association), Google, ING

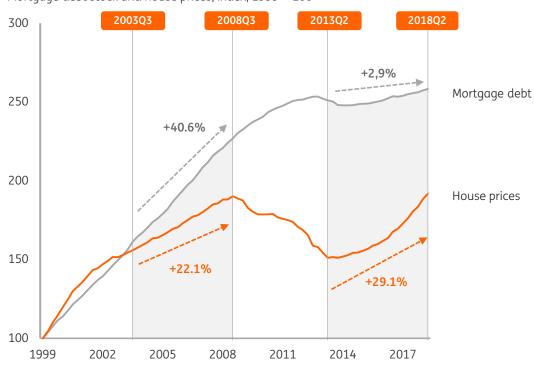
^{*} Using average house price and average household income. Since 2013, interest on new mortgages is only tax deductible for amortising mortgages.

Measures have been taken to curtail mortgage debt growth



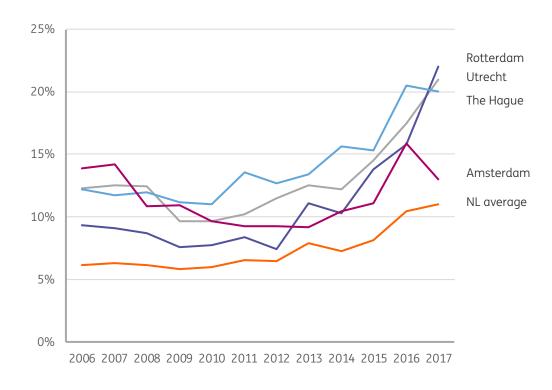
Current price increase not credit driven, unlike in 2003 - 2008

Previous sharp increase in house prices strongly credit-driven, but in the last five years, higher house prices accompanied by hardly any increase in mortgage debt Mortgage debt stock and house prices, index, 1999 = 100



In major cities, private investors are pushing up house prices

Estimated buy to let transactions, share in total house sales



Source: CBS, DNB, ING

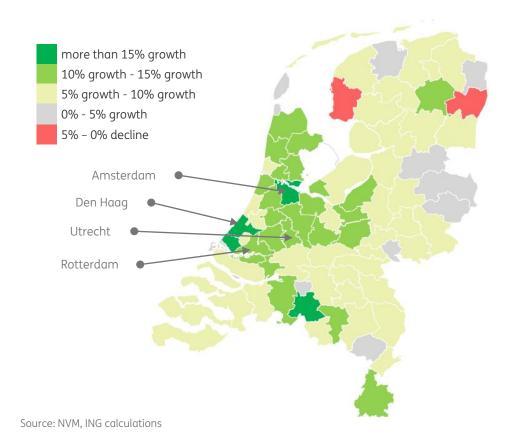
Source: Kadaster, Dynamis, ING

75

Housing market characterised by major regional differences

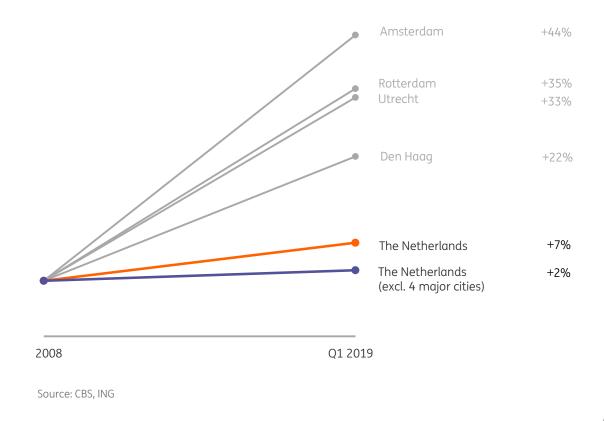
House prices rose fast in 'Randstad' area, where four biggest cities are located

Median transaction price, difference between 2017Q2 - 2018Q2



Outside four major cities, average house price just above 2008 peak

House price difference compared with peak in 2008

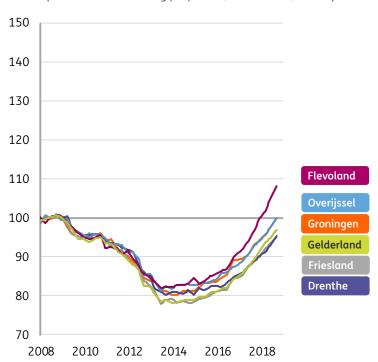


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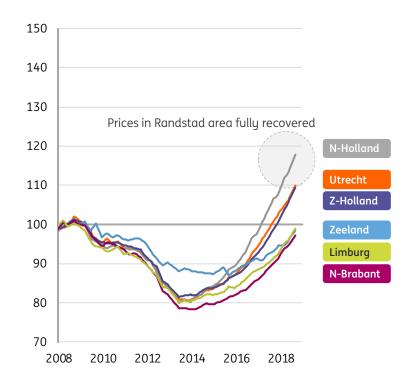
Large cities lead house price recovery

North & East: except for Flevoland and Friesland, prices still below 2008 levels

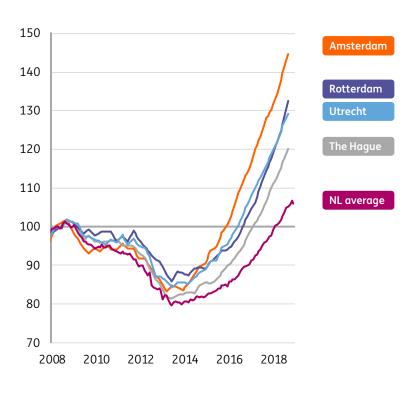
House price index for existing properties, 2008 = 100, Dutch provinces



West & South: vast price increases in highly urbanised Randstad area...



Higher prices in Randstad mainly driven by substantial increases in major cities

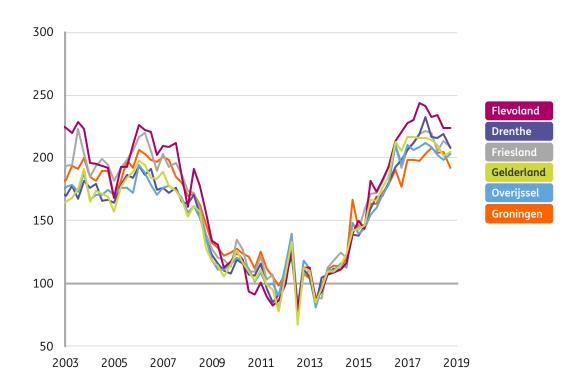


Source: CBS via Macrobond Source: CBS via Macrobond Source: CBS via Macrobond

Drying up of supply is pushing down home sales

North & East: Upward trend in home sales has turned

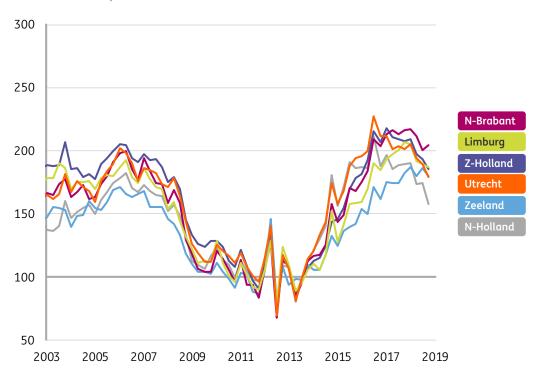
Homes sales index, 2013 = 100



Source: CBS

South & West: sales in Utrecht and N-Holland (Amsterdam) far below peak, others are following

Home sales index, 2013 = 100

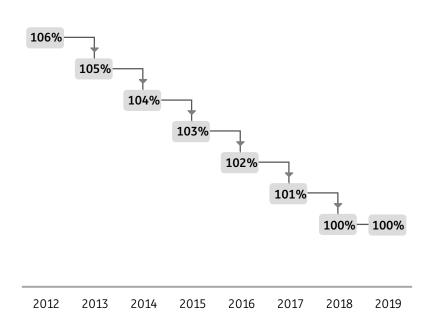


Source: CBS

Average age of homebuyer is increasing, since first-time buyers find it harder to buy due to stricter LTV-policies

Gradual decrease in maximum allowed loan-to-value (LTV)

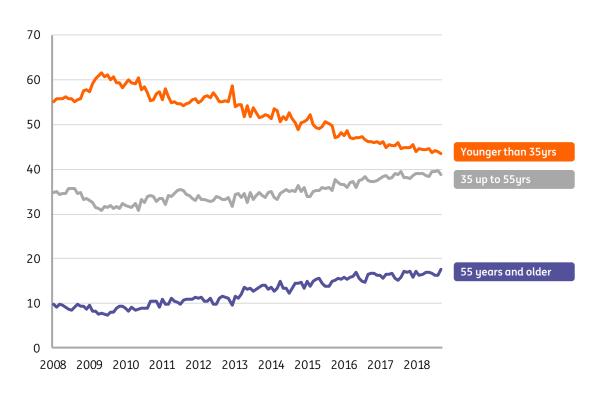
Maximum mortgage amount as share of purchase price (including expenses to be paid for by buyer)



Source: Rijksoverheid.nl

Resultingly, the share of homes bought by young people is declining

% of total home sales, per age group

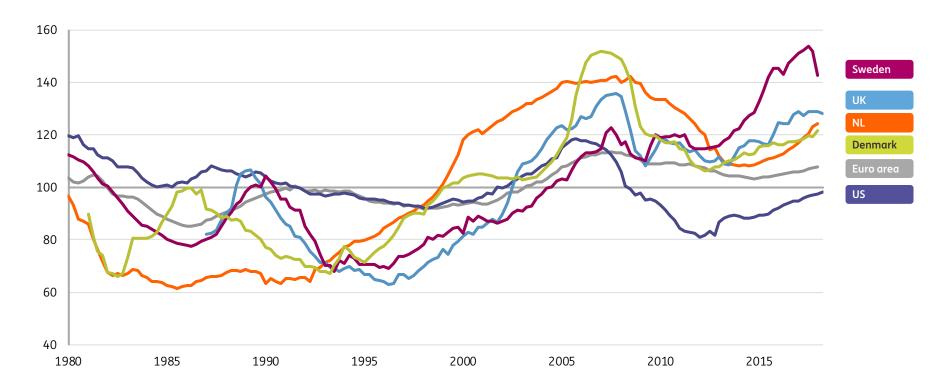


Source: Kadaster

House price-to-income ratio increasing again

Price-to-income in Sweden far above long-term average, in UK, NL and Denmark somewhat

House price-to-income, deviation from long-term average, 1980-2016 = 100



Source: OECD via Macrobond

Government

- Dutch public finances are healthy. In fact, the fiscal surplus turned out somewhat higher than expected. In 2018, the government failed to execute its spending plans, in part because of the challenges in finding personnel and delays with infrastructure projects. This will be a risk for spending in 2019 again, both to the downside and upside.
- Labour income taxes were lowered at the start of 2019, while the VAT-rate, energy taxes
 and healthcare premiums rose, with a net positive effect for a large majority of households.
 Also 2020 brings income tax relief for households. For businesses taxes are raised in 2019
 mainly as a results from higher unemployment premiums and energy taxes and the
 broadening of the corporate income tax base.
- We forecast the government budget balances hovering around 1% GDP during the entire term of the third government with Mark Rutte at the helm. This is despite the fact that the government is using some of the cyclical tax revenues for additional spending on defence, education, R&D, civil service and infrastructure, as well as on tax cuts. The structural fiscal balance will decrease from 0.8 % GDP in 2018 to 0.4% in 2020.
- Dutch government debt stood at 51% of GDP in the first quarter of 2019, clearly below the European norm of 60% GDP. We forecast the drop of the debt ratio to continue to

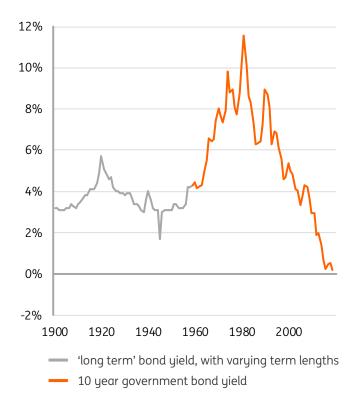
- something below 50% by 2020, as a result of cumulating surpluses and the continuation of the sale of the bank ABN AMRO.
- While the interest rate differential with Germany faced by the Dutch government is at a normal limited level, the actual yield on ten year government bonds is negative and at historical lows. As a result, the share of expenditures spend on interest payment is low.
- Public finances are more or less robust in light of population ageing: when looking at the net
 present value of future revenues and expenditures, however, a minor sustainability surplus
 of 0.1% GDP remains. This does not take into account some adjustments to the state
 pension from 2020 onwards, which should have a minor downward effect on future
 projection of the sustainability balance by the Netherlands Bureau of Economic Policy
 Analysis (CPB).

Chapter updated on June 24th

Dutch government bond yield at historically low levels

Historically record low Dutch government bond yield

Average yield*, per year



Bond yield currently negative at record lows

Yield on Dutch 10 year government bonds, monthly average



Yield spread versus Germany at normal level

Difference between yield on Dutch and German 10 year government bond, in %-points monthly average



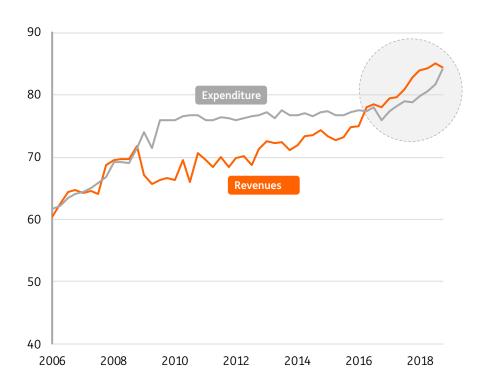
Source: Macrobond Source: Macrobond

Source: CBS via Macrobond

Continuing budget surplus

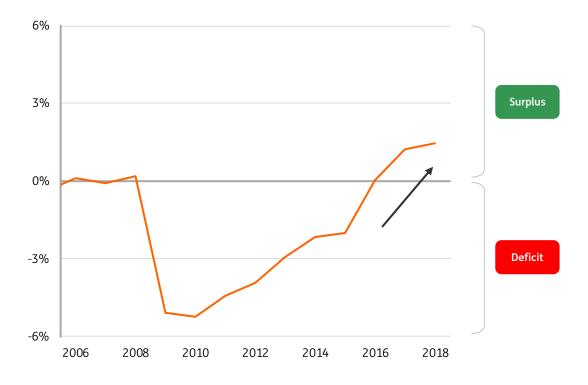
Government revenues are exceeding expenditures since 2016...

In billions of euro, per quarter, seasonally-adjusted



... which brought the fiscal balance in positive territory

Actual government budget balance (EMU-definition), share of GDP

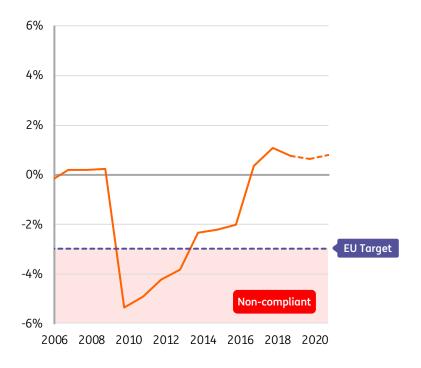


Source: CBS via Macrobond Source: CBS

Compliant with the European rules

Headline balance safely above European target

Headline balance, share of GDP



Structural balance also above target

Headline balance adjusted for economic cycle and one-off effects, share of GDP



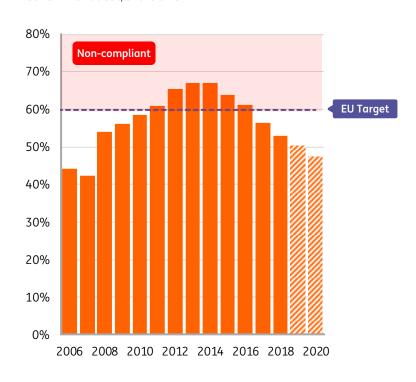
^{*} Medium Term Objective (MTO)

Source: CBS via Macrobond, ING forecasts

Source: CBS, ING forecasts

Government debt moving further below 60%-target

Government debt, share of GDP

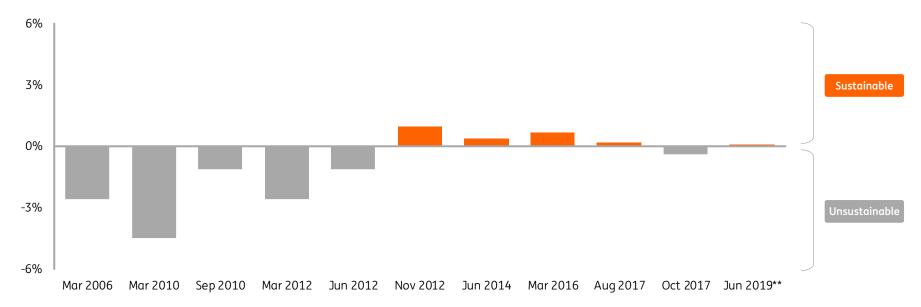


Source: CBS, ING forecasts

Long-term government finances close to sustainable

Present value of government expenditures and revenues close to zero

Sustainability balance* as share of GDP at moment of publication



*The sustainability balance shows how much policy measures need to be taken (in % of GDP) to ensure that future generations can benefit to a similar degree from public services at a constant tax burden (as a percentage of GDP) as is faced by present generations. This balance shows whether future tax revenues are sufficient to cover future government expenditures. The current modest sustainability surplus means that the debt level will stabilise under the assumption of consistent arrangements.

Source: CPB

 $^{^{**}}$ The June 2019 figure is our own estimate, consisting of the sustainability balance as reported by CPB in October 2017 plus the estimated impact of new labour supply projections.

Contact details

Author

Marcel Klok Senior Economist ING Netherlands Economics Department marcel.klok@ing.com +31 (0) 20 57 60 465

With the contribution of

Mirjam Bani ING Economisch Bureau
Dimitry Fleming ING Economisch Bureau
Marten van Garderen ING Economisch Bureau
Lex Hoekstra ING Economisch Bureau

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