# CONJONCTURE IN FRANCE

## December 2017



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# FRANCE KEEPS UP THE PACE

# France keeps up the pace

*Since the end of 2016, French activity has kept up a sustained rate (+0.5 to 0.6% per quarter): annual growth thus reached 2.2% this summer, returning to a rate not seen since 2011, against a backdrop of relatively homogenous growth throughout the Eurozone.*

*The world environment remained buoyant this summer and should remain so over the forecasting period (to mid-2018), as the business climate remains very positive in most of the business tendency surveys. American growth has not weakened in recent months; the fiscal stimulus announced during the presidential election is still awaited, but should happen from 2018. In Japan, consumption should take over little by little from foreign trade in driving activity. In the UK, meanwhile, domestic demand is likely to be hit by the sharp upswing in inflation and the uncertainties surrounding the terms of Brexit.*

*World trade is likely to be driven by the recovery in the emerging markets: Chinese growth remains at a high level despite the tendency towards a slowdown in investment, notably in real estate. The Russian, Brazilian and Indian economies, buoyed by relatively low inflation and recovering consumption, are picking up after two years of recession, pulling imports in their wake.*

*In the Eurozone, growth was very strong once again in Q3 (+0.6% after +0.7%) and the business climate is at its highest in 17 years: the political uncertainties in Europe, with the Catalan crisis, the more difficult than expected formation of a majority government in Germany and upcoming elections in Italy do not seem to be affecting the morale of entrepreneurs for the moment. Fiscal policy is likely to remain neutral or even accommodating in the main Eurozone countries. Buoyed by steady investment, activity should therefore remain robust throughout the Eurozone through to mid-2018 (+0.6% at the end of 2017, then +0.5% per quarter), while certain countries are beginning to see tensions appearing in their production systems, in particular Germany.*

*France is unlikely to be an exception to this general trend: the French economy is likely to maintain its momentum over the coming quarters (+0.6% at the end of 2017, +0.5% in early 2018, then +0.4% in the spring). Annual growth should come to +1.9% in 2017 and the growth overhang for 2018 should be +1.7% by mid-year.*

*French business leaders are resolutely optimistic according to the business tendency surveys: the business climate has been progressing continuously since the end of 2016, reaching its highest since early 2008 in November 2017. The different sectors are all in unison, whether in industry (where general activity prospects are at levels not seen in 17 years), market-sector services (which continue to benefit from the return of tourists, among other factors), or construction.*

*Growth is set to be driven by strong global demand. Although exports may be affected by jolts in the aeronautics and shipbuilding sectors, and the trade deficit is likely to widen a little further in manufactured goods, foreign trade should stop weighing down on growth in mid-2018, thanks to agricultural products and tourism. Regarding domestic demand, growing numbers of companies are declaring supply-side difficulties and their investment expenditure is therefore unlikely to ease up. Households, meanwhile, should benefit from dynamic earned income. Rising inflation and the calendar effects of taxation measures are likely to restrain their purchasing power temporarily over the winter, placing their consumption under strain, but it should hold up: households are likely to reduce their savings ratio in anticipation of an improvement in their purchasing power at the end of 2018. Their investment expenditure should accelerate significantly in 2017, but then slow down a little in mid-2018, in line with the stabilisation in sales of new houses observed in the last few months.*

*The French economy should continue to generate about 100,000 market-sector jobs per semester, while non-market-sector employment is likely to fall back once again, with the reduction in subsidised employment. Total employment should nonetheless progress more quickly than the labour force and the unemployment rate should fall slightly, to 9.4% over the forecasting period (–0.1 points year on year).*

*In the short term, this scenario is likely to be affected by political uncertainties on both sides of the Atlantic, as well as by the consumption behaviour of French households in the face of the temporary downturn in their purchasing power.* ■

# General outlook

## Global activity remained dynamic this summer

*Recovery confirmed in the emerging economies*

In the emerging economies, activity and imports have recovered significantly since the end of 2016. In China, growth stood at +1.7% in Q3 2017 and has been at a constant rate since the start of the year. In Brazil and Russia, activity has been buoyed by the recovery in consumption and would appear to have progressed since January, after two years of recession in 2015 and 2016. All in all, imports of the emerging economies rebounded this summer (+1.6% after –0.5% in Q2, up 6,8% year on year).

*American growth remained strong*

In Q3 2017, growth remained sustained in the advanced economies (+0.8% as in the previous quarter), notably in the United States (+0.8%) where household consumption only barely slowed down under the effects of the hurricanes in the south of the country. In Japan, activity remained dynamic (+0.6% after +0.7%), buoyed by Chinese demand and despite a one-off fall in household expenditure. In the United Kingdom, growth was slightly higher than expected (+0.4% after +0.3%), as households managed to increase their spending despite the fall in their purchasing power due to the sharp upswing in inflation. All in all, world trade accelerated (+1.0% after +0.6%).

*Growth reached +0.6% in the Eurozone this summer*

In the Eurozone, activity remained very dynamic in Q3 (+0.6% after +0.7% in Q2), a little more than forecast in *Conjoncture in France* in October. Activity accelerated notably in Germany (+0.8% after +0.6%) and in Italy (+0.4% after +0.3%). It slowed down slightly in Spain, although remaining very robust (+0.8% after +0.9%).

## In France, activity progressed by 0.5% in Q3, making +2.2% year on year

In France, activity progressed by 0.5% this summer (after +0.6%), as forecast in *Conjoncture in France* in October. Manufacturing output did not weaken (+0.8%), driven notably by the dynamic performance in aeronautics. On the demand side, household consumption accelerated (+0.6% after +0.3%), with the change in the dates of the summer sales automatically favouring purchases in textiles and household equipment in Q3. Investment remained steady, among both businesses (+1.1% after +1.2%) and households (+1.1% after +1.4%). Exports slowed down, however, due to a backlash after the spring's shipbuilding deliveries (+1.1% after +2.2%), while imports leapt upwards (+2.8% after +0.3%), driven by strong domestic demand and also by large-scale sourcing in chemicals and aeronautics. All in all, the contribution of foreign trade was significantly more negative than forecast (–0.6 points) and, symmetrically, that of inventory change was very positive (+0.5 points).

## The oil price and the euro rising slightly

*The Fed returns to normal, the ECB continues its QE*

Across the Atlantic, inflation stands at around 2% and the unemployment rate is at its lowest since 2001 (4.1% in October 2017): the Federal Reserve (Fed) therefore raised its main base rate to 1.25% in June and is likely to keep on tightening its monetary policy through to June 2018. It also announced a reduction in its balance sheet in October 2017, and will be gradually accentuating that move over the coming year. Conversely, the ECB is continuing its purchases of public securities, although it will be reducing the rate to €30 billion a month from January 2018 (instead of €60 billion previously).

*A rise in the euro this summer*

In this context, interest rates remain very low in the Eurozone compared to the United States. For France, the 10-year sovereign yield has been stable on the whole at around 0.7% since the summer, compared to 2.3% for US securities. Despite this, due to the improved outlook in Europe and uncertainties as to the scale of the fiscal stimulus in the US, the euro rose significantly this summer, levelling out at about $1.17 at the end of the year, compared to $1.04 one year earlier.

*The OPEC output reduction agreement is being complied with, the price of Brent is rising a little*

The agreement to reduce the output of the OPEC countries and Russia has been complied with on the whole since the start of the year, restoring balance to the physical market, or even a slight deficit after two years of surpluses. With the announcement of its renewal, oil prices rose at the end of the summer, levelling out at around $60. At this price, however, unconventional oil production in the US should show a marked upswing through to June 2018, which should contain any upward pressures, especially as stocks, although down slightly, remain particularly high.

## World expansion to continue through to mid-2018

*The emerging economies are recovering despite an expected slowdown in China*

In Brazil, Russia and India, the fall in inflation as exchange rates have stabilised is working through quickly into consumption. The business climate is improving, although it is still below its average levels, and activity is set to accelerate through to mid-2018 after showing a recovery in 2017, pulling imports in its wake. In China, after a spectacular recovery at the end of 2016 and beginning of 2017, demand seems to be easing: investment is slowing anew, in particular in real estate. All in all, it is likely that the imports of the emerging economies will barely weaken at all, growing at a rate of around +1.5% per quarter, although that is still below the average rate from 1990 to 2011 (+2.3%).

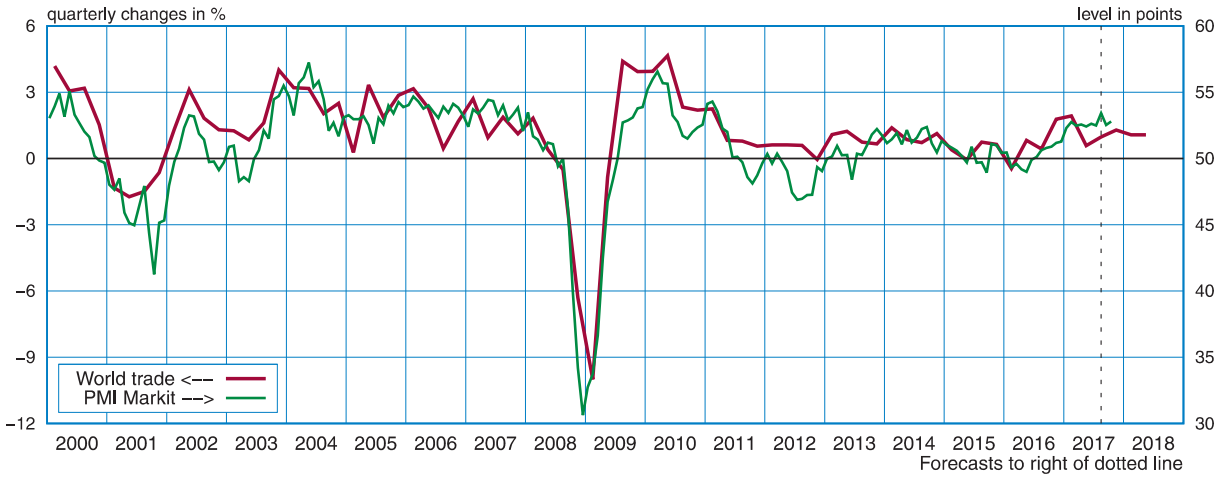
*The United States waiting for a tax stimulus*

In the advanced economies, the business climate remains very positive, notably in the United States where it has reached the highest levels in 12 years in both services and industry. US growth should therefore remain strong through to mid-2018 (+0.8% then +0.6% per quarter). American households are likely to profit from the acceleration in wages, encouraged by an unemployment rate at its lowest in 17 years and the promised tax cuts. In Japan, activity should slow down yet remain solid (+0.2% to +0.3%): due to the expected slowdown in China, the contribution of foreign trade is likely to weaken, but consumption should pick up the slack. In the United Kingdom, however, where inflation has reached a high of 3%, activity should progress significantly more slowly (+0.4% at the end of 2017 then +0.3% per quarter) than on average between 2013 and 2016: households are likely to be forced to adjust their expenditure to the past fall in their purchasing power and the uncertainty surrounding the terms of the country's departure from the European Union is likely to hold back investment.

*World trade showing no sign of weakness and likely to remain very dynamic through to mid-2018*

After slowing sharply in 2015 (+2.3%), growth in world trade was just +1.6% in 2016, its weakest since 2009, due to sluggish imports in the US and emerging economies. In 2017, with a growth rate close to that in 2011, the recovery in world trade should be very strong (+5.0%). Surveys of purchasing managers around the world about their foreign orders remain at levels not seen since 2011 (*Graph 1*) and world trade should barely weaken through to mid-2018 (+1.3% at the end of 2017 then +1.1% per quarter in early 2018). All in all, the growth overhang in world trade for 2018 should stand at +3.5% by mid-year.

**1 - World trade should barely weaken through to mid-2018**




*Sources: DG Trésor, PMI Markit, INSEE calculations*

# General outlook

## At the end of 2017, the business climate in the Eurozone soars to its highest in 17 years

*In the Eurozone, the business climate continues to progress, with tensions appearing on the supply side*

In the Eurozone, the business climate has continued to progress since the summer, reaching its highest since 2001 (*Graph 2*). This improvement is common to all the Eurozone countries and is being driven more particularly by industry and construction. Supply-side tensions are appearing in European production systems, particularly in Germany. The resurgence of political uncertainties in Spain, Germany and Italy does not appear to be affecting the morale of entrepreneurs. Activity should therefore remain very robust through to mid-2018 (+0.6% at the end of 2017, then +0.5% per quarter).

*Investment to remain steady*

With growing supply-side tensions, equipment investment should remain strong through to mid-2018, especially as the savings of European companies remain at very high levels and external financing terms are still favourable. In construction, building permits remain on an upward trend, although easing slightly: investment is likely to slow a little through to mid-2018 but continues to buoy up activity.

*European households to continue reducing their precautionary savings slightly*

Employment should remain dynamic with unemployment continuing to fall and wages firming up in all countries due to the improvement in the labour market and the past rise in inflation. Driven by energy prices, inflation rose to +1.4% year on year in Q3 2017, compared to +0.7% at the end of 2016, and should reach +1.6% in mid-2018. This rise in prices should continue to erode gains in purchasing power slightly but household expenditure is unlikely to weaken (+0.5% per quarter), as the improving labour market makes it easier to dip into precautionary savings.

*In early 2018, relatively homogenous growth through the Eurozone*

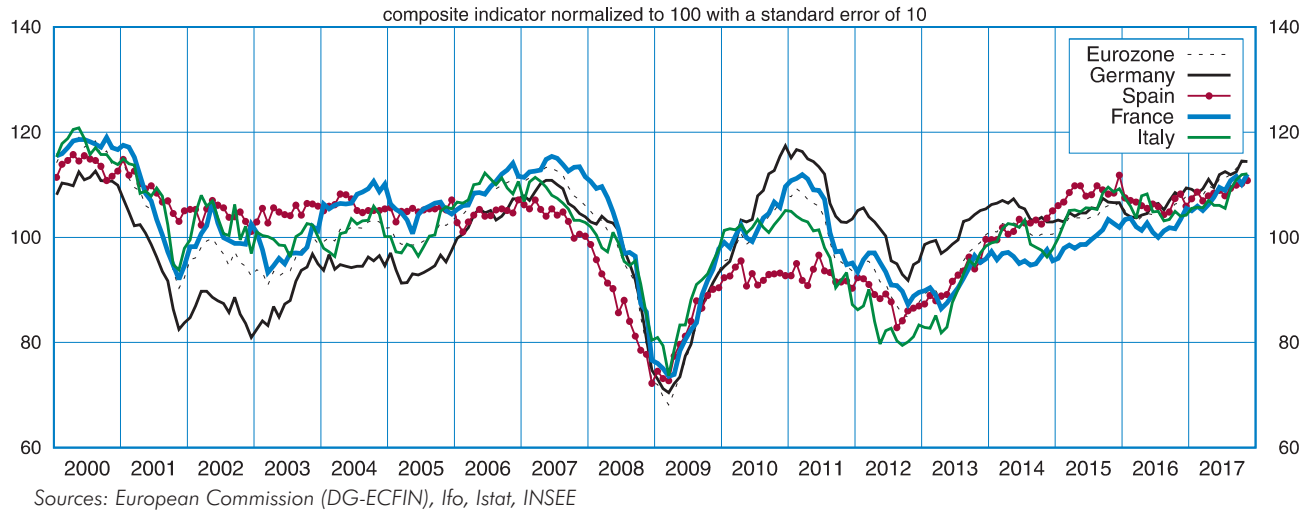
Growth will benefit all the European countries. Activity should remain very steady in Germany, where the growth overhang should be +2.0% by mid-year, after +2.6% growth in 2017. Activity should barely slow down in Spain. In Italy and France, growth should be close to the European average.

## Foreign trade to stop weighing down on French activity through to mid-2018

*French exports hit by jolts in the aeronautics and shipbuilding sector*

French exports slowed down in Q3 (+1.1% after +2.2%) in a backlash effect after the sale of an ocean liner in the spring, masking the good performance of other sales. In Q4, exports should leap to +1.8%: civilian aeronautics sales should make up the ground lost since the start of the year and agricultural exports should remain very vigorous due to the rebound in the cereals harvest. In H1 2018, despite dynamic demand for French products, manufacturing exports should slow down: aeronautics sales should return to normal while other sectors suffer a little from the rise in the euro.

**2 - The Eurozone business climate is at its highest level since 2001**




*Sources: European Commission (DG-ECFIN), Ifo, Istat, INSEE*

Finally, tourism should continue to recover through to mid-2018, gradually returning to its level before the terror attacks of 2015 and 2016. All in all, the growth overhang in exports for 2018 should stand at +3.4% by mid-year, exceeding growth in the whole of 2017.

*Imports to ease and foreign trade to stop weighing down on activity*

In Q4 2017, imports should be at a standstill (+0.2% after +2.8%), in reaction to the exceptional purchases over the summer, notably in chemicals and aeronautics. In early 2018, they should increase again steadily to serve domestic demand (+0.8% per quarter). All in all, the contribution of foreign trade to the growth overhang should be neutral in mid-2018, after five years of negative contributions. This improvement should be driven by agricultural products, tourism and energy, while the deficit in manufactured goods should continue to widen slightly in early 2018, at its lowest since 2011.

## In France, businesses remain resolutely optimistic

*The business climate in France at its highest in almost 10 years*

From October 2015 to November 2016, the business climate in France remained almost stable, a little above its long-term average. Since the end of 2016, it has progressed continuously and reached 111 in November, its highest since early 2008 (*Graph 3*). The improvement is common to all sectors. In industry notably, the balances for general activity prospects have reached levels not seen in 17 years. Manufacturing production is therefore set to accelerate strongly at the end of 2017 (+1.5%) and then remain solid in H1 2018 (+0.6% then +0.3%): by mid-year, its growth overhang for 2018 (+2.5%) should already exceed the growth posted in the whole of 2017 (+1.9%).

*Market-sector services to continue benefiting from the return of tourists*

Production of market-sector services should remain very dynamic through to mid-2018, at between +0.6% and +0.8% per quarter. In addition to the strength of industrial production and corporate investment, the transport and accommodation and food services sectors should continue to benefit from the return of foreign tourists: after falling by 6.9% in 2016, their expenditure should increase by 5.2% in 2017 and their growth overhang for 2018 should stand at +3.0% by mid-year.

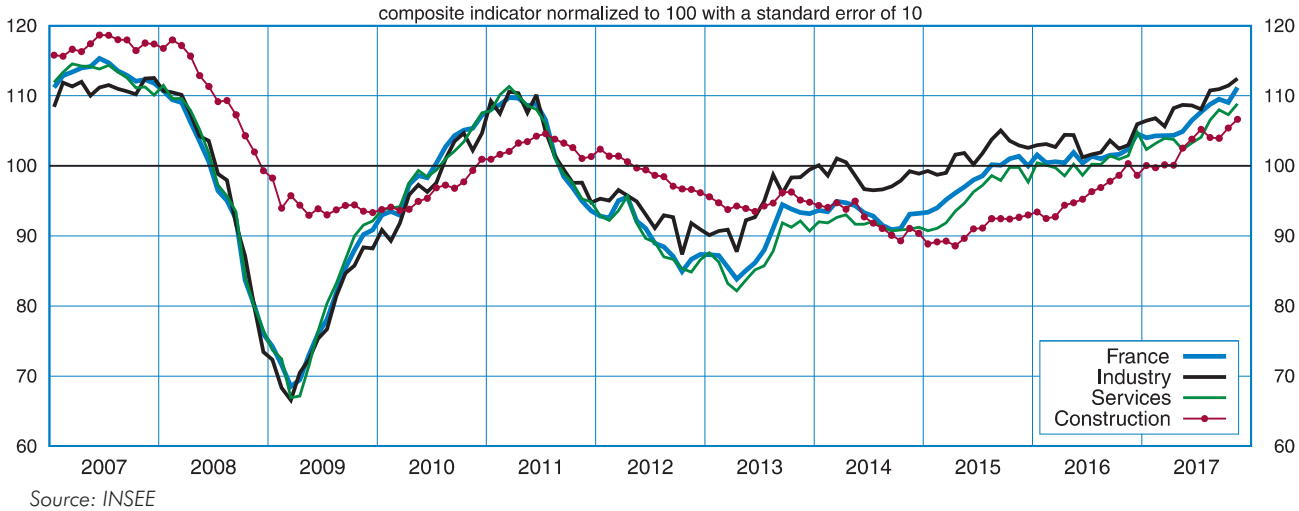
*Construction to slow slightly*

After falling sharply in 2014 (–1.9%) then again in 2015 (–1.5%), activity in construction stopped shrinking in 2016 (+0.1%) and should accelerate significantly in 2017 (+2.6%). It is set to remain very dynamic at the end of 2017 and in early 2018, and then slow a little in mid-2018 as the stabilisation in sales of new homes since the start of 2017 works through.

*French growth to reach 1.9% in 2017*

All in all, GDP should continue to grow steadily: +0.6% at the end of 2017, +0.5% at the beginning of 2018, then +0.4% in Q2 2018. Annual growth should come to +1.9% in 2017, its highest since 2011. The growth overhang for 2018 should stand at +1.7% by mid-year, which is more than one year previously.

**3 - In France the business climate is taking off and has returned to its pre-crisis level**




*Source: INSEE*

## Private employment to progress steadily but the fall in unemployment likely to be limited by the reduction in subsidised employment

*The French economy should continue to generate about 100,000 market-sector jobs per semester*

Market-sector payroll employment slowed down in Q3 (+46,000 after +77,000 in the spring), mainly in reaction to the end of the hiring premium for SMEs on 30 June. After a dip this summer, workforce prospects have progressed strongly in the business tendency surveys and the employment climate stood at 109 in November. Market-sector employment is set to progress in Q4 2017 (+60,000) and increase by a further 100,000 in H1 2018, driven by the improvement in activity. The measures to reduce labour costs are unlikely to continue increasing the employment intensity of growth, as the positive effects of the Tax Credit for Encouraging Competitiveness and Jobs (CICE) and the Responsibility and Solidarity Pact (PRS) are offset by the negative effects of the termination of the hiring premium for SMEs. All in all, after +215,000 jobs in 2016, market-sector payroll employment should progress by 242,000 in 2017 and barely weaken in early 2018.

*Non-market-sector employment to continue falling due to subsidised employment*

In the non-market sectors, employment should fall significantly in H2 2017 (–38,000 after +27,000 in H1), due to the reduction in the number of subsidised jobs. In H1 2018, the cuts in subsidised employment are set to continue and non-market-sector employment should continue to fall (–32,000). The rest of employment should remain stable, with the result that total employment should slow down significantly in H2 2017, with net job creations of 71,000 after +163,000 in H1. In H1 2018, 72,000 jobs should be created (*Graph 4*).

*Unemployment to fall slightly through to mid-2018*

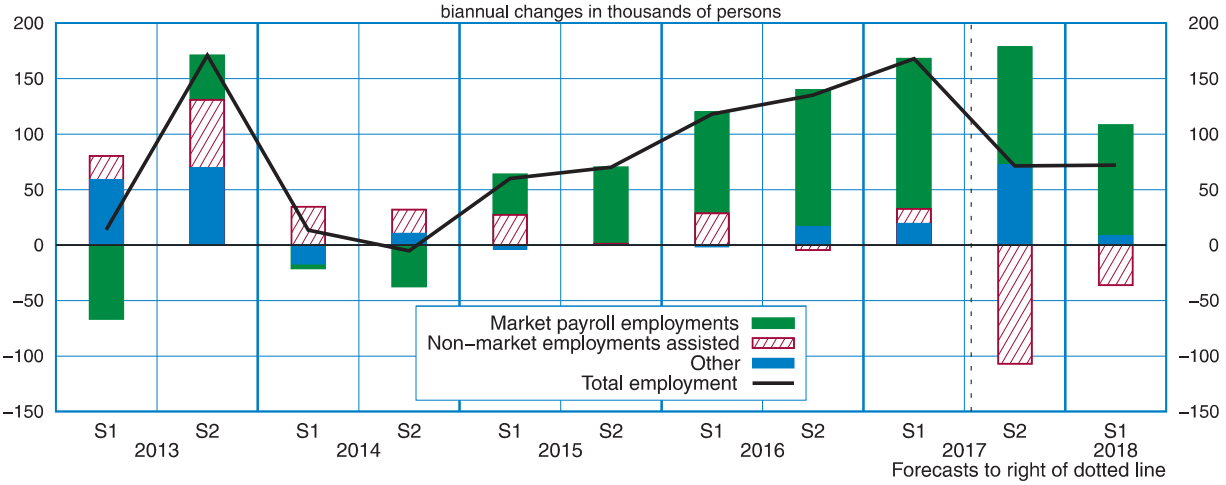
After a sharp fall in H1 2017, the employment survey indicated an unexpected rise in the unemployment rate this summer: +0.2 points over the quarter to 9.7% of the French labour force. That is still down 0.3 points year on year. Over the following quarters, the expected rise in employment should once again exceed the variation in the labour force, and the number of unemployed should fall a little: the unemployment rate should stand at 9.4% in mid-2018, down 0.1 points year on year.

## Purchasing power at a standstill in early 2018 due to inflation and the taxation calendar

*Inflation to increase again*

Since the end of 2016, inflation has increased significantly, reaching +1.2% year on year in November 2017, compared to +0.5% one year earlier. This upturn is largely due to rising oil prices. Through to mid-2018, headline inflation should continue to rise to +1.6% in June. On the one hand, tax on petroleum products and tobacco is set to increase. On the other, core inflation should rise from +0.5% in October 2017 to +1.0% in June 2018, as service-sector companies gradually pass on the past rise in wages.

**4 - Market-sector employment should barely weaken but the fall in the number of subsidised employment contracts is likely weigh down on total employment**




Source: INSEE

*Nominal wages to remain strong*

In 2017, per capita nominal wages should accelerate significantly (+2.1% after +1.2%), due especially to the upswing in inflation and the fall in unemployment. In early 2018, wages should remain dynamic in the market sector (+1.2% in H1), against a backdrop of sharp increases in recruitment difficulties.

*The taxation calendar to restrain purchasing power temporarily*

In 2017, earned income should accelerate clearly with the combined progressions in both wages and employment, partly offsetting the marked upswing in inflation (*Graph 5*). All in all, purchasing power should progress by 1.6%, after +1.8% in 2016. In 2018, a large number of tax measures are to be introduced: the Generalised Social Contribution (CSG) is to be increased and social contributions are to be reduced for those in work, while wealth tax and housing tax are to be cut. The measures with a negative impact on purchasing power (CSG, indirect taxes) should be concentrated at the start of the year, however, while those with a positive impact (housing tax, part of the cut in social contributions) will only come at the end of the year. All in all, despite dynamic earned income, purchasing power is likely to be at a standstill in early 2018 and its growth overhang only +0.6% in mid-year.

## Household consumption under strain but likely to hold up

*Household consumption to remain moderate in early 2018*

Household consumption accelerated this summer (+0.6% after +0.3%), due to the change in the date of the summer sales, and is likely to slow down in reaction in the autumn (+0.3%). Over 2017 as a whole, consumption should slow more significantly than purchasing power (+1.2% after +2.1%) with the backlash after the one-off events that boosted it in 2016 (European football championship, change in the television broadcasting standard, effect of temperatures on energy spending). Faced with the slowdown in their purchasing power, households are likely to limit the rise in their spending in H1 2018 (+0.3% per quarter) even if they do anticipate the expected improvement at the end of the year due to the taxation calendar. All in all, the growth overhang in consumption should be +1.1% by mid-2018, which is roughly equivalent to the growth in the whole of 2017.

*The savings ratio to fall sharply by a smoothing effect*

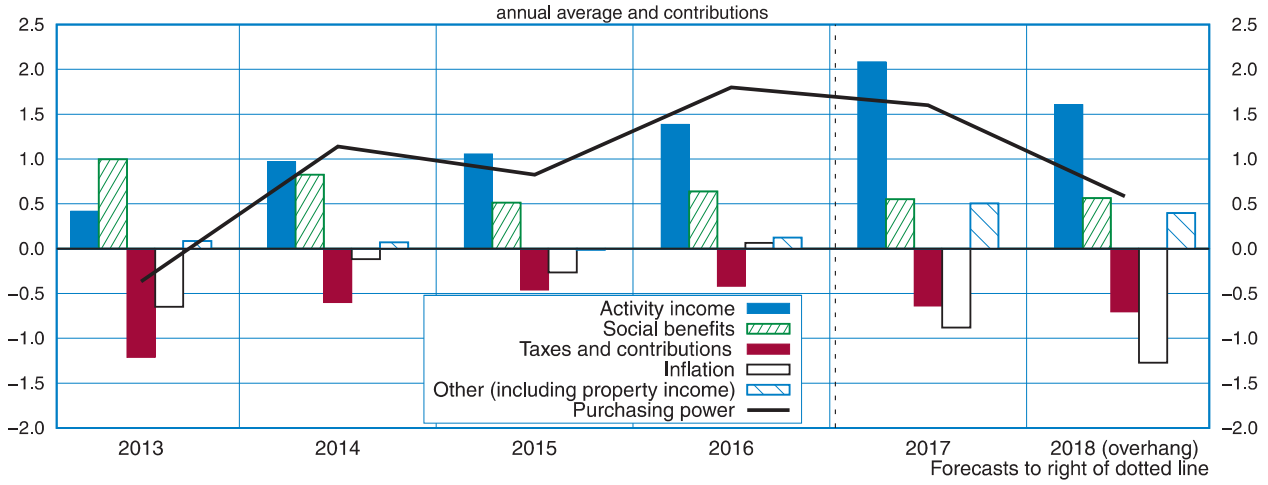
Due to this consumption smoothing behaviour, the savings ratio is set to fall through to mid-2018, slipping from 14.4% in Q3 2017 to 13.9% in Q2 2018. This fall should also be facilitated by the improvement in the labour market which encourages households to reduce their precautionary savings.

## Investment to remain dynamic

*Corporate expenditure unlikely to weaken*

Since the beginning of the year, corporate investment has progressed sharply, even holding up through the termination of the one-off additional depreciation measure in April. Through to mid-2018, the financial situation of companies should improve further with the rise in the rate of the Tax Credit for Encouraging Competitiveness and Jobs (CICE) from 6% to 7%. Faced with supply-side tensions

**5 - Purchasing power is expected to stall in early 2018 due to inflation and calendar effects**




Source: INSEE

and growing demand, companies should continue to increase their production capacities through to mid-2018 (+0.9% to +1.2% per quarter). The growth overhang in investment should reach +3.7% by mid-year, after +4.4% in 2017.

*After an exceptional progression in 2017, household investment set to lose a little momentum*

Household investment has recovered quickly over the past two years, passing on the past upswing in sales of new homes. It should therefore reach 5.2% in 2017, a growth rate not seen since 1999. However, sales of new homes have levelled out since the start of the year and household investment should slow down gradually through to mid-2018 while remaining solid: its growth overhang should stand at +2.9% in mid-year.

*Public investment to rebound significantly through to mid-2018*

Public investment should fall back again in 2017, for the fifth consecutive year. In civil engineering, however, companies are reporting a significant upswing in their public-sector order books, in particular as spending on the *Grand Paris Express* ramps up. Expenditure on equipment is also likely to rebound: all in all, public investment should return to growth in 2018 with a mid-year growth overhang of +2.3%.

## Uncertainties: political uncertainties in the United States and Europe and consumption behaviour in France

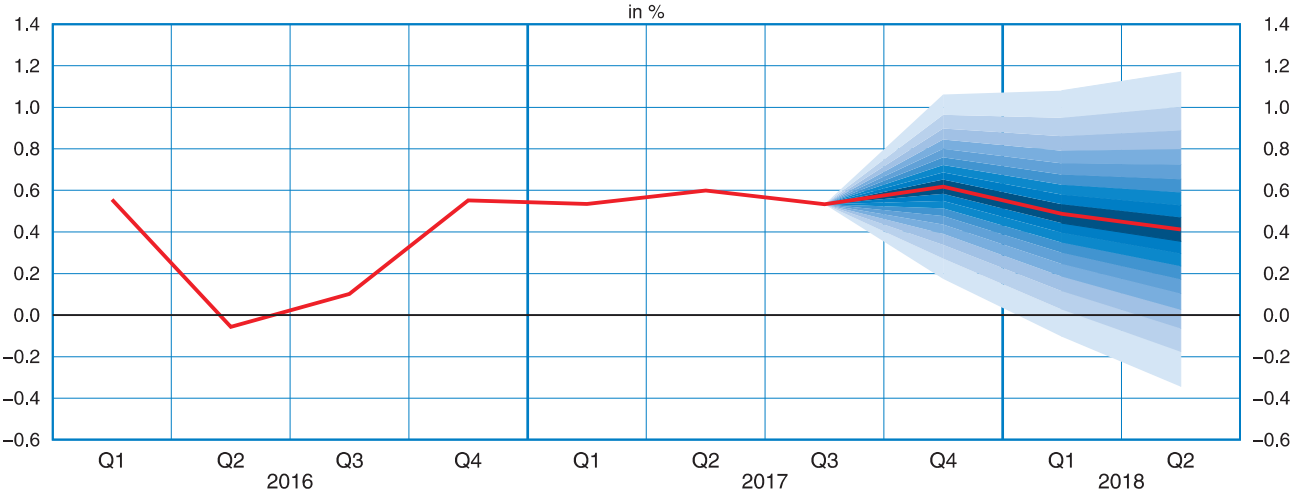
*The scale of the US stimulus and the resurgence of political uncertainties in Europe*

In the United States, the details of the tax stimulus are not yet known in full, as the government and Congress are still in discussion, even though the Senate has passed a text. The effect on activity and therefore on US imports will depend on the scale of that stimulus. In Europe, political uncertainties seem to be making a resurgence at the end of the year, with Catalan demands in Spain, no parliamentary majority in Germany, Italian general elections scheduled for spring 2018 and difficulties coming to an agreement on the terms of Brexit. At present, the European outlook seems not to be reacting to these political uncertainties, but depending on how they turn out, the risks could hinder the current recovery.

*Consumption behaviour of French households*

In France, household purchasing power is likely to be at a standstill in early 2018, notably due to the taxation calendar, but consumption should hold up. The measures that have been implemented make significant redistributions between households and their effects on savings behaviour are difficult to determine. The fall in the savings ratio could therefore be more or less pronounced than that used in this forecast, with a significant effect on activity. ■

**6 - Fan chart for *Conjoncture in France***




How to read it: the fan chart plots 90% of the likely scenarios around the baseline forecast (red line). The first and darkest band covers the likeliest scenarios around the baseline, which have a combined probability of 10%. The second band, which is a shade lighter, comprises two sub-bands just above and just below the central band. It contains the next most likely scenarios, raising the total probability of the first two bands to 20%. We can repeat the process, moving from the centre outwards and from the darkest band to the lightest, up to a 90% probability (*see INSEE Conjoncture in France* for June 2008, pages 15 to 18). It can therefore be estimated that the first estimate that will be published in the quarterly accounts for Q4 2017 has a 50% chance of being between +0.4% and +0.8%.

*Source: INSEE*

## Key figures: France and its international environment

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **International environment** | | | | | | | | | | | | | |
| Advanced economy GDP | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.7 | 0.8 | 0.6 | 0.5 | 0.5 | 1.6 | 2.3 | 1.9 |
| Eurozone GDP[1] | 0.5 | 0.3 | 0.4 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 1.7 | 2.4 | 1.8 |
| Barrel of Brent oil (in dollars) | 34 | 46 | 47 | 51 | 55 | 51 | 52 | 60 | 60 | 60 | 44 | 54 | 60 |
| Euro-dollar exchange rate | 1.10 | 1.13 | 1.12 | 1.08 | 1.06 | 1.10 | 1.17 | 1.17 | 1.17 | 1.17 | 1.11 | 1.13 | 1.17 |
| World demand for French products | 0.0 | 1.4 | 0.2 | 1.8 | 1.5 | 0.9 | 1.0 | 1.2 | 1.0 | 1.0 | 2.7 | 4.8 | 3.3 |
| **France - supply and uses** | | | | | | | | | | | | | |
| **GDP** | **0.6** | **–0.1** | **0.1** | **0.6** | **0.5** | **0.6** | **0.5** | **0.6** | **0.5** | **0.4** | **1.1** | **1.9** | **1.7** |
| Imports | 0.5 | –1.0 | 2.6 | 0.9 | 1.2 | 0.3 | 2.8 | 0.2 | 0.8 | 0.8 | 4.2 | 4.6 | 3.1 |
| Household consumption | 1.3 | 0.4 | –0.2 | 0.7 | 0.1 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 2.1 | 1.2 | 1.1 |
| GG and NPISHs consumption | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.2 | 0.4 | 0.3 | 1.2 | 1.5 | 1.1 |
| Total GFCF | 1.0 | 0.1 | 0.2 | 0.6 | 1.5 | 1.1 | 0.9 | 1.1 | 1.0 | 0.8 | 2.7 | 3.7 | 3.2 |
| *of which: NFEs* | *1.6* | *–0.2* | *0.0* | *0.7* | *2.1* | *1.2* | *1.1* | *1.2* | *1.1* | *0.9* | *3.4* | *4.4* | *3.7* |
| *Households* | *0.7* | *0.7* | *1.0* | *1.3* | *1.6* | *1.4* | *1.1* | *1.0* | *0.8* | *0.6* | *2.4* | *5.2* | *2.9* |
| *General government* | *–0.8* | *0.2* | *–0.5* | *–0.7* | *–0.8* | *0.2* | *–0.2* | *0.7* | *1.1* | *0.9* | *–0.1* | *–1.2* | *2.3* |
| Exports | 0.5 | –0.2 | 0.8 | 1.3 | –0.7 | 2.2 | 1.1 | 1.8 | 0.7 | 0.2 | 1.9 | 3.3 | 3.4 |
| Contributions (in point) | | | | | | | | | | | | | |
| Domestic demand excluding changes in inventories[2] | 1.0 | 0.3 | 0.0 | 0.6 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 2.0 | 1.8 | 1.6 |
| Changes in inventories[2] | –0.4 | –0.6 | 0.7 | –0.2 | 0.7 | –0.5 | 0.5 | –0.3 | 0.0 | 0.2 | –0.1 | 0.5 | 0.1 |
| Net foreign trade | 0.0 | 0.3 | –0.6 | 0.1 | –0.6 | 0.5 | –0.6 | 0.5 | 0.0 | –0.2 | –0.8 | –0.5 | 0.0 |
| **France - situation of households** | | | | | | | | | | | | | |
| Total employment | 59 | 59 | 79 | 56 | 79 | 89 | 45 | 26 | 37 | 35 | 253 | 239 | 72 |
| Non-farm market sector employment | 51 | 40 | 55 | 68 | 59 | 77 | 46 | 60 | 55 | 45 | 215 | 242 | 100 |
| ILO unemployment rate France[3] | 10.2 | 10.0 | 10.0 | 10.0 | 9.6 | 9.5 | 9.7 | 9.5 | 9.5 | 9.4 | 10.0 | 9.5 | 9.4 |
| Consumer price index[4] | –0.1 | 0.2 | 0.4 | 0.6 | 1.1 | 0.7 | 1.0 | 1.2 | 1.4 | 1.6 | 0.2 | 1.0 | - |
| Core inflation[4] | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 0.6 | 0.5 | - |
| Household purchasing power | 0.5 | 0.2 | 0.7 | 0.2 | 0.2 | 0.7 | 0.5 | 0.1 | –0.3 | 0.4 | 1.8 | 1.6 | 0.6 |

Forecast

1. Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015
2. Changes in inventories include acquisitions net of sales of valuable
3. For annual data, unemployment rate is that of the last quarter of the year
4. Year-on-year on the last month of the quarter and annual averages

GDP: gross domestic product
GFCF: gross fixed capital formation
GG: general government
NFEs: non-financial enterprises
NPISHs: non-profit institutions serving households
ILO unemployment: unemployment as defined by the International Labour Organisation

How to read it: the volumes are calculated at the previous year's chain-linked prices, seasonally and working-day adjusted, quarterly and annual averages, as a %.

*Source: INSEE*

# Special Analysis

# Is the increase in French firms' indebtedness a cause for concern?

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*Since 2009, the indebtedness of non-financial corporations in France has presented a singularly different dynamic to the rest of Europe. It increased by 16 percentage points of GDP between 2009 and 2016 whereas it remained more or less stable across the Eurozone. In 2016, enterprises' debt in France reached 90 percentage points of GDP, a level higher than that of its main neighbours (Germany, Italy or Spain). This dynamic is occurring in a context of exceptionally low interest rates, although this also applies in the other Eurozone countries.*

*The debt profile of non-financial corporations since 2009 seems to reflect a more dynamic investment record in France than in the other main European countries, while saving has only increased there very recently compared to the latter. In addition, the indebtedness of non-financial corporations has been accompanied by a sharp rise in the liquid assets they hold. A study carried out at microeconomic level suggests that this phenomenon, which is specific to France, could in fact be due mainly to the same companies, which take on debt whilst accumulating liquid assets at the same time. These are mostly large corporations, operating in the manufacturing sector and representing the parent companies in groups.*

*Net of liquid assets and assets held in a broader sense, the debt level appears to be relatively contained in French companies. This finding, however, has no bearing on their exposure to a sudden rise in interest rates or a fall in the price of assets.*

## Box 1 - Data used

### Macroeconomic analysis

Different measurements of the indebtedness of non-financial corporations (referred to in the report as "enterprises" for reasons of facility) can be used:
- that of non-consolidated national accounting, which aggregates the debts in enterprises' liabilities;
- that of consolidated national accounting, which starts from the foregoing and deducts loans between domestic enterprises;
- that of the central banks which starts from banking data to construct the consolidated indebtedness of enterprises.

For the four countries compared in this report, the three definitions differ in level, but their variations are very similar. In the three cases, France stands out by its sharp increase in the indebtedness of non-financial corporations, unlike the other major countries in the Eurozone. Furthermore, the comparison of data on levels can pose problems because the producers of data differ in the scope chosen as well as the methods of aggregation (Fournier, 2017). In this report, we look only at the variation in indebtedness (even if the levels are represented for the sake of convenience) and we use the consolidated national accounting definition which allows a precise accounting breakdown of the contributions to indebtedness based on the Overall Economic Account (TEE).

Indebtedness until 2016 is therefore calculated with the national accounting data. Enterprises' liabilities can be found in the annual financial balance sheets of the institutional sectors available on Eurostat. The values are taken consolidated. Indebtedness is defined as the sum of debt securities (PF3) and loans (PF4) in the balance sheet. The data are annual, for the graphs they are smoothed and then the curves obtained are extended by applying the variations in the enterprise indebtedness data of the Banque de France, which provide information on the first half of 2017.

For the Eurozone, the indebtedness of Ireland is taken out as this country saw a break in 2015.

In order to create this breakdown, non-financial operations in the national accounts allow the self-financing capacity/capital requirement to be obtained (B9NF). The Revaluation and other changes in volume account is then necessary to be able to make the link with the variation in assets and liabilities.

### Microeconomic analysis

The microeconomic analysis of the indebtedness of non-financial corporations rests on the exploitation of INSEE's enterprise data, through the FARE base (results from the ESANE business statistics system) matched with Sirus (System of identification in the directory of statistical units). The bases for the period 2010-2015 are used.

The working base was built by using the legal units registered as belonging to institutional sector S11 (non-financial enterprises, NFCs) and excluding those whose main activity sector is finance (sector K). In addition, the legal units for which the financial debt or workforce did not show any strictly positive values over the period were excluded (the two operations leading to about 300,000 exclusions a year). For each legal unit showing a long-term financial debt that is sometimes zero and sometimes clearly positive over the period, the zero value entered for the debt was considered as appearing instead of missing values and corrected. The observation was imputed by assuming it to be equal to the average of the non-zero values observed over the period for the enterprise concerned.

Furthermore, the exercise of aggregating certain variables is limited by the ability to consolidate the accounts of legal units. Indeed, if value added or physical workforce variables can be added together, for balance sheet variables such as equity this cannot be done directly, because the capital of a legal unit may be held by another legal unit in the database. Nevertheless, this limit seems to be minimised by the decision to focus the study on long-term financial debt, which mainly consists of bank debt. ■

# Is the increase in French firms' indebtedness a cause for concern?

## The indebtedness of French enterprises is growing faster than that of their European counterparts

*The debt levels of French non-financial corporations have been increasing since 2009*

Measured relative to GDP, the indebtedness of non-financial corporations (NFCs) increased in the Eurozone until the beginning of 2009, exceeding 80 percentage points of GDP (*Graph 1*), before falling afterwards. This has been the case in particular in Spain, where the debt level of NFCs was over 110 percentage points of GDP in 2009 but then fell quickly to 82 points at the beginning of 2017, its 2005 level. In Italy corporate debt has been falling sharply for four years.

In Germany,[1] debt reduction has been ongoing constantly since the beginning of the 2000s: in 2016 German enterprises were substantially less indebted than those of other European countries, their debt representing something of the order of 30 percentage points of German GDP. France stands out by its rapid and steady increase in the indebtedness of NFCs (+16.0 percentage points of GDP between 2009 and 2016, the year when it reached 89.7 percentage points).

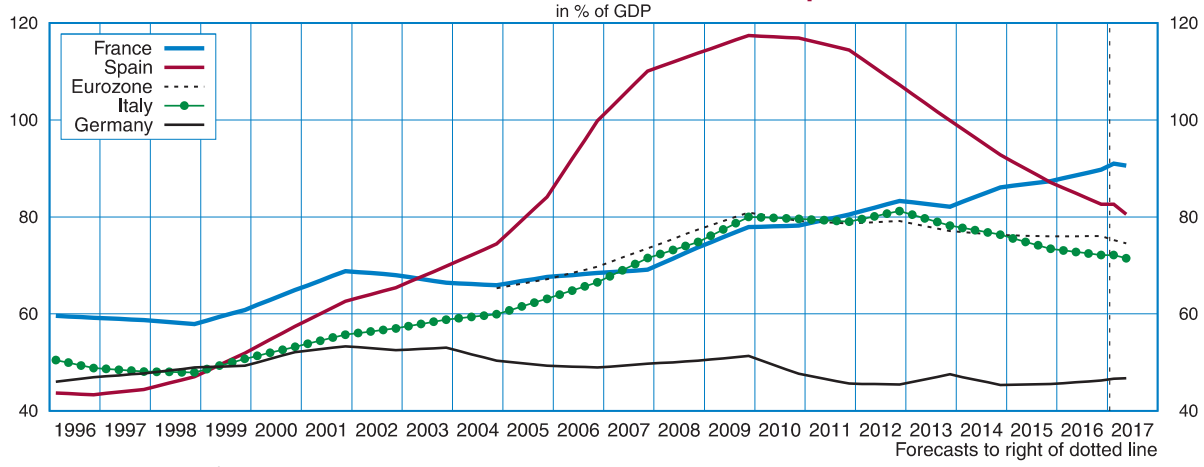
The make-up of this debt has also changed. Whereas between 2000 and 2009, the increase was mainly driven by bank indebtedness, the opposite has been the case since 2009: bond debt contributed 14.5 of the 16.0 GDP points of the increase in the indebtedness of NFCs, suggesting that this trend is above all accounted for by large corporations.

*This increase in indebtedness in France has occurred in a low-interest environment common to all the countries in the zone*

The interest rates applied to enterprises have fallen overall since 2009 (*Graph 2*). At the end of 2008 and the beginning of 2009, the ECB substantially lowered its base rate, from 4.25% in October 2008 to 1% in May 2009. This reduction was soon passed on to corporate lending rates, which fell in the Eurozone by 3 percentage points on average over the period. They then increased again slightly at the time of the sovereign debt crisis, particularly in Italy and Spain, before falling once again and converging with the implementation of quantitative easing (QE) from 2015 onwards. At the beginning of 2017, the rates on new loans to enterprises stabilised at just below 2% (compared to about 6% in 2008) in all the countries in the Eurozone. This drop in rates led to a decrease in the interest charges paid by companies.

1. The comparison of enterprise indebtedness data for France and Germany raises certain difficulties. The inclusion of holding companies in the financial sector is more common in Germany than in France; likewise, differences in the scope of groups lead to consolidated data that should only be compared with caution (Fournier, 2017). Here we will content ourselves with examining recent differences in dynamics without justifying any differences in level.

**1 - Indebtedness of non-financial enterprises**




*Sources: Eurostat, Banque de France*

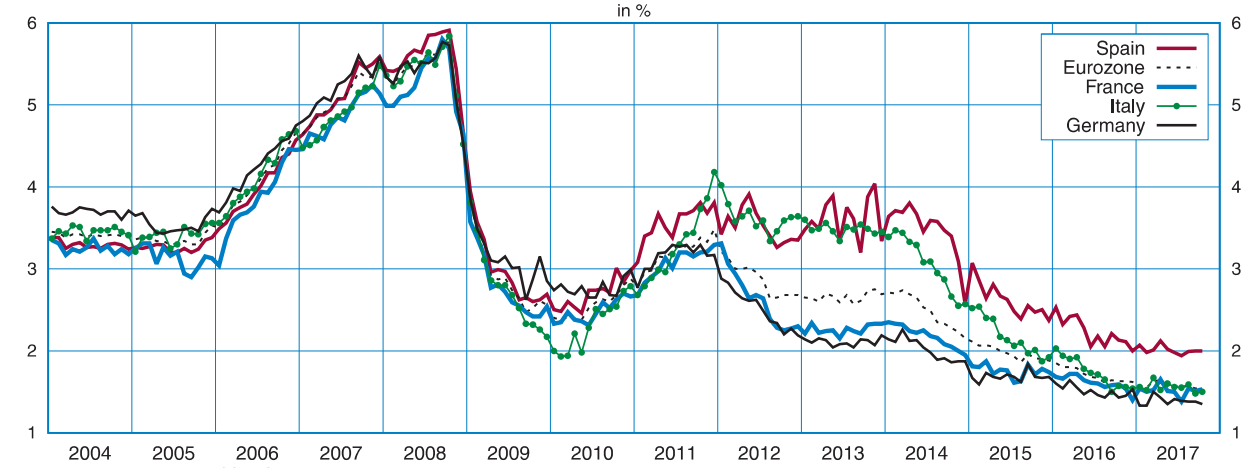
# Is the increase in French firms' indebtedness a cause for concern?

*An accounting breakdown of the changes in indebtedness*

From an accounting point of view, the variation in corporate debt expressed in percentage points of GDP can be broken down into several items: the investment rate, the savings ratio, variations in the stock of financial assets, in the amount of equity and, finally, a term proportional to nominal GDP growth (*Box 2*).

In France, corporate indebtedness plainly gathered speed after the crisis (+2.0 points per year on average from 2009 to 2016 compared to +1.0 point on average per year between 2000 and 2007), whereas it has fallen in its main European partner countries. The accounting breakdown highlights several factors that have contributed to this difference (*Table 1*): the investment rate increased in France between the two periods whereas it fell everywhere else; conversely, the corporate savings ratio collapsed in France whereas it increased in all the other countries; finally, on the asset acquisition and issuance side, the breakdown reveals a highly atypical accumulation of liquid assets in France.

**2 - Rate of new loans to enterprises**




*Source: European central bank*

**Table 1 - Accounting breakdown of the variations in the indebtedness of European enterprises**

*in GDP points*

| | Annual average in GDP points | Variation of the debt =(1)+(2) +...+(8) | Investment (1) | Savings (opposed sign) (2) | Variation of liquid assets (3) | Variations of securities and loans held (4) | Variation of shares held with adjustment (5) | Variations of shares liabilities (opposed sign) (6) | GDP effect (7) | Other (8) |
|---|---|---|---|---|---|---|---|---|---|---|
| France | Between 2000 and 2007 | 1.0 | 10.9 | –9.7 | 1.0 | 2.6 | 5.1 | –6.2 | –2.6 | 0.0 |
| | Between 2009 and 2016 | 2.0 | 11.5 | –9.1 | 1.8 | 1.1 | 4.8 | –6.4 | –1.1 | –0.5 |
| Italy | Between 2000 and 2007 | 2.6 | 10.5 | –8.1 | 0.9 | 0.4 | 7.1 | –6.8 | –2.2 | 0.7 |
| | Between 2009 and 2016 | –0.3 | 9.1 | –8.2 | 0.8 | 0.0 | –0.7 | –0.6 | –0.3 | –0.6 |
| Spain | Between 2000 and 2007 | 7.3 | 15.4 | –9.6 | 2.1 | 2.1 | 11.3 | –8.8 | –5.1 | –0.1 |
| | Between 2009 and 2016 | –3.9 | 13.0 | –15.0 | 0.0 | 0.2 | 1.8 | –4.0 | 0.2 | 0.0 |
| Germany | Between 2000 and 2007 | 0.1 | 11.7 | –11.0 | 0.6 | 0.6 | 3.3 | –2.0 | –1.2 | –2.0 |
| | Between 2009 and 2016 | –0.5 | 11.3 | –12.8 | 0.7 | –0.4 | 6.9 | –5.2 | –1.2 | 0.2 |

How to read it: between 2009 and 2016, the debt of non-financial corporations increased on average by 2.0 percentage points of GDP a year. This variation in indebtedness breaks down from an accounting point of view into eight items such as investment in percentage points of GDP (11.5), savings counted negatively (–9.1) as well as variation in liquid assets held (+1.8) etc.

As stocks of shares are valuation-sensitive, the major stock market upheaval of the year 2008 makes that year so exceptional that it was excluded from the study.

*Sources: Eurostat, INSEE calculations*

## Box 2 - A breakdown of the debt dynamic

The variation in stocks of financial assets and liabilities is attached to the financial flows[1] using the formula:

$$\Delta(AF - PF) \approx F_{net}$$

where:
- $AF$ is the stock of financial assets;
- $PF$ is the stock of financial liabilities;
- $F_{net}$ is the net financial flow.

In the case of non-financial enterprises, the liabilities are broken down into two items, indebtedness and shares (PF5): $PF = debt + PF5$. However, financial flows come mainly from the difference between enterprises' savings and investments:

$$F_{net} \approx S - I$$

$S$ representing enterprises' savings (as flows) and $I$ their investment.

The variation in enterprises' debt can therefore be expressed according to investment, savings and the variation in financial assets, in the form:

$$\Delta Debt \approx I - S + \Delta(AF - PF5)$$

Linked to GDP, a growth effect item is added:

$$\Delta\frac{Debt}{GDP} \approx \frac{I}{GDP} - \frac{S}{GDP} + \frac{\Delta AF}{GDP} - \frac{\Delta PF5}{GDP} - \frac{Debt}{GDP}\cdot\frac{\Delta GDP}{GDP}$$

The increase in the assets is the sum of three elements:

$$\Delta AF = \Delta AF2 + \Delta AF5 + \Delta AF_{other}$$

where:
- $\Delta AF2$ is the variation in the liquid assets held;
- $\Delta AF5$ is the variation in the shares held;
- $\Delta AF_{other}$ is the rest of the variations in assets, including loans and securities.

This approaches accounting equality: the residual item (other) includes elements that are normally low in the French case (inventory, acquisition...). ■

1. With revaluations and changes in volume.

### Investment held up better in France than in the other main European countries with savings slightly down

After the crisis, investment fell in the main European partner countries while it increased in France, rising from 10.9% over the 2000-2007 period to 11.5% over the 2009-2016 period (Focus in the June 2017 *Conjoncture in France*). Conversely, investment fell sharply in Spain (13.0% after 15.4%) and in Italy (9.1% after 10.5%) and more moderately in Germany (11.3% after 11.7%). The sharp drop in investment in Spain and Italy can be explained on the one hand by macroeconomic factors, the decline in activity being the most marked, in particular during the sovereign debt crisis, and on the other hand by financial factors directly linked to indebtedness: in these two countries, the 2008 crisis then that of 2011-2013 led to a very sharp increase in non-performing loans

(*Graph 3*) and an increase in restrictions on bank lending. It is therefore partly the financial conditions and the need to reduce debt that have hampered investment rather than the other way round. Since 2014 in Spain and 2015 in Italy, corporate investment has started to pick up gain, most notably because self-financing ratios have increased, as the situation of the banking systems in these countries remains fragile (Fortin *et al.*, 2015). In Germany, weak investment seems to be decorrelated with from the traditional fundamentals in view of the country's good macroeconomic performances and the financial soundness of its enterprises since the crisis (Baquero, 2016): it could be the result of more structural factors linked to the age of business leaders or high sensitivity to uncertainty.

The savings ratio of French enterprises between 2009 and 2016 was lower than in the period before the crisis. It has, it is true, picked up again recently under the effect of the CICE (competitiveness and employment tax credit), the fall in the price of oil and improvement in activity (*Special Analysis* p. 39), but real wages have continued to grow steadily in France, which is not the case in Spain and in Italy where a sharp increase in unemployment has weighed much more heavily on workers' bargaining power and their pay. In Germany wages have been growing faster since 2009, but enterprises have paid less in dividends and have amassed the gains from their debt reduction in the form of lower interest charges. All in all, the savings ratio of enterprises rose in these three countries over the 2009-2016 period compared to the period before the crisis, while in fell in France.

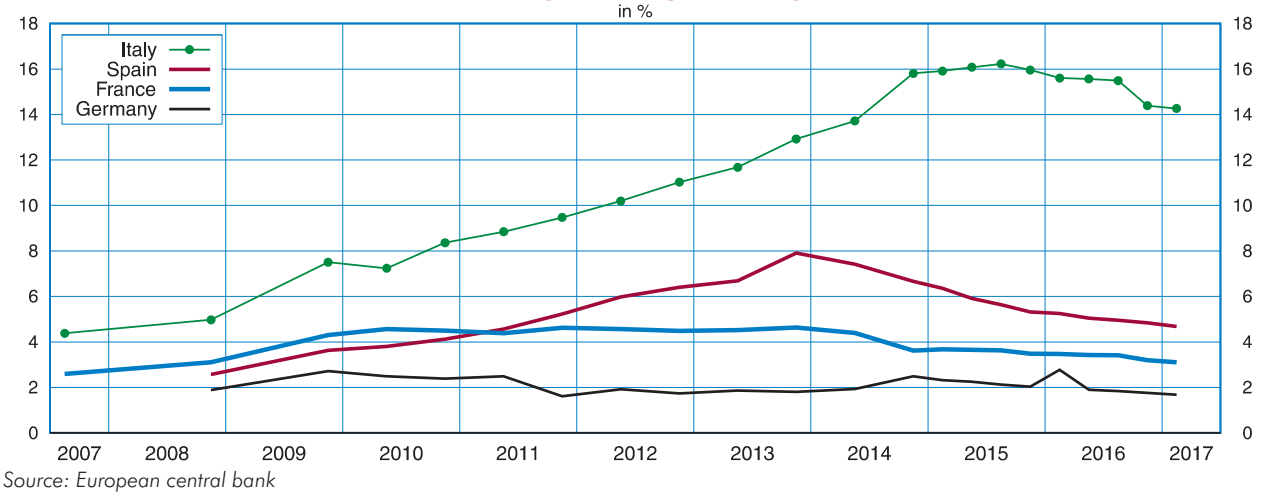
## The holding of financial assets, and liquid assets in particular, has risen sharply in France

*Increasing reserves of liquid assets: a phenomenon specific to France*

French enterprises have boosted their holdings of liquid assets since the crisis: liquid assets represent more than 25% of GDP in France in 2016, compared to less than 15% in 2008. Conversely, the liquid assets held by German and Spanish enterprises have remained virtually stable as a proportion of GDP (*Graph 4*).

This surge in liquidities partly puts into perspective the increase in indebtedness, at least at aggregate level. Thus, if the enterprises that hold them are also the ones building up their debt, they will easily be able to reduce that debt if financing conditions become tighter. On the other hand, if this is not the case, the increase in debt remains a risk factor for the financial system as a whole.

**3 - Percentage of non-performing loans**




*Source: European central bank*

# Is the increase in French firms' indebtedness a cause for concern?

*French enterprises are lending more to foreign subsidiaries, but that does not explain the recent momentum*

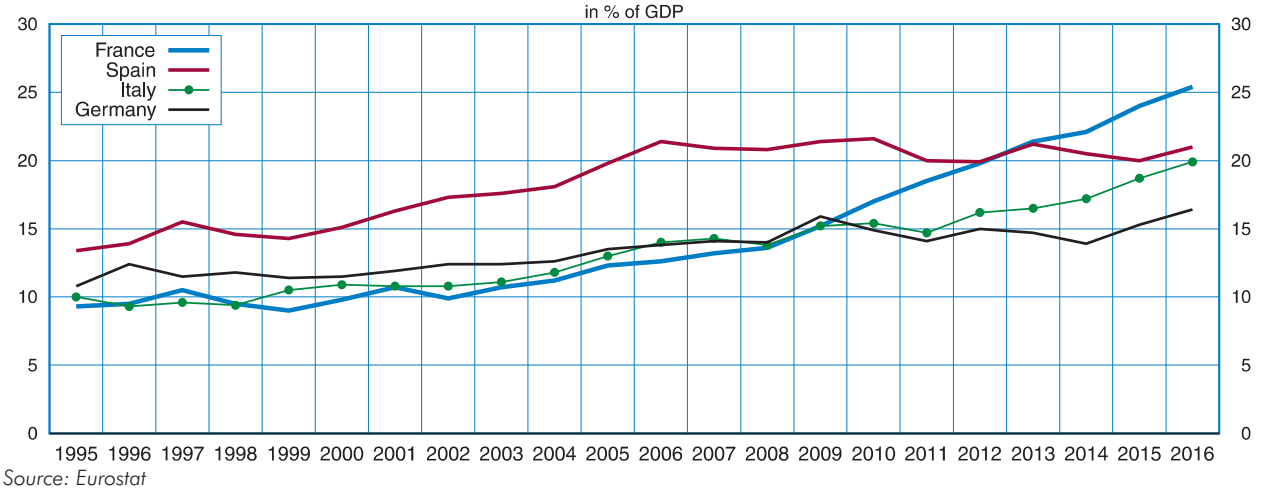
National accounting has provided an estimation of loans granted by French enterprises to foreign economic agents[2] ( *Graph 5*). In GDP percentage points, the volume of French enterprises' lending abroad appears to be considerably higher than in the other main European countries.

These behaviours partly help to put into perspective the level of debt of French enterprises, which, although they are indebted, can also be creditors themselves. However, although loans to foreign subsidiaries increased until 2009, they have stabilised since then, and therefore have played no role in the debt dynamics of French enterprises since the crisis (*Table 1*).

Likewise, French enterprises' shareholdings also show a relatively stable profile and the crisis has not significantly changed their pace of growth (*Table 1*).

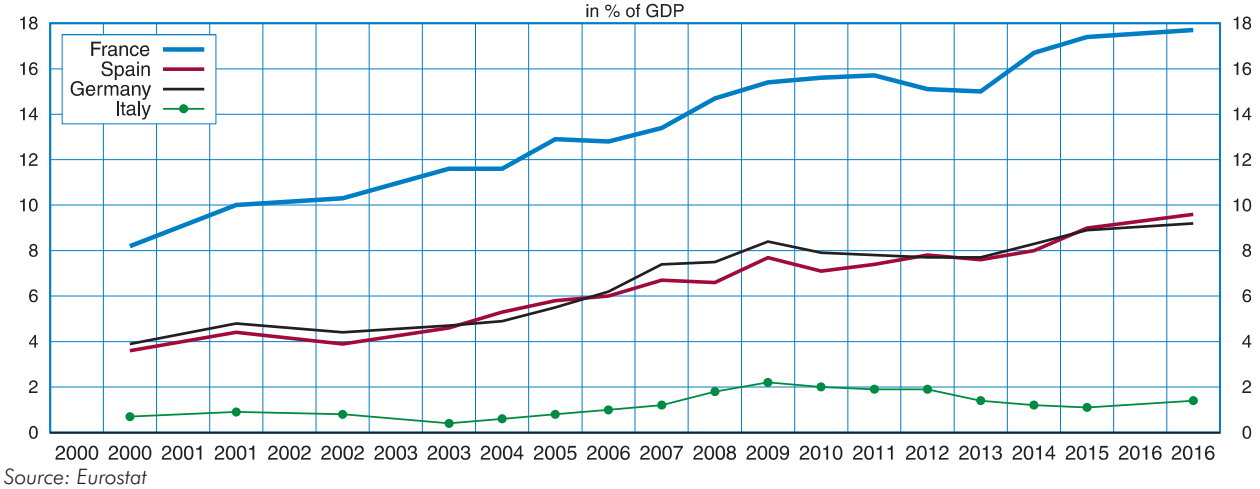
2. This concerns loans to institutional agents other than non-financial corporations, that is to say generally households, financial corporations, general government and the rest of the world. Normally, these loans are mainly destined for the rest of the world and are therefore a good indicator of the intra-group loans that are not consolidated in a national accounting framework.

**4 - Ratio of stocks of liquid assets consolidated to GDP**




*Source: Eurostat*

**5 - Ratio of stocks of loans in the consolidated assets of enterprises to GDP**




*Source: Eurostat*

# Is the increase in French firms' indebtedness a cause for concern?

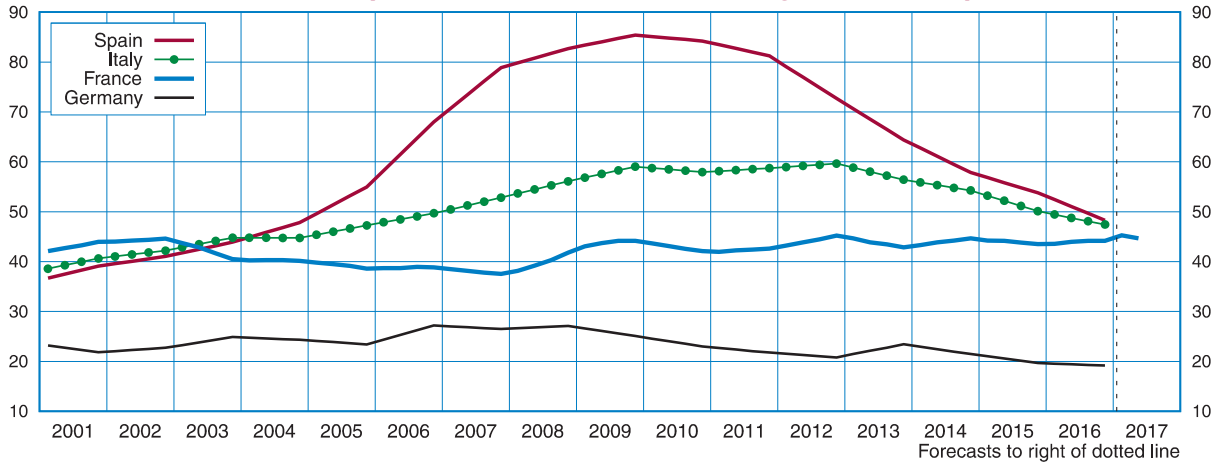
## All in all, the indebtedness of French enterprises corrected for their available liquid assets and loans to subsidiaries has been relatively stable since the crisis

To take account of the French specificities relating to lending to foreign subsidiaries and liquid assets, it is possible to construct a "corrected" indebtedness indicator, deducting from the debt of NFCs the liquid assets they hold as well as the lending to foreign subsidiaries, loans to domestic subsidiaries already being removed in the consolidated data. All in all, "corrected" indebtedness appears to be virtually stable since the crisis — at around 45% of GDP (*Graph 6*).

Seeing indebtedness as a ratio not of GDP, but of equity[3] makes it possible to see whether the structure of enterprises' liabilities has changed as well as giving an idea of their solvency. In this respect, enterprises' indebtedness also seems to be stable: the indebtedness of French companies is accompanied by a comparable increase in their equity ( *Graph 7*).

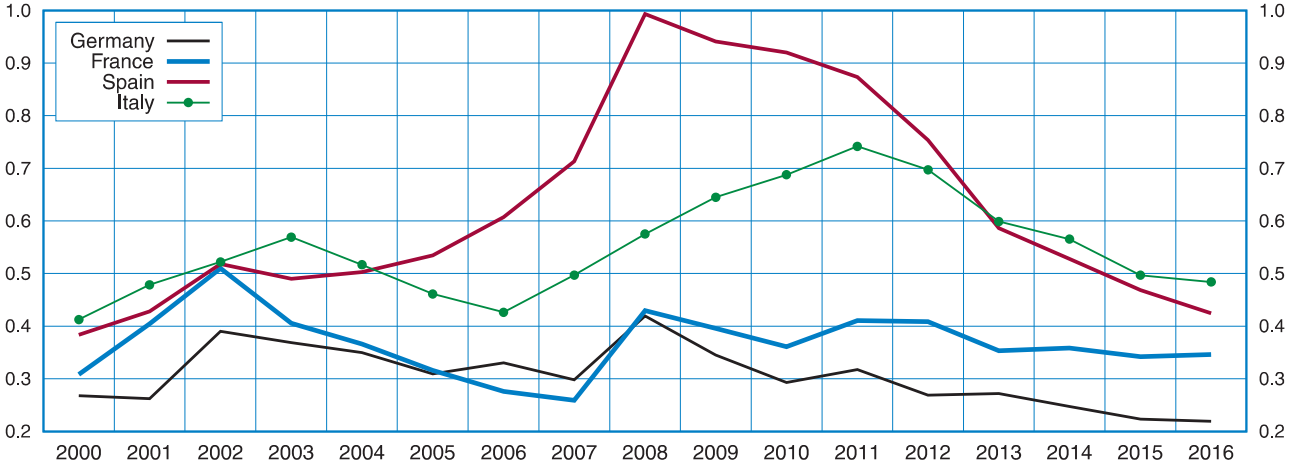
3. Here shares are used as liabilities for an enterprise.

**6 - Ratio of enterprises' corrected indebtedness to gross domestic product**




*Sources: Eurostat, Banque de France, INSEE calculations*

**7 - Ratio of enterprises' corrected indebtedness to equity**




How to read it: in France in 2016, enterprises' corrected indebtedness represented 35% of their equity. This ratio should be treated with care as equity is valued at market prices and is therefore likely to vary considerably. This limit is, however, common to all the Eurozone countries.

*Sources: Eurostat, Banque de France, INSEE calculations*

## The heterogeneous contribution to the macroeconomic debt dynamics requires closer analysis

The observation at macroeconomic level of a simultaneous increase in enterprises' indebtedness and their holding of liquid assets, although reassuring, is not enough to discount the hypothesis of a rise in financial risk. This does indeed mean that it is necessary to check whether it is the same enterprises that are indebted and have accumulated liquid assets, in which case the financial risk will in fact be lower since those liquid assets will be able to be used to service loans.

To do this, INSEE's annual enterprise statistics are mobilised by exploiting the data from the income statements and financial balance sheets of some 900,000 companies, excluding the financial and agricultural sectors (*Box 1*). They represented value added of 41.2% of GDP in 2010, or around 80% of the value added of NFCs. The period studied is limited to 2010-2015, due to an overhaul of the way enterprise statistics were collected in 2008. The companies considered represent legal units, not assimilable with enterprises[4] as they are not necessarily independent of each other. In particular, the aggregation of data from financial balance sheets carried out below is not consolidated by the financial relations between legal units.[5]

The companies examined are divided into four separate categories, according to the direction of the respective changes over the period from 2010 to 2015 in their debt ratio (outstanding long-term financial debt[6] compared to the value added of the legal unit) and their stock of liquid assets.[7] The categories are:

- "PP" companies, which over 2010-2015 have seen their debt ratio and their stock of liquid assets increase simultaneously;
- "PN" companies, which have seen their debt ratio increase and their stock of liquid assets fall;
- "NN" companies, which have seen their debt ratio and their stock of liquid assets simultaneously fall;
- "NP" companies, which have seen their debt ratio fall and their stock of liquid assets increase;

The results presented below focus on this division into four categories of companies. They are of relatively comparable sizes in terms of value added and also generally stable over 2010-2015 (*Graph 8* and *Box 3*).

4. An enterprise within the meaning of the implementing decree of Law no. 2008-776 on the modernisation of the economy of 4 August 2008 is defined as "the smallest combination of legal units that forms an organisational unit producing goods and services and enjoying a certain autonomy in decision-making, in particular for the allocation of routine resources". On the other hand, a legal unit refers to a legal personality concept and implies an obligation to provide corporate financial statements.

5. For an analyse of the indebtedness of the major French groups, see Charasson-Jasson (2017).

6. Long-term financial debt represents the sum of bond loans and loans and other borrowings from credit institutions. The choice of including long-term financial debt is justified for two reasons: firstly, the increase in long-term bank loans and bond issues has largely contributed to the increase in French indebtedness post-crisis, an observation that is corroborated by the enterprise data (cf. below); secondly, short-term bank debt represents a stable amount over the period 2010-2015, both in the companies considered in the macroeconomics analysis and in the national accounting data.

7. Liquid assets, also known as cash assets, represent cash in hand (coins and bank notes in the company's possession) and cash in bank.

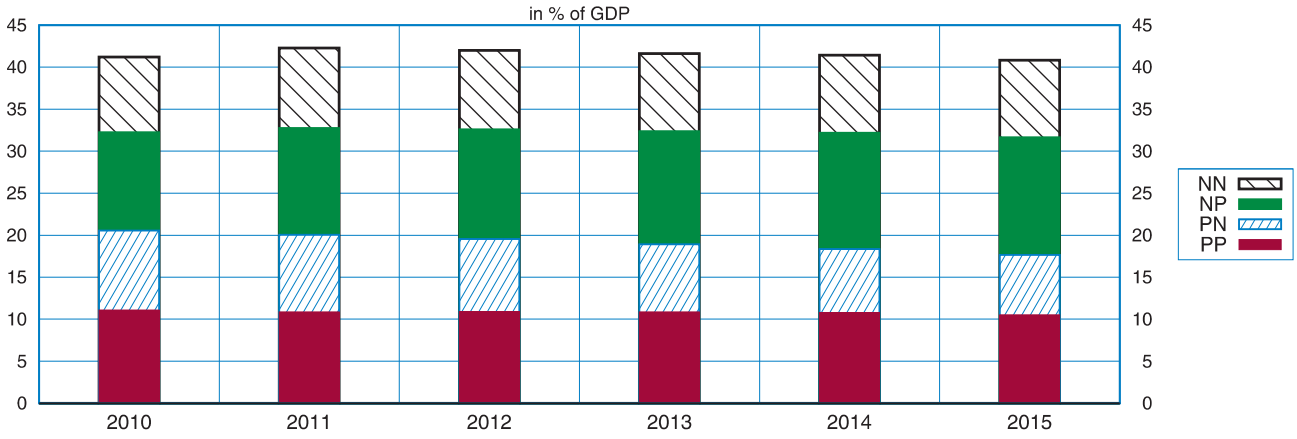
# Is the increase in French firms' indebtedness a cause for concern?

## The increase in corporate debt between 2010 and 2015 results mainly from companies that have also built up liquid assets

The companies that increased their indebtedness and their liquid assets over 2010-2015 represented the largest amount of outstanding debt in 2010 (€330bn, when the outstanding debt of the other categories of company was between €120bn and €310bn; *Graph 9*). These were also those whose outstanding debt increased the most over the period (+€170bn), whereas the outstanding debt of the other categories of company fell or increased only slightly. This represents an increase of 6.6 percentage points of GDP, of the same order as that of the indebtedness of NFCs observed at macroeconomic level (9.5 points on consolidated data). This category therefore accounts for the bulk of the increase in corporate debt between 2010 and 2015.

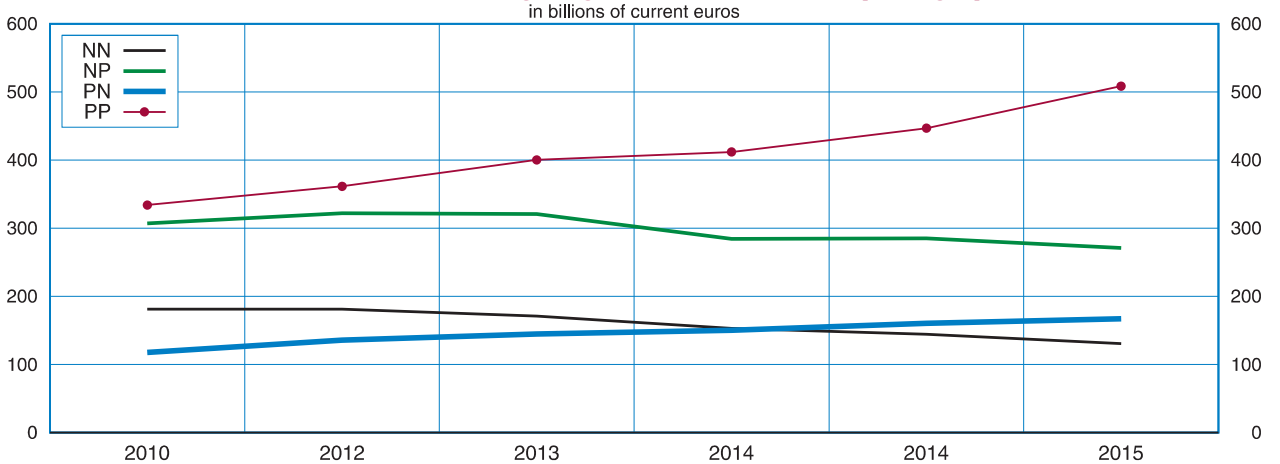
Furthermore, the companies that increased their debt over 2010-2015 without increasing their liquid assets in 2010 represented an outstanding debt that was considerably lower than that of other categories (€120bn). The increase in that debt, about €50bn (1.8 percentage points of GDP), was also substantially lower than that of the companies which, having increased their debt, also built up liquid assets.

**8 - Value added of each category of companies**




Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

**9 - Total outstanding long-term financial debt by category**




Note: the total outstanding long-term financial debt is not consolidated. The categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

## Box 3 - Characterisation of the four categories of company in terms of the sector they belong to and size

Companies here are legal units and may be part of larger groups. They are divided into four categories, as indicated in the text.

The four categories of companies are relatively well balanced: categories PP (which increase their debts and build up liquid assets) and PN (which increase their debts without building up liquid assets) include about 169,000 and 179,000 legal units respectively each year, whilst categories NP (which reduce their debts and build up liquid assets) and NN (which reduce their debts and do not build up liquid assets) include about 273,000 and 214,000 respectively. The legal units that reduce their indebtedness are nevertheless more numerous than those that increase their debt: companies' debt behaviours are very heterogeneous and the marked increase in indebtedness at macroeconomic level seems to result from a minority of enterprises.

PP companies mainly include "heavy" industries such as the production of electricity and gas, water production, as well as manufacturing industry (*Table 1*). This is coherent with the high capital intensity of these sectors, which requires significant use of external financing. PN companies are relatively more numerous in the construction sector, real estate activities, and in trade. Finally, NP companies are overrepresented in sectors with a high technology content, or in business services, while NN companies are relatively more numerous in food service and accommodation activities.

**Table 1 - Sector-based distribution of categories of company**

| Sector | NN | NP | PN | PP |
|---|---|---|---|---|
| Agriculture, forestry and fishing | – | – | + | + |
| Extractive industries | – | – | + | + |
| Manufacturing industry | – – | – | – | ++ |
| Production and distribution of electricity, gas, steam and conditioned air | – – | – | ++ | ++ |
| Production and distribution of water ; sanitation, waste treatment and decontamination | – – | + | + | ++ |
| Construction | 0 | – – | ++ | + |
| Trade ; repair of vehicles and motorcycles | – | – – | ++ | 0 |
| Transports and storages | – | ++ | – – | + |
| Accommodation and food services | ++ | 0 | – – | – – |
| Information and communication | – – | ++ | 0 | + |
| Real estate activities | – – | – | ++ | 0 |
| Specialised, scientific and technical activities | – – | ++ | – | + |
| Administrative and support service activities | – | ++ | – – | 0 |

Note : the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
The results are based on a chi-square test of independence, 2, significant to less than 0.1%:
++: strong overrepresentation
+: overrepresentation
–: underrepresentation
– –: string under-representation
0: neither over- nor under-representation

The sectors Financial and insurance activities, Public administration, Activities of households as employers, Extra-territorial activities are by nature excluded from the analysis, which is limited to non-financial enterprises. The sectors Education, Human health and social work activities, Arts, entertainments and recreation, Other service activities are not represented.

*Source: INSEE calculations*

Companies that reduce their debt (categories NP and NN) seem to be overrepresented among legal units with very small workforces (*Table 2*). Conversely, companies that increase their debt and build up liquid assets (PP) tend to be overrepresented among large legal units (over 5,000 employees) while companies that increase their debt without building up liquid assets (PN) are relatively more numerous among small or medium-sized legal units (10 to 250 employees). ■

**Table 2 - Distribution by category size**

| Workforce (EQTP) | NN | NP | PN | PP | Share in the base |
|---|---|---|---|---|---|
| Less than 10 EQTP | ++ | + | – | –– | 79% |
| Between 10 and 249 EQTP | –– | – | + | ++ | 21% |
| Between 250 and 4,999 EQTP | – | – | 0 | ++ | <1% |
| More than 5,000 EQTP | – | – | 0 | ++ | <1% |
| **Share in the base** | 26% | 33% | 21% | 20% | 100% |

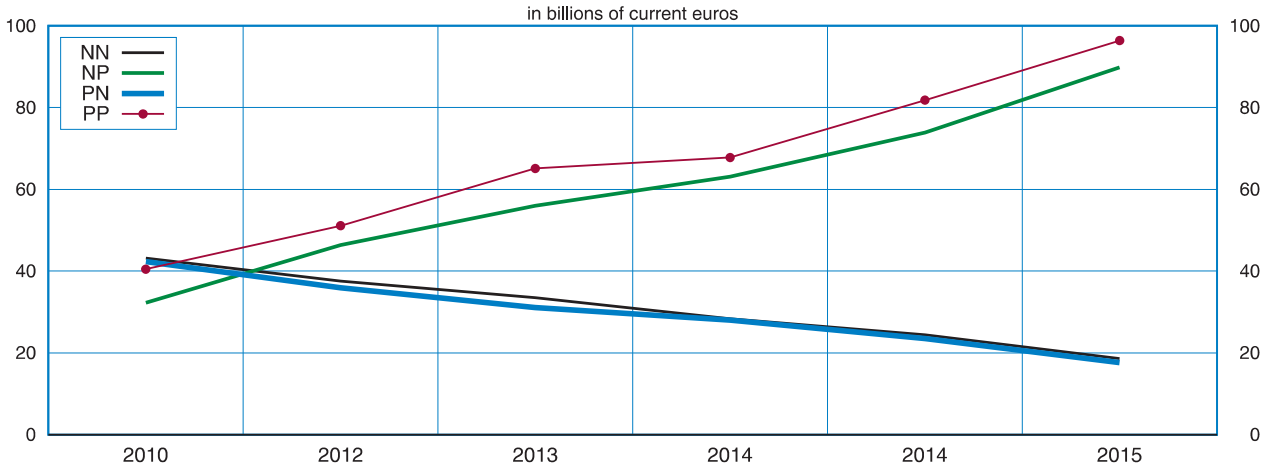
Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
The results are based on a chi-square test of independence, 2, significant to less than 0.1%:
++: strong overrepresentation
+: overrepresentation
–: underrepresentation
– –: string under-representation
0: neither over- nor under-representation
*Source: INSEE calculations*

*The accumulation of liquid assets by companies between 2010 and 2015 is accounted for as much by companies that increased their debt as by those that did not*

In 2010, the four categories of companies had amounts of liquid assets that were generally similar (between about €30bn and €40bn depending on the categories, *Graph 10*). The accumulation of liquid assets between 2010 and 2015 was high in the companies concerned (+€110bn in total) and was accounted for both by companies that had increased their debt and by those whose indebtedness fell. This finding also applies to companies that reduced their stock of liquid assets: this reduction, representing a total of €50bn, was accounted for both by companies that increased their indebtedness and those that reduced it.

In other terms, the companies that increased their debt during the period 2010-2015 possess a stock of liquid assets that has increased overall, without this accounting for the whole of the increase in liquid assets over the period. This finding clarifies, in any case, the analysis made at macroeconomic level: the simultaneous increase in indebtedness and liquid assets in recent years seems to come to a large extent from the same category of companies. A more in-depth exploitation of their microeconomic data will make it possible to get a better idea of the behaviour behind the indebtedness.

**10 - Total amount of liquid assets in companies' assets, by category**




Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

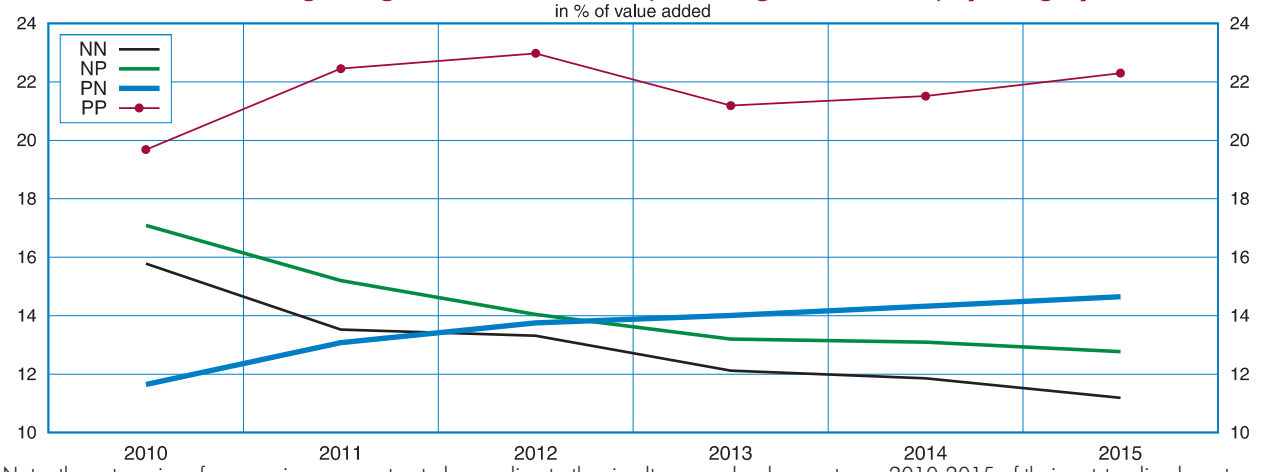
# Is the increase in French firms' indebtedness a cause for concern?

## The accumulation of liquid assets by the companies that increase their debt does not seem to have been to the detriment of investment

On average over 2010-2015, the largest part of tangible investments (excluding contributions) was made by companies that increased their debt and at the same time built up their liquid assets over the period (*Graph 11*). In particular, their tangible investment ratio remained relatively stable, going from 20% of their value added in 2010 to 22% in 2015. In comparison, the companies that reduced their debt whilst building up liquid assets reduced their tangible investment rate from 17 to less than 13 percentage points of value added.

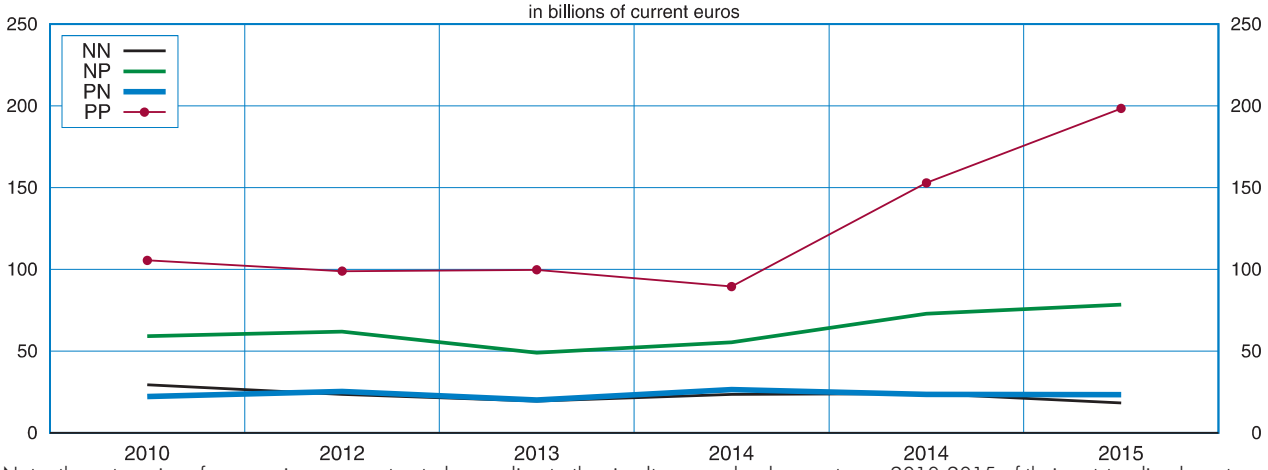
Furthermore, the companies that increased their debt and built up liquid assets also substantially increased their financial investments, which amounted to €106bn in 2010, but reached almost €200bn in 2015 (*Graph 12*). This finding may suggest behaviours on the part of these companies similar to the carry trade initially developed on the currency markets, which consisted of borrowing at low rates to acquire assets with a better yield (*Box 4*). Investments in land, which are mainly made by companies increasing their debt whilst building up liquid assets, did not show any particular developments over the period.

**11 - Average tangible investment rate (excluding contributions) by category**




Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

**12 - Total amount of companies' financial investments, by category**



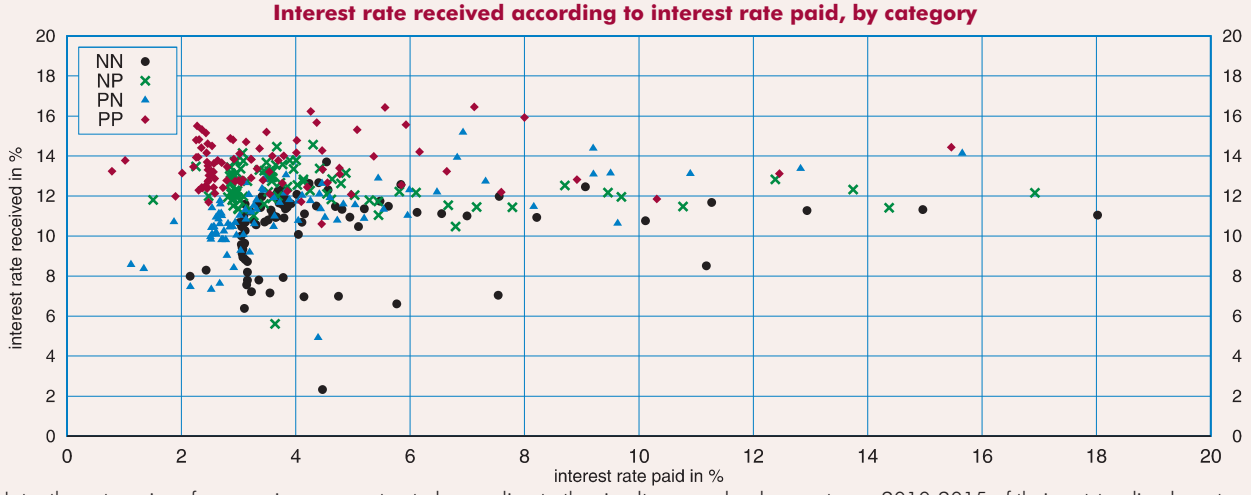

Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

## Box 4 - Have enterprises become indebted to purchase financial assets?

The fall in the cost of debt, in particular due to the accommodating monetary policy implemented by the European Central Bank since 2009, may lead to enterprises borrowing to acquire financial assets with a better yield. This operation, qualified as carry trade,[1] includes a risk for the enterprises as it exposes them to a reversal in the rate gap in their disfavour. In our database, the marked increase in the financial investments of companies that increase their debt and build up liquid assets may suggest carry trade behaviours insofar as:
- financial investment shows a marked and recent increase for this category of companies only (*Graph 12*);
- the remunerations received on their investments are higher for companies that increase their debt and build up liquid assets than for others, at the cost of the given debt. These companies seem to be able to optimise their yield on assets while also managing to limit the cost of their debt (*Graph*);
- this observation is confirmed by an examination of the joint changes in the interest rate paid and the interest rate received from 2013 onwards in the different categories of companies: companies that increase their debt while building up liquid assets are overrepresented among those that have seen the cost of their debt fall and the remuneration of their assets increase (*Table*), in line with the carry trade hypothesis. ■

1. See Acharya and Steffen (2015), Caballero *et al.* (2016) and Coeuré (2017).

**Interest rate received according to interest rate paid, by category**




Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
The interest rate paid is approximated by the ratio of financial charges to financial debt. The interest rate received is approximated by the sum of the income from other securities (excluding participating interests), the income from fixed asset receivables and other interests, as a ratio of long-term financial assets. For reasons of readability, each point represents the median value of the interest rates received and paid by percentile of interest rate paid.
*Source: INSEE calculations*

**Variation in interest rates paid and received by category**

| Variation in rate paid and variation in rate received | NN | NP | PN | PP | Total |
|---|---|---|---|---|---|
| decrease in rate paid<br>decrease in rate received | – | – – | + + | + | 49% |
| decrease in rate paid<br>increase in rate received | – – | – | + | + + | 8% |
| increase in rate paid<br>decrease in rate received | + + | + | – | – – | 36% |
| increase in rate paid<br>increase in rate received | – | + + | – | + | 7% |

Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
The results are based on a chi-square test of independence, 2, significant to less than 0.1%:
+ +: strong overrepresentation + : overrepresentation – : underrepresentation – –: string under-representation
0: neither over- nor under-representation
*Source: INSEE calculations*

# Is the increase in French firms' indebtedness a cause for concern?

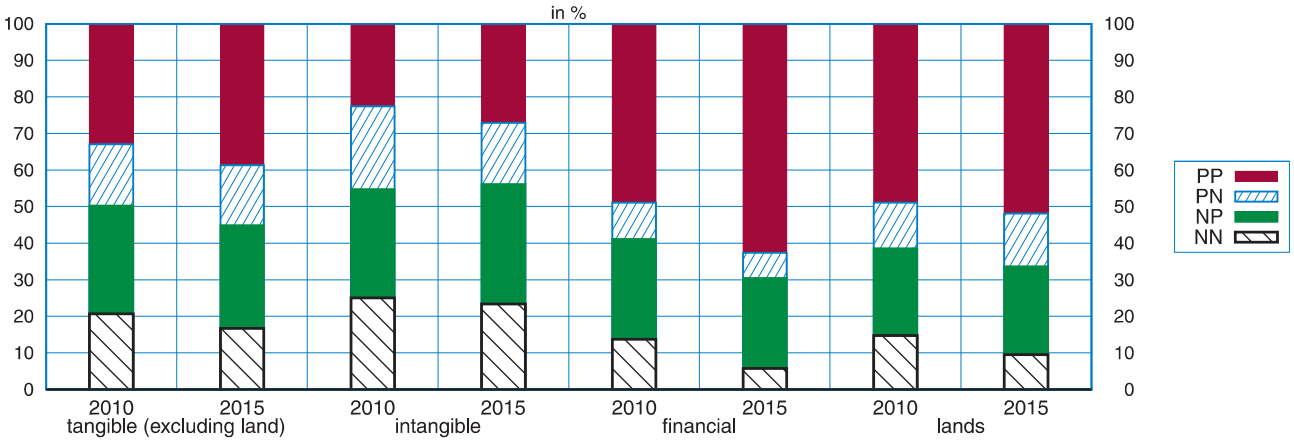
Finally, the companies that increase their debt whilst building up their liquid assets are the second largest contributors (after companies that reduce their debt whilst building up liquid assets) to investment in intangible assets (including development costs, concessions, patents and similar rights), accounting for 25% of the total, or an amount that has remained stable at about €10bn (*Graph 13*).

This finding therefore rules out the hypothesis of companies having increased both their indebtedness and their liquid assets to the detriment of their investment (Artus, 2017), even if, amongst the latter, financial investment appears to have taken a larger share.

*The companies that increased their debt whilst building up liquid assets maintained their margins and improved their savings ratios...*

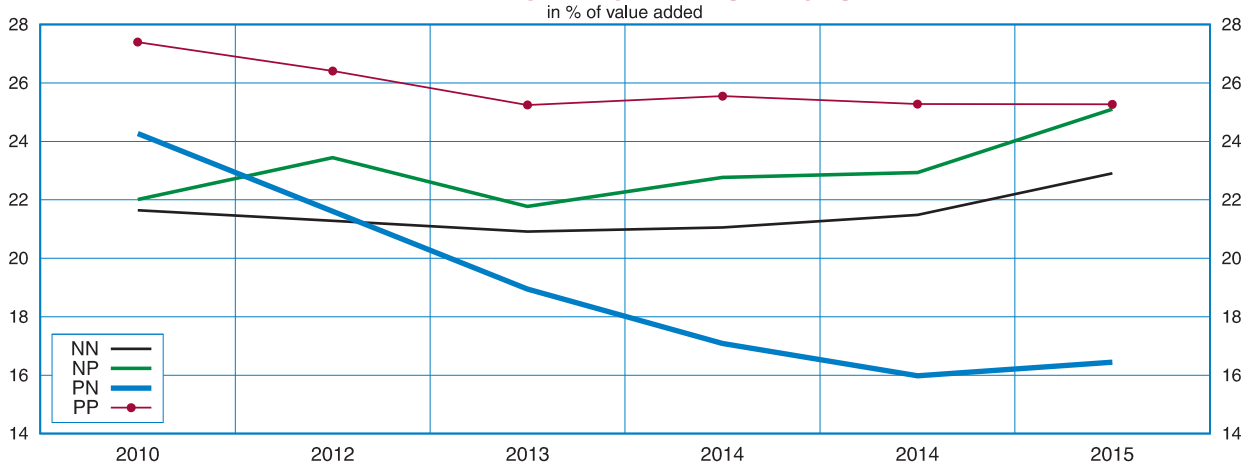
The companies that increased their debt and built up liquid assets do not seem to have seen their operational performance deteriorate over the period: indeed, although it fell by 2 percentage points of value added between 2010 and 2015, their average margin rate stabilised from 2012 onwards and, moreover, remains higher than that of the other categories (*Graph 14*).

**13 - Distribution of investment by category and by type**




Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

**14 - Average margin rate by category**




Note: the margin rate refers to ratio of the gross operating surplus of the companies concerned to their value added.
The categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

A similar observation can be made regarding savings ratios: the average savings ratios of the companies that increased their debts and built up liquid assets over 2010-2015 remained stable overall between 2010 and 2014 (approximately 12 percentage points of value) and then increased to 15 percentage points of value added in 2015 (*Graph 15*). Both the margin rates and the savings ratios of these companies were higher than those of companies that built up liquid assets whilst reducing their indebtedness.[8] These facts therefore seem to counter, for the companies that increased their debts and built up liquid assets, the hypothesis of indebtedness being due to insufficient profitability.

On the other hand, the companies that increased their debts without building up liquid assets saw a clear decline in their margin rate over the period, the latter falling from 24 percentage points of value added in 2010 to 16 points in 2015. Their savings ratio showed a similar profile, falling by 5 percentage points of value added between 2010 and 2015.

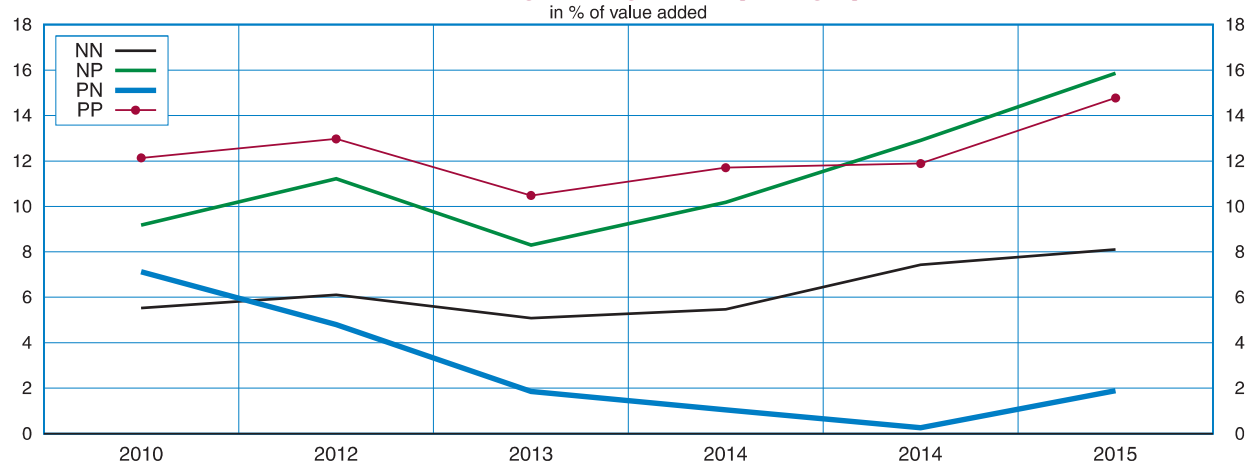
*... and did not pay out more in dividends over the period*

The intensity of dividend payouts, measured as the share of dividends in the self-financing capacity (net revenue before payment of dividends) fell overall for companies that increased both their indebtedness and their liquid assets: after a period of stability between 2010 and 2014 at around 60%, the figure fell sharply in 2015 to about 30% (*Graph 16*). In view of these elements, the hypothesis of debt being incurred with a view to remunerating shareholders better by paying out dividends does not seem very credible (although this does not exclude the remuneration of shareholders by buying back shares). Nevertheless, the dividend-value added ratio stabilised over the period, reflecting an increase in profits rather than the intensity of dividend payouts.

On the other hand, the companies that increased their debt without increasing their stock of liquid assets showed a strong increase in the intensity of dividend payouts. It seems that faced with a deterioration in their self-financing capacity, these companies sought to maintain the amount of the dividends paid (as a % of value added), at the risk of using up most of their self-financing capacity. These marked differences in dividend payouts between categories may reflect the distribution of revenues between the legal units in the same group. Indeed, companies that increase their debt seem to be overrepresented among group subsidiaries (*Box 5*).

8. It should be noted that the savings ratio is calculated net of changes in the repayment of debt, which reinforces the findings.

**15 - Average savings ratio by category**



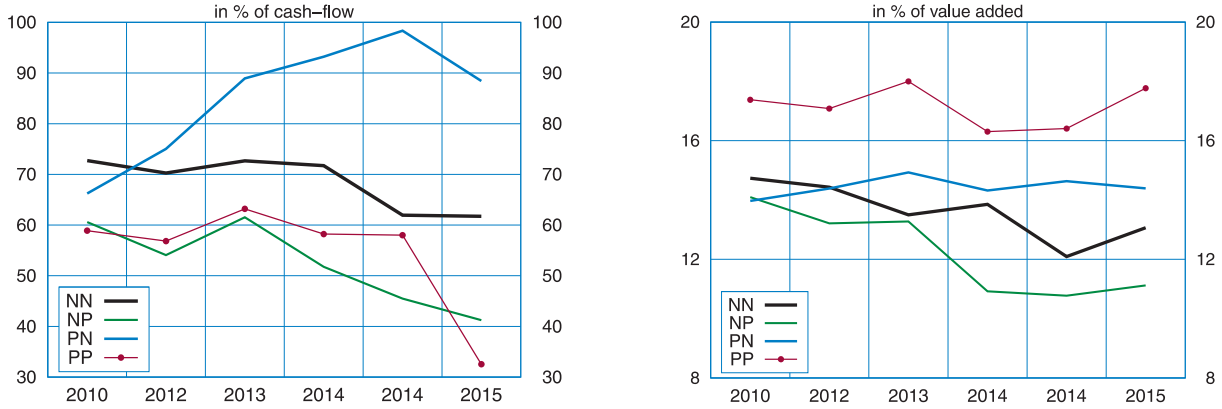

Note: the savings ratio refers to the ratio of the self-financing capacity of the companies concerned (amount that the company manages to set aside from its annual business after payment of all the parties involved, such as employees, subcontractors and temporary workers, lenders, the State and the shareholders) to their value added.
The categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets
*Source: INSEE calculations*

## The companies that increase their debt whilst building up liquid assets increase their equity, but at a slower pace than their debt

The sustainability of an enterprise's debt can also be analysed by comparing it with its equity. Equity (defined here as the sum of the share capital, the reserves, the amounts carried forward, the year's profits, subsidies and regulated provisions) represents a stable resource for the enterprise, contributed by the shareholders or partners with a view to exercising a right of control. For its part, the debt represents a predetermined financial charge - loan repayments - which can constitute a burden for the enterprise if its results are temporarily inadequate. Thus, the ratio of this long-term financial debt to equity gives an indication of the proportion of the company's long-term resources required by recurring financial charges, and a sudden increase in this ratio can immediately appear as a source of risk.

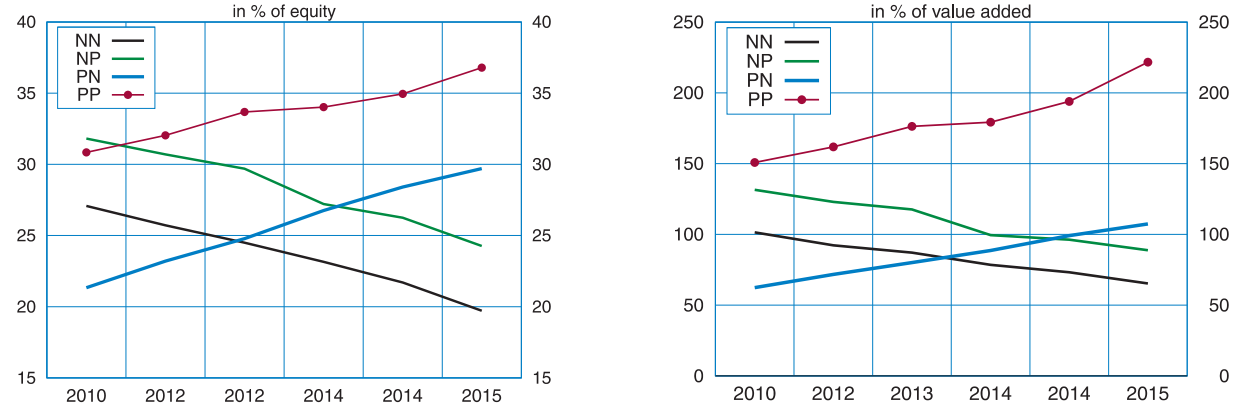
For the companies that increased their debt over 2010-2015 and built up liquid assets, debt-to-equity ratio increased by 6 points between 2010 and 2015 (*Graph 17*). This admittedly noteworthy increase is nevertheless lower than that of the debt-to-value added ratio, which increased by 71 points between 2010 and 2015. Thus, the companies that increased their debt whilst building up liquid assets increased their equity, at a comparable rate, although lower than that of the increase in their debts: the balance sheet structure is only reasonably deformed in favour of the debt. On the other hand, these companies' debt increased sharply in relation to their value added, which indicates a generalised increase in balance sheets disconnected from these companies' results.

**16 - Average dividend payout by category**




Note:the intensity of the dividend payout refers to the ratio of the amount of the dividends paid by the companies concerned to their self-financing capacity (net revenues before payment of dividends).

**17 - Indebtedness rate by category**




The categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets

*Source: INSEE calculations*

### Box 5 - Categories and belonging to a group

The microeconomic analysis is based on the legal unit as the statistical unit, with the idea of being able to follow a company in the sample for as long as possible. Indeed, the exploitation of profiled enterprise data (that is to say bringing together legal units belonging to the same group) did not allow the years before 2013 to be studied.

This analysis, which is by nature non-consolidated, therefore allows an examination of the link between indebtedness and intra-group organisation. The legal units that increased their debt over the period 2010-2015 seem to mainly belong to groups, in line with the existing literature (Picart, 2003, and also Kremp and Sevestre, 2000). Nevertheless, those that increase their debt and build up liquid assets are overrepresented among parent companies, whilst companies that increased their debt are overrepresented among subsidiaries of groups, whatever their behaviour concerning liquid assets (*Table*). These results are consistent with the dividend payout dynamic, which has been on a particularly upward trend in companies that increase their debt without building up liquid assets (often subsidiaries) and substantially down for companies that increased their debt and built up liquid assets, which included numerous parent companies. ■

**Frequency of parent companies and subsidiaries in the different categories of companies**

| **Is the legal unit...** | | | | | |
|---|---|---|---|---|---|
| **... a parent company?** | **NN** | **NP** | **PN** | **PP** | **Share in the base** |
| No | ++ | + | + | −− | 89% |
| Yes | −− | − | − | ++ | 11% |
| **... a subsidiarie ?** | **NN** | **NP** | **PN** | **PP** | **Share in the base** |
| No | ++ | + | − | −− | 73% |
| Yes | −− | − | + | ++ | 27% |
| **Share in the base** | 25% | 33% | 21% | 21% | 100% |

Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets

*Source: INSEE calculations*

## At individual level, the bulk of the debt is taken on by companies whose indebtedness rate net of liquid assets remains contained, even if certain heterogeneous dynamics call for vigilance

In a similar way to what was done at macroeconomic level, we now consider the net indebtedness of companies (debt net of liquid assets, in proportion to value added). In order to concentrate on those that could pose a risk in terms of their indebtedness, we will consider only the most indebted 10% of companies in 2015 (in terms of outstanding debt): this includes approximately 76,000 legal units,[9] which represented more than 80% of the total outstanding debt in 2015. Companies that increased their debt and built up liquid assets represent about a third of the companies in this scope, whilst companies that increased their debt without building up liquid assets and those that reduced their debt whilst building up liquid assets each represent about 20%.

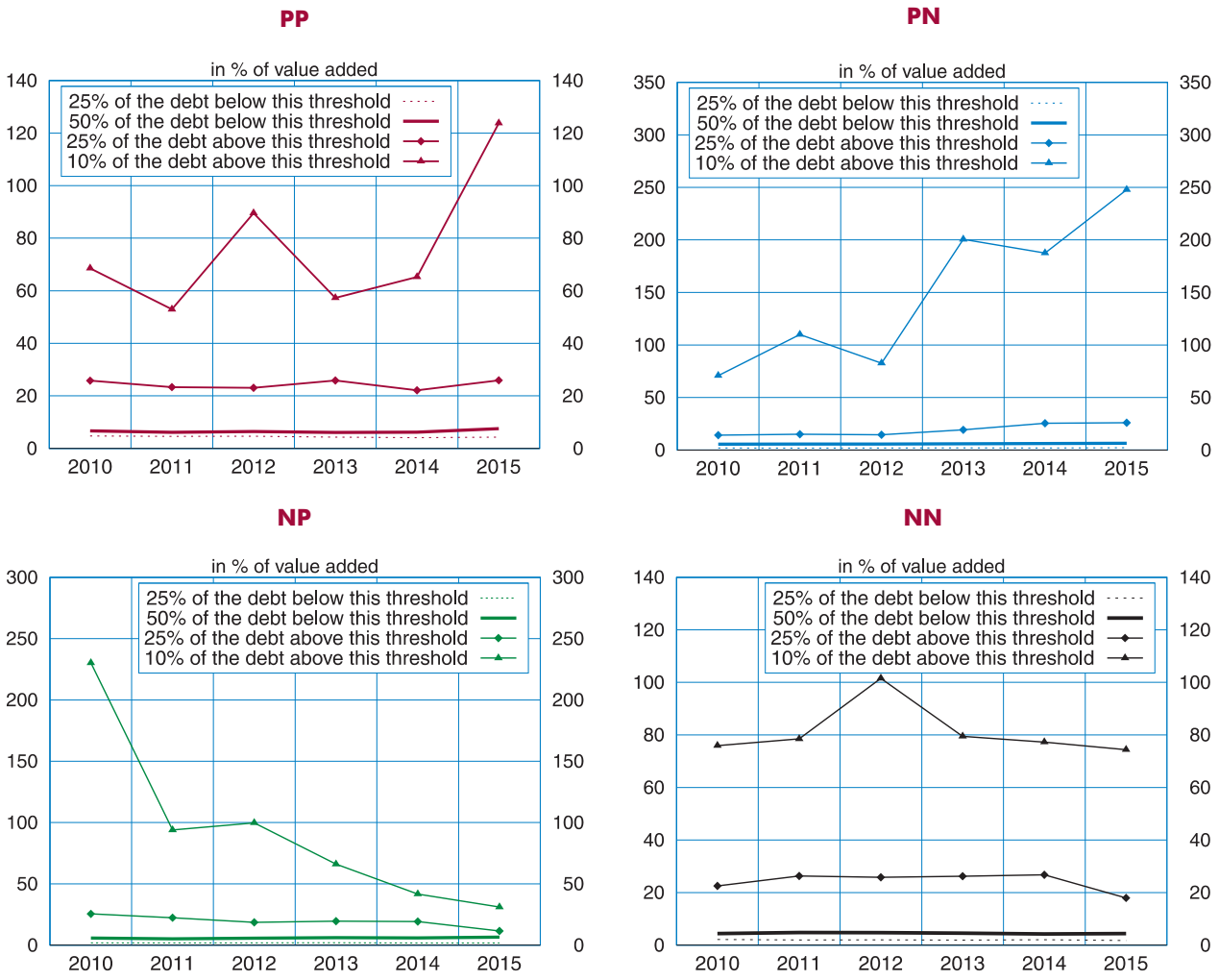
9. 3,600 legal units belonging to large corporations (within the meaning of the Law on the modernisation of the economy in 2008), 12,000 legal units belonging to intermediate-sized companies, 20,000 and 41,000 legal units considered as micro-enterprises and small and medium-sized enterprises respectively.

# Is the increase in French firms' indebtedness a cause for concern?

Within this scope of the most indebted companies in 2015, the largest part of the debt is situated in companies whose indebtedness rate net of liquid assets remains under 30% or 40% depending on the categories of company, and this applies over the entire period: for example, among the companies that increased their debt and built up liquid assets, 75% of the debt is carried by companies whose net indebtedness net of liquid assets does not exceed 30% of their value added (*Graph 18*), suggesting that the latter are building up liquid assets at a rate sufficient to cover their debt.

On the other hand, a part of the debt is concentrated in companies whose levels of indebtedness are substantially higher and more dynamic: among the companies that increased their debt and built up liquid assets, 10% of the debt is held by those whose indebtedness net of liquid assets exceeded 70% of value added in 2010, then 120% in 2015. In the companies that increased their debt without building up liquid assets, 10% of the debt is carried by those whose net indebtedness exceeded 60% of the value added in 2010, then 250% in 2015.

**18 - Indebtedness rate net of liquid assets of the most indebted 10% of companies in 2015, by category**




How to read it: in 2010 and in the most indebted companies in 2015 (in volume of debt), 75% of the debt of the PP companies was carried by companies who indebtedness net of liquid assets was less than 25% of their value added, while 10% of the debt was carried by companies whose indebtedness net of liquid assets was greater than 70% of their value added.
Note: the categories of companies are constructed according to the simultaneous development over 2010-2015 of their outstanding long-term financial debt (as a % of value added) and of their stock of liquid assets.
PP: increase in the debt and increase in the liquid assets - PN: increase in the debt and reduction in the liquid assets - NP: reduction in the debt and increase in the liquid assets - NN: reduction in the debt and reduction in the liquid assets

*Source: INSEE calculations*

### Although the debt of French enterprises is mainly held by enterprises with substantial liquid assets, a financial risk subsists

The recent rise in debt therefore seems to be due to enterprises that are also accumulating liquid assets at the same time. In particular, large corporations, which make a large contribution to the aggregate outstanding debt, have seen the ratio of their net debt (net of liquid assets) to their equity fall since 2012 (Banque de France Bulletin, 2017). However, this does not mean there is no financial risk at all. On the one hand, the high level of indebtedness of French enterprises relative to other European enterprises makes them more vulnerable to a scenario of rising interest rates, as well as to any adverse economic shock more generally (OECD, 2017). On the other hand, there is reason to fear a scenario where some of the liquid assets held by enterprises were used to acquire assets at prices that were already high. Such behaviour would then make them vulnerable to changes in the value of the newly acquired assets. ■

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# Corporate margin rate should stabilise below pre-crisis level

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*The margin rate of non-financial corporations is a schematic measurement of the proportion of capital in the distribution of value added. Generally stable between 1987 and 2007 at around 32.7%, it slumped during the crisis of 2009 and again in 2012 and 2013. It has picked up again in the meantime, but without quite making up for the drop caused by the crisis. Since early 2016 the rate has hovered at around 31.6%, one percentage point below its pre-crisis level. This decrease can be solely attributed to market services companies. Indeed, the margin rate in industry hit a 30-year high in 2016.*

*Several factors can explain this misalignment. First of all, the margin rate contains a significant cyclical component, which increases in line with payroll rigidity and the scale of activity shocks. Depending on the degree of substitutability between production factors in the overall production apparatus, the margin rate may be affected by the relative cost of production factors, and thus by fluctuations in commodity prices, taxes on labour and capital, interest rates (which influence the cost of capital) and the bargaining power of employees. Finally, the literature demonstrates the role played by the degree of competition: the greater the market power of a firm, the higher its equilibrium margin rate will be.*

*By breaking down the accounting elements and modelling the margin rate for each branch at a fine level, it is possible to quantify the contribution of these factors to variations in the margin rates of French businesses and determine whether or not this is a long-term situation, making the distinction between industry and services.*

*In industry, the margin rate currently stands at an exceptionally high level thanks to a reduction in levies on businesses and the improved terms of trade resulting from the recent fall in oil prices. However, the cyclical component, which was previously strongly negative, has simply returned to its average level in 2017.*

*For market services, the decline has a fairly strong cyclical component because the rebound in activity in services came later than it did for industry. Nevertheless, there are also more structural factors at work: in the trade and information-communication branches, the substantial decrease seems to be largely a result of the intensity of competition. This has led to a fall in the price of value added in these branches and a dilution of market share, calculated from individual data. In services to businesses, virtually all of the decline seen over the past 17 years can be attributed to the movement towards specialisation in low capital-intensive activities: heavily capital-intensive activities such as equipment hire have shrunk, while a large increase has been observed in administrative support services, which are very labour-intensive and have a very low margin rate. This drop in the margin rate of services is not specific to France: in Germany, the rate declined much more sharply over the same period.*

*All sectors combined, one-third of the decrease in the margin rate (in relation to the levels seen in the 1990s) can be attributed to short-term factors. In services, the negative effects of the cycle have been partially offset by the positive effects of falling labour costs and the improved terms of trade. The remainder appears to stem from long-term factors linked to a mutation in the structure of French activity towards branches which are less capital-intensive, along with the higher degree of competition in certain service sectors. The margin rate could therefore see a slight increase as activity continues to grow, but without necessarily returning to its pre-crisis level.*

# Corporate margin rates should stabilise below pre-crisis levels

## The corporate margin rate decreased between 2008 and 2013 after remaining stable from 1987 to 2007

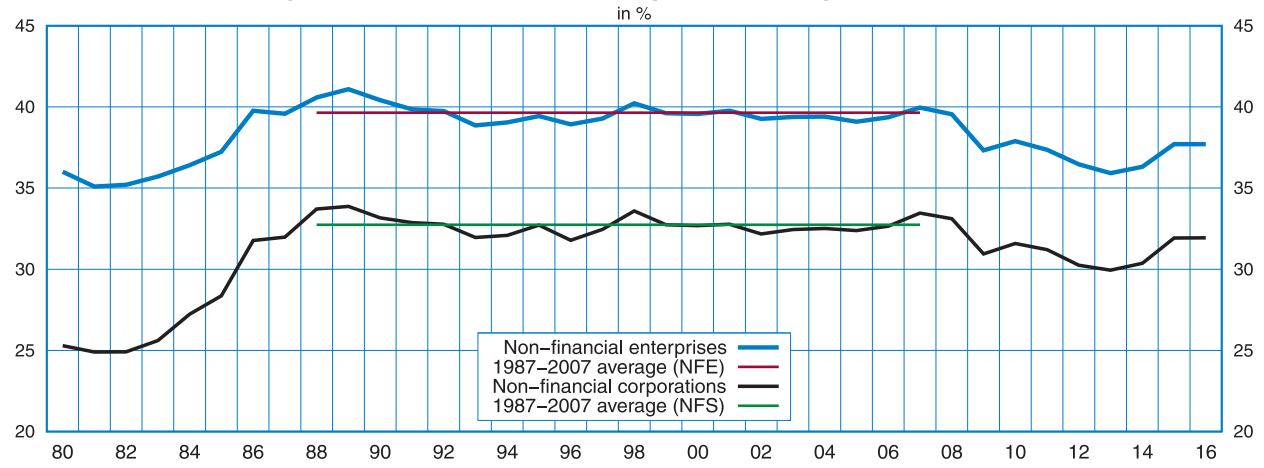
*The corporate margin rate remained stable from 1987 to 2007*

The margin rate of non-financial corporations (NFCs) is the ratio of their margin, or gross operating surplus, to their gross value added. It measures the profit share of value added, broadly defined: gross operating surplus covers the corporation tax, financial costs and investments costs of NFCs. After increasing sharply between 1982 and 1987 against the backdrop of the policy known as "competitive disinflation," it remained broadly stable between 1987 and 2007, hovering around an average of 32.7% (*Graph 1*). The margin rate of non-financial enterprises - which, by definition, is higher (*Box 1*) - also remained stable over this period, averaging 39.6%.

*Margins shrank during the crisis and have not fully recovered since*

In 2008 and 2009, the decline in corporate value added had a knock-on effect on corporate margins. The margin rate of NFCs thus dropped by 2.6 points between 2007 and 2009. It began to fall again in 2012 and sank to 29.9% in 2013, its lowest level since 1985. It has since risen slightly and stabilized at 31.9% in 2016, remaining slightly below the pre-crisis average. The margin rate of non-financial enterprises has followed a similar trajectory to NFCs, and in 2016 stood at 37.7%, i.e. nearly 2 points below its pre-crisis average.

**1 - Margin rate in non-financial enterprises and corporations since 1980**




*Source: INSEE, annual national accounts, base 2010*

### Box 1 - Margin rates of NFCs, NFEs and branches

The margin rate of non-financial corporations measures the portion of value added devoted to the remuneration of capital. It is a corollary of the weight of payroll costs as a proportion of value added.

The category non-financial enterprises (NFEs) includes non-financial corporations (NFCs) and non-financial sole proprietors (NFSPs). As the incomes of these sole proprietors are not counted as wages, but instead as "mixed income" comparable to gross operating surplus, the margin rate for NFEs is structurally higher (37.7% in 2016) than it is for NFCs alone (*Graph 1*). The margin rate is sensitive to short-term fluctuations, but the long-term decline in the contribution of sole proprietors to value added (as a result of the increase in payroll employment) is reflected in the decline in the margin rate of NFEs (Pionnier, 2009). Between 2014 and 2016, the increase in the margin rate of NFEs in general (+1.4 points) was close to the increase recorded for NFCs (+1.6 points).

We can represent the fluctuations in the margin rate for different branches of activity, but in this case we cannot separate the contribution of the institutional sectors (financial and non-financial enterprises, households, general government and non-profit institutions serving households). For the purposes of this study, a specific analysis was performed for the industrial and market service branches, comprised primarily of non-financial enterprises. We thus retained all industrial branches. In the service branches, on the other hand, the breakdown of fluctuations in the margin rate concerns the following branches: trade and repairs, transport and storage, accommodation and food services, information and communication and services to businesses. Financial services and insurance have been excluded, as have property services and "other service activities," a category which contains a significant portion of activities classified as household activities. Aggregating the data for the branches under consideration allows us to obtain a reasonably accurate representation of the general evolution of the margin rate for non-financial enterprises. ■

# Corporate margin rates should stabilise below pre-crisis levels

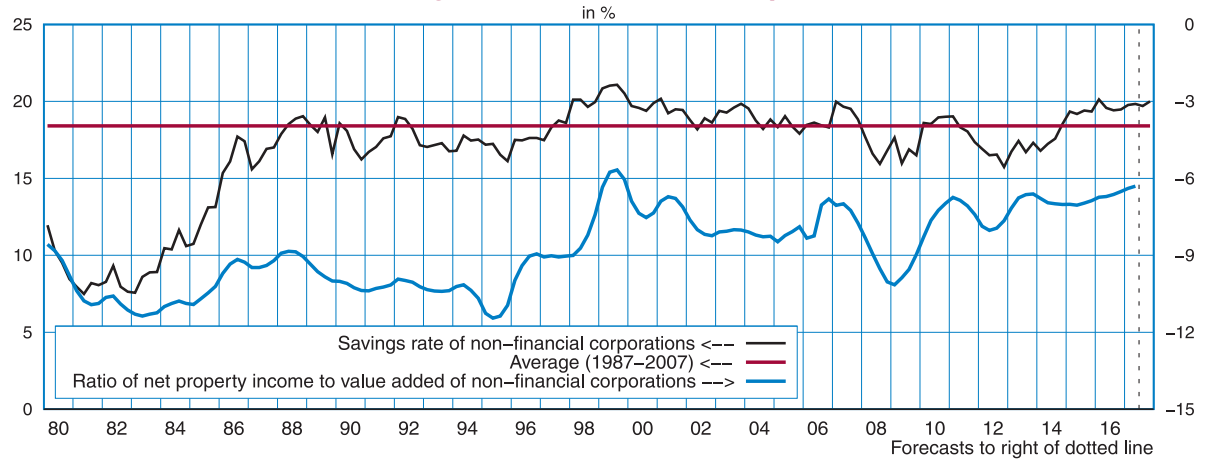
*Businesses have maintained their self-financing capacity*

Since the onset of the crisis in 2008, the fall in margins has been more than offset by the fall in net interest and dividends, and by the downward trend in corporation tax. The gross savings of enterprises, i.e. the income which remains after payment of wages as well as all taxes and property income (interest, dividends and rents, primarily), now account for a greater portion of value added than they did before the crisis. The savings ratio of non-financial corporations (the ratio of gross savings to value added) was 20% in 2016, its highest level since 2007 (*Graph 2*). Businesses have thus reduced their margins but reconstituted their capacity to self-finance.

*Margins in the industrial branches have picked up in the past two years, but the margin rates of service companies remain below their pre-crisis level*

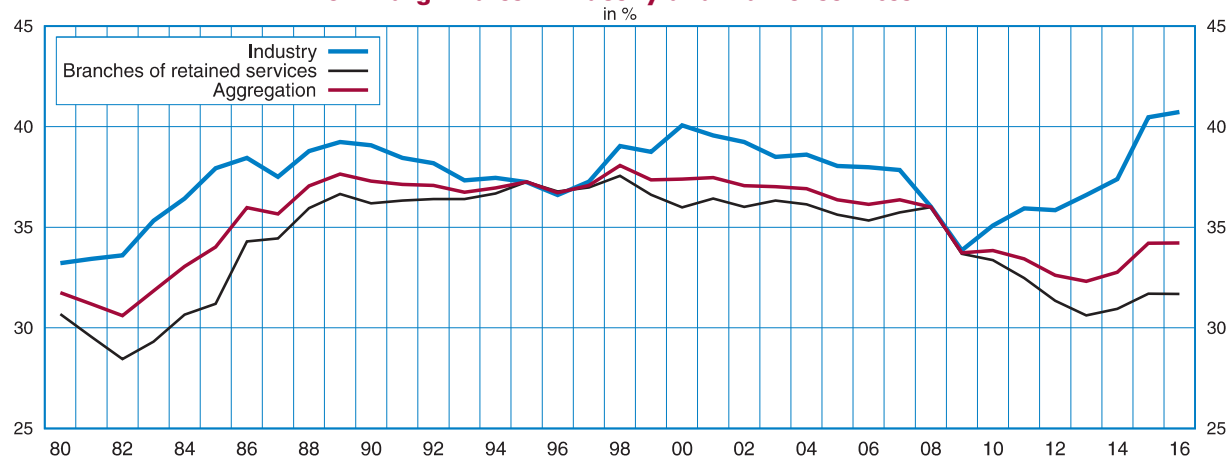
In the industrial branches, margin rates fluctuated between 36% and 40% in the period from 1987 to 2008, then fell during the crisis and hit 33.9% in 2009 (*Graph 3*). The average rate has gradually improved since, and now exceeds its pre-crisis level (40.7% in 2016). In the market service branches (*Box 1*), the average margin rate also fell sharply during the crisis after a long period of stability (hovering between 35.7% and 38.1% from 1987 to 2008). The rate fell to 30.6% in 2013 and has only slightly increased since (31.7% in 2016). Since enterprises of industrial services use various service functions (Ceci-Renaud, 2016), the margin rates in industry and services are not independent of one another. Over the period as a whole, the variation in both rates can be partly attributed to the transfer of activities with low margins from industry towards the service branches, particularly via the growing use of temporary employment in industry (*Box 2*). Beyond this transfer of activities between branches however, corporate margin rates in the industrial branches and service branches have diverged since the crisis.

**2 - Savings ratio of non-financial corporations**




*Source: INSEE, quarterly national accounts, base 2010*

**3 - Margin rates in industry and market services**




Note: the margin rate in services is calculated based on the following branches: trade and repairs, transport and storage, accommodation and food services, information and communication and services to businesses.
*Source: INSEE, annual national accounts, base 2010*

## Box 2 - The effects of temporary work on the distribution of value added in industry and services

In the national accounts, workers are assigned to different branches based on the activities of the companies by whom they are employed. Temporary workers are therefore considered to belong to the branch containing temporary employment agencies, a sub-section of the services to businesses branch.
When a company in the industrial, construction or commerce sectors uses the services of a temporary employment agency to substitute or temporarily augment its own workforce, this expenditure on temporary work services is counted as part of the intermediate consumption of the branch to which the company belongs, while in resource terms it is counted as part of the output of the temporary employment branch.

$$CI_B(Interim) = P_{Interim} = CI_{Interim} + VA_{Interim} = CI_{Interim} + MS_{Interim} + EBE_{Interim}$$

The use of temporary workers therefore generates a significant transfer of value added from businesses towards the branch containing temporary employment agencies. But the value added of this branch is, by definition, very low on capital: the branch has a low margin rate and a very weak ratio of intermediate consumption to output. Temporary employment thus primarily represents a transfer of payroll costs, and pushes up the margin rate of companies using such services.

We can assess the impact of this effect on the margin rate of different branches by recalculating their value added and gross operating surplus based on their intermediate consumption of temporary work services CIB (Interim).

The value added of different branches can thus be corrected for the use of temporary work by adding the intermediate consumption of employment services (Branch 78 in the French classification of activities [NAF], including the activities of temporary employment agencies), weighted based on the intensity of value added in the output of the employment services branch.

$$VA_B^* = VA_B + VA_{Interim}(B) = VA_B + \frac{VA_{Interim}}{P_{Interim}} \times CI_B(Interim)$$

A certain proportion of this extra added value corresponds to the margins of employment services. The gross operating surplus of the branches can thus be corrected by applying the margin rate for the employment services branch.

$$EBE_B^* = EBE_B + TxM_{Interim} \times VA_{Interim}(B)$$

The margin rate corrected for temporary work consumption is deduced from the corrected indicators for value added and gross operating surplus.

$$TxM_B^* = \frac{EBE_B^*}{VA_B^*}$$

The value added and gross operating surplus for the employment services branch are finally corrected by deducting the sums attributed to other branches.

$$VA_{Interim}^* = VA_{Interim} - \sum_i VA_{Interim}(B_i)$$

$$EBE_{Interim}^* = EBE_{Interim} - \sum_i EBE_{Interim}(B_i)$$

**Effects of the temporary employment correction on the margin rate in different branches**

*in %*

| | Margin rate in 2015 | Margin rate corrected | Gap |
|---|---|---|---|
| Total industry, of which: | 40.5 | 38.7 | 1.8 |
| Extractive industries, energy, water, waste | 55.7 | 54.5 | 1.2 |
| Agri-food | 46.2 | 44.0 | 2.2 |
| Coke and refined petroleum products | 32.2 | 31.7 | 0.4 |
| Capital goods | 31.1 | 29.5 | 1.6 |
| Transport equipments | 43.8 | 41.1 | 2.8 |
| Other industrial products | 33.4 | 31.9 | 1.5 |
| Total services, of which : | 31.7 | 32.9 | –1.2 |
| Trade | 28.7 | 28.3 | 0.4 |
| Transport | 32.5 | 31.4 | 1.1 |
| Accommodation and food services activities | 38.1 | 37.8 | 0.3 |
| Information and communication | 39.7 | 39.6 | 0.1 |
| Business services (including temporary work) | 29.2 | 33.5 | –4.2 |

*Source: INSEE, annual national accounts, base 2010, calculations by authors*

Compared with the direct recruitment of extra employees by the branches concerned, this correction shows that using temporary employment services clearly increases businesses' margins. The increase was 1.8% for industry. The biggest gain occurred in the transport equipment manufacturing branch. In services, the biggest gain came in the transport and warehousing branch.

According to this calculation method, in 2015 the use of temporary employment services contributed to a three-point gap between industry and the service branches covered by this study. By transferring payroll costs from industry to the service branches, temporary employment reduced the margin rate in services and increased the margin rate in industrial activities. The rate of temporary employment has increased significantly since the late 1980s: between 1990 and 2015 it was multiplied by 1.9 in the market branches (from an average of 1.9% in 1990 to 3.5% in 2015). Over the period in question (1987-2016), the rise of temporary employment services has thus contributed to a structural reduction in the margin rate of services to businesses by 2 points. This reduction occurred primarily in the early 1990s. ■

## Economic theory singles out a number of long-term determinants of the margin rate: the cost of production factors, the cost of intermediate goods and regulation of the labour and goods markets

*The margin rate incorporates a cyclical component and a long-term trend*

Some factors contribute to the long-term margin rate, whereas others theoretically only contribute to its short-term fluctuations. These fluctuations are generally pro-cyclical: in periods of economic expansion the margin rate tends to grow, because productivity tends to increase more rapidly than real wages. Conversely, as the labour force and wages adjust less rapidly and less sharply than prices and production volumes, the return on capital tends to cover most of the adjustment in times of recession. The current level of the margin rate thus contains a cyclical element and a structural element.

*An accounting breakdown to track the short-term fluctuations and an econometric model to identify long-term factors and the dynamic contribution of each factor*

In order to track the variation in margin rates by branch, an initial approach involves breaking down this variation in accounting form. As the margin rate is linked to the share of wages in total value added, in accounting terms it is directly influenced by the principal determinants of payroll costs. Its variations can thus be broken down according to productivity gains, real wages, employers' contributions and the ratio between the price of value added and consumer prices (*Box 3*). Breaking indicators down into their accounting components serves to identify the different factors at work in each branch, and track the variation in margin rates in the short term.

### Box 3 - Accounting breakdown of fluctuations in the margin rate

In the short term, variations in the margin rate can be represented as the sum of the contributions made by payroll employment, the apparent productivity of labour, real wages, contributions, taxes and subsidies paid or received by businesses, as well as the ratio of value-added prices to consumer prices, which reflects changes in the terms of trade (ratio of import prices to export prices). Variations in the margin rate depend on the fluctuations in each of these contributions.

In accounting terms they can be broken down as follows:

- the ratio between payroll employment (ES) and total employment (ET), measured in full-time equivalent, which has a positive effect;
- the development of productivity (Y/ET), where Y is value added, and the ratio of value-added prices to consumer prices ($P^{VA}/P_C$), or the terms of trade, with a positive effect;
- the development of average wages at full-time equivalent ($SM_{ETP}/P_C$) and the rate of employers' contributions ($W/SM_{ETP}$, where W represents the cost of labour at full-time equivalent), with a negative effect;
- other factors: this includes taxes on output minus subsidies such as the CICE (which reduces companies' tax bills but is recorded in the national accounts as a subsidy paid to businesses).

$$TM = \frac{EBE}{VA} = 1 - \frac{W \cdot ES}{Y \cdot P_{VA}} + other\ \ factors$$

$$TM = 1 - \frac{ES}{ET} \times \frac{ET}{Y} \times \frac{W}{SM_{ETP}} \times \frac{SM_{ETP}}{P_C} \times \frac{P_C}{P_{VA}} + other\ \ factors$$

These different contributions are expressed in accounting terms and thus correspond to an *ex ante* effect, without taking into account businesses' adaptive behaviour: *ex post* businesses may decide to allocate their value added differently, by increasing wages or reducing the sale prices of their products in response to a reduction in employers' social security contributions, for example. The long-term effect of these factors may thus be quite different from its *ex ante* accounting effect. ■

Nevertheless, in the longer term these factors alone are insufficient to explain the variations. For example, the gains made thanks to the terms of trade will gradually spread to the rest of the economy in the form of price cuts, wage increases or employment. An econometric approach is therefore required in order to assess the persistence over time of the different factors which influence the margin rate, and to identify which among them only have a short-term impact, particularly the productivity cycle, and which factors modify the equilibrium margin rate for the branch. Based on literature a review, a theoretical framework is put forward (*Box 4*) and tested for each branch in order to distinguish between short-term and long-term effects, and thus to assess the different dynamic contributions of these factors to variations in the margin rate (*Appendix: sources and models*).

The different theoretical analyses of the distribution of value added schematically identify two major sets of factors likely to have an influence in the long term: technical factors, linked to the way in which companies combine intermediate goods, labour and capital in their production processes, and institutional factors, linked to the organisation of the labour and goods markets and the financial markets (Askenazy *et al.*, 2011).

### Box 4 - Theoretical framework employed

The factors which determine the equilibrium level of the margin rate may be derived from hypotheses based on the productive function of the economy and the state of competition in the markets in goods and services.

The long-term stability of the margin rate is compatible with a Cobb-Douglas representation of the productive function of the economy, within the theoretical framework of perfect competition. The level of output is the result of a combination of two production factors: capital and labour. In the Cobb-Douglas model, the elasticity of substitution between these production factors is equal to one: any increase in the relative price of a factor is fully offset by a reduction in the quantity of the factor used. As such, the long-term relationship between gross operating surplus, which measures the remuneration of capital, and value added is unitary. In the short term the margin rate is affected by the immediate circumstances, while in the long term it converges towards its equilibrium rate which is supposed to be stable.

Introducing additional variables to the long-term equilibrium ratio requires us to remove certain hypotheses from the schematic model:

- the influence of the prices of factors of production on the long-term equilibrium level of the margin rate corresponds to a non-unitary elasticity of substitution hypothesis regarding the production function. It can be modelled using a CES function (constant elasticity of substitution), where the elasticity of substitution is constant but not necessarily equal to one.

- classical production functions do not represent intermediate consumption in the process of creating value added. Implicitly, they suppose that intermediate consumption corresponds to a constant share of output and thus has no influence. It is possible to add an intermediate consumption variable to the production function: the latter thus appears in the production process and in the transition from output to value added. The function can influence the level of the margin rate depending on the substitutability of capital and labour.

- modelling the influence of competition requires us to abandon the perfect competition hypothesis, particularly the idea that businesses are "price takers." In a context of monopolistic competition, firms seek to optimize their behaviour in terms of both quantity and price, and thus have a degree of market power.

The theoretical production function and behavioural hypotheses posited by Prigent (1999) illustrate these three aspects.

The production function uses three production factors - capital, labour and energy - in the following configuration:

$$F(K,L,E) = \left[a \times (\theta \times L)^{-\rho} + b \times (Min\ \ K, d \times E)^{-\rho}\right]^{\frac{-1}{\rho}}$$

The elasticity of substitution is not fixed at 1: the price of the factors may have an impact on the division of value added. If we suppose that the elasticity of substitution between the factors is less than one, a reduction in the cost of capital will also drive down the margin rate.

Energy is considered to be complementary to capital (with a complementarity coefficient d). It influences the distribution of value added both in terms of choices regarding the quantity of production factors and also as a term subtracted from output when calculating value added.

Finally, the article exists within a context of monopolistic competition: firms apply a mark-up rate to their marginal costs in order to determine their sale price; the margin rate increases in line with the rate of this mark-up.

The long-term equilibrium of the margin rate depends on the mark-up rate, the real cost of capital and the relative price of energy. ■

## Corporate margin rates should stabilise below pre-crisis levels

*In the long term, the margin rate depends on the sensitivity of enterprises to variations in the cost of production factors*

In the short term, the share of labour in value added depends on its cost. When a short-term shock has an impact on wage levels, the share of labour in total value added will mechanically decrease or increase because the demand for labour does not adjust immediately. The cost of production factors thus affects the breakdown of value added, through a price effect. In the long term, a substitution effect is observed: companies may modify their production in response to lasting changes in the relative cost of production factors, developing technologies which are more or less labour and capital intensive. The margin rate thus depends on how sensitive the production techniques used by companies are to the costs of these factors (Baghli *et al.*, 2003).

In the specific example of a Cobb-Douglas production function, the substitution effect will counterbalance the price effect. In the long term, all of the effects of changes in the price of production factors are counterbalanced by the adjustments made by companies. When payroll costs increase, the quantity of labour demanded by companies decreases and the contribution of payroll costs remains stable; by the same token, when the cost of capital increases the quantity of capital falls and the contribution of capital thus remains stable. In this framework, the cost of production factors has no long-term influence on the distribution of value added. Nevertheless, this counterbalancing hypothesis is very restrictive. In practice, the elasticity of substitution between production factors is not necessarily unitary over the long term (*Box 4*). If companies do not fully counterbalance the effect of a relative increase in the cost of one of their production factors by reducing their use of this factor, the increase in this factor proportionally to value added may become a lasting phenomenon.

*The equilibrium level of the margin rate increases as real interest rates increase...*

In the French context, with an economy which is open to international capital exchanges, fluctuations in the cost of capital are largely determined by external conditions: decisions taken by the central banks and international capital markets. However, labour is less mobile than capital. Companies make choices in relation to the external constraint of financing conditions, adjusting their payroll costs as required. In theory, this link between the price of production factors (known in the economic literature as the "factor price frontier") and the difference in mobility between capital and labour suggests that, if the elasticity of substitution between production factors is not unitary, the cost of capital has more of an influence than the cost of labour on the long-term equilibrium margin rate (Cotis & Rignols, 1998). In other words, prevailing economic theory holds that the effects of variations in the relative prices of production factors are passed on via the cost of capital more than via the cost of labour. In particular, when the cost of capital decreases, if companies do not fully counterbalance this price effect by increasing their use of capital in their production processes, then the return on capital will tend to decrease as a share of value added.

*... and falls when the cost of intermediate goods falls*

The equilibrium margin rate is also influenced by the cost of intermediate goods because it does not encompass the distribution of turnover from all sales made by businesses, but only that of their value added, i.e. their output less their intermediate consumption. By modelling the weight of intermediate consumption in the production function, it is possible to reveal the long-term relationship between its price and the level of the margin rate (Prigent, 1999). The cost of intermediate consumption (including energy, which has probably had a significant influence on the distribution of value added during oil shocks and countershocks) is therefore also held to be a factor which influences the level of the margin rate in the long term. Its short-term influence is even more substantial, as a result of smoothing behaviour by companies.

## Corporate margin rates should stabilise below pre-crisis levels

*The margin rate varies with the degree of competition in the goods and services markets...*

When companies have market power in a given sector, they have the ability to set sale prices at a level superior to their marginal cost. The lower the degree of competition and thus the more scope there is for mark-up, the higher the margin rate will be. Oligopolistic markets tend to emerge in sectors where there are substantial fixed costs, such as network costs, or technological advances made by a small number of players. In the market for a specific good or service, the degree of competition can be approximated by measuring the concentration of enterprises. During market expansion phases, the margin rate may be pushed downwards by the gradual reduction in mark-up rate applied by the sector's pioneers (Blanchard & Giavazzi, 2003). Conversely, the development of sectors with strong market power can drive the margin rate of the economy as a whole upwards, a hypothesis which has been studied in the American market (Gutiérrez & Philippon, 2016; De Loecker & Eeckhout, 2017). The degree of competition can thus be considered a structural factor capable of influencing the equilibrium margin rate. This would explain why the reduction in the margin rate has been restricted to the service branches, where competition has probably intensified, and has not spread to the industrial branches where international competition has been generally strong and constant since the introduction of the Single European Act in 1987.

*... and drops in line with the bargaining power of employees*

Finally, the margin rate also depends on the capacity of workers to negotiate their pay. In insider-outsider theoretical models, the bargaining power of employees influences the level of their wages and thus the weight of payroll costs as a proportion of value added. This bargaining power is particularly affected by the unemployment rate: the higher the unemployment rate, the lower the bargaining power of employees and the higher the margin rate will potentially be. An increase in the unemployment rate thus theoretically leads to an increase in the equilibrium margin rate (Blanchard & Giavazzi, 2003). In theory this is primarily a short-term factor, as the unemployment rate should converge towards its structural level in the long term.

### Economic recovery, terms of trade and measures to reduce the cost of labour have contributed to the recovery of the margin rate in industry

*Industry margins have been helped by the return to growth*

During the two crisis years of 2008 and 2009, the margin rate in industry fell by 4 points. The decline in value added by industry was reflected in a substantial decrease in the productivity of labour (*Graph 4*). This contributed –2.5 points to the fall in the industry margin rate (*Table 1*). Since 2010, however, value added has grown more rapidly than payroll. The productivity of labour has contributed an annual average of +1.5 points to the increase in the margin rate, while the effect of wage increases has only been –0.8 points per annum on average. In 2015 in particular, the strong increase in value added in manufacturing of transport equipment (+15%) was reflected in a sharp increase in the margin rate of this branch (+8 points).

*The weak Euro and low oil prices have provided breathing space for the goods manufacturing branches*

At a detailed level, the increase in the margin rate since 2009 has been particularly strong in the three goods manufacturing branches: capital goods (+9.5 points), transport equipment (+18.3 points) and other manufacturing industries (+5.9 points). The transport equipment manufacturing branch has benefited substantially from the improvement in the terms of trade since 2014. This branch consumes an above-average quantity of petroleum products, and oil prices have fallen. Elsewhere, the transport equipment branch in particular benefited from the fall in the value of the Euro in 2015: the vast majority of export contracts, particularly in the aeronautical sector, are priced in dollars, which

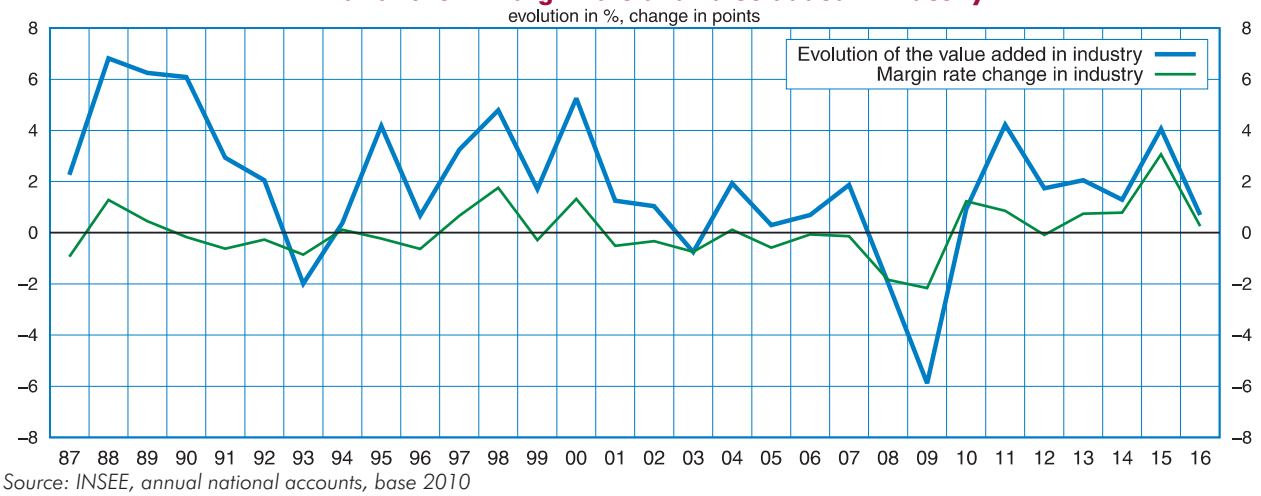
helps to explain the significant rise in export prices. This short-term upturn in the terms of trade follows a long period of decline: the prices of value added in industry had been less dynamic than consumer prices since 1987, and the margin rate only remained stable across that period because productivity grew at a significantly higher rate than wages.

*Cuts in levies in 2010 and again since 2014 have contributed to the improvement of margins in the industrial branches*

In the first decade of this century, policies designed to reduce employers' contributions helped to increase the margin rate of businesses in industry (which increased by an average of +0.1 points per year between 2000 and 2009). The introduction of the tax credit for encouraging competitiveness and jobs (CICE) followed by the Responsibility and Solidarity Pact (PRS) and the hiring premium for SMEs between 2014 and 2016, and particularly the reform of the Professional Tax in 2010, have all made a clear contribution to the recovery of the margin rate in industry since the crisis. The margin rate grew by an average of one percentage point per year between 2010 and 2016, of which 0.4 points can be attributed to the impact of these measures.

The greatest beneficiaries of the 2010 professional tax reform have been the energy production branches (electricity, gas, steam and air conditioning; manufacture of coke and refined petroleum products). The beneficial effects of the decrease in the cost of labour made possible by the CICE have been more evenly spread across all industrial branches.

**4 - Variations in margin rate and value added in industry**




*Source: INSEE, annual national accounts, base 2010*

**Table 1 - Accounting breakdown of the variations in the margin rate in industry**

*in % and in points*

| | 1987-2016 | 1987-1999 | 2000-2007 | 2008-2009 | 2010-2016 |
|---|---|---|---|---|---|
| **Margin rate at the end of the period** | **40.7** | **38.7** | **37.8** | **33.9** | **40.7** |
| **Annual average variation of margin rate** | **0.1** | **0.1** | **–0.1** | **–2.0** | **1.0** |
| **Annual average contributions to margin rate variation** | | | | | |
| *Payroll employment* | *0.0* | *0.0* | *0.0* | *0.0* | *0.1* |
| *Productivity gains* | *1.7* | *2.2* | *1.7* | *–1.3* | *1.5* |
| *Real wage per FTE* | *–0.9* | *–1.2* | *–0.6* | *–1.1* | *–0.8* |
| *Employer contribution rate* | *0.0* | *0.0* | *0.1* | *0.1* | *–0.1* |
| *Ratio of the value added price to the consumer price* | *–0.7* | *–0.8* | *–1.4* | *0.2* | *0.0* |
| *Other factors (of which taxes on output and subsidies like CICE)* | *0.0* | *–0.2* | *0.0* | *0.0* | *0.4* |

*Source: INSEE, annual national accounts, base 2010*

# Corporate margin rates should stabilise below pre-crisis levels

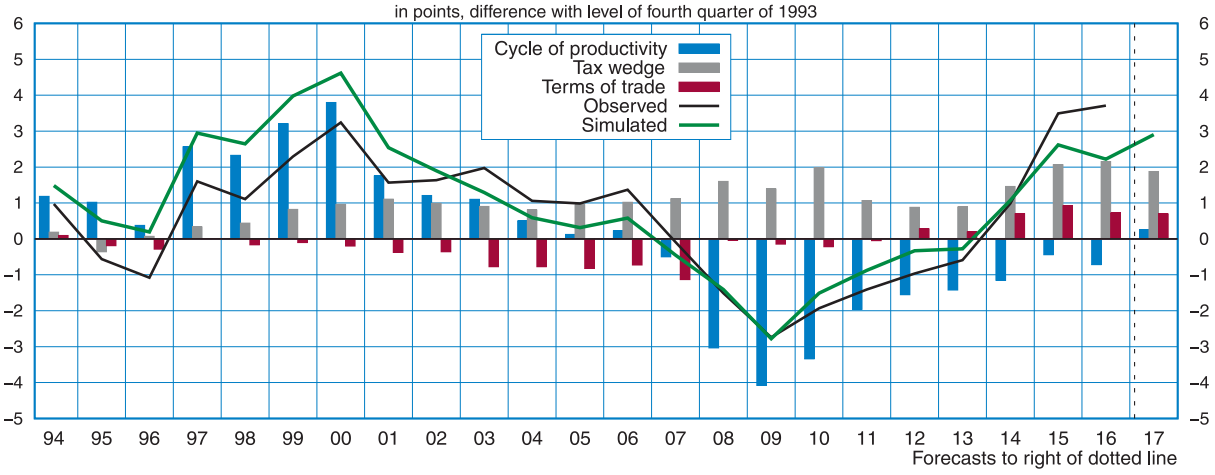
*The productivity cycle, taxation and terms of trade can be used to model the variation in the margin rate in industry*

Above and beyond this accounting breakdown, econometric modelling of the margin rate in industry serves to reconstruct the influence of the productivity cycle, taxation and the terms of trade over time, taking account of their gradual dissemination throughout the economy. In particular, it can represent the cumulated contributions of different factors (*Graph 5*).

Fluctuations in the margin rate are predominantly determined by the productivity cycle, which bolstered the ratio considerably between 1996 and 2000 before contributing to its deterioration in 2001 and again in 2008. When value added increases, the increase in gross operating surplus is more than proportional. In the longer term, the model does not reject the hypothesis of a unitary relationship between gross operating surplus and value added: the equilibrium margin rate in industry would thus appear to have been stable since 1987, with value added shocks having a purely temporary effect. In 2017, the impact of the 2008 crisis appears to have been dampened by the industrial branches: the contribution of the productivity cycle to the variation in the margin rate observed since 1993 is slightly positive, whereas it was strongly negative in 2009 (–4 points).

The model also tracks the significant short-term influence of the "tax wedge", which includes the effects linked to the rate of employers' contributions as well as business taxes less subsidies. Policies aimed at reducing the cost of labour and taxes on production have made a significant contribution to the industrial margin rate since 2000, according to the model. Measured in 2017, these factors have contributed two points to the increase in the rate compared with its level at the end of 1993. The model also confirms the positive effect of the improved terms of trade since 2008, which have contributed almost one percentage point to the increase seen since 1993. While the model is broadly accurate in its representation of fluctuations in the margin rate, it does not fully represent the scale of the increase in the margin rate observed in 2015. This may be due to the exceptionally favourable conditions created by the depreciation of the Euro in that year, which boosted margins in the aeronautical sector, whose export contracts are priced in dollars.

**5 - Dynamic contributions to the evolution of the industrial margin rate**




How to read it: the graph shows the difference in the margin rate with reference to its level in Q4 1993. These contributions are cumulative.

*Source: INSEE, quarterly national accounts, base 2010, calculations by authors*

# Corporate margin rates should stabilise below pre-crisis levels

## The decline in the margin rate in market services stems primarily from trade, information-communication and services to businesses

*Margins in trade, information-communication and services to businesses have been shrinking since 2008*

Contrary to the situation in industry, the margins of service companies have not really picked up since 2014, having slumped during the 2008 crisis and again in 2012. Across the whole period under consideration, 1987 to 2016, the margin rate in market services (trade, transport, accommodation and food services, information and communication, services to businesses) fell by 2.7 points. This downturn can be attributed to just three branches: trade, information and communication, and services to businesses (*Table 2*). It reflects two major developments: a decline in the margin rate in certain branches (the rate variation effect) and the fact that branches with weaker margin rates have come to account for a greater share of total value added (structural effect).

*Changes in the structure of activity in the service branches have spurred a downward trend in the margin rate*

In the three branches identified above, the margin rate began to decline in the recession of 2008-2009 (as in the industrial branches), but the decline has since continued. The margin rate in the service branches has been further driven down by a structural effect which accounts for 1.6 points of the decline observed between 1987 and 2015. This structural effect accounts for virtually all of the decline observed in the margin rate in services to businesses: in this branch, very capital-intensive activities such as equipment hire have declined while other activities such as legal and accounting services, management, architecture, engineering, technical analysis and inspections and other administrative and support services have increased, including temporary employment (*Box 2*). These activities are labour-intensive, with a very low margin rate.

*The increase in payroll employment contributed to a structural reduction in the margin rate of service companies up until the early 2000s*

In service companies, the rate of payroll employment grew until the early 2000s. By this time payroll employment accounted for 90% of total full-time equivalent employment, a 5-point increase since 1987. The decline in the proportion of sole proprietors was particularly strong in certain branches: trade and repairs, accommodation and food, legal activities, accountancy, management, architecture, engineering, technical analyses and inspections (*Graph 6*). All in all, the increase in payroll employment in service companies drove their margin rate down by an average of 0.1 points per year, equivalent to a cumulative decrease of 3.2 points between 1987 and 2016 (*Table 3*). After stabilising in the 2000s, the rate of payroll employment has shrunk slightly since 2010, which, in accounting terms, has contributed to a slight increase in the margin rate (approx. 0.1 points per year).

**Table 2 - Margin rates by branch in market services**

*margin rate in %, contributions in points*

| | Margin rate | | | Contribution of branches to margin rate variation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1987-2015 | | | 1987-2000 | 2000-2007 | 2007-2009 | 2009-2015 |
| | 1987 | 2015 | 1987-2015 | Contribution | Rate variation effect | Structural effect | Contribution | | | |
| **Total** | **34.4** | **31.7** | **–2.7** | **–2.7** | **–1.1** | **–1.6** | **1.5** | **–0.3** | **–2.1** | **–2.0** |
| Trade | 33.0 | 28.7 | –4.3 | –1.2 | –1.4 | 0.2 | 1.1 | –0.9 | –0.2 | –1.0 |
| Transport | 26.8 | 32.5 | 5.6 | 0.8 | 0.8 | 0.0 | –0.3 | 0.3 | –0.1 | 0.9 |
| Accommodation and food services activities | 38.5 | 38.1 | –0.3 | 0.0 | 0.0 | 0.1 | 0.4 | –0.1 | –0.3 | 0.0 |
| Information and communication | 48.1 | 39.7 | –8.4 | –1.2 | –0.6 | –0 .6 | –0.3 | 0.1 | –0.3 | –0.7 |
| Business services | 32.4 | 29.2 | –3.1 | –1.2 | 0.1 | –1.3 | 0.6 | 0.3 | –1.1 | –1.1 |

Note: the contribution of each branch to variations in the margin rate can be broken down into an effect linked to variations in the rate for that branch and a structural effect, linked to the shifting importance of the branch as a proportion of total value added. These contributions have been calculated here using the method proposed by J.-P. Berthier (2002). The rate and structural effects are calculated at level A38, then added to the higher levels.

*Source: INSEE, annual national accounts, base 2010, calculations by authors*

# Corporate margin rates should stabilise below pre-crisis levels

*Wages have been more dynamic than productivity in services since 2000*

Since 2000, real wages per full-time equivalent have increased by 19 points while the apparent productivity of labour has grown by just 8 points. The gap between wages and productivity has widened further still since the recession of 2008-2009 (*Graph 7*). This gap is particularly pronounced in the accommodation and food services and services to businesses branches.

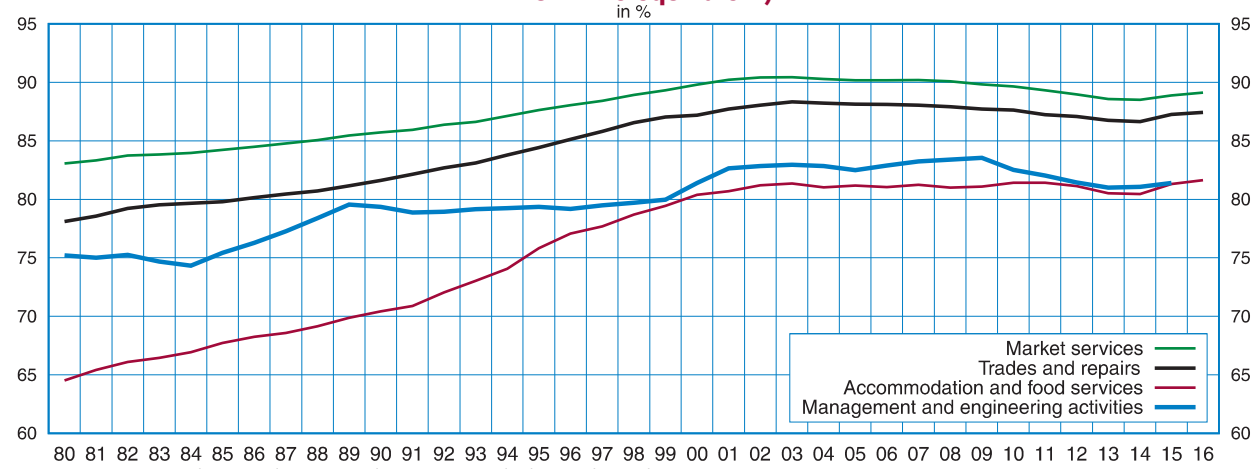
*The fall in the cost of labour has not been sufficient to offset this dynamism*

In the early 2000s, the dynamic growth of wages was offset by policies designed to reduce employers' contributions. For example, the requirement to maintain salaries at the same level when the reduced working week was introduced was offset by a reduction in employers' contributions. Since the crisis, reductions in contributions, taxes and subsidies have also offset the dynamism of wages, but only partially. Since 2008 they have contributed +1.3 points to the margin rate of companies in the service branches, but over the same period the disparity between the increase in wages and the increase in productivity has weakened the margin rate by 5 points.

*Prices of value added have increased much less rapidly than consumer prices since 2010*

Companies have not passed on the increase in their production costs to their prices. The value added prices of service companies have actually increased at a slower rate than consumer prices since 2010. But within this average trend, there are some clear contrasts. In energy-intensive branches (particularly transport), margins have clearly benefited from the fall in oil prices since 2014, as companies have not passed on all of the savings made in the form of reduced sale prices. However, prices have come down in the trade (–4% between 2010 and 2016) and information-communication sectors, especially telecommunications (–37% between 2010 and 2016), thanks in part to the arrival of a new mobile operator (Bacheré, 2017).

**6 - Payroll employment in service companies (payroll employment/total employment in full-time equivalent)**




*Source: INSEE, annual national accounts, base 2010, calculations by authors*

**Table 3 - Breakdown of margin rates in the selected service branches**

*in % and in points*

| | 1987-2016 | 1987-1999 | 2000-2007 | 2008-2009 | 2010-2016 |
|---|---|---|---|---|---|
| **Margin rate at the end of the period** | **31.7** | **36.6** | **35.7** | **33.7** | **31.7** |
| **Annual average variation of margin rate** | **–0.1** | **0.2** | **–0.1** | **–1.0** | **–0.3** |
| **Annual average contributions to margin rate variation** | | | | | |
| *Payroll employment* | *–0.1* | *–0.3* | *–0.1* | *0.2* | *0.1* |
| *Productivity gains* | *0.6* | *1.1* | *0.3* | *–0.9* | *0.6* |
| *Real wage per FTE* | *–0.6* | *–0.4* | *–0.6* | *–1.2* | *–0.7* |
| *Employer contribution rate* | *0.1* | *0.1* | *0.2* | *0.0* | *0.0* |
| *Ratio of the value added price to the consumer price* | *–0.1* | *–0.2* | *0.0* | *0.9* | *–0.4* |
| *Other factors (of which taxes on output and subsidies like CICE)* | *0.0* | *–0.1* | *0.1* | *0.0* | *0.2* |

*Source: INSEE, annual national accounts, base 2010*

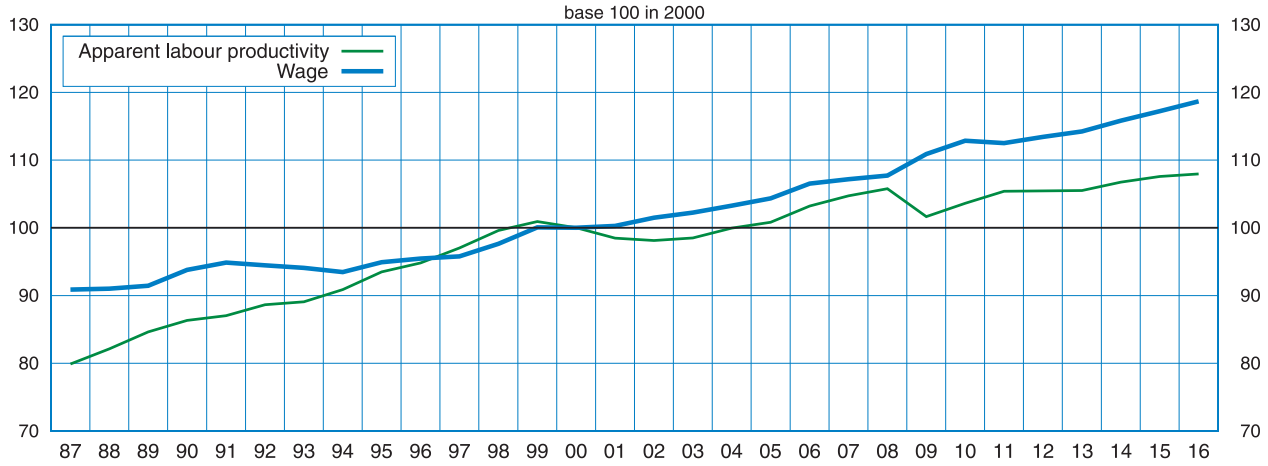
# Corporate margin rates should stabilise below pre-crisis levels

Between 2010 and 2016, variations in the ratio of value added prices to consumer prices contributed to an 8-point fall in the margin rate for the trade branch, and a 20-point fall in the telecoms branch. Overall, the variation in the ratio of value added prices to consumer prices in these service branches contributed to the 3-point decrease in the margin rate for all service companies observed since 2010. The variation in value added prices in these two branches accounts for half of the decline in the overall service-sector margin rate in relation to its pre-crisis average level (31.7% in 2016 compared with 36.4% between 1988 and 2007).

*Competition has become more intense in the trade and information-communication branches, apparently putting an end to oligopoly "rents"*

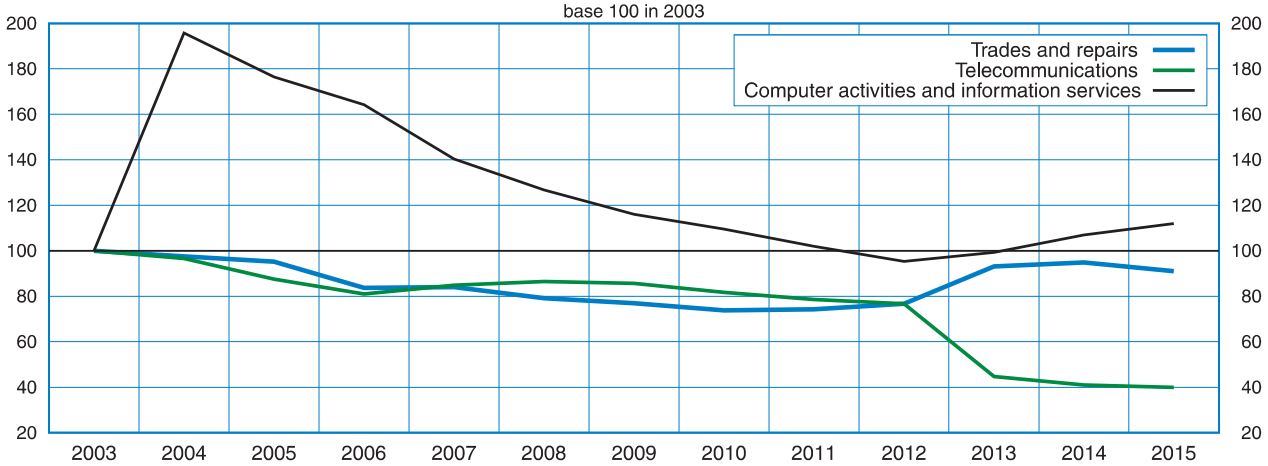
The intensification of competition can be seen in the Herfindahl-Hirschmann concentration indices for each branch, calculated using individual data (*Graph 8* and *Appendix*). The effect of competition is very clear in the information-communication branch, where the margin rate has collapsed since 2011 (–5 points) as a result of the severe decline in the prices of telecommunication services caused by the arrival of a new operator. A reduction in the concentration of turnover can also be seen in trade over the period 2003-2012, followed by a more recent trend towards reconcentration. In this sector, European integration has led to the introduction of policies promoting competition between brands, while the rise of the internet has fuelled the growth of newcomers in the retail sector.

**7 - Variations in wages and productivity in market services**




Scope: trade, transports, accommodation and food services activities, information and communication and business services.
*Source: INSEE, annual national accounts, base 2010, calculations by authors*

**8 - Sectoral index for concentration of turnover**




*Sources: Ficus (2003-2007), FARE (2008-2015), LiFi (2003-2015), calculations by authors*

# Corporate margin rates should stabilise below pre-crisis levels

In the IT and information services sector, the crisis which erupted in the early 2000s was followed by a large-scale restructuring of the sector including numerous mergers and acquisitions (Mordier, 2009). This is reflected in the clear increase in the concentration index for this sector in 2004. The concentration of the sector has since decreased.

*... in both France and Germany*

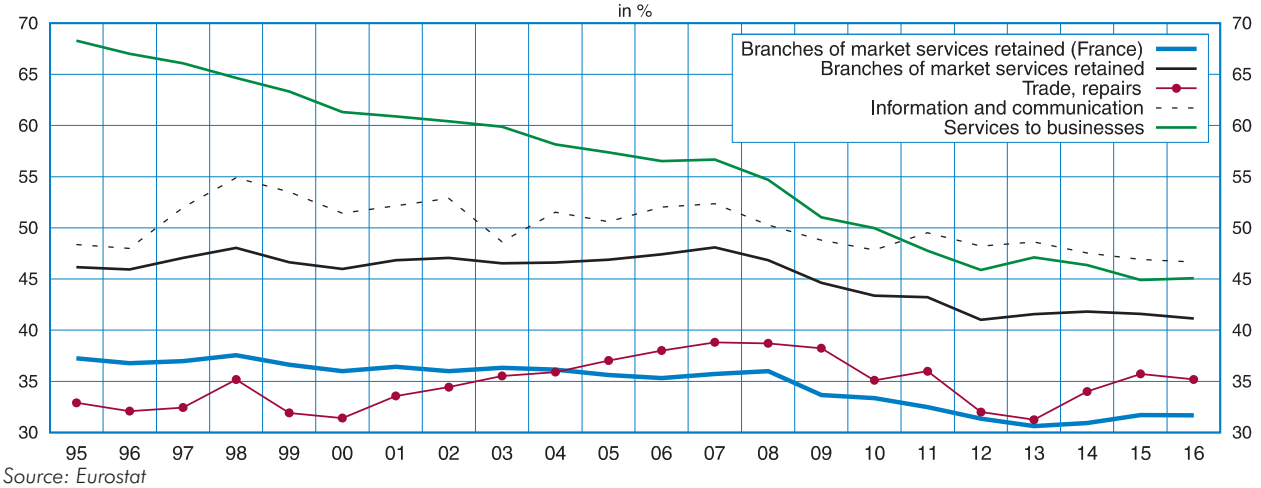
The decline in margin rates in services has not been a specifically French phenomenon: in Germany, the margin rate in services declined a little more sharply over the same period (*Graph 9*). While France saw a more pronounced decline in the information-communication branch, the rate fell less sharply in services to businesses. Even though bargaining power and the labour market situation differ considerably between France and Germany, the scale of the decrease seen in both countries would appear to suggest a general trend towards more intense competition in the service branches across Europe.

**The low level of the margin rate in market services appears to be the result of cyclical effects, the development of low capital-intensive activities, and variations in the level of competition**

*Modelling the margin rates branch-by-branch in market services provides a credible account of their evolution in all branches, with the exception of services to businesses*

As in industry, an accounting breakdown alone does not give a picture of the way in which short-term shocks spread to the margin rates of different branches over time. Branch-by-branch econometric modelling is therefore employed (*Appendix: sources and models*) in order to identify the effects of the productivity cycle, short-term shocks and factors affecting the equilibrium level of the margin rate. The modelled equations quite accurately retrace the variations in the margin rates in trade and repairs, transport services, accommodation and food services and information and communication (*Graph 10*). In these four branches, the long-term level of the margin rate is influenced by changes in value added, as well as by factors specific to each branch (competition for trade and information-communication, terms of trade for transport, producer prices and structural effects linked with developments in telecoms for information-communication). The margin rate is also sensitive to short-term variations in value added. In each of these branches, as in industry, value added has a very clear accelerator effect.

**9 - Margin rate of market services in Germany**




*Source: Eurostat*

However, the econometric variables tested do not retrace the variation in the margin rate for the services of businesses branch. As can be seen from the accounting breakdown, the fall in the margin rate in this branch can be attributed primarily to structural effects, with fluctuations around this trend appearing to be purely cyclical. Variations in the margin rate in services to businesses (excluding structural effects) are included in the modelling residual for all of the service branches considered here.

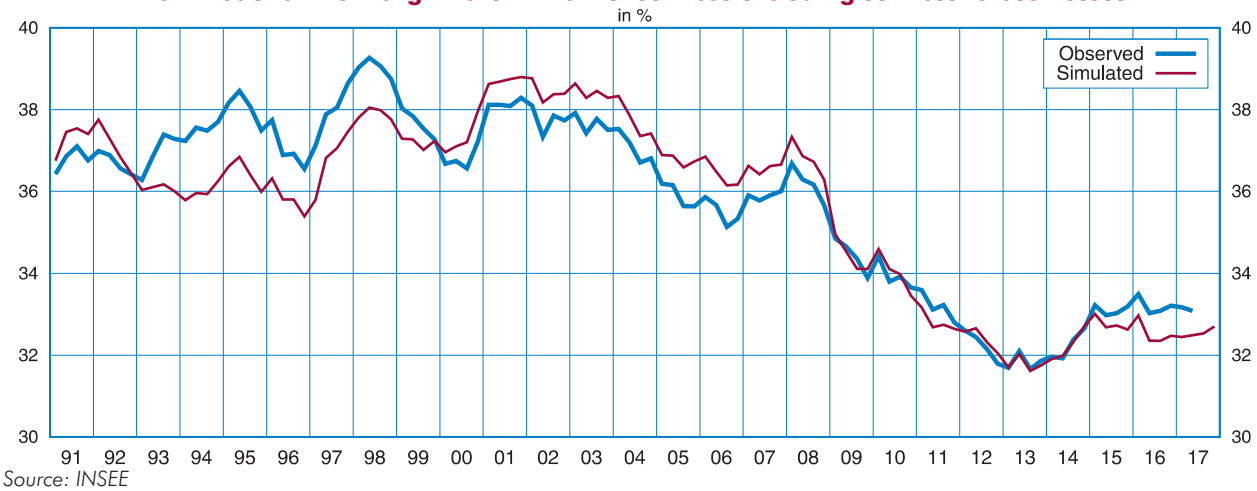
*The model used for the market service branches distinguishes between structural effects and other effects*

Moreover, in the model used to aggregate the effects in market services, the structural effects connected with the shifting proportional weight in terms of value added of the different service branches are presented in terms of their accounting impact. Thus, the model distinguishes between those factors identified in the equations for each branch, and the structural effects linked to the shifting weight of each branch as a proportion of total value added by market services.

*The model can be used to break down the 5-point reduction in the margin rate observed since 1999*

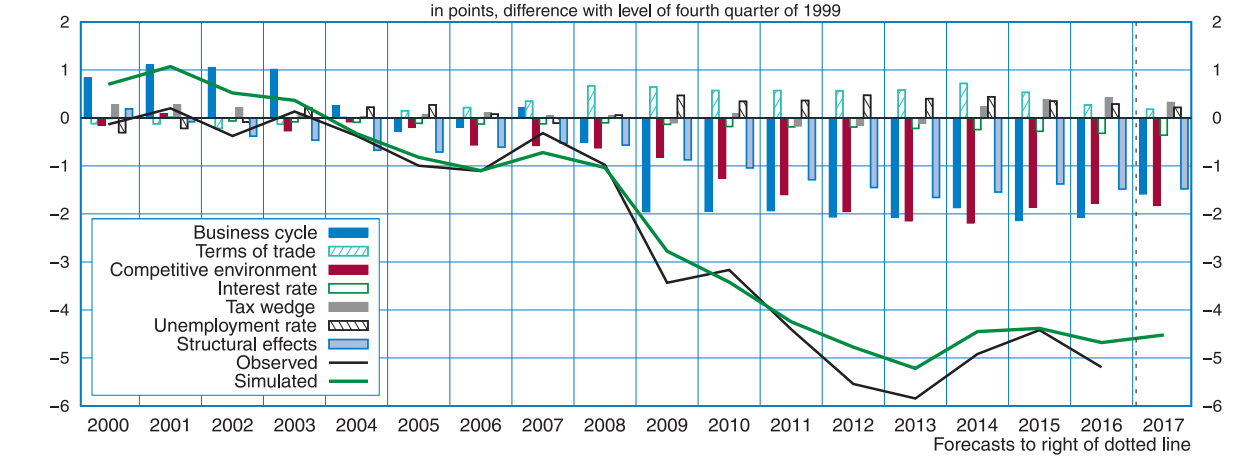
This breakdown enables an analysis of the variation in the margin rate in market services. Since 1999 the margin rate in market services has fallen by around 5 points, of which more than four can be attributed to the different explanatory factors identified (*Graph 11*).

**10 - Model of the margin rate in market services excluding services to businesses**




*Source: INSEE*

**11 - Variation in the margin rate in market services since 2000**




*Source: INSEE, quarterly national accounts, base 2010, calculations by authors*

## Corporate margin rates should stabilise below pre-crisis levels

*The increase in competitive pressure has had an impact on the margins of businesses in the trade & repairs and information & communication sectors (accounting for 1.8 points in the decline in the margin rate of services since 1999)*

In the trade and repairs branch, the concentration of turnover generated by companies in the trade sector decreased in the 2000s. This trend is associated with the variation in the equilibrium margin rate for the branch in the retained model. In the information and communication branch, the model shows that pressure on prices had an impact on the equilibrium margin rate. Furthermore, the decline in value-added prices has indirectly affected the relative weight of this branch. Since the margin rate in this branch is very high on account of its capital intensiveness, this has also contributed to the reduction in margin rates in services via structural effects. This reduction has been largely connected with the decrease in value-added prices, a structural effect which is here counted as a consequence of the intensification of competition in this sector.

All in all, in the model retained, factors connected with the competitive environment contribute to a 1.8-point reduction in the margin rate of market services since 1999.

*The short-term cycle explains a significant portion of the decrease in the margin rate since 1999 (–1.6 points)*

According to the model, a significant proportion of the fluctuations observed in the margin rate in market services can be explained as cyclical effects. Although the economic recovery has seen margins begin to pick up again, in 2017 this cyclical component still accounts for 1.6 points of the decline in the market services margin rate since 1999, although margins were at a high point in that period (*Graph 2*).

*Branches which are not capital-intensive now account for a greater proportion of the total value added in services, and contribute to the fall in margin rates (–1.5 points)*

Since 1999, changes in the respective weights of different market services branches have had a negative impact on the margin rate. The least capital-intensive branches have seen more vigorous development compared to the more capital-intensive branches. In particular, the use of legal services, accountancy, management services, architecture, engineering, technical analysis and inspections and IT services has intensified. All in all, these structural changes (excluding the specific effect from the information-communication branch) have contributed to a 1.5-point decrease in the margin rate since 1999, representing a long-term factor pushing margin rates down in the market services sector.

*The fall in the cost of capital should contribute slightly to the decrease in the proportion of capital in total value added in services (–0.4 points)*

Across all of the market services considered, the cost of capital has contributed, albeit modestly, to the fall in margin rates since 1999. The substitution effect of labour in favour of capital when the cost of the latter falls does not fully counterbalance the price effect. Nevertheless, interest rates appear to be a significant factor in the long-term development of the margin rate only in the model for the accommodation and food services branch. The influence of interest rates on the long-term equilibrium of the margin rate in market services therefore appears to be limited.

*CICE and PRS explain the recent 0.3-point increase in the margin rate in services*

Contributions, taxes and subsidies contributed very little to the estimated variation in the margin rate in the service branches between 1999 and 2013, unlike the industrial branches where the reform of the professional tax had a very positive effect in 2010. However, the decrease in the cost of labour made possible by the CICE and the Responsibility and Solidarity Pact has had a positive impact on the margin rate since 2014, an effect which the model suggests is still being felt in 2017. It has contributed +0.3 points to the level of the margin rate in 2017, compared with 1999.

*The weakened labour market situation and the terms of trade have both contributed to an increase of approximately 0.2 points in the margin rate in services*

Increases in the unemployment rate in 2008 and again in 2012 damaged the bargaining power of employees and, according to the model, contributed to a slight increase in the margin rate. In 2017 this effect has not yet dissipated, and the labour market situation appears to still be affecting the contribution of wages to value added: the unemployment rate has contributed to an increase of around 0.2 points in the margin rate in service companies, from its 1999 level. Recent developments in the terms of trade in transport services also appear to have played a role in increasing the margin rate in the corresponding service branches by 0.2 points.

## Corporate margin rates should stabilise below pre-crisis levels

### The margin rate has clearly shrunk since 1999, a loss which appears to be two-thirds lasting and one-third temporary

An aggregation of the models for industry and services results in a reconstruction which satisfactorily retraces variations in the margin rate of non-financial corporations. Only the service branches have made a significant contribution to the drop of around two points seen in the margin rate since 1999, as the margin rate in industry remains very close to the level recorded in the late 1990s. Within the service branches, two thirds of the decrease can be attributed to long-term factors (intensification of competition, structural shift of the economy towards branches which are less capital-intensive) while the remainder appears to be linked to more short-term factors (the persistently negative effect of the position in the productivity cycle, partly counterbalanced by the temporary impact of measures to reduce the cost of labour and by the labour market situation). These long-term factors are shared by France and Germany, where the margin rate in the service branches has declined even more seriously since the crisis. The margin rate should therefore pick up slightly over the next few quarters, as activity levels continue to improve and the rate of the CICE credit is increased. However, the rate should remain below the average seen in the period 1987-2007. ■

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## Appendix - Sources and models

### Data sources

#### *National and quarterly accounts*

Accounting breakdowns of variations in the margin rate are based on annual data from the national accounts, whereas econometric models are estimated using quarterly data.

#### *The Herfindahl-Hirschmann concentration index*

Concentration indicators measure the distribution of the total turnover generated by a given sector of activity. The Herfindahl-Hirschmann concentration index (HHI) for a sector composed of i companies is equivalent to:

$$IHH = \sum_i \left( \frac{x_i}{\sum_i x_i} \right)^2$$ $x_i$ being turnover for the company i

The more widely-distributed the turnover in a sector, the lower the concentration index will be. The maximum possible value is 1, equivalent to a situation in which a single company accounts for the entire turnover of the sector. The value decreases when new players enter the market, and increases when companies merge. An increase in the index indicates an increase in the oligopolistic nature of the sector, while a decrease suggests that competition has become more intense.

For the period 2003-2007 the concentration index is calculated using the "Unified SUSE accounting files" (FICUS): FICUS files are derived from tax declarations reworked into usable form by INSEE. Each file contains a profit or loss account and balance sheet. For the years 2008-2015 the index is calculated using the Esane result files (FARE), containing accounting information derived from tax declarations and cross-referenced with information from the annual sectoral survey (ESA). The information on businesses contained in these databases is classified using the French classification of activities (version 2). Data from tax forms collected before 2003 are classified using a previous version of the classification system. The concentration index has been calculated for the period 2003-2015 only, in order to avoid the risk of inconsistency caused by changes in the classification system.

The index is calculated at group level, as defined in the database on financial connections. Businesses which are more than 50% controlled by the same parent company are considered to belong to the same entity, and categorised in the sector in which the group generates the majority of its turnover.

#### *Real cost of capital*

The cost of capital used in the branch-specific econometric models is calculated as the sum of rates on new loans (excluding overdrafts) granted to non-financial corporations (Source: Banque de France), deflated by the annual shift in production prices for each branch, and the applicable rate of fixed capital consumption.

#### *Cost indicators*

The accounting breakdown reveals the short-term influence of the ratio of value-added prices to consumer prices on the margin rate. This terms of trade variable is systematically tested in the econometric models. The influence of the annual price variation in intermediate consumption within the branches is also tested in the modelling process, in order to confirm or discount the effect of intermediate consumption prices on the distribution of value added. Finally, the influence of production prices is tested in the model in order to take account of price shocks unrelated to intermediate consumption, and to ascertain the effect of changes in overpricing behaviour within each branch.

#### *Tax wedge*

In this context the tax wedge[1] contains two components: the rate of employers' social security contributions and the taxes and subsidies paid or received by businesses. In the accounting breakdown of changes in the margin rate, the rate of employers' contributions appears explicitly whereas the effect of taxes and subsidies is included under "other factors." In the econometric model, the influence of the rate of contributions is tested along with the overall total of taxes and subsidies. These components are defined per branch.

#### *Estimating the margin rate equations for each branch*

The error correction models method enables us to test and identify the dynamic contributions of different explanatory factors within the theoretical framework used here: long-term ratio of gross operating surplus to value added; short-term fluctuations in value added; cost of capital and intermediate products; terms of trade measured as the ration of value-added prices to consumer prices; exchange rate; unemployment rate; indicators connected with intra-branch competition.

Models are estimated for all industrial branches, trade, transport and storage, accommodation and food services and information and communication. The endogenous variable is the gross operating surplus for the branch. The hypothesis of a unitary ratio between gross operating surplus and value added is tested in order to take into account the long-term relationship between these two variables. Other factors liable to influence the margin rate in the long term were also tested.

1. The tax wedge is sometimes calculated as the total sum of income taxes and social security contributions, less the value of subsidies and benefits, as a proportion of total payroll costs. However, the definition has been expanded to include all taxes and subsidies.

The models are estimated in a single stage. In the resulting models (*Table*), the pull-back force is significant with regard to the method proposed by Ericsson and MacKinnon (2002).

Econometric modelling allows us to reconstruct the variations in the margin rate for all branches under examination, with the exception of services to businesses where the long-term equilibria tested were not found to be significant. In all other branches there is a long-term connection between gross operating surplus and value added. However, the pull-back forces are significant but generally low, suggesting that short-term shocks have a relatively long-lasting impact. In the service branches considered here, the long-term equilibrium of the margin rate is also affected by additional variables and thus does not appear to be exclusively determined by developments in value added. In trade, the rate is sensitive to the level of the sectoral concentration index, which suggests that the decline in the market rate for this sector can be attributed to developments in the competitive environment. In the transport services branch the equilibrium margin rate would appear to be influenced by the exchange rate. In accommodation and food services, the model attributes part of the downward trend in the margin rate to the long-term effect of real interest rates. The substitution effect with capital does not appear to fully offset the price effect in this branch of activity. For information and communication activities, the long-term level of the margin rate is sensitive to specific developments in production prices in this branch, which can be attributed to changes in the mark-up rate applied by businesses.

These long-term equilibria relations come with a high level of sensitivity to short-term shocks. In the short term, unexpected fluctuations in value added are absorbed by gross operating surplus: the coefficients associated with value added are well above 1 in the short term. In the short term, business' margins are also highly sensitive to policies affecting the rate of employers' social security contributions and the total sum of taxes paid and subsidies received by by businesses: a reduction in employers' contributions will have a substantial effect on margins in the short term. However, these factors are not decisive in the long term. In the long run, the effects of variations in contributions are shared between employees and employers.

**Results of the models for each branch**

| | Industry | Trade | Transports | Accommodation and food services | Information-communication (except structural effects) |
|---|---|---|---|---|---|
| Constant | –0.06 (–4.5) | 0.08 (1.4) | –0.16 (–5.4) | +0.06 (0.3) | –0.07 (–5.6) |
| **Long term (lagged variables)** | | | | | |
| Gross operating surplus | –0.06 (–4.4) | –0.06 (–4.0) | –0.10 (–4.6) | –0.09 (–4.1) | –0.08 (–5.0) |
| Value added (in value) | 0.06 (4.4) | 0.06 (4.0) | 0.10 (4.6) | 0.09 (4.1) | 0.08 (5.0) |
| Production price of the branch | | | | | 0.05 (2.4) |
| Concentration indicator | | 0.03 (2.3) | | | |
| Real interest rate | | | | 0.05 (4.3) | |
| Euro-dollar exchange rate | | | 0.08 (5.7) | | |
| **Short term (variables in difference)** | | | | | |
| Value added (in value) | | | 3.25 (30.1) | | |
| Value added in volume | 2.34 (40.0) | 2.67 (21.7) | | 2.12 (17.3) | 1.87 (33.9) |
| Value added price | 1.84 (11.1) | 2.80 (19.2) | | 2.08 (14.8) | 2.04 (37.7) |
| Contribution rate | –0.34 (–4.7) | –0.21 (–2.0) | | –0.26 (–2.5) | –0.27 (–5.1) |
| Taxes and subsidies | –0.11 (–7.2) | –0.11 (–4.6) | –0.07 (–1.7) | –0.03 (–2.4) | –0.02 (–3.3) |
| Exchange terms | 0.51 (3.1) | | 0.59 (4.9) | | |
| Unemployment rate | | 0.02 (3.8) | | | 0.01 (5.3) |
| $R^2$ | 0.96 | 0.91 | 0.94 | 0.83 | 0.95 |
| Beginning | 1987 Q1 | 1991 Q1 | 1987 Q1 | 1991 Q1 | 1987 Q1 |
| End | 2013 Q4 | 2013 Q4 | 2013 Q4 | 2013 Q4 | 2013 Q4 |

### Aggregating the equations for the market services branches considered here

In the market services branches, the econometric results allow us to trace the development of the intra-branch margin rates. In order to aggregate these results, fluctuations in the aggregated margin rate are identified quarter-by-quarter using a rate effect, estimated with a model, and a structural effect which reflects the shifting weight of each branch as a proportion of total value added. These rate and structural effects are calculated using the method developed by Berthier (2002).

In the information and communication branch in particular, the fluctuation in branch's contribution to total value added can be exclusively attributed to the fall in production prices in the telecoms branch. The structural effect for this branch is thus associated with a "competitive environment" component in the breakdown of factors influencing the margin rate of service activities.

Finally, in the business services branch, we were unable to identify a valid model but virtually all of the decline observed can be attributed to a structural effect specific to this branch, connected with the growing significance of administrative and support services with very low margin rates. These effects are thus added to the "structural effects" component in the breakdown of margin rate fluctuations in the market services branch. Variations in the margin rate for the business services sector which cannot be explained by this structural effect are considered to be unexplained residual terms. ■

# French developments

# Review of the previous forecast

*In Q3 2017, gross domestic product (GDP) progressed by 0.5%, as expected in* Conjoncture in France *in October 2017. Domestic demand excluding inventory buoyed growth in GDP, almost as forecast (+0.6 points against +0.5 points). Foreign trade, however, weighed down more on growth than expected (–0.6 points against –0.2 points) and, symmetrically, the contribution of changes in inventories was greater than expected (+0.5 points against +0.3 points). The growth forecast for Q4 2017 is revised upwards slightly from that in* Conjoncture in France *in October (+0.6%).*

*Market-sector employment slowed down as forecast (+46,000 in Q3 after +77,000). At the same time, the unemployment rate rose to 9.7% of the French labour force (against an expected 9.4%). In November 2017, headline inflation stood at +1.2% according to the provisional estimate, a little higher than forecast, due to the rise in oil prices, and the forecast for the end of the year is also revised upwards to +1.2%.*

## In Q3, activity progressed as forecast

In Q3 2017, growth reached +0.5% (*Table 1*) as expected in *Conjoncture in France* in October 2017. Production in all branches increased a little more than forecast (+0.7%, *Table 2*), although with differences in composition: production in the water-energy-waste branch came out higher than expected (+1.7% against 0.0%) due to the rather cool temperatures in September. Construction, meanwhile, disappointed slightly (+0.3% against +0.7%), due to an unexpected fall in civil engineering. In services, production was in line with the forecast.

## Domestic demand buoyed growth as forecast

The contribution of domestic demand excluding inventory to growth in GDP was slightly greater than forecast (+0.6 points against +0.5 points). Household consumption rebounded a little more than forecast (+0.6% against +0.5% and after +0.3%). Corporate investment was higher than expected (+1.1% against +0.6%), due to higher expenditure on manufactured goods. Household investment progressed almost as forecast (+1.1% against +1.0%).

Table 1
**Gross domestic product and its main components in the expenditure approach**
*Percentage changes from previous period in %*

| | *Conjoncture in France* October 2017 | | *Conjoncture in France* December 2017 | |
|---|---|---|---|---|
| | Q3 2017 | Q4 2017 | Q3 2017 | Q4 2017 |
| Gross domestic product | 0.5 | 0.5 | 0.5 | 0.6 |
| Imports | 1.4 | 0.2 | 2.8 | 0.2 |
| Household consumption expenditure | 0.5 | 0.3 | 0.6 | 0.3 |
| General government consumption expenditure* | 0.4 | 0.4 | 0.5 | 0.2 |
| Gross fixed capital formation | 0.6 | 0.8 | 0.9 | 1.1 |
| *of which: Non financial enterprises* | *0.6* | *1.0* | *1.1* | *1.2* |
| *Households* | *1.0* | *0.9* | *1.1* | *1.0* |
| *General government* | *–0.1* | *0.0* | *–0.2* | *0.7* |
| Exports | 0.9 | 1.7 | 1.1 | 1.8 |
| **Contributions (in percentage points)** | | | | |
| Domestic demand excluding changes in inventories** | 0.5 | 0.4 | 0.6 | 0.4 |
| Changes in inventories** | 0.3 | –0.4 | 0.5 | –0.3 |
| Net foreign trade | –0.2 | 0.4 | –0.6 | 0.5 |

Forecast

* General government and non-profit institutions serving households
** Changes in inventories include acquisitions net of sales of valuable
*Source: INSEE*

The external balance weighed down on growth (–0.6 points) more than expected (–0.2 points). Exports progressed a little more than anticipated (+1.1% against an expected figure of +0.9%) and imports were once again significantly more dynamic than expected (+2.8% against +1.4%). Purchases of agricultural products fell significantly less than had been forecast (–2.0% against –5.0%) and those of manufactured goods rose more than expected (+4.4% against +2.4%). The contribution of changes in inventories was greater than in the forecast (+0.5 points against +0.3 points), essentially due to aeronautics.

## The growth forecast for Q4 2017 is revised upwards

The growth forecast for Q4 2017 has been revised upwards from that in *Conjoncture in France* in October 2017 (+0.6% against +0.5%), due to manufacturing production that would appear to be significantly more dynamic than forecast (+1.5% against +0.6%). Production progressed sharply in October.

Domestic demand, however, should drive growth as anticipated in *Conjoncture in France* (+0.4.points). The household consumption forecast remains unchanged. In more detail, due to the inclusion of the data for October, the forecast has been lowered for manufactured products and energy, but raised in services, in line with the constant improvement in the business climate in this sector.

The household investment forecast, meanwhile, has been revised upwards slightly (+1.0%) and that for government investment raised more significantly (+0.7% against +0.0%) due to the expected rebound in civil engineering. Finally, with the sharp improvement in the business climate, the forecast for corporate investment has been revised upwards.

Foreign trade would appear to have made a slightly more positive contribution to growth than had been forecast in October (+0.5% instead of +0.4%), essentially due to aeronautics deliveries being concentrated at the end of the year. Exports should accelerate a little more than forecast (+1.8%). Imports should be sluggish due to a backlash after exceptional sourcing this summer. Symmetrically, the contribution of changes in inventories is forecast to be lower, as in October (–0.3 points against –0.4 points).

## Market-sector employment slowed down as forecast

In Q3 2017, market-sector employment slowed down as expected (+46,000 net job creations, after +77,000). In addition, the unemployment rate (overseas departments included) stands at 9.7%, against a forecast of a fall to 9.4%, due notably to the unexpected fall in the halo of employment.

## At the end of 2017, inflation set to rise to +1.2%, a little higher than expected

In November 2017, headline inflation stood at +1.2% according to the provisional estimate, a little higher than forecast due to the upswing in oil prices. For the end of the year, the forecast for headline inflation has been raised slightly (+1.2% in December, against +1.0%), while core inflation should be a little lower than forecast (+0.6% against +0.8%), above all due to the price of services, which would seem to have been a little less dynamic than anticipated. ■

Table 2

**Activity by sector and labour market**

*Percentage changes from previous period in %*

| | *Conjoncture in France* October2017 | | *Conjoncture in France* December 2017 | |
|---|---|---|---|---|
| | **Q3 2017** | **Q4 2017** | **Q3 2017** | **Q4 2017** |
| **Output by sector** | | | | |
| Agriculture | 1.0 | 0.7 | 0.8 | 0.4 |
| Manufacturing | 0.6 | 0.6 | 0.8 | 1.5 |
| Energy, water and waste | 0.0 | 0.1 | 1.7 | –0.2 |
| Construction | 0.7 | 0.6 | 0.3 | 0.8 |
| Trade | 0.7 | 0.7 | 0.9 | 0.7 |
| Market services excluding trade | 0.7 | 0.6 | 0.7 | 0.8 |
| Non market services | 0.3 | 0.3 | 0.5 | 0.2 |
| **Total** | **0.6** | **0.6** | **0.7** | **0.8** |
| **Employment, unemployment, prices** | | | | |
| Non-agricultural market sector employment | 46 | 40 | 46 | 60 |
| ILO* unemployment rate - Metropolitan France | 9.4 | 9.4 | 9.7 | 9.5 |
| Consumer price index[1] | 1.0 | 1.0 | 1.0 | 1.2 |
| Core inflation[1] | 0.6 | 0.8 | 0.5 | 0.6 |

Forecast

* ILO unemployment: unemployment as defined by the International Labour Organisation
1. Year-on-year on the last month of the quarter

*Source: INSEE*

# Output

*In Q3 2017, gross domestic product grew steadily (+0.5%) after three quarters at almost the same rate (0.5% to 0.6%). Total output of goods and services increased, as in the previous quarter (+0.7%).*
*In November, the business climate in France reached a level not seen since January 2008, well above its long-term average.The output of goods and services should therefore continue to increase quite considerably in Q4 (+0.8%). Over the year as a whole, it is expected to grow by 2.3% (after +0.9% in 2016), its biggest rise since 2011. It is set to progress significantly again in H1 2018 (+0.6% in Q1 followed by +0.4% in Q2). By mid-2018, the carry-over effect for output for the year is expected to be +2.0%.*

## The output of goods and services should barely slow through to mid-2018

After significantly increasing in Q2 (+0.7%), output continued to grow at this rate in Q3 (*Table 1* ). Activity slackened in agriculture (+0.8% after +1.3%) and to a significant extent in construction (+0.3% after +1.2%), but accelerated sharply in energy-water-waste (+1,7% after +0.4%). It increased at almost the same pace as in Q2 in the manufacturing (+0.8%), trade (+0.9%), market services excluding trade (+0.7%), and non-market services (+0.5%) sectors.

In November, the business climate in France reached its highest level since January 2008 (*Graph 1*), driven by all sectors. This level has not been seen in six years in services, nine years in the building industry, and ten years in retail trade and manufacturing.

The output of goods and services should therefore remain vigorous in Q4 2017 (+0.8%), taking its average growth over the year to +2.3%. Activity is expected to slip back slightly in energy-water-waste (–0.2%), and to slow somewhat in agriculture (+0.4% after +0,8%), trade (+0.7% after +0.9%) and non-market services (+0.2% after +0.5%). It is likely to gain more momentum in construction (+0.8% after +0.3%) and should continue to grow in market services excluding trade at virtually the same rate as in Q3 (+0.8%). It should pick up sharply in the manufacturing sectors (+1.5% after +0.8%). In H1 2018, output is expected to rise steadily again in all sectors (+0.6% in Q1 and then +0.4% in Q2), despite declining in the spring due to a deceleration of activity in the manufacturing, construction and trade sectors. By mid-2018, the growth overhang for output should be +2.0% for the year.

## Manufacturing output is set to accelerate significantly at the end of 2017

After picking up strongly in Q2 2017 (+0.8%), manufacturing output increased again in Q3 (+0.8%) thanks to transport equipment (+3.6%) and "other industries" (+0.8%). However, activity

Table 1

**Output by branch at the previous year's chain-linked prices**

*Q/Q-1 variations (as a %), SA-WDA data*

| | Quarterly changes | | | | | | | | | | Annual changes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agriculture (2%) | –2.3 | –1.4 | –0.6 | 0.5 | 1.1 | 1.3 | 0.8 | 0.4 | 0.1 | 0.0 | –5.6 | 2.3 | 1.1 |
| Manufacturing industry (20%) | 0.3 | –0.8 | 0.7 | 0.7 | –0.1 | 0.8 | 0.8 | 1.5 | 0.6 | 0.3 | 0.8 | 1.9 | 2.5 |
| Energy, water, waste (4%) | 1.3 | 1.3 | –2.4 | 2.4 | –0.8 | 0.4 | 1.7 | –0.2 | 0.3 | 0.3 | 0.8 | 1.2 | 1.2 |
| Construction (8%) | 0.1 | –0.2 | 0.3 | 0.8 | 0.6 | 1.2 | 0.3 | 0.8 | 0.7 | 0.5 | 0.1 | 2.6 | 2.2 |
| Trade (10%) | 1.0 | –0.3 | –0.2 | 0.7 | 0.4 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 1.5 | 2.2 | 2.2 |
| Market services excluding trade (41%) | 0.5 | –0.3 | 0.4 | 0.7 | 1.0 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 1.3 | 2.8 | 2.2 |
| Non-market services (15%) | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.3 | 0.2 | 1.0 | 1.3 | 1.0 |
| **Total (100%)** | **0.4** | **–0.3** | **0.2** | **0.7** | **0.6** | **0.7** | **0.7** | **0.8** | **0.6** | **0.4** | **0.9** | **2.3** | **2.0** |

Forecast

Weights constructed from the annual production value in 2015.

*Source: INSEE*

slipped back in the coke and refined petroleum (–1.2%), agri-food (–0.3%) and capital goods (–1.0%) sectors.

In Q4 2017, manufacturing activity is set to accelerate significantly. In October, the quarterly carry-over effect in the industrial production index (IPI) was very high (+3.0%) and the business climate was very positive, at a level not seen since December 2007 (*Graph 2*). The balances of opinion on expected activity and order books were substantially above their normal level. Activity is expected to start rising again in capital goods (+3.2% after –1.0%) and in agri-foods (+0.5% after –0.3%), in line with the business climate in November. It should pick up sharply in "other industries" (+1.6% after +0.8%). Activity is likely to slow in transport equipment (+1.4% after +3.6%), in reaction to the sharp rise in Q3, but it should remain vigorous.

In Q1 2018, manufacturing activity should rise again steadily (+0.6%), before slowing down in Q2 (+0.3%), due to scheduled maintenance shutdowns in refineries, in particular. On average, a brisk rise in manufacturing output is expected in 2017 (+1.9%). The growth overhang for 2018 should stand at +2.5% by mid-year.

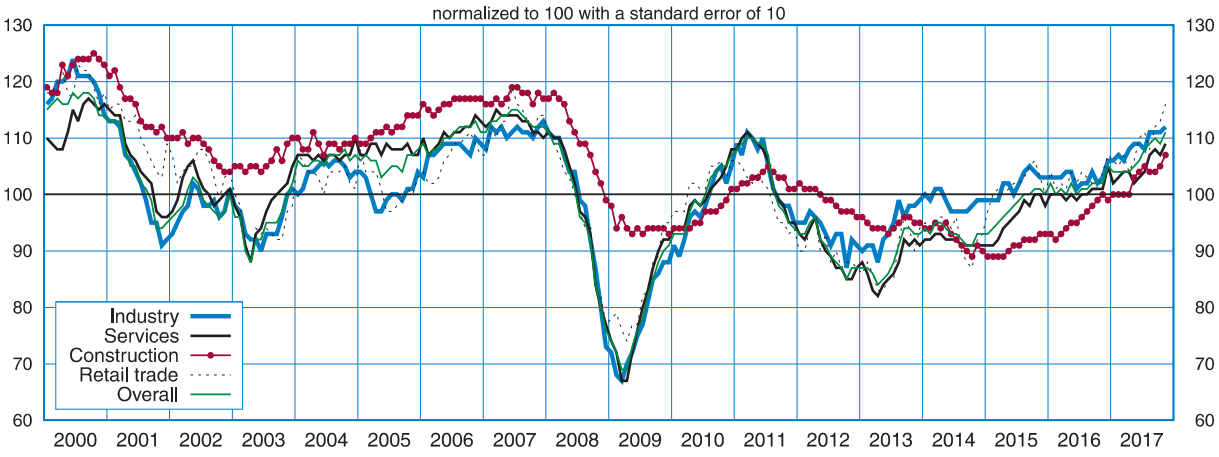
## Agricultural output is likely to slow down gradually through to mid-2018

Agricultural output continued to rise steadily in Q3 2017 (+0.8%). It is expected to slow down in Q4 (+0.4%) and should remain almost stable in H1 2018. Over 2017 as a whole, due to the rebound in cereal harvests, agricultural output is set to rise again (+2.3%) after two years of pronounced decline. By mid-2018, the annual growth overhang should stand at +1.1%, driven by the recovery of wine production.

## Energy production should accelerate slightly in 2017

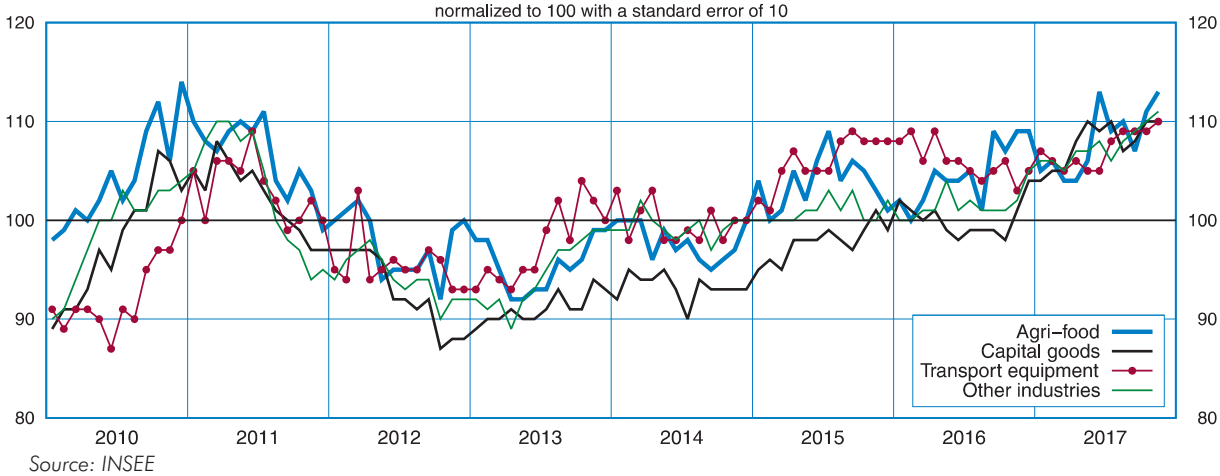
After a dynamic Q3 2017 (+1.7%) due to abnormally low temperatures in September, energy production – in reaction – should edge down slightly in Q4 (–0.2%). Driven by the electricity demand from industry, it is expected to rise in H1

**1 - Business climate in France: all sectors in industry, services and construction**




*Source: INSEE*

**2 – Sub-sector business climates in industry**




*Source: INSEE*

2018 (+0.3% per quarter) assuming that temperatures are seasonal. Over the year as a whole, production should accelerate slightly in 2017 (+1.2% after +0.8%). By mid-2018, the growth overhang for the year should be +1.2%.

### In construction, activity is set to gather pace at the end of 2017 before slipping back slightly in early 2018

In Q3 2017, output in the construction sector decelerated significantly (+0.3% after +1.2%), held back by the slowdown in the building industry and the decline in civil engineering.

The number of building permits for individuals dwellings bounced back slightly in Q3 after a sharp downturn in Q2. The number of building permits for collective accommodation slowed but the growth rate remains vigorous. In the business tendency survey on business leaders in the building sector, the balances of opinion on past and expected activity have increased sharply and are significantly above their long-term average (*Graph 3*). Although property developers are reporting a drop in demand for new dwellings and less favourable prospects for housing starts than in the previous quarter, the associated balances remain higher than average. Output in the building industry is therefore expected to remain solid but should slacken gradually through to mid-2018. In civil engineering, contractors' balances of opinion have reached a record level for their activity forecasts and are at their highest level since 2008 for their order books, pointing to a new rise in output in Q4 2017. Activity is expected to bounce back in this sector, with public demand being given a particularly strong boost by the ramping up of work on the Greater Paris development project. Consequently, total construction output should speed up sharply in late 2017 (+0.8%) and then continue at this rate at the start of 2018 (+0.7%) before slowing down in Q2 (+0.5%). Over 2017 as a whole, output in the construction sector is expected to accelerate quite considerably (+2.6% after +0.1% in 2016). By mid-2018, the growth overhang for the year should be +2.2%.

### Trade activity is likely to remain buoyant through to June 2018

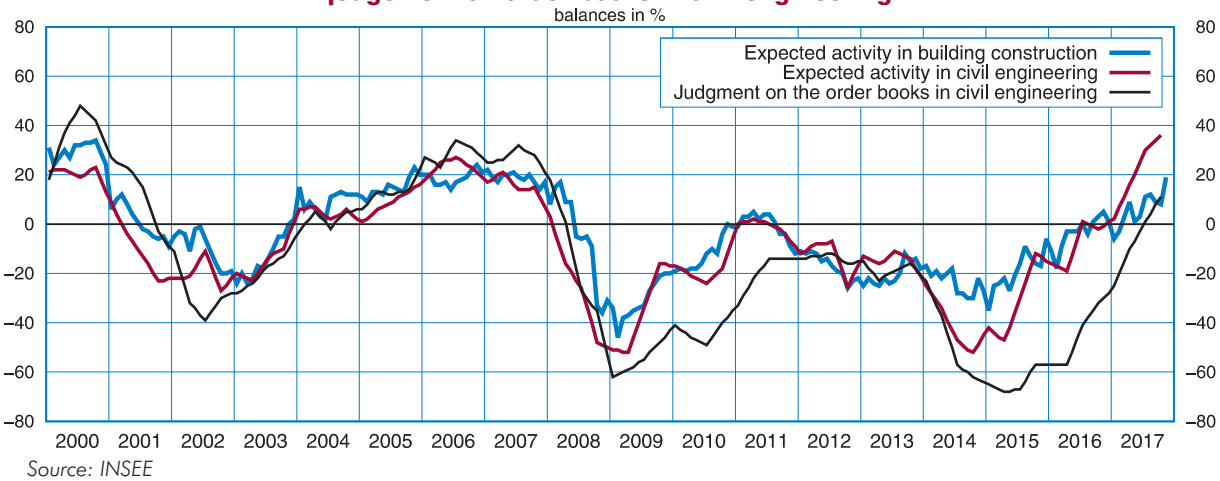
In Q3 2017 trade activity remained lively (+0.9%), driven by household consumption expenditure on manufactured products (+0.6%).

In November, the business climate improved in wholesale trade, retail trade and the automobile sector. Wholesalers and retailers remain optimistic: the balances of opinion relating to general business prospects and ordering intentions are high.

Consequently, activity in trade is likely to remain high at the end of 2017 (+0.7%) and should continue to grow steadily in H1 2018 (+0.6% in Q1 followed by +0.5% in Q2).

All in all, the growth overhang for output in trade for 2018 should stand at +2.2% by mid-year, after an annual average of +2.2% in 2017.

**3 - Expected activity in construction, judgement on order books in civil engineering**




*Source: INSEE*

## Market services excluding trade: activity is expected to remain vigorous through to mid-2018

In Q3 2017, activity in market services excluding trade increased at a sustained rate (+0.7%), as in the previous quarter. It accelerated sharply in accommodation and food services (+1.2% after +0.2%), boosted by the return of foreign tourists, and continued to grow at a sustained pace in "other service activities" (+0.8%), financial activities (+0.9%) and in services to businesses (+0.8%). It decelerated in information-communication (+0.9% after +1.7%), while remaining buoyant. Output in transport remained virtually unchanged (+0.1%), due to a one-off downturn in air transport.

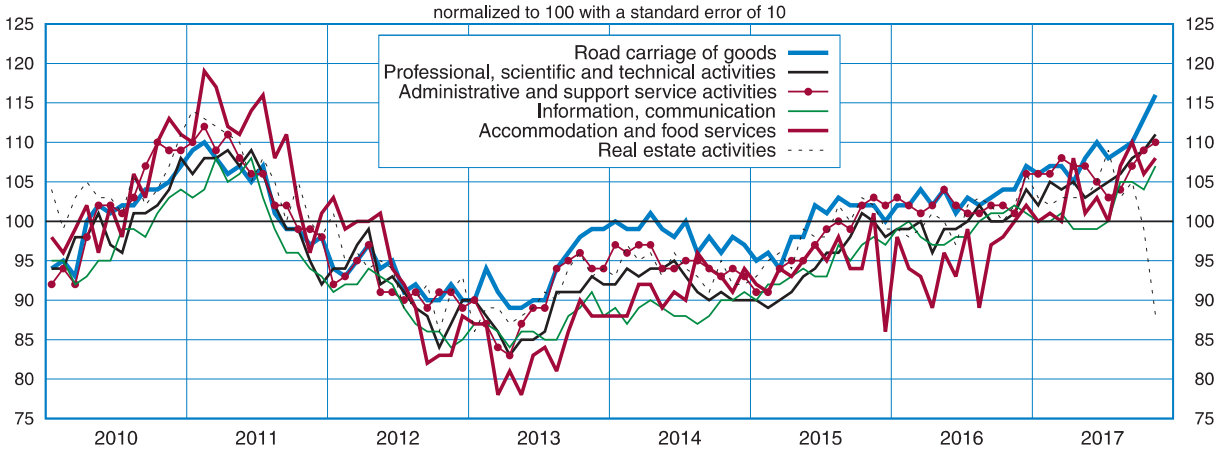
In November, the business climate in services reached its highest level since May 2011 and remains high in virtually all sectors, particularly for goods transported by road (*Graph 4*). Real estate activity is the only sector with a deteriorating climate, due to the performance of housing rental companies.

In this context, the activity of market services excluding trade should continue to rise steadily in late 2017 (+0.8%) and in H1 2018 (+0.6% per quarter). Over 2017 as a whole, the output of market services excluding trade is expected to increase by 2.8%. By mid-2018, the growth overhang for the year should be +2.2%.

## Mainly non-market services: activity is set to decelerate slightly through to June 2018

In Q3 2017, mainly non-market activity grew at almost the same rate as in Q2 (+0.5%). It should continue to grow through to mid-2018 (+0.2% to +0.3% per quarter) but at a slower rate, due to the expected slowdown in public spending. Over 2017 as a whole, output is expected to pick up slightly (+1.3% after +1.0% in 2016). By mid-2018, the growth overhang is expected to be +1.0%. ■

**4 – Sub-sector business climates in services**




*Source: INSEE*

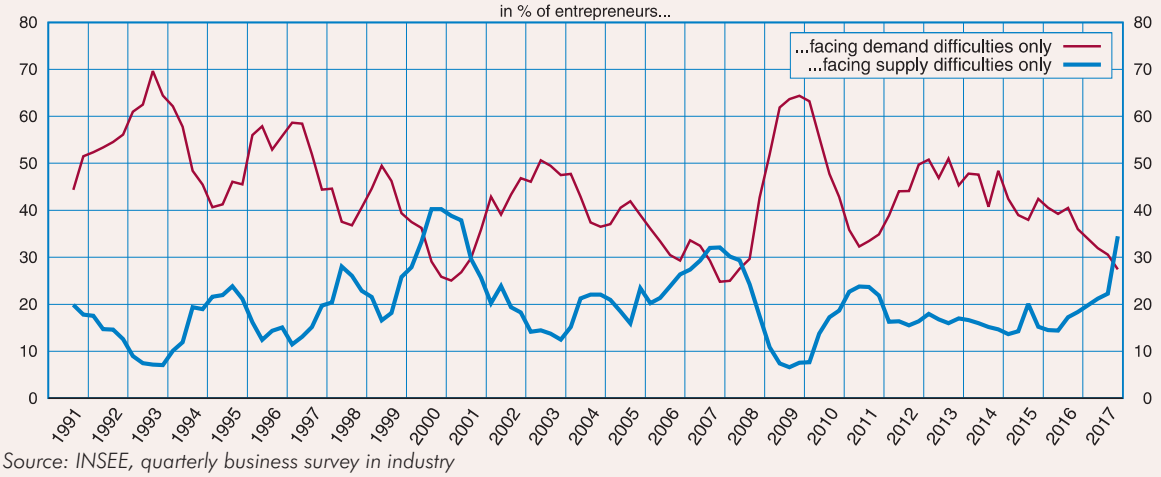
## More and more French companies consider themselves hampered by production capacity issues

Staff shortages, insufficient equipment, difficulties in sourcing ... While the business climate in France is at its highest point in ten years, more and more businesses are reporting difficulties that prevent them from increasing their production as much as they would like. These supply-side difficulties are currently outstripping demand issues. Since summer 2017, companies have been reporting supply problems more often than demand problems in industry, services and building construction, although in this last sector slightly more companies than average over the past thirty years have experienced demand difficulties. In all sectors, hiring difficulties have become much more acute since 2016 and are approaching their 2007 level. In other European countries too, companies are increasingly feeling that the lack of manpower is holding back their expansion, especially German industrial enterprises.

### In industry, business leaders report similar supply-side tensions to those experienced in 2000 or 2007

The business climate in France has improved since the beginning of the year and was at a very high level in November. At the same time, in their responses to INSEE's business tendency surveys, more and more business leaders report that they are experiencing supply difficulties which prevent them from developing their production as they would like. In industry especially, production capacity tensions are increasing. The production capacity utilisation rate has been rising steadily for several quarters, and stood at 84.9% in October 2017, not quite reaching its highest level (86.6% at the end of 2007). For the first time since 2007 industrialists say they the majority of their constraints are on the supply side rather than the demand side (*Graph 1*). Almost twice as many as a year ago only report supply difficulties (*Table*).

**1 - Supply and demand difficulties in French industry**




*Source: INSEE, quarterly business survey in industry*

**Table - Distribution of companies according to sector and factors restricting their activity**

*in %*

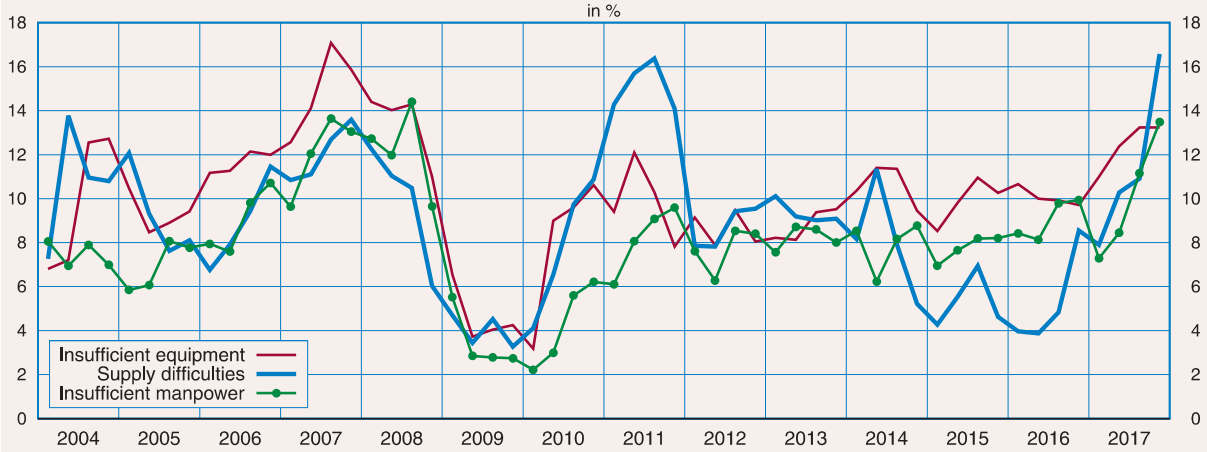
| | Demand difficulties only | | | Supply difficulties only | | |
|---|---|---|---|---|---|---|
| | Average of the serie | October 2016 | October 2017 | Average of the serie | October 2016 | October 2017 |
| **Industry** | **44** | **36** | **27** | **19** | **18** | **34** |
| C1 - Agrifood industries | 43 | 37 | 31 | 19 | 19 | 28 |
| C3 - Capital goods | 50 | 55 | 33 | 17 | 12 | 26 |
| C4 - Transport equipments | 43 | 26 | 23 | 25 | 28 | 49 |
| C5 - Other industries | 45 | 39 | 29 | 19 | 19 | 26 |
| **Building industry** | **19** | **33** | **21** | **28** | **16** | **26** |
| **Services** | **32** | **35** | **26** | **22** | **22** | **30** |
| H - Road freight transport | 42 | 45 | 20 | 23 | 18 | 53 |
| I - Accommodation and food services activities | 42 | 55 | 55 | 17 | 18 | 22 |
| J - Information and communication | 23 | 29 | 18 | 29 | 29 | 37 |
| L - Real estate activities | 18 | 15 | 13 | 28 | 25 | 30 |
| M - Specialised, scientific and technical activities | 37 | 42 | 34 | 18 | 18 | 20 |
| N - Administrative and support services | 35 | 33 | 21 | 18 | 18 | 27 |

Scope : Industry since April 1991 (seasonally adjusted data), Building industry since January 1999 (raw data), Services since January 2004 (excluding road freight transport, data since 2006 ; seasonally adjusted data)
*Source : INSEE, business tendency surveys*

These tensions have deepened since 2015, and since January 2017 the supply difficulties have become more frequent than the long-term average. Conversely, the proportion of industrial enterprises that say they are limited in their activity solely because of demand problems has decreased since 2013; From 2015 it fell below its long-term average.

Since the beginning of 2017, the increase in supply constraints in industry has been largely due to a very distinct rise in sourcing difficulties. This increase was particularly vigorous in October. Also more industrialists report difficulties caused by insufficient equipment and staff shortages (*Graph 2*). All sub-sectors are concerned, especially transport equipment.

**2 - Factors limiting supply in industry (excluding manufacture of coke and refined petroleum products)**




*Source: INSEE, quarterly business survey in industry*

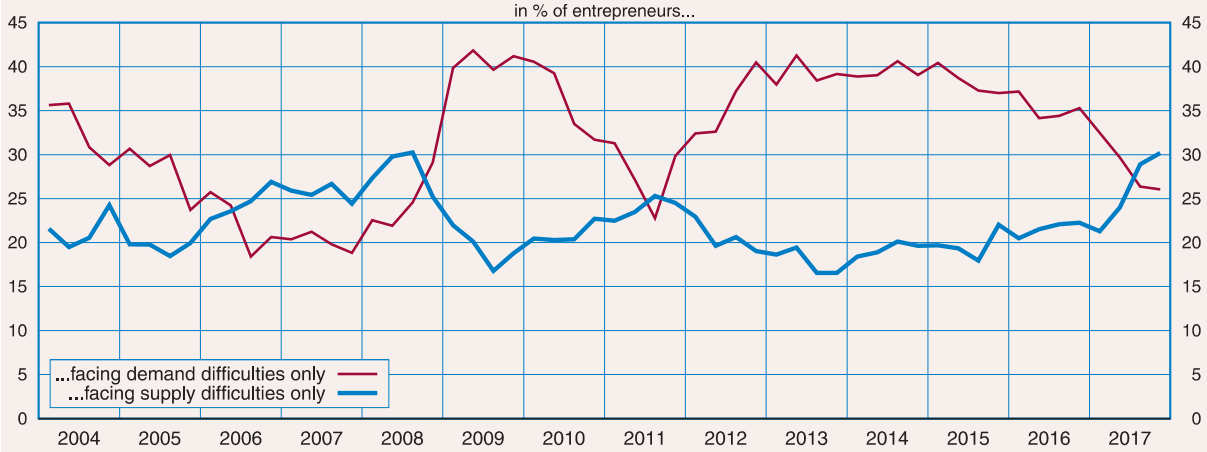
**Since H2 2017, supply difficulties have exceeded demand difficulties in services**

In November 2017, the business climate in services reached its highest level since May 2011 (109). At the same time, 30% of service sector businesses said that they had supply problems only, against 22% one year before. This rise is widespread across all sub-sectors, but it is particularly strong in road freight transport, administrative and support service activities, and information-communication (*Table*). Business leaders in services reported that they were mostly hampered by staff shortages and, to a lesser degree, by insufficient equipment or materials.

In contrast, difficulties linked solely with demand fell sharply: in October 2017, 26% of service enterprises said they experienced demand problems against 35% one year earlier. This decline is seen in all sub-sectors except accommodation and food services.

Since October 2011 the number of companies reporting demand problems was greater than those with supply problems only. This trend has reversed since July 2017. In October 2017, while there were fewer demand problems, the proportion of companies describing supply problems is now well above its long-term average (*Graph 3*).

**3 - Difficulties of supply and demand in services**



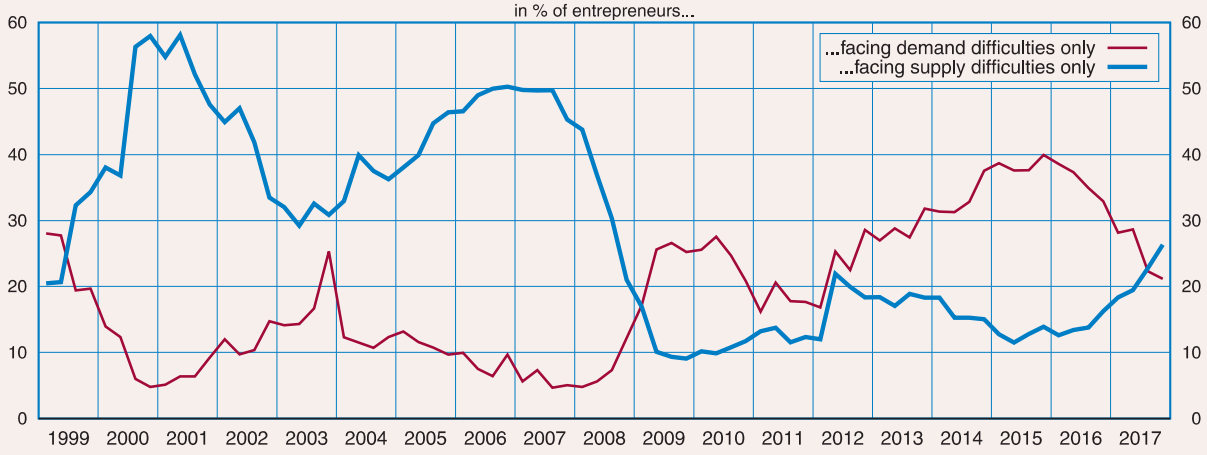

*Source: INSEE, quarterly business survey in services*

**In the building industry, the business climate is improving but demand problems still slightly exceed the long-term average**

In the building industry the business climate was sluggish for several years, but has improved regularly over the last two and a half years. The sector's composite indicator returned to its long-term average (100) in November 2016 and in November 2017 was well above this level (107). At the same time, the share of companies only facing demand problems has gradually decreased and has almost returned to its average (*Graph 4*). In addition, in October 2017, 26% of entrepreneurs said they experienced supply difficulties only, a figure which is almost as high as the long-term average (28%) and substantially higher than two years ago (14%). The main reason for this sharp rise is the growing number of enterprises reporting staff shortages. Indeed, 24% highlighted this problem in October 2017, virtually the same proportion as the long-term average, against only 9% two years ago.

Another sign of a return to normal in construction is that the proportion of enterprises reporting that they have no difficulty increasing their production is once again close to the long-term average, after several years under this level.

**4 - Difficulties of supply and demand in the building industry**

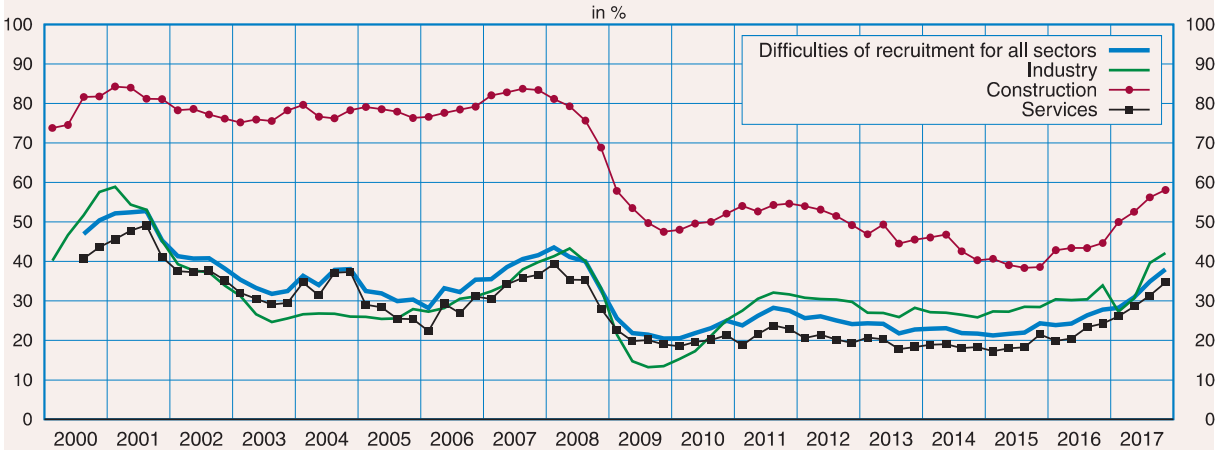



*Source: INSEE, quarterly business survey in building industry*

**Hiring difficulties increased in all sectors and were close to 2007 levels**

In their responses to the business tendency surveys, companies described the factors that limit their growth in production, and among these are staff shortages. They are also asked to report whether, more generally, they have any hiring difficulties. At the end of 2017, this issue concerned 38% of companies. Recruitment difficulties have increased in all sectors since 2016. They have returned to their 2007 level in industry and services but are still far from this level in the building industry (*Graph 5*).

**5 - Difficulties of recruitment in all sectors**



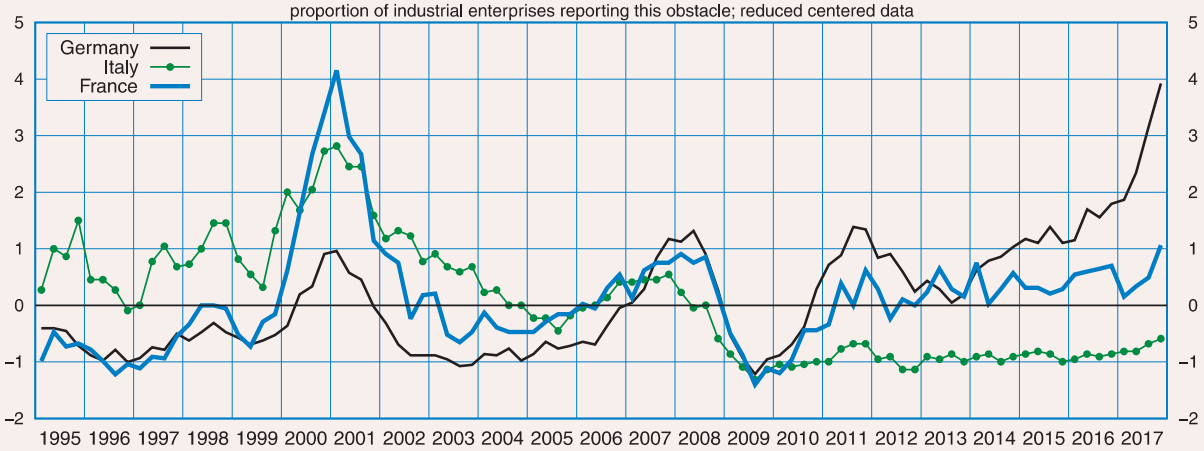

Note: the general question concerning recruitment difficulties, and that of staff shortages hampering growth in production, are distinct. This graph illustrates the first of these questions.

*Source: INSEE, quarterly business surveys in industry, building industry and services*

**Lack of staff is more keenly felt in Germany and is more moderate in Italy**

France is not an isolated case in Europe. Demand-side difficulties in industrial companies have also receded in the main Eurozone partners. Conversely, companies more often report supply-side difficulties, mainly due to a lack of manpower. This obstacle is not experienced with the same intensity in every country. In Germany, many more companies say they have to limit their production because of a lack of staff: in October 2017, 21% of industrialists said they experienced this type of problem, which is twice as many as in 2008 and a record level since the series first came into existence (1985). This share has increased beyond its average almost continuously since mid-2013 (*Graph 6*).

**6 - Industrial companies hampered in their production by a lack of manpower**




How to read it: in Germany, 21% of industrialists reported that they were hampered in their production due to a lack of staff; such a level is 4 standard deviations above the long-term average for the industrialists' responses to this question (5%).

*Source: European Commission (DG-ECFIN)*

In France, the proportion of industrial companies who said that they were hampered in their activity by a lack of staff, a proportion which is also increasing, has returned to a level similar to that observed at the end of 2007 (13%). However, these tensions seem to be moderate compared with Germany.

In Italy, difficulties due to staff shortages are tending to increase slightly, but they remain low, well below their long-term average. ■

# Foreign trade

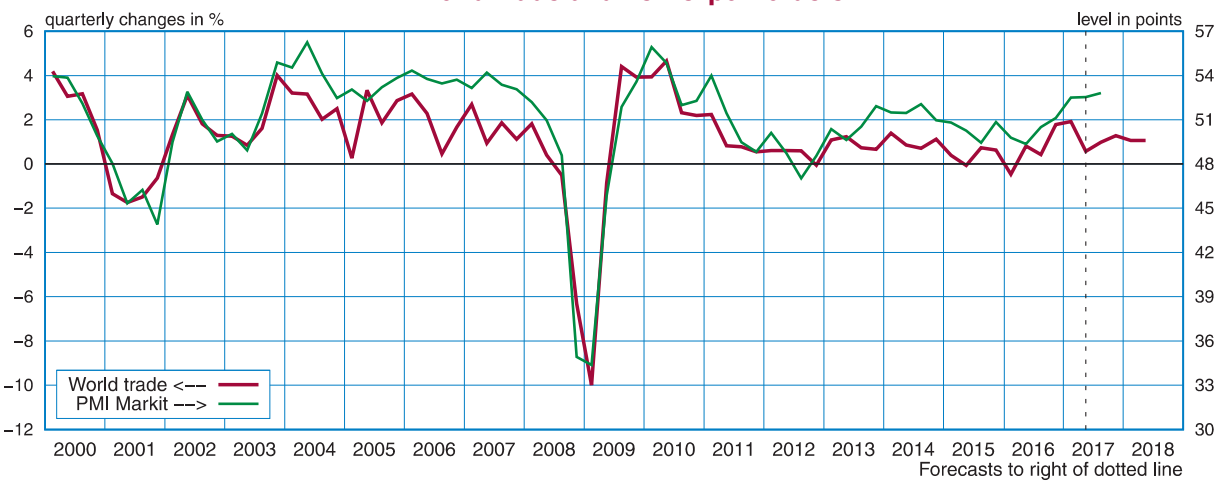
*In Q3 2017, world trade is expected to have picked up pace as a result of dynamic imports from the advanced countries and a rebound in imports in the emerging countries. World trade should remain solid between now and mid-2018, sustained by demand from the emerging countries as well as the advanced countries, particularly the Eurozone.*
*World demand for French products again grew sharply in Q3 2017 (+1.0% after +0.9%). French exports returned to a similar rate of growth (+1.1% after +2.2%), particularly the manufactured goods branch (+1.0% after +2.8%) following the delivery of an ocean liner in the previous quarter. Exports should grow sharply in Q4 (+1.8%), buoyed by sales of military hardware and the upturn in aeronautical exports. The after-effect of this upswing means that exports should slow in H1 2018, despite the delivery of a major shipbuilding contract.*
*Imports leapt in Q3 2017 (+2.8% after +0.3%), particularly manufactured goods (+4.4% after +0.4%) as a result of massive purchases of chemical products and aeronautical equipment. They should come to a standstill in Q4 2017 (+0.2%). In H1 2018, imports are expected to grow more rapidly than domestic demand once again (+0.8% per quarter).*
*After weighing down on growth in Q3 2017 (–0.6 points), the contribution of foreign trade should be positive in Q4 (+0.5 points), then slightly negative in H1 2018. As an annual average for 2017, foreign trade is expected to slow French growth by 0.5 points, less so than in 2016 (–0.8 points).*

## World trade should continue to grow through to mid-2018

World trade is expected to have picked up in Q3 (+1.0% after +0.6%, *Graph 1*), after an already-vigorous H1 (+1.3% on average). In this healthy international context, imports in emerging nations, and particularly China, regained some of their dynamism over the summer. World trade should continue to grow robustly in Q4 2017 (+1.3%), then by +1.1% per quarter until mid-2018. Trade should be bolstered by the still-solid imports in the advanced countries, primarily the USA and the Eurozone. Purchasing by emerging countries should remain steady, albeit slowing slightly. As an average over the whole year, world trade should see a sharp increase in 2017, growing at the highest rate since 2011 (+5.0% after +1.6%, *Table 1*). This momentum should continue into 2018 (+3.5% growth overhang by mid-2018).

World demand for French products is expected to show a slight acceleration for Q3 2017 (+1.0% after +0.9%). Between now and mid-2018 demand for French products should continue to increase at virtually the same rate as world trade (+1.2% in Q4 2017 then +1.0% per quarter in H1 2018, *Graph 2*), driven primarily by demand from France's main European trading partners.

**1 – World trade and new export orders**




*Sources: Markit, DG Trésor, INSEE forecast*

## Exports should increase sharply in Q4 2017

In Q3 2017, total French exports slowed down (+1.1% after +2.2%). Exports of manufactured goods slowed (+1.0% after +2.8%), largely due to a sharp downturn in transport equipment (+0.0% after +5.6%) as an after-effect of the ocean liner delivered in Q2. Furthermore, agricultural and food exports came to a standstill (+0.2% after +3.6%), and exports of refined petroleum products slowed (+3.9% after +8.0%), as did exports of industrial goods (+1.1% after +2.1%). However, exports of capital goods bounced back (+2.1% after –0.3%).

In Q4 2017, manufacturing exports should increase strongly (+2.3%, *Table 2*). Aeronautical and shipbuilding exports are expected to accelerate towards the end of this year, as a result of a catch-up effect in civil aeronautical deliveries, in line with the annual targets set by the main exporter in this sector, and also the continuation of military hardware deliveries. Service exports should continue to accelerate (+0.8%) and exports of agricultural goods should remain dynamic (+2.0%), buoyed by the rebound in French harvest volumes in 2017. Energy exports are expected to come to a standstill (0.0%) after three consecutive quarters of growth. Tourist numbers should also continue to improve. All in all, exports of goods and services should experience a sharp acceleration (+1.8%).

In H1 2018, despite the dynamism of world demand for French products, exports are expected to suffer from the return to normal levels of deliveries in the aeronautical sector and the negative effects of the recent appreciation of the euro on price competitiveness. Exports are expected to hold up in Q1 thanks to the delivery of a major shipbuilding contract (+0.7%), before stalling in Q2 (+0.2%, *Graph 3*).

As an average for the year as a whole, exports are expected to have risen sharply in 2017 (+3.3% after +1.9% in 2016). In spite of the clear slowdown in H1, they should still see a further acceleration in 2018 (+3.4% growth overhang in H1 2018), mainly thanks to agricultural exports.

Table 1

**World trade and world demand for French products**

*levels ; percentage changes from previous period*

| | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **World trade** | **1.9** | **0.6** | **1.0** | **1.3** | **1.1** | **1.1** | **1.6** | **5.0** | **3.5** |
| Imports of advanced economies | 1.6 | 1.1 | 0.7 | 1.1 | 0.9 | 1.0 | 2.6 | 4.7 | 3.1 |
| Imports of emerging economies | 2.6 | –0.5 | 1.6 | 1.8 | 1.3 | 1.3 | –0.4 | 5.7 | 4.4 |
| **World demand for French products** | **1.5** | **0.9** | **1.0** | **1.2** | **1.0** | **1.0** | **2.7** | **4.8** | **3.3** |

Forecast

*Sources: INSEE, DG Trésor*

Table 2

**Foreign trade growth forecast**

*variations in % at chain-linked previous year prices, contributions in points*

| | Quarterly changes | | | | | | Annual changes | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Exports** | | | | | | | | | |
| All goods and services | –0.7 | 2.2 | 1.1 | 1.8 | 0.7 | 0.2 | 1.9 | 3.3 | 3.4 |
| Manufactured products (68%)* | –1.8 | 2.8 | 1.0 | 2.3 | 0.7 | –0.1 | 3.0 | 3.7 | 3.5 |
| **Imports** | | | | | | | | | |
| All goods and services | 1.2 | 0.3 | 2.8 | 0.2 | 0.8 | 0.8 | 4.2 | 4.6 | 3.1 |
| Manufactured products (68%)* | 2.8 | 0.4 | 4.4 | 0.2 | 1.0 | 1.0 | 4.4 | 6.3 | 4.2 |
| **Contribution of foreign trade to GDP** | **–0.6** | **0.5** | **–0.6** | **0.5** | **0.0** | **–0.2** | **–0.8** | **–0.5** | **0.0** |

Forecast

*Part of exports (resp. imports) of non-energy industrial goods in exports (resp. imports) in a whole in 2016.

*Source: INSEE*

## Imports are expected to come to a standstill in Q4 2017

In Q3 2017, French imports picked up sharply (+2.8% after +0.3%). This momentum stems primarily from purchases of manufactured goods (+4.4% after +0.4%), particularly capital goods (+3.9% after +2.0%), "other manufactured goods" (+2.0% after +1.5%) following a massive uranium purchase, and transport equipment (+12.9% after –2.4%) linked to purchases of satellite components and turbojets.

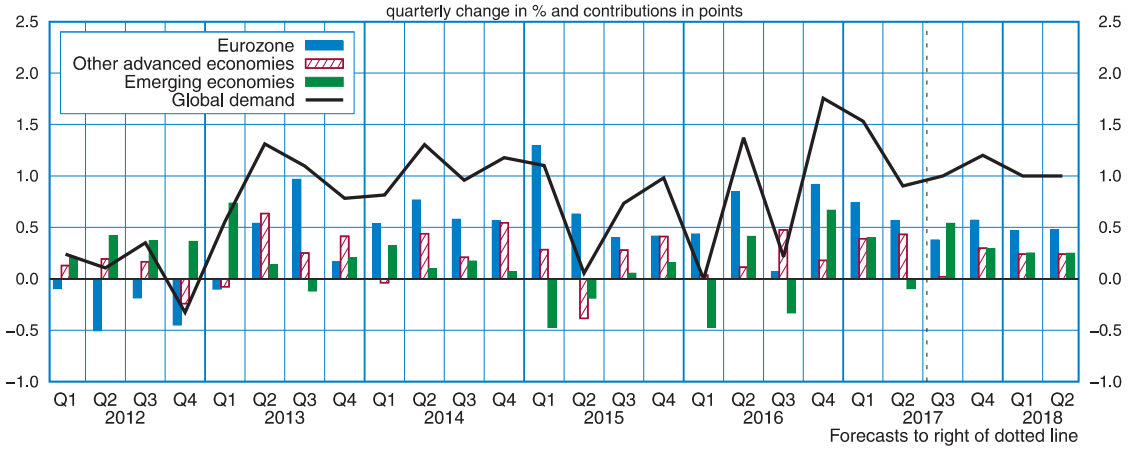
Nonetheless, energy imports have dropped off along with imports of agricultural products, as improved harvests in France have reduced the need for imports.

Imports are expected to slow sharply in Q4 2017 (+0.2% after +2.8%), before returning to a level consistent with the relative buoyancy of domestic demand in early 2018 (+0.8% per quarter).

As an annual average, imports should see another strong increase in 2017 (+4.6% after +4.2% in 2016), growing more rapidly than exports. As such, the contribution of foreign trade to growth should be negative again in 2017, but less so than in 2016 (–0.5 points after –0.8 points in 2016). In 2018, the contribution of foreign trade to the growth overhang at the mid-year point should be neutral: the negative contribution of trade in manufactured goods should be counterbalanced by the positive contributions of agricultural products, energy and tourism.

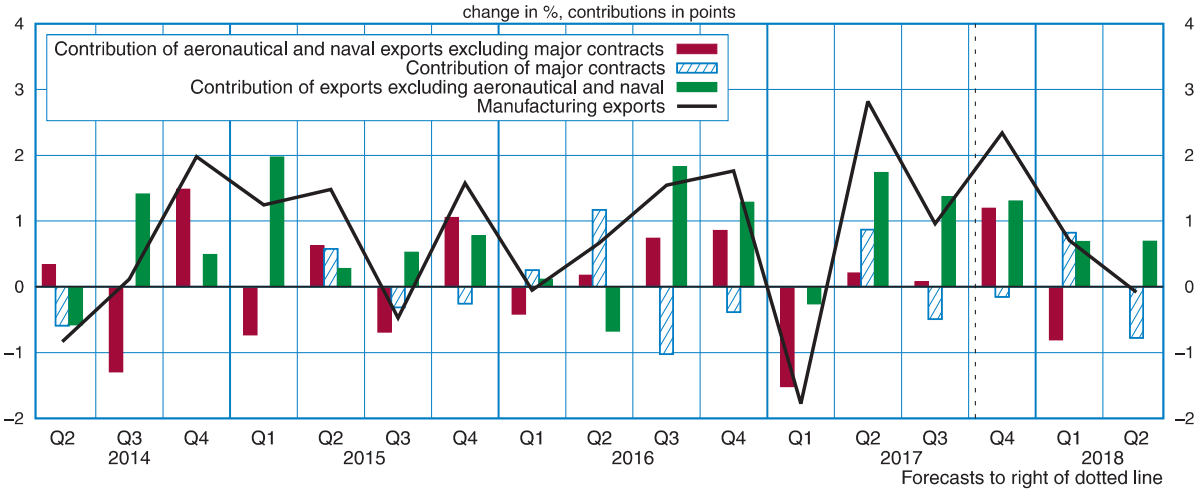
In H1 2017, the balance of trade in goods services deteriorated significantly. As a result of the rise in oil prices the balance should continue to deteriorate slightly until mid-2018, returning to a level close to the minimum recorded in early 2011 (–2.7% of GDP). ■

**2 - World demand for French products and contributions of the main partners**




*Sources: DG Trésor, INSEE forecast*

**3 - Manufacturing exports and main components contributions**




*Source: INSEE*

# Employment

*In France, non-farm market payroll employment slowed down in Q3 2017 (+46 000, after +77,000 in Q2). The employment intensity of growth linked to measures to lower the cost of labour would appear to have been lower than in the previous year, due to the end of the hiring premium for SMEs. However, the hiring intentions of business leaders expressed in the business tendency surveys show that employment should pick up in Q4, bringing the number of job creations in H2 2017 to 106,000. Over the year as a whole, 242,000 jobs are expected to be created (after +215,000 in 2016). This pace should be maintained in H1 2018 (+100,000).*

*In the non-market sector, employment should fall back significantly in H2 2017 (–38,000, after +27,000 jobs in H1) due to the sharp decrease in the number of subsidised contracts. At the beginning of 2018, the decline is expected to continue with 32,000 fewer jobs in H1.*

*All in all, 239,000 jobs would appear to have been created in 2017 (after 253,000 in 2016). The pace of job creations seems to have been markedly slower in the second half of the year (+71,000 in H2 2017, after +168,000 in H1), primarily due to the decrease in subsidised contracts. In H1 2018, total employment is expected to rise, as at end 2017, with the creation of 72,000 jobs.*

## Market payroll employment is expected to keep increasing at the end of 2017 and in H1 2018

In 2017 in France (excluding Mayotte), the rise in payroll employment in the non-farm market sectors would appear to have been slightly greater than in the previous year (+242,000, after +215 000 in 2016, *Table 1*). It is not expected to weaken in H1 2018 (+100,000 jobs).

Based on business leaders' responses on recruitment in the business tendency surveys, the employment climate continues to improve. After experiencing a slight decline during the summer, the index picked up, reaching 109 in November, its highest level since the summer of 2011. In Q4 2017, non-farm market payroll employment is therefore expected to accelerate (+60,000): it should cease to decline in industry for the first time since 2011 and should continue to rise in construction (+8,000) as well as in the tertiary sector excluding temporary work (+45,000, after +36,000 in Q3). At the beginning of 2018, payroll employment is expected to continue its growth in the non-farm market sectors (*Graph 1*), thanks to continued buoyant growth in activity. The general measures aimed at lowering the cost of labour would appear to have made a neutral contribution overall to growth. The Tax Credit for Encouraging Competitiveness and Jobs (CICE) and the Responsibility and Solidarity Pact (PRS) should continue to boost growth in employment, creating approximately 15,000 jobs in H1 2018, as at the end of 2017. However, the end of the

Table 1

**Change in employment**

*in thousands, SA*

| | 2017 | | | | 2018 | | 2017 H1 | 2017 H2 | 2018 H1 | 2016 | 2017 | Level end 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | | | | |
| **Mainly non-agricultural market sectors (1)** | **59** | **77** | **46** | **60** | **55** | **45** | **135** | **106** | **100** | **215** | **242** | **16,718** |
| Industry | –4 | –3 | –3 | 0 | –1 | –3 | –6 | –3 | –4 | –23 | –9 | 3,136 |
| Construction | 9 | 5 | 2 | 8 | 7 | 7 | 15 | 10 | 14 | –14 | 25 | 1,356 |
| Temporary employment | –1 | 29 | 11 | 7 | 3 | 0 | 28 | 18 | 3 | 99 | 46 | 735 |
| Market services excl. tempory employment | 53 | 45 | 36 | 45 | 46 | 41 | 98 | 81 | 87 | 153 | 180 | 11, 491 |
| **Agricultural workers** | **3** | **2** | **1** | **2** | **2** | **2** | **5** | **2** | **3** | **1** | **7** | **301** |
| **Mainly non–market service sectors** | **17** | **10** | **–2** | **–36** | **–20** | **–12** | **27** | **–38** | **–32** | **44** | **–11** | **8,045** |
| **Self–employed** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **1** | **–6** | **2** | **2,811** |
| **TOTAL EMPLOYMENT** | **79** | **89** | **45** | **26** | **37** | **35** | **168** | **71** | **72** | **253** | **239** | **27,875** |

Forecast

(1) Sectors DE to MN and RU

*Source: INSEE*

hiring premium for SMEs on 30 June 2017 should continue to weigh down on employment in a similar proportion at the beginning of 2018, although it could have a smaller impact than initially expected (*Focus*).

### Temporary employment is set to slow, but employment in the tertiary sector excluding temporary work should remain strong

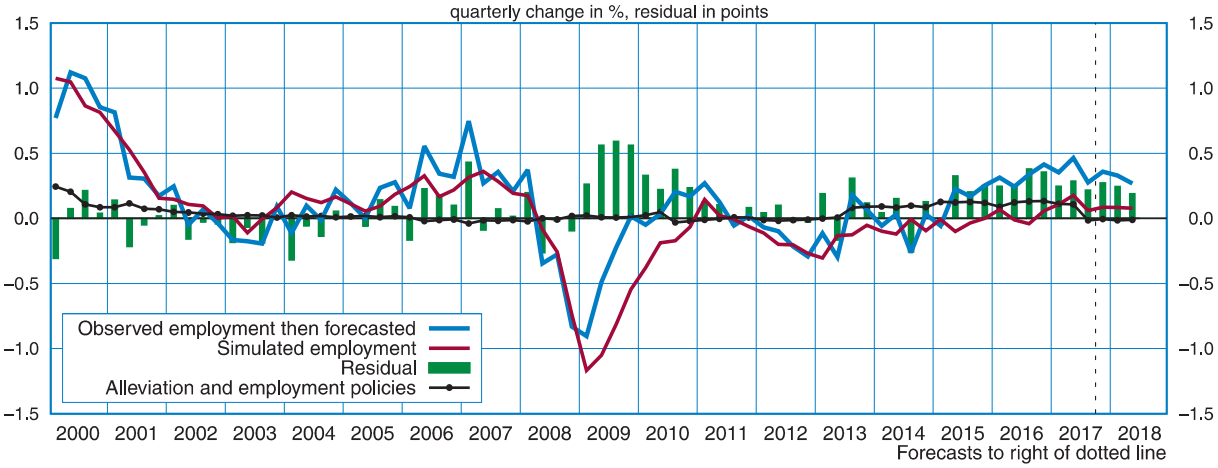
In 2017, temporary employment would appear to have slowed down (+46,000, after +99,000 in 2016). As it responds rapidly to fluctuations in activity, it recovered more quickly than the other employment components (*Graph 2*), exceeding the high levels it had reached before the economic crisis of 2008-2009. It increased particularly in transport equipment manufacturing and transport-warehousing services. After increasing by 28,000 jobs in H1 2017, temporary work is expected to slow down through to mid-2018 (+18,000 in H2 2017, then +3,000 in H1 2018). Employment in the tertiary market sector excluding temporary work accelerated slightly in 2017 (+180,000 after +153,000 in 2016) and should maintain a similar pace in H1 2018 (+87,000), with business leaders still optimistic about the growth of their workforces (*Graph 3*) on the strength of growth in activity that is expected to remain sustained.

All in all, employment in the non-market tertiary sector (including temporary work) is set to increase by 226,000 in 2017 (+127,000 in H1 2017, then +99,000 in H2). It should maintain this pace during the first half of 2018 (+90,000 jobs).

### Job losses in industry are expected to ease

In 2017, net job losses in industry would appear to have eased (–9,000 jobs lost after –23,000 the previous year). As the expectations of business managers in industry regarding their workforces

**1 - Employment observed in the non-agricultural market sector, simulated and residual employment**

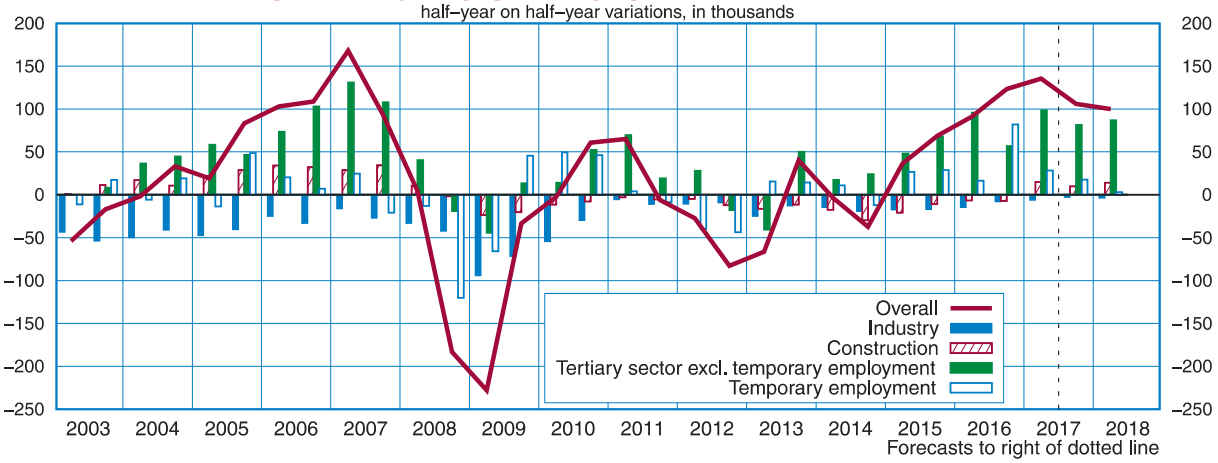



Note: The equation residual for employment is the spread between the observed employment and the simulated employment from past and current variations in employment and activity and from effects of employment policies (included, over the recent period, the effects of the CICE, the PRS and the employment plan). A positive residual, such as that observed in 2015, indicates that observed employment showed better growth than past behaviour would lead us to expect. Estimation period: 1984-2009.

Scope: France excluding Mayotte

*Source: INSEE*

**2 - Year-on-year change in payroll employment in the non-farm market sectors**




Scope: France excluding Mayotte

*Source: INSEE*

are at their highest level since 2007, employment in industry should stabilise in Q4 2017, before slightly declining again in H1 2018 (–4,000 jobs).

### The construction sector returns to job creation

Payroll employment in construction decreased almost continuously between 2008 and the end of 2016. However, job losses have progressively diminished, and at the start of 2017 the sector returned to growth; for the year, it would appear to have created jobs anew (+25,000 jobs, after –14,000 in 2016). In the business tendency surveys, business leaders' opinions on the growth of their workforces is at a very high level in the building industry and especially in civil engineering. Employment in construction should therefore continue to grow in H1 2018 (+14,000).

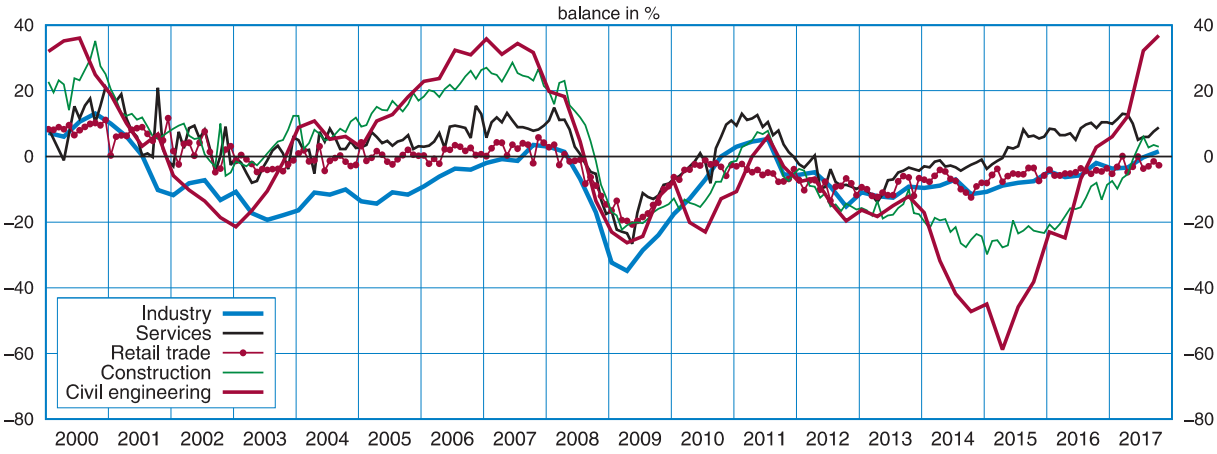
### Non-market employment is expected to fall back

In 2017, non-market employment would appear to have declined by 11,000 jobs, primarily due to the reduction in the number of beneficiaries of contrats uniques d'insertion (single integration contracts) and emplois d'avenir (future jobs) in H2 (*Table 2*). This decline is likely to continue in the first half of 2018, with 36,000 fewer subsidised contracts and another drop in non-market employment (–32,000).

### Total employment should increase by 72,000 in H1 2018

Including agricultural employment and self-employment, net job creations across all sectors would appear to have reached 239,000 in 2017 (after +253,000 in 2016). The slowdown appears to be fairly significant in H2 (+71,000, after +168,000 in H1 2017). This dip seems to have originated from market payroll employment on the one hand, with the end of the hiring premium for SMEs in mid-2017, and non-market payroll employment on the other hand, with the drop in the number of beneficiaries of subsidised contracts. Total employment should continue to grow at a similar pace in H1 2018, with 72,000 net job creations, driven by activity that should continue to be positive, albeit still held back by the reduction in subsidised contracts. ■

**3 - Balance of opinion of business leaders on expected workforce**




*Source: INSEE, Business tendency surveys*

Table 2

**Change in subsidised employment and civic service in the non–market sector**

*in thousands*

| | 2017 | | | | 2018 | | 2017 H1 | 2017 H2 | 2018 H1 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | | | |
| *"Future Jobs"* | –4 | –4 | –13 | –10 | –10 | –8 | –8 | –23 | –18 | –21 | –31 |
| CUI-CAE incl. ACI* | 5 | 6 | –40 | –48 | –14 | –4 | 11 | –88 | –19 | 19 | –77 |
| Civic service contracts | 3 | 6 | 5 | 0 | 1 | 0 | 10 | 4 | 1 | 5 | 14 |
| **Total** | **4** | **9** | **–49** | **–58** | **–24** | **–12** | **13** | **–107** | **–36** | **3** | **–94** |

Forecast

* Since July 2014, recruitment by integration workshops and sites (ACI) no longer takes the form of a CUI–CAE (*Contrat unique d'insertion – Contrat d'accompagnement dans l'emploi* – Single integration contract – Employment support contract) but instead a CDDI (*Contrat à durée déterminée d'insertion* - Fixed-term integration contract). Nevertheless, in order to ensure that the scope of this analysis remains constant when tracking subsidised jobs, the CUI–CAE forecasts given here include ACIs.
Scope: Metropolitan France

*Sources: DARES, INSEE calculations*

## Effect of the Hiring Premium for SMEs on employment: measurement *via* business tendency surveys

Business tendency surveys provide a way of assessing whether the "hiring premium for SMEs" had an effect in boosting the employment intensity of growth, as entrepreneurs give their opinions in the surveys on their activity and on changes in their number of employees. For a given level of activity, the hiring premium does seem, taken on its own, to have given SMEs an incentive to recruit more than other enterprises, but the effect has remained somewhat limited.

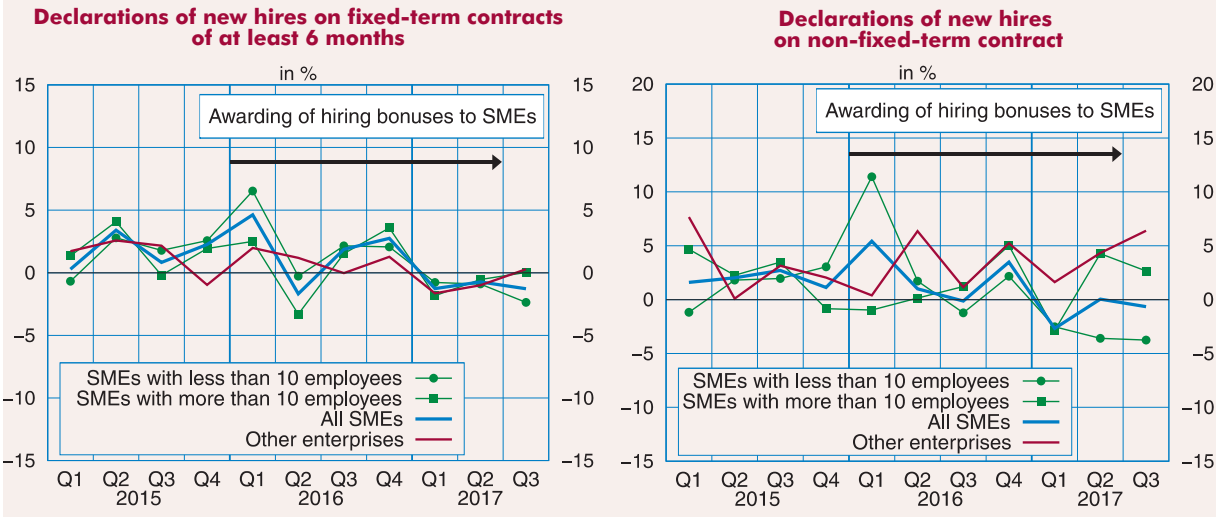
### The Hiring Premium: a specific scheme from January 2016 to June 2017

Between 18 January 2016 and 30 June 2017, every enterprise or association with a headcount of less than 250 employees that hired a new employee on an open-ended contract or on a fixed-term contract of over 6 months with gross monthly pay of up to €1,900, received a quarterly premium of €500 for the first two years of the contract. The premium thus came to a maximum of €4,000 in total. In the space of 18 months, 1.6 million hiring premiums were granted to small and medium enterprises (SMEs). It should be noted that the range of enterprises benefiting from the hiring premium was broader than the range of SMEs usually described in INSEE publications (see *Definitions*). The measure was part of the Emergency Plan for Employment announced in January 2016. It was initially scheduled to stop at the end of December 2016, but was extended for a further six months by a decree published in November 2016 and therefore ended in June 2017.

### Declarations of new hires on fixed-term contracts of at least 6 months progressed significantly more for SMEs than for other enterprises

Implementation of the hiring premium would appear to have had an impact on declarations of new hires on fixed-term contracts of at least 6 months, as declarations made by SMEs increased more than those by other enterprises (*Graph 1*). In 2016 and H1 2017, the average number of new hire declarations per quarter increased by 8% for SMEs and by only 4% for other enterprises, in relation to 2015. This difference is largely explained by the behaviour of smaller enterprises (fewer than 10 employees on a full-time equivalent basis), in which recruitments were particularly dynamic, with the exception of the relative slowdown in Q2 2016 in reaction to the sharp acceleration in Q1. New hires on open-ended contracts did not show a similar trend, with declarations of new hires by SMEs (+10% on average over the period) even being less dynamic than those of other enterprises (+14%). However, for both types of employment contract, declarations of new hires by SMEs slowed down in Q3 2017, which would seem to indicate that the end of the measure did indeed have an impact on recruitments in stable employment.

**1 – Quarterly change in number of new hire declarations in the market sectors by enterprise size**




How to read it: in Q1 2016, declarations of new hires on fixed-term contracts of at least 6 months by market-sector SMEs with at least 10 employees on a full-time-equivalent basis, increased by 7%.

*Sources: Acoss, DPAE, INSEE, calculations of enterprises categories and seasonal adjustment*

**SMEs contributed significantly to the improvement in the employment climate in 2016 and then its fall in summer 2017**

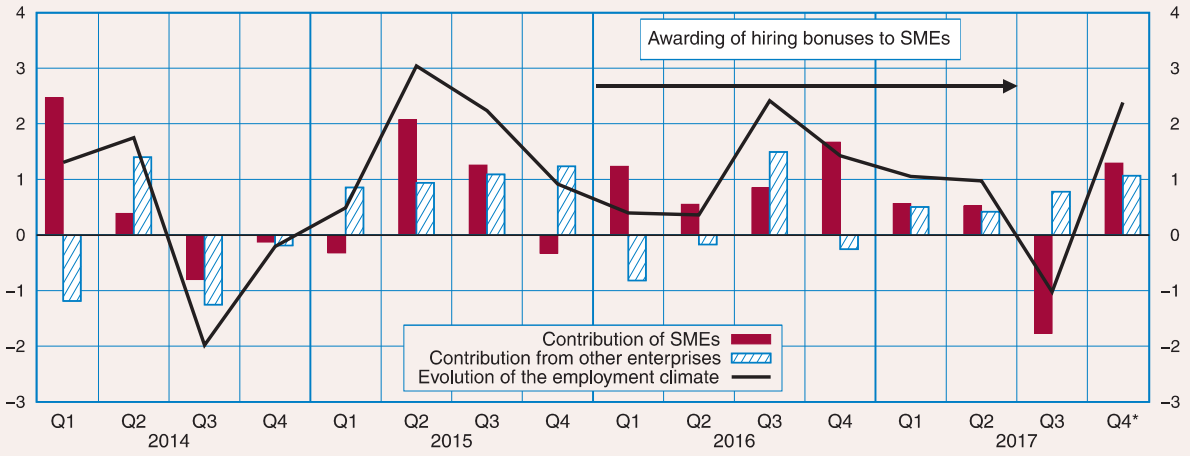
The effect of the hiring premium on employment cannot be deduced directly from the trend in new hire declarations, as companies may have substituted recruitments on fixed-term contracts of more than 6 months for contracts of less than 6 months in order to benefit from the measure without necessarily increasing their headcount. However, the responses of SMEs to the business tendency surveys, compared to those of other enterprises, do testify to a positive effect of the measure on trends in the employment climate in 2016 (*Graph 2*). The "employment climate" combines the balances of opinion on past and future employment from the different business tendency surveys carried out monthly by INSEE (report in Conjoncture en France in March 2017).

Over the two years prior to the introduction of the measure, the responses of each category of enterprise explain the variation in the employment climate proportionally to their weight: in 2014 and 2015, SMEs contributed +0.6 points to the quarterly average of the employment climate, against +0.4 points for other companies. This result is roughly proportional to the share of SMEs in employment within the scope of the surveys (a little over 60% in 2015). In 2016, the contribution of SMEs was significantly greater (+1.1 points on average) than that of other enterprises (+0.1 points). In H1 2017, the extension of the measure does not seem to have driven any particular trend in the employment reported by SMEs. The end of the measure, however, was accompanied by a strong negative contribution of SMEs to the employment climate over Q3 2017. The rebound observed in the surveys in October and November 2017 also seems to have been due mainly to SMEs: the backlash triggered by the end of the hiring premium would appear to have affected their responses only over the summer, without any effect thereafter.

**The business tendency surveys serve to go further by measuring the effect on the employment intensity of growth**

However, during the period of existence of the measure, larger enterprises may have been affected by a different economic outlook to that of SMEs. SMEs may also have benefited more than other enterprises from the other measures to reduce labour costs. In particular, the Tax Credit for Encouraging Competitiveness and Jobs (CICE, from 2013 onwards) and the Responsibility and Solidarity Pact (PRS, from 2014 onwards) aim to reduce the cost of labour for the lowest pay levels. These mechanisms may have favoured employment in SMEs a little more than that in larger enterprises, as shown by the business tendency surveys, given that within the scope of the surveys, the Tax Credit for Encouraging Competitiveness and Jobs covers about 60% of the payroll of SMEs, against 50% for the other enterprises.

**2 - Contribution of the different categories of enterprises to change in the employment climate**




*The result for Q4 2017 was obtained on the basis only of the business tendency surveys for October and November 2017.

How to read it: the quarterly average of the employment climate indicator (black line) increased between Q1 2014 and Q4 2013 (+1.4 points). This rise was due to the improvement in the employment outlook for SMEs (contribution of +2.5 points, dark red bar), partly attenuated by the deterioration in the employment climate for other enterprises (contribution of –1.1 points).

*Sources: INSEE, DADS and business tendency surveys in industry, services, retail trade and building industry*

**A model to assess the effect of the measure on response behaviour**

To measure the effect of the hiring premium on the employment intensity of growth, a comparison must be conducted between those enterprises that benefited from the premium and those that did not, while comparing enterprises with equivalent levels of activity and which use the other labour cost reduction mechanisms in the same way. We therefore analysed the responses of each company *i* to the question on the change in their number of employees over the past quarter *T* ($past\_employment_{i,T}$), taking account of the change in their activity over the past quarters and of the share of their payroll affected by labour cost reduction measures. The following fixed-effect linear model ($\mu_i$) was estimated (see *Method*):

$$\begin{aligned} past\_employment_{i,T} = & \sum_{k=0}^{3} \left( \alpha_k . past\_activity_{i,T-k} + \beta_k . order_{i,T-k} \right) \\ & + \gamma_T . share\_wage\_reduction\_CICE_i \\ & + \kappa_T . share\_wage\_reduction\_PRS_i \\ & + \delta_T^{SME} . 1_{SME}(i) + \delta_T^{Other} . 1_{Other}(i) \\ & + \delta_T^{Sub-sector} . 1_{Sub-sector}(i) + \mu_i + \varepsilon_{i,T} \end{aligned} \qquad (1)$$

In order to take account of the effect of the productivity cycle on enterprises' responses concerning their workforce, we took into consideration the responses of enterprises on their activity over the last four quarters. Two types of activity-linked variables were used:

- the change in activity over the past three months (the variable $past\_activity_{i,T-k}$): these are the qualitative responses of entrepreneurs on the past trend in production for industry, in turnover for services, and in business or sales for the retail trade;

- the state of orders or demand (the variable $order_{i,T-k}$): these are the qualitative responses to the questions about the overall level of orderbooks in industry, about the likely trend in demand over the coming three months in services, and about the likely trend in the orders the enterprise intends to place over the coming three months in the retail trade.

There was a control for the effects of other labour cost reduction measures by taking account of the share[1] of the payroll of each company corresponding to wages of less than 2.5x the minimum wage for the Tax Credit for Encouraging Competitiveness and Jobs ($share\_wage\_reduction\_CICE_i$) and of less than 1.6x the minimum wage for the Responsibility and Solidarity Pact ($share\_wage\_reduction\_PRS_i$). A different model was estimated for each sector. As industry and services are highly heterogeneous sectors, controls were added to the models for each sub-sector ($\delta_T^{Sub-sector}$) to take account of any specific short-term employment outlooks.

**The estimations can identify the introduction of the hiring premium mechanism**

Over the 2012-2015 period, the SME-specific change in employment [$(\delta_T^{SME})$] and that specific to larger enterprises with less than 500 employees [$(\delta_T^{Other})$] followed relatively similar trajectories (*Graph 3*): for a given level of activity in the two categories of enterprise, employment fell in 2012 before increasing sharply in 2014 and 2015. Over the period when the hiring premium was being awarded, SMEs increased their workforces more on average than larger companies, for a given level of activity. The measure does therefore seem to have boosted the employment intensity of growth in the activity of SMEs. In Q3 2017, a backlash was observed when the mechanism came to an end.

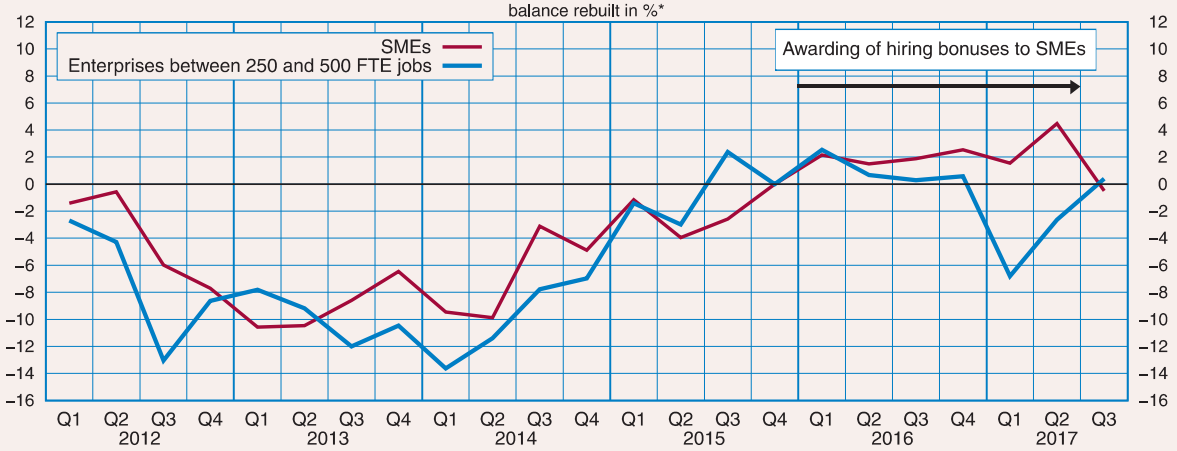
**The effect of the measure is significant in the responses of enterprises in industry and the retail trade**

The specific effect of the hiring premium can be estimated by comparing the SME-specific trend in employment with that for larger enterprises with a headcount of less than 500. The change was calculated in relation to Q4 2015, the quarter preceding entry into force of the measure. For quarter T, the effect of the mechanism corresponds to the following twofold difference:

$$Effect_T = \delta_T^{SME} - \delta_{2015Q4}^{SME} - \left( \delta_T^{Other} - \delta_{2015Q4}^{Other} \right) \qquad (2)$$

1. These shares were estimated on average over the year 2014 as a whole, based on the DADS.

**3 – Effects on the employment intensity of growth, estimated over the period 2012-2017**




* see *Method*

How to read it: the "SME" curve corresponds to the estimated coefficients of the model (1) $\delta_T^{SME}$ while the "Enterprises between 250 and 500 FTE employees" curve corresponds to the coefficients $\delta_T^{Other}$. The two series were calculated so as to be zero for the quarter prior to the introduction of the hiring premium, which is to say Q4 2015. This convention enables us to interpret the gap between the two curves as the effect of implementation of the measure on employment in SMEs. It has an influence on the amplitude of the result but not on its significance.

Scope: enterprises with less than 500 employees on an FTE basis and responding to the business tendency surveys in the industry, market-sector services excluding temporary work, and retail trade sectors.

*Sources: INSEE, DADS and business tendency surveys in industry, services and retail trade*

Over the period during which the hiring premium was awarded, SMEs in industry and trade reported an increase in their workforce more often on average than larger companies, for a given level of activity (*Table* ). The measure does seem to have boosted the employment intensity of growth in the activity of SMEs in these sectors and to have driven an average increase of 2.1 points in the balance of opinion on changes in the number of employees over the past quarter in industry, and an increase of 3.2 points in trade. In market-sector services excluding temporary employment, the effect was positive in H1 2017, but was not statistically significant on average over the period. When the results were aggregated and weighted for the level of employment in each sector, we obtained a significant average effect on the balance of opinion of +1.6 points.

**Estimation of the effect of the hiring premium (equation 2) on the balance of opinion on past number of employees**

*in points of balance*

| | Services except temporary employment | Industry | Trade | All 3 sectors |
|---|---|---|---|---|
| 2016 Q1 | 0.0 | 1.0 | 2.2 | 0.7 |
| 2016 Q2 | –0.4 | 2.5** | 2.2 | 0.8 |
| 2016 Q3 | –0.2 | 1.7* | 3.7* | 1.1 |
| 2016 Q4 | 0.5 | 2.0 | 1.0 | 1.0 |
| 2017 Q1 | 2.7* | 2.8** | 7.0*** | 3.7** |
| 2017 Q2 | 1.9 | 2.4** | 3.3* | 2.3* |
| **Mean on the period active device** | **0.8** | **2.1**** | **3.2*** | **1.6**** |
| 2017 Q3 (completed device) | 0.0 | 0.1 | 3.8* | 0.9 |

Note : *, ** and *** indicate that the effect on employment was significantly greater than 0 for a test with an error level of 10%, 5% and 1% respectively. For industry, the reference period was H2 2015, with this choice being justified by the high volatility of the coefficients obtained at the end of 2015 for other enterprises in this sector.

How to read the table: in Q2 2016, the award of hiring premiums to SMEs would appear to have increased the balance of opinion on past number of employees in the sector as a whole by 2.5 points. This effect is significantly greater than 0 for a test with an error level of 5%.

**The effect measured using the business tendency surveys would appear to correspond to an increase of about 10,000 jobs in 6 quarters**

The effect on the "past change in employment" balance can be translated into a number of jobs using calibration models that explain the change in employment in each sector on the basis of the past change balance obtained at the end of the quarter. On average over the period of existence of the measure, the rise in the past employment balance attributable to the hiring premium would appear to correspond to the creation of about 10,000 additional jobs from the beginning of 2016 through to mid-2017 in industry, trade and market-sector services excluding temporary work. This does therefore show that the measure had a positive but limited effect. This result remains quite close to that of Beaumont et al. who did not find a significant effect when comparing enterprises on either side of the 250-employee threshold. According to the focus in the Employment sheet in Conjoncture in France in June 2016, based on the habitual elasticity of employment to its cost, the estimated effect was much greater, at around 50,000 jobs during the 6 quarters when the premium existed.

However, converting the balances directly into numbers of jobs is a very approximate process and the results should be interpreted with caution. More particularly, the choice of the group of enterprises serving as the point of comparison (those with 250 to 500 employees, here) is open to debate: in the building sector, the assessment method we have just described produces results that are not very realistic. Even before the introduction of the hiring premium, SMEs and enterprises with 250 to 500 employees were showing very different trends in employment (for a fixed level of activity). The choice of the reference period was also made by convention: if H2 2015 had been chosen for all sectors, the estimated effect would have been a little greater, at around 15,000 jobs. Conversely, if the whole of 2015 had been taken as the reference period, the result would have been to cut the estimation of the effect on employment intensity to around 7,000 jobs.

Finally, business tendency surveys and the method used here are not particularly well suited to monitoring the smallest (or youngest) companies, as they are surveyed less frequently (as is the case of industrial enterprises with less than 20 employees) and respond less regularly to surveys. They are therefore taken into account less often in the estimation of the model (1) which requires the same enterprise to be observed in four consecutive quarters. However, analysis of the new hire declarations (*Graph 1*) indicates that the smallest companies would appear to have changed their recruitment policies more particularly with the introduction of the hiring premium.

All in all at this stage, the estimation of the effect on the job intensity of growth made in June 2016 has been kept for the forecast in this *Conjoncture in France*, which is to say +10,000 per quarter from Q2 2016 to Q2 2017 and then –10,000 per quarter from mid-2017 to mid-2018. ■

## Bibliography

**Beaumont P.**, **Luciani A.** and **Slimani Houti I.** (2016), "Hiring bonus in small and medium-sized enterprises: initial evaluation based on hiring declarations", *INSEE Analyse* n° 29, December.

**Dortet-Bernadet V.** and **Glotain M.** (2017), "Forecasting employment based on business tendency survey responses", *Conjoncture in France*, March, p. 19-33.

"The new emergency plan for employment should strengthen job growth and increase the number of individuals receiving training", *Conjoncture in France*, June 2016, p. 74-76. ■

## Definitions

Small and medium enterprises (SMEs) and other enterprises: in this study, the "SME" category includes all those companies that were eligible for the hiring premium. These were legal units with less than 250 employees on an FTE basis in 2015. Their salaried workforce was estimated on the basis of their Annual Declarations of Social Data (DADS). The notion of an enterprise used here is not that in Article 51 of the Law on the Modernisation of the Economy, which is to say the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. This is because the legal units eligible to benefit from the measure were not always independent of a larger group. To estimate the model (1) and the effect (2), the "other enterprises" category included legal units that were not eligible for the hiring premium, employing between 250 and less than 500 employees on an FTE basis. As the hiring premium did not apply to temporary employment, all temporary work agencies (class 78.20 in the NAF French Classification of Activities, rev. 2) were classified in the "other enterprises" category, whatever their size.

## Method

The model (1) was estimated by setting the value of the qualitative variables (past_employment, for example) to 100 when the enterprise responded "up", to 0 when it responded "unchanged" and to–100 when it responded "down". The balances were obtained by calculating a weighted average of these variables. The estimate was calculated using the responses from companies with less than 500 salaried employees on an FTE basis.

# Unemployment

*In Q3 2017, the ILO unemployment rate rose 0.2 points, reaching 9.7% of the labour force after a sharp fall during H1 2017. Year-on-year, it has declined by 0.3 points.*

*Between mid-2017 and mid-2018, the rise in employment should be slightly greater than that of the labour force, resulting in a slight decrease in the unemployment rate. Over the forecasting period, it should stand at 9.4% in France, or 0.1 points less than a year earlier.*

## The unemployment rate increased by 0.2 points in Q3 2017, but remained lower than one year previously

After a sharp drop in H1 2017 (*Graph*), the unemployment rate rose 0.2 points in Q3 2017 to stand at 9.7% in France excluding Mayotte (*Table*). Year-on-year it dropped by 0.3 points. The number of unemployed increased by 62,000 in Q3 2017, but fell by 77,000 over the year. In Metropolitan France, the halo of unemployment[1] shed 59,000 people between Q2 and Q3 2017, and 62,000 since Q3 2016.

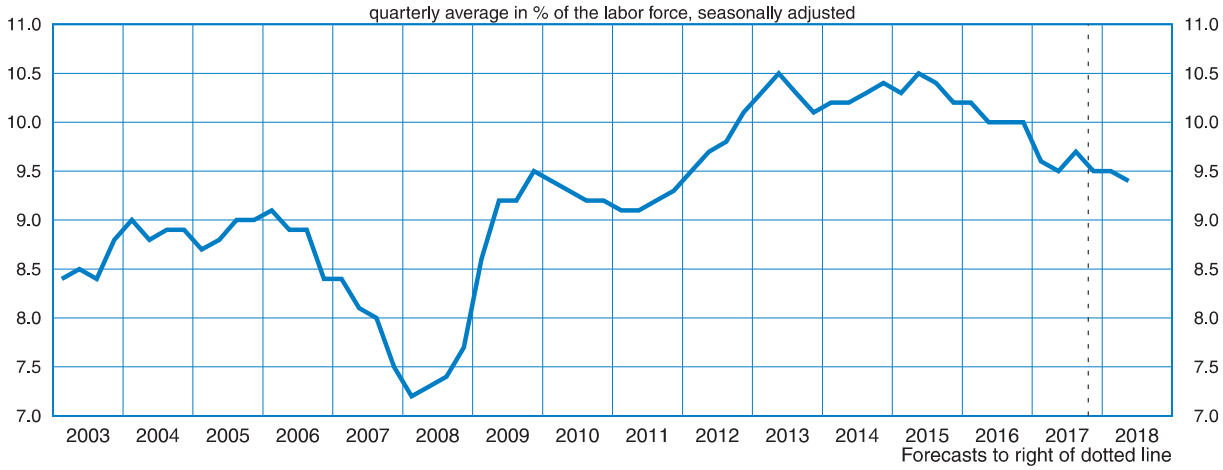
## The youth unemployment rate again fell in Q3 2017

In Q3 2017, the rate of youth unemployment in France stood at 22.4% of the labour force aged under 25. It decreased by 0.8 points compared to the previous quarter, and 2.9 points compared to Q3 2016. Over the last year, young people have benefited in particular from the upswing in temporary employment (see Employment sheet). The unemployment rate for 25-49-year-olds rose 0.4 points between Q2 and Q3 2017, particularly among women (+0.7 points); they may have been more greatly affected than other categories by the drop in the number of beneficiaries of CUI-CAE (single integration and employment support contracts). Over one year, the unemployment rate for 25-49-year-olds increased by 0.3 points.

The unemployment rate for those aged 50 or over remained relatively stable, at 6.6% (+0.1 points for the quarter); it decreased by 0.6 points compared to Q3 2016.

1. The halo of unemployment is made up of economically inactive persons as defined bi the International Labour Office (ILO): it refers to people who are seeking employment but who are not available and people who wish to work but are not seeking employment, whether they are available or not.

**Unemployment rate (ILO definition)**




Scope: France (excluding Mayotte), population of households, people aged 15 or over
*Source: INSEE, Employment Survey*

## The unemployment rate has dropped more sharply for women year-on-year

Between Q2 and Q3 2017, the unemployment rate rose 0.2 points for both men and women. Over one year, it decreased by 0.6 points for women and only dropped very slightly for men (–0.1 points): women benefited more from job creations in the market tertiary sector (excluding temporary employment) than men.

## The unemployment rate should again decrease through to mid-2018

In 2016, the labour force increased by 194,000 people, after +42,000 in 2015. On average over the two years, this increase is in line with the trend growth in the working-age population. In 2017, the spontaneous growth of the labour force (+91,000) would seem to be less significant than in 2016 (+103,000): the impact of the age of pension eligibility being raised to 62 years at the beginning of 2017 would appear to have been further eroded by the specific scheme for long careers. Furthermore, the impact of the jobseekers' training plan, announced at the beginning of 2016, culminated at the end of 2016, and the after-effect would appear to have contributed to a slight increase in the labour force in 2017. Finally, the strong recovery in employment has led some inactive people to enter the labour market, through an economic downturn effect. All in all, in 2017 the increase in the labour force (+128,000) should be less significant than that of net job creations (+254,000) and the number of unemployed should decrease. The unemployment rate should settle at 9.5% at the end of 2017 against 10.0% a year earlier: after declining in H1 2017, it should stabilise in H2 due to the overall slowdown in employment caused by the decrease in subsidised contracts. In H1 2018, job creations (+68,000) should again outstrip the increase in the labour force (+41,000): the unemployment rate is set to fall to 9.4% at mid-year, or 0.1 points less than one year previously. ■

**Changes in the labour force, employment and unemployment**

*in thousands, SA, and in %*

| | Quarterly changes | | | | | | | | | | Annual changes | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | | | | |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | 2015 | 2016 | 2017 | 2018 S1 |
| Population of the 15-64 age bracket | –6 | –6 | –6 | –6 | 0 | 0 | 0 | 0 | –2 | –2 | –55 | –24 | –1 | –3 |
| Population of the 15-59 age bracket | 1 | 1 | 1 | 1 | –3 | –3 | –3 | –3 | –2 | –2 | –43 | 3 | –14 | –5 |
| **Labour force** | **72** | **–4** | **66** | **60** | **–42** | **61** | **129** | **–20** | **21** | **21** | **42** | **194** | **128** | **41** |
| including: | | | | | | | | | | | | | | |
| *(a) Contribution of the population and the trend activity rate* | *26* | *26* | *26* | *26* | *23* | *23* | *23* | *23* | *21* | *21* | *121* | *103* | *91* | *42* |
| *(b) Estimated effects of economic downturns* | *2* | *2* | *2* | *2* | *4* | *4* | *4* | *4* | *0* | *0* | *–4* | *8* | *15* | *0* |
| *(c) Estimated effects of public policies* | *–6* | *–14* | *–4* | *–8* | *10* | *10* | *2* | *–1* | *0* | *0* | *2* | *–31* | *22* | *–1* |
| *(d) Other short-term fluctuations (residual)* | *50* | *–18* | *42* | *40* | *–79* | *24* | *100* | *–46* | *0* | *0* | *–78* | *114* | *0* | *0* |
| **Employment** | **55** | **59** | **69** | **68** | **68** | **84** | **67** | **36** | **32** | **36** | **117** | **251** | **254** | **68** |
| Reminder: End-of-period employment (see *"Employment"* sheet) | 59 | 59 | 79 | 56 | 79 | 89 | 45 | 26 | 37 | 35 | 130 | 253 | 239 | 72 |
| **ILO unemployment** | **17** | **–63** | **–3** | **–7** | **–109** | **–23** | **62** | **–56** | **–11** | **–15** | **–76** | **–56** | **–126** | **–26** |
| | Quarterly average | | | | | | | | | | Average in the last quarter of the period | | | |
| **ILO unemployment rate (%)** | | | | | | | | | | | | | | |
| France (including the overseas departments) | 10.2 | 10.0 | 10.0 | 10.0 | 9.6 | 9.5 | 9.7 | 9.5 | 9.5 | 9.4 | 10.2 | 10.0 | 9.5 | 9.4 |

Forecast

How to read it:
- the Employment line presents variations in the number of people in employment as a quarterly average, for consistency with the other data in the table,
- employment and unemployment are not estimated here within strictly equivalent scopes: total population for employment. population of households (excluding collective) for unemployment. As the impact of this difference is very minor (the population outside of households represents less than 1% of the active population), it is neglected here for the unemployment forecasting exercise,
- in (a), the contribution of demographics and of trend activity behaviour includes all the effects of pensions reforms up to and including that in 2010.

Scope: France (excluding Mayotte for employment, unemployment and estimated effects of public policies)

*Source: INSEE*

# Consumer prices

*In November 2017, the year-on-year rate of inflation stood at +1.2% according to the provisional estimate. Through to mid-2018 it is expected to increase further to +1.6% year-on-year, its highest level since October 2012. Tobacco prices should increase sharply, and energy inflation should be bolstered by tax increases. After slipping back in late 2016, core inflation[1] has remained sluggish throughout 2017 (+0.5% year on year in October). By June 2018 it should have picked up sharply to reach +1.0%: the prices of services are expected to pick up, driven by the renewed dynamism of nominal wages. Meanwhile, prices of manufactured goods should remain virtually stable: the upward trend driven by previous increases in commodity prices is still being counterbalanced by the recent appreciation of the euro.*

## Headline inflation should rise again

In November 2017, according to the provisional estimate of the consumer price index, headline inflation increased slightly to +1.2% after +1.1% in October (*Graph 1*). Prices of services accelerated slightly (+1.1% after +1.0%), as did energy prices (+5.5% after +4.8%). The decline in the prices of manufactured goods has eased slightly (–0.2% after –0.3%). Inflation of food prices remains stable at +1.5%.

Headline inflation should increase again in H1 2017 to stand at +1.6% in June 2018 (*Table*), a level not seen since October 2012. This increase will be driven by the strong increase in tobacco prices (+19.7% year on year in June 2018, after +4.4% in November 2017), and by the increase in green taxes. Prices of services should also accelerate, driven by the dynamism of nominal wages.

## Energy inflation should remain robust

Energy prices has gathered pace since the end of the summer, standing at +5.5% in November, as a result of the rise in crude oil prices. Energy taxation is set to increase in January 2018, more substantially than in recent years (*Focus*). Assuming that the price of a barrel of Brent crude remains stable at $60 (€51.30), energy inflation should remain vigorous at +6.4% year-on-year in June 2018.

## Food product prices should slow slightly

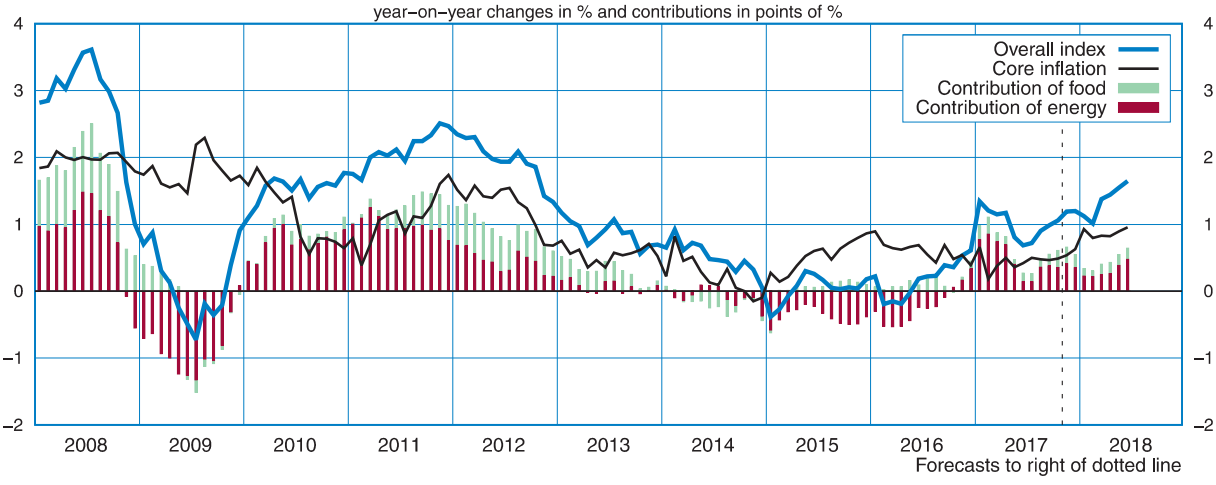
Food prices should slow slightly by June 2018, at +1.0% after +1.5% in November.

Sluggish during the summer, fresh food prices picked up in the autumn (+3.6% in November). Based on the assumption that production conditions remain normal over the coming seasons, prices should slow by June 2018 (+1.6% year-on-year).

Inflation of food products other than fresh food picked up in 2017, reaching its highest level since mid-2013 (+1.1% in November), bolstered in particular by the prices of dairy products and meat.

1. The core inflation indicator calculated by INSEE is estimated by excluding the prices of energy, fresh food, public tarifs from the overall index. This indicator is corrected for tax measures and is seasonally-adjusted.

**1 - Inflation in France**




Source: INSEE

Prices should nonetheless slow by June 2018, tempered by the recent appreciation of the euro and the fall in grain prices to reach +0.9%.

## Prices of manufactured goods should remain virtually stable

Prices of manufactured goods should remain virtually stable through mid-2018 (–0.2% year-on-year in June 2018, as in November 2017). Prices for "other manufactured goods" (excluding clothing and medical products) should continue to increase (+0.2% year-on-year in June 2018 after +0.1% in October 2017) under the influence of past increases in commodity prices. Nevertheless, the recent appreciation of the euro should curb price rises.

Prices of clothing and footwear fell by 0.4% in October 2017, after enduring a series of jolts over the summer as a result of the sales being later than the previous year. Through to June 2018 their trajectory should be less volatile, and prices should stop falling (+0.2% year-on-year) due to the increase in fabric prices.

However, the decrease in medical product prices should become more pronounced through to mid-2018 (–2.1% year-on-year in June 2018 after –1.7% in October 2017), particularly the prices of medicines, in accordance with the target set in the Social Security Financing Act for 2018. However, this fall will continue to be offset by the dynamism of prices for glasses and contact lenses, which have stopped falling since the effects of the "Consumption" act of March 2014 have stopped being felt.

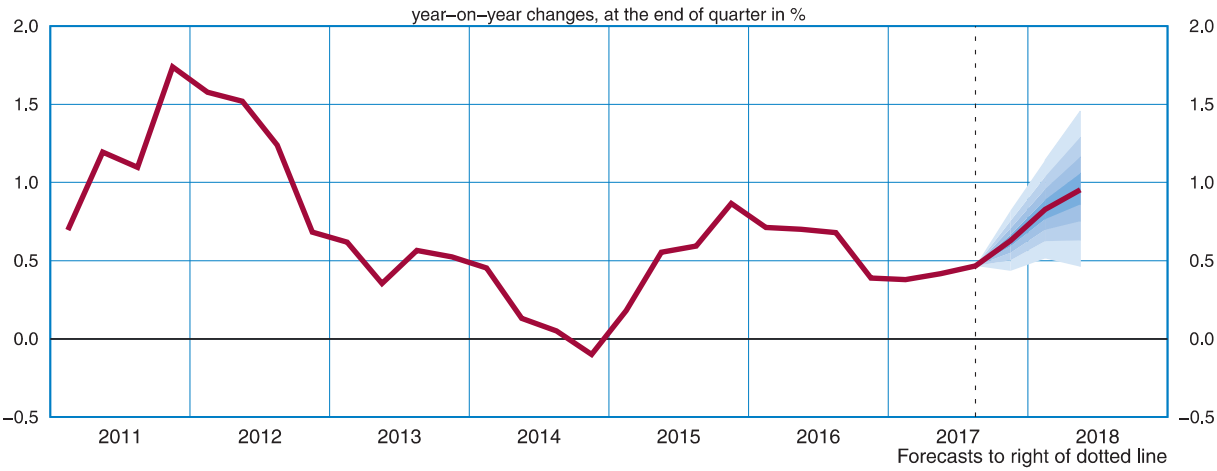
## Service prices should pick up pace

Prices of services should accelerate through to mid-2018 (+1.4% year-on-year in June 2018 after +1.1% in November 2017), buoyed by the dynamism of nominal wages. Prices of communication services should see a sharp increase (+2.1% year-on-year in June 2018 after –5.1% in October 2017), as the year-on-year figures are no longer affected by the sharp decreases seen in early 2017. Prices of transport services should accelerate (+2.7% after +1.5% in October 2017), driven by the rebound in oil prices. Prices of health services should remain dynamic (+1.1% year-on-year in June 2018 after +1.8% in October 2017), thanks to further increases in certain consultation rates. Conversely, rent prices should fall (–0.3% in June 2018, after +0.5% in October 2017) as a result of rent reductions in social housing contained in the Finance Law, despite the expected upturn in the private sector.

## Core inflation is expected to pick up sharply

After slipping back in 2016, core inflation has remained sluggish throughout 2017 (+0.5% in October 2017 after +0.4% in December 2016). Through to June 2018 core inflation should pick up more substantially +1.0% year-on-year (*Graph 2*). Service prices should gather pace while the prices of manufactured goods remain virtually stable. More specifically, previous decreases in communication service rates should no longer hold back prices. ■

**2 - The core inflation forecast for France and risks around the forecast**




How to read it: the fan chart plots 80% of the likely scenarios around the baseline forecast. The first and darkest band covers the likeliest scenarios around the baseline, which have a combined probability of 20%. The second band, which is a shade lighter, comprises two sub-bands just above and just below the central band. It contains the next most likely scenarios, raising the total probability of the first two bands to 40%. We can repeat the process, moving from the centre outwards and from the darkest band to the lightest, up to a 80% probability.

*Source: INSEE*

# French developments

## Consumer prices

*changes as %*

| CPI* groups (2017 weightings) | October 2017 | | November 2017 | | December 2017 | | June 2018 | | Annual averages | |
|---|---|---|---|---|---|---|---|---|---|---|
| | yoy | cyoy | yoy | cyoy | yoy | cyoy | yoy | cyoy | 2016 | 2017 |
| **Food (16.3%)** | **1.5** | **0.2** | **1.5** | **0.2** | **1.2** | **0.2** | **1.0** | **0.2** | **0.6** | **1.0** |
| *including: fresh food (2.4%)* | *4.5* | *0.1* | *3.6* | *0.1* | *1.3* | *0.0* | *1.6* | *0.0* | *3.7* | *3.2* |
| *excluding: fresh food (13.9%)* | *1.1* | *0.1* | *1.1* | *0.2* | *1.2* | *0.2* | *0.9* | *0.1* | *0.1* | *0.7* |
| **Tobacco (1.9%)** | **2.4** | **0.0** | **4.4** | **0.1** | **6.0** | **0.1** | **19.7** | **0.4** | **0.1** | **2.6** |
| **Manufactured products (26.2%)** | **–0.3** | **–0.1** | **–0.2** | **–0.1** | **–0.2** | **–0.1** | **–0.2** | **0.0** | **–0.5** | **–0.6** |
| *including: clothing and footwear (4.3%)* | *–0.4* | *0.0* | *–0.3* | *0.0* | *–0.3* | *0.0* | *0.2* | *0.0* | *0.1* | *0.0* |
| *medical products (4.3%)* | *–1.7* | *–0.1* | *–1.6* | *–0.1* | *–1.5* | *–0.1* | *–2.1* | *–0.1* | *–3.0* | *–2.1* |
| *other manufactured products (17.5%)* | *0.1* | *0.0* | *0.1* | *0.0* | *0.1* | *0.0* | *0.2* | *0.0* | *–0.1* | *–0.3* |
| **Energy (7.5%)** | **4.8** | **0.4** | **5.5** | **0.4** | **4.7** | **0.4** | **6.4** | **0.5** | **–2.8** | **6.2** |
| *including: oil products (3.8%)* | *7.4* | *0.3* | *8.8* | *0.4* | *7.6* | *0.3* | *10.4* | *0.4* | *–5.4* | *10.2* |
| **Services (48.2%)** | **1.0** | **0.5** | **1.1** | **0.5** | **1.2** | **0.6** | **1.4** | **0.7** | **0.9** | **1.0** |
| *including: rent-water (7.8%)* | *0.5* | *0.0* | *0.5* | *0.0* | *0.5* | *0.0* | *–0.3* | *0.0* | *0.6* | *0.5* |
| *health services (6.0%)* | *1.8* | *0.1* | *2.1* | *0.1* | *2.4* | *0.1* | *1.1* | *0.1* | *0.2* | *1.3* |
| *transport (2.8%)* | *1.5* | *0.0* | *1.1* | *0.0* | *1.6* | *0.0* | *2.7* | *0.1* | *–1.5* | *2.1* |
| *communications (2.4%)* | *–5.1* | *–0.1* | *–4.5* | *–0.1* | *–3.8* | *–0.1* | *2.1* | *0.1* | *2.0* | *–3.5* |
| *other services (29.2%)* | *1.4* | *0.4* | *1.5* | *0.4* | *1.6* | *0.4* | *1.8* | *0.5* | *1.3* | *1.4* |
| **All (100%)** | **1.1** | **1.1** | **1.2** | **1.2** | **1.2** | **1.2** | **1.6** | **1.6** | **0.2** | **1.0** |
| All excluding energy (92.5%) | 0.8 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 1.3 | 1.2 | 0.5 | 0.6 |
| All excluding tobacco (98.1%) | 1.0 | 0.9 | 1.1 | 1.0 | 1.1 | 1.0 | 1.3 | 1.2 | 0.2 | 1.0 |
| **Core inflation (61.3%)**** | **0.5** | **0.3** | **0.5** | **0.3** | **0.6** | **0.4** | **1.0** | **0.6** | **0.6** | **0.5** |

Provisional  Forecast

yoy : year-on-year
cyoy : contribution to the year-on-year value of the overall index
*Consumer price index (CPI)
**Index excluding public tariffs and products with volatile prices, corrected for tax measures.
*Source: INSEE*

## Tax increases since 2014 have to a large extent absorbed the effect of the drop in oil prices on energy consumer prices

Oil prices have plummeted since 2014. The average price of a barrel of Brent was US$108 in H1 2014, but it fell dramatically from the end of 2014, reaching a low point of $31 in January 2016. It has picked up since then, and at the end of 2017 was hovering around $60, but is still far below the price at the beginning of 2014.

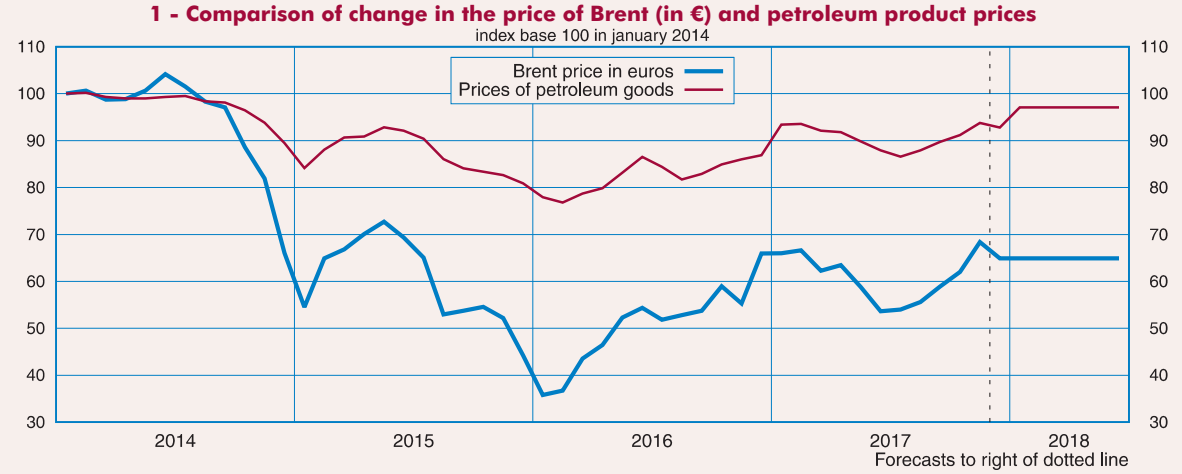
In the wake of oil prices, petroleum product consumer prices (fuel and domestic heating oil) slipped back by around –6% between January 2014 and November 2017. This drop was less pronounced than that for oil prices (*Graph 1*) because only part of the price of fuel reacts to variations in oil prices, and energy taxation rose substantially over the same period. At the start of 2018, the price of petroleum products is therefore likely to be only 3% lower than in January 2014, although the price of a barrel of Brent is still expected to be 35% lower than at the beginning of 2014.

### The drop in pre-tax prices was limited because margins were maintained or increased

Only part of the price of petroleum products reacts to variations in oil prices. This is because the domestic duty on consumption of energy products (TICPE) relates to volumes (quantities consumed in litres) and not to the ad valorem amount. Thus for the same consumption, the amount of this duty is not affected by a rise or a fall in the price per litre. In October 2017, these duties represented an average of 46% of the price of fuel (*Graph 2*), and 16% of the price of domestic heating oil.

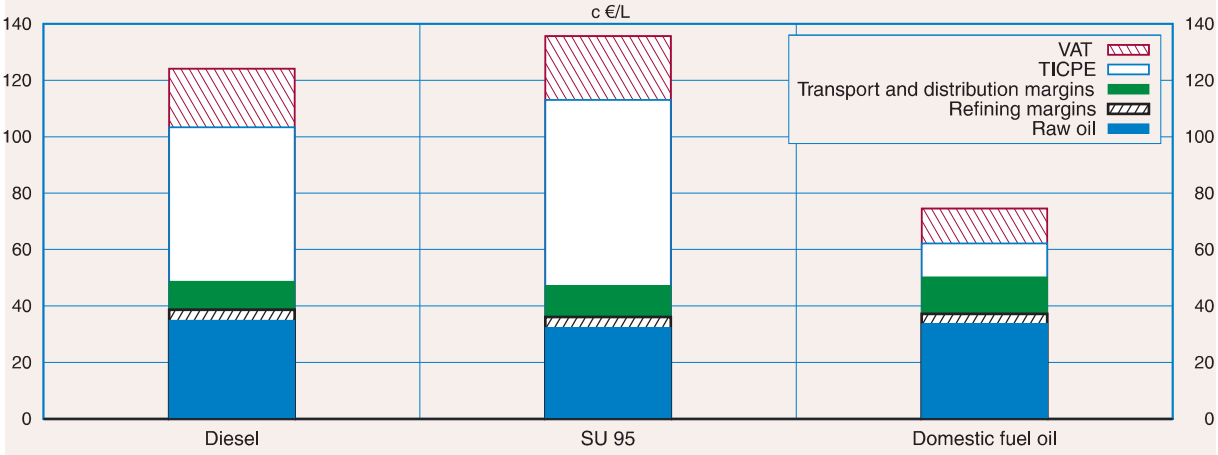
In addition, any reduction in pre-tax prices was limited by transport-distribution margins being maintained or increased. For diesel prices these were c€7.8/L on average in 2014 (i.e. 12% of the pre-tax price), whereas at the end of 2017, they were c€10.0/L (i.e. 22% of the pre-tax price). Transport-distribution margins for petrol were at the same level at the end of

**1 - Comparison of change in the price of Brent (in €) and petroleum product prices**




*Sources: INSEE, DataInsight*

**2 - Breakdown of average price of a litre of diesel, unleaded 95 petrol and domestic heating oil in October 2017**




*Sources: DGEC, INSEE calculations*

2017 as in 2014 (c€10.0/L). The increased margins in the manufacture of refined petroleum products also limited any price reduction. These were €3.1/barrel on average in 2014 (which represented 4% of the price in euros of a barrel of Brent), against €5.8 in October 2017 (i.e. 12% of the price per barrel).

VAT, on the other hand, is a proportional tax: the amount is adjusted downwards when oil prices fall.

All in all, the drop in petroleum product prices inclusive of taxes is therefore less pronounced than the drop in the pre-tax price (*Graph 3*).

**Successive tax rises between 2014 and 2018 have to a large extent absorbed the effect of the fall in oil prices on energy consumer prices**

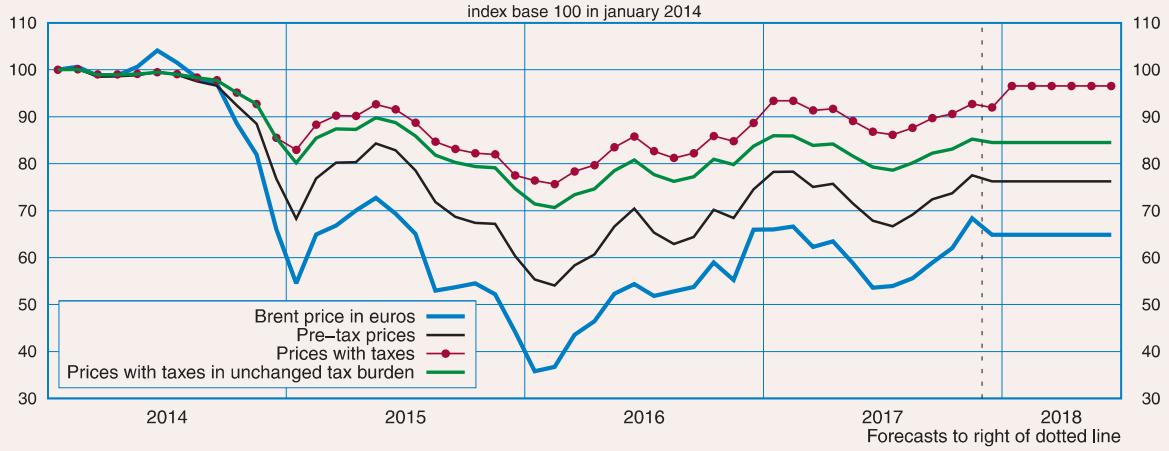
Taxes on petroleum products have increased on 1st January of each year since 2015, in order to reduce fossil fuel consumption and contribute to a return to equilibrium for public finances (see Clément and Rolland, 2017). Between January 2014 and December 2017, these increases bolstered petroleum product prices by around 8.1 points (i.e. 2.7 points per year on average).

Taxation will increase again in January 2018, in accordance with the measures set out in the Finance Law. This increase is likely to be greater than in previous years, affecting petroleum product prices by +4.9 points in 2018 (*Table 1*). The rise in energy taxation is therefore expected to buoy up inflation overall by 0.2 points in 2018.

About half of the oil imported by France is used to manufacture fuels consumed directly by households. The decline in oil prices represents an improvement in the terms of trade of around €20 billion per year (see Bortoli and Milin, 2016), half of which is therefore potentially related to household consumption. The actual drop in consumer prices of petroleum products (fuels and domestic heating oil) has been much less pronounced, however, as energy taxation increased substantially over the same period.

Taking into account the rise forecast for January 2018 and using 2013 (i.e. before the fall in prices) as the baseline year, the State looks set to lose €1.3 billion in annual VAT revenue in 2018 compared with 2013 because of the fall in pre-tax prices. However, with the increase in indirect taxation between 2014 and 2018 it should recover €5.7 billion of additional taxes on petroleum products (*Table 2*). The net gain for the State

**3 - Comparison of change in the price including taxes, in the simulated price including taxes with taxation unchanged, and in the pre-tax price of petroleum products and the price of Brent**




*Sources: DGEC, INSEE forecast*

**Table 1 - Effect of tax increases on petroleum product prices**

*contribution in point to annual variation*

| | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|
| Diesel | +3.7 | +3.1 | +3.9 | +6.2 |
| Gasoline | +1.4 | +1.0 | +1.1 | +2.8 |
| Heating oil | +2.8 | +3.4 | +4.3 | +6.1 |
| **Petroleum products** | **+2.7** | **+2.4** | **+2.9** | **+4.9** |

*Sources : DGEC, INSEE calculations*

**Table 2 - Annual savings for households (compared with 2013) due to the drop in petroleum product prices**

*in billion euros in gap to year of reference 2013*

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| **Gains made by households** | **+2.3** | **+7.3** | **+9.2** | **+5.3** | **+2.3** |
| **of which pre-tax price** | **+2.1** | **+7.3** | **+9.7** | **+7.4** | **+6.7** |
| **of which price of taxes paid** | **+0.2** | **0.0** | **–0.5** | **–2.1** | **–4.4** |
| of which increase in indirect taxation | –0.2 | –1.4 | –2.4 | –3.6 | –5.7 |
| of which VAT | +0.4 | +1.4 | +1.9 | +1.5 | +1.3 |

*Source: INSEE calculations*

should therefore be €4.4 billion compared with baseline year 2013, which would represent almost two-thirds of the €6.7 billion in total gains as a result of the drop in pre-tax prices.

**Taxes on petroleum products have increased more in France than in the rest of Europe since 2014**

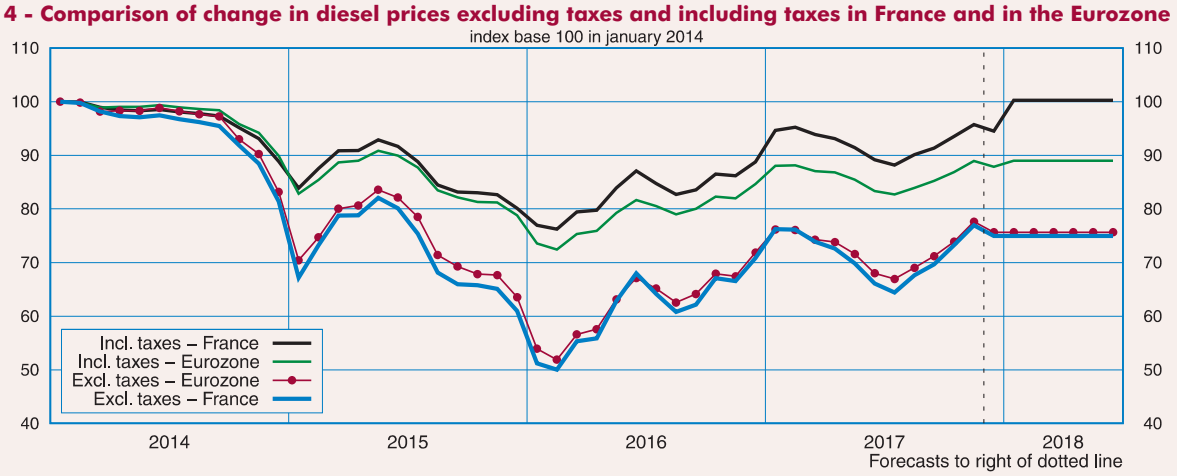
The change in petroleum product prices excluding taxes in France is fairly similar to the average trajectory observed in the European Union (*Graph 4*). However, energy taxation has not been recorded in the main European countries, apart from France. For diesel in particular, when the rise planned for January 2018 is taken into account, the price in France at the beginning of 2018, including tax, is expected to be back to the same level as at the start of 2014, whereas in the Eurozone it is still likely to be 10% less, on average. In 2018, the proportion of taxation in the total price of diesel in France, which in 2013 was similar to that in Germany, is expected to be the same as in Italy, which is considerably higher than in Germany or Spain (*Graph 5*). ■

## Bibliography

**Bortoli C.** and **Milin K.** (2016), "Who has benefited from the fall in oil prices?", *Conjoncture in France*, INSEE, March, p. 41-61.

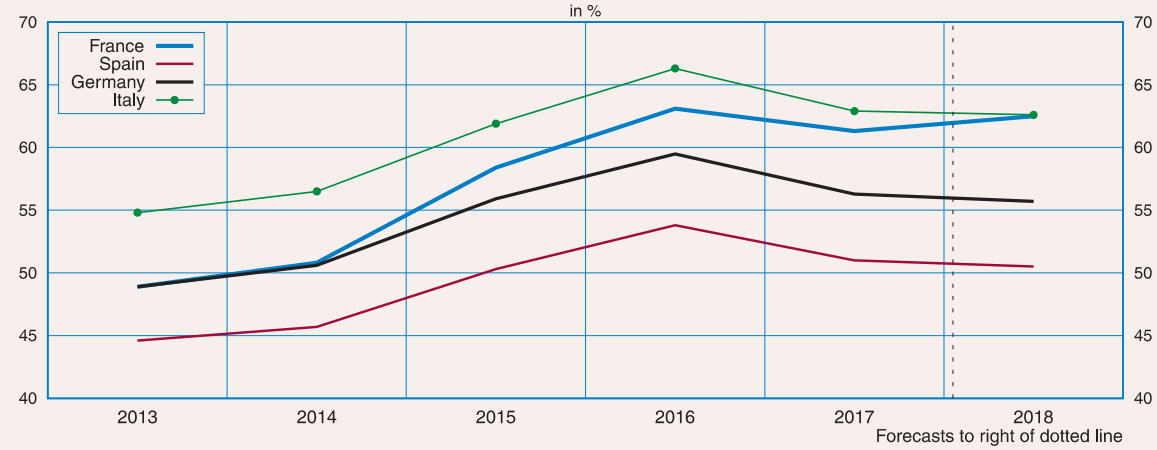
**Clément M.** and **Rolland A.** (2017), "Household energy bills have gone down since 2013 despite higher taxes", *Economic players and the environment - INSEE Références*, p. 25-34. ■

**4 - Comparison of change in diesel prices excluding taxes and including taxes in France and in the Eurozone**




*Sources: Weekly Oil Bulletin of European Commission, INSEE forecast*

**5 - Share of taxes in the total price of diesel**




*Sources: Weekly Oil Bulletin of European Commission, INSEE forecast*

# Wages

*In 2017, nominal wages accelerated in the market sectors: hardly at all for the basic monthly wage, with +1.3% as an annual average, after +1.2% in 2016; more significantly for the average wage per capita, with +2.1% after +1.2%. Prices accelerated more sharply, resulting in real wages slowing down slightly in 2017: +1.2% after +1.3% for the average wage per capita.*

*In H1 2018, the average nominal wage per capita should progress slightly faster than in H2 2017. Yet with the expected rise in inflation, the purchasing power of market-sector wages is expected to slow down, with a +0.5% growth overhang in mid-2018. However, net wages are likely to be more dynamic, since the decrease in contributions is greater than the rise in the general social security contribution (CSG) for employees in these sectors.*

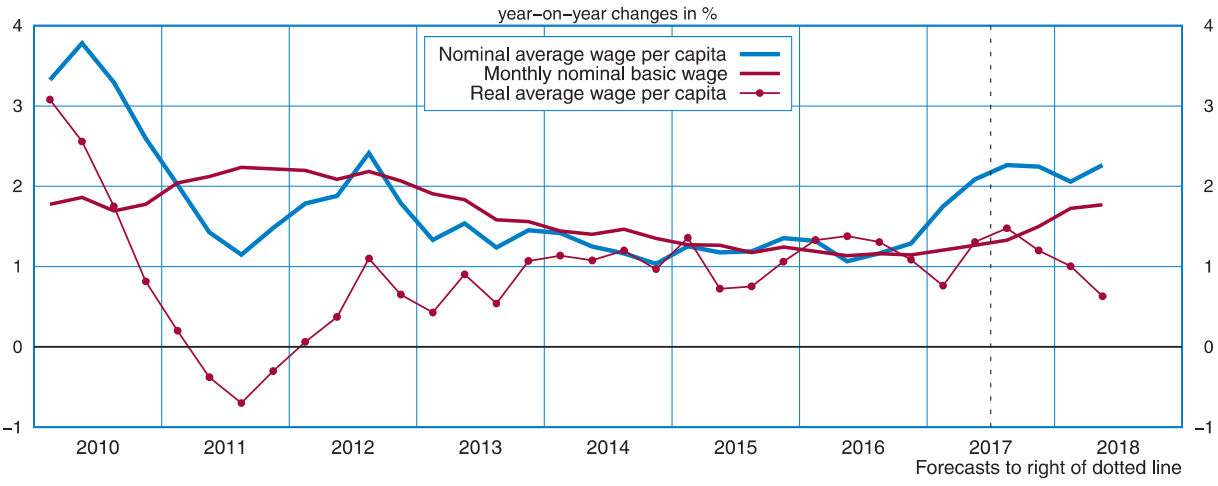
*In general government, the average gross nominal wage per capita sharply accelerated in 2017 (+2.2% as an annual average in 2017, after +0.8% in 2016) with the effect of statutory measures (protocol for career paths and wages – PPCR) and increases in the index point in February 2017. It also accelerated in real terms (+1.3% after +0.9%). In 2018, the compensation for the increase in the general social security contribution for public officials is likely to be different from that of private employees: this should be partially due to a rise in gross wages through a compensatory allowance. Consequently, although the index point will not be increased, and despite the one-year deferral of certain terms of the PPCR protocol, the average gross nominal wage per capita should remain buoyant: its annual growth rate carried over should reach +1.6% in mid-2018. However, net wages are likely to slow down significantly, since the increases in gross wages should only compensate for the rise in the general social security contribution.*

## In 2017, wages in market sectors accelerated in nominal terms, but slowed down in real terms

In 2017, the minimum wage was raised a little more (+0.9%) than the previous year (+0.6%), unemployment should decrease, and inflation should rise a little. In the non-farm market sectors, the basic monthly wage[1] should increase 1.3% as an annual average, almost as in 2016 (+1.2%, *Graph* and *Table*). The average wage per capita, which covers a wider range of remunerations (bonuses, profit-sharing and overtime payments), is expected to accelerate more significantly (+2.1% on average in 2017 after +1.2% in 2016), due in particular to a dynamic first quarter (+0.8%). In H2 2017, the average wage per capita should be slightly less marked than in the first half (+1.0% half-year on half-year after 1.2% in H1 2017).

1. For a definition of *basic monthly wage* and *nominal average wage per capita*, see the "Definitions" section on the website www.insee.fr

**Change in the nominal and real average wage per capita and basic wage**




Scope: non-agricultural market sector
*Sources: INSEE, Dares, Acoss*

Over the year in 2017, prices[2] are expected to increase regularly: +0.4% in H1 and +0.6% in H2. As a result, the real average wage per capita should slow down at the end of the year (+0.4% in H2 after +0.8%). The real basic monthly wage should stabilise at +0.2% in H2 as in H1.

### At the beginning of 2018, nominal wages are likely to remain dynamic, but real wages should slow down significantly

Assuming there is no added boost, the minimum wage should be increased on 1st January 2018 by +1.2%, which is higher than the increases of the two previous years. In H1 2018, this acceleration, combined with the expected upturn in inflation and growing difficulty in recruiting (*Production sheet Focus*) is expected to help boost wages. The nominal average wage per capita in the market sectors is likely to increase by +1.2%, after +1.0% half-year on half-year. In real terms, wages are still likely to decelerate slightly (+0.2% after +0.4%).

In mid-2018, the annual growth overhang for the average wage per capita in nominal terms should be 1.8%, a little more than the previous year (+1.7% in mid-2017). However, in real terms, the growth overhang is likely to only be +0.5% against +1.0% the previous year, due to the expected acceleration in prices. Net wages are likely to be more dynamic, since the reduction in social contributions (health and unemployment) should be more significant than the rise in general social security contributions for employees in these sectors (see *Household income sheet*).

### In the civil service, gross nominal wages accelerated in 2017 and are unlikely to weaken in early 2018

In general government, the index point was increased by 0.6% in February 2017. In addition, the protocol for "career paths and wages" (PPCR) was further boosted in 2017 with measures for increasing the wage grids, in addition to bonus/point transfer operations. As an annual average, the average wage per capita in general government therefore should accelerate more markedly in nominal terms: +2.2% in 2017 after +0.8% in 2016. Given the expected rise in prices, the real average wage per capita should accelerate less than in nominal terms: +1.3% after +0.9% in 2016.

For 2018, the index point will be frozen and certain terms of the PPCR protocol will be deferred by one year. However, the modalities of the rise in the general social security contribution will differ from the private sector and will include an allowance, which will contribute approximately +0.8 points to the rise in the average wage per capita in 2018. Therefore, gross wages should remain dynamic: the annual growth overhang should stand at +1.6% in mid-2018, only slightly less than the previous year (+1.9%); in real terms, it should decline by +0.3% against +1.2% in mid-2017. Net nominal wages should be much less dynamic and should decline in real terms. ■

2. Inflation is measured here by the variation in household consumer prices, provided by the quarterly national accounts.

**Variation in the basic monthly wage and the average wage per capita in the non-farm market branches and in general government**

*in %*

| | Quarterly growth rates | | | | | | Half-yearly rates | | | Annual averages | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | | | 2018 | | 2017 H1 | 2017 H2 | 2018 H1 | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | | | | |
| Basic monthly wage | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.6 | 0.9 | 0.9 | 1.2 | 1.3 | 1.4 |
| Average wage per capita in the non-farm market branches | 0.8 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 1.2 | 1.0 | 1.2 | 1.2 | 2.1 | 1.8 |
| Average wage per capita in general government (GG) | | | | | | | | | | 0.8 | 2.2 | 1.6 |
| Household consumer price index (quarterly national accounts) | 0.6 | –0.1 | 0.1 | 0.5 | 0.6 | 0.4 | 0.4 | 0.6 | 1.0 | –0.1 | 0.9 | 1.3 |
| Real basic monthly wage | –0.3 | 0.5 | 0.2 | 0.0 | –0.1 | 0.0 | 0.2 | 0.2 | –0.1 | 1.2 | 0.4 | 0.2 |
| Real average wage per capita (non-farm market branches) | 0.2 | 0.5 | 0.4 | 0.0 | 0.0 | 0.2 | 0.8 | 0.4 | 0.2 | 1.3 | 1.2 | 0.5 |

Forecast

*Sources: INSEE, Dares*

# Household income

*In 2017, the purchasing power of household income appeared to have slowed down slightly: +1.6% after +1.8% in 2016. This slight downturn would be primarily caused by a significant recovery in consumer prices (+0.9% after –0.1%), which did not fully follow the acceleration in earned income (+3.0% after +2.0%).*
*In H1 2018, the purchasing power of households is likely to slow down significantly (+0.2% half-year on half-year after +0.7% in H2 2017), primarily due to a rise in inflation related to the increase in indirect taxes.*

## Earned income is expected to accelerate in 2017

In 2017, the earned income of households should increase again (+3.0% after +2.0% in 2016 and +1.5% in 2015; *Table 1*), particularly in the wages received by households (+3.3% after +2.0%). In the non-farm market sectors, the strong acceleration in the average wage per capita (+2.1% in 2017 after +1.2% in 2016; *Graph*) and that of payroll employment (+1.5% after +1.1% in 2016) should both contribute to this. In early 2018, the payroll received by households should remain buoyant (+1.6% half-year on half-year after +1.4%, *Table 2*).

Property income should pick up slightly in 2017 (+0.5% after –3.2% in 2016): the increase in distributed dividends would appear to have offset the drop in life insurance income, which was related to the decline in interest rates paid to policyholders. In H1 2018, property income is likely to accelerate (+1.8% for the half-year, after +1.0% during the previous half-year): the planned reduction in taxes and social contributions on investment income (introduction of a single flat-rate tax) should encourage companies to increase the distribution of dividends.

Table 1

**Household gross disposable income**

| | Quarterly changes in % | | | | | | | | | | Annual changes in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Gross disposable income (100%)** | **0.3** | **0.3** | **0.8** | **0.5** | **0.7** | **0.6** | **0.7** | **0.7** | **0.3** | **0.9** | **1.7** | **2.5** | **1.9** |
| including: | | | | | | | | | | | | | |
| Earned income (71%) | 0.5 | 0.3 | 0.6 | 0.7 | 1.0 | 0.7 | 0.7 | 0.6 | 0.8 | 0.7 | 2.0 | 3.0 | 2.3 |
| *Gross wages and salaries (63%)* | *0.5* | *0.3* | *0.7* | *0.8* | *1.1* | *0.7* | *0.7* | *0.7* | *0.9* | *0.7* | *2.0* | *3.3* | *2.5* |
| *GOS of sole proprietors[1] (8%)* | *0.7* | *–0.2* | *0.2* | *0.0* | *–0.1* | *0.3* | *0.4* | *0.5* | *0.4* | *0.3* | *1.6* | *0.5* | *1.3* |
| Social benefits in cash (35%) | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 0.6 | 1.8 | 1.6 | 1.6 |
| GOS of "pure" households (13%) | 0.3 | 0.6 | 0.6 | 0.8 | 0.4 | 0.7 | 0.4 | 0.9 | 0.5 | 0.3 | 2.2 | 2.4 | 1.8 |
| Property income (8%) | –1.0 | –0.9 | –0.5 | –0.2 | 0.0 | 0.9 | 1.0 | 0.0 | 0.9 | 0.9 | –3.2 | 0.5 | 2.3 |
| Social contributions and taxes (–27%) | 1.0 | 0.4 | –0.6 | 0.9 | 0.6 | 0.7 | 1.0 | 0.4 | 1.8 | –0.2 | 1.5 | 2.3 | 2.7 |
| *Contributions of households (–11%)* | *0.7* | *0.6* | *0.5* | *0.8* | *0.6* | *0.6* | *0.7* | *0.6* | *–8.5* | *0.8* | *2.2* | *2.5* | *–7.1* |
| *Income and wealth tax (including CSG and CRDS) (–16%)* | *1.2* | *0.3* | *–1.3* | *1.0* | *0.7* | *0.7* | *1.3* | *0.3* | *9.1* | *–0.9* | *1.1* | *2.2* | *9.6* |
| **Household consumer prices (quarterly national accounts)** | **–0.2** | **0.1** | **0.1** | **0.3** | **0.6** | **–0.1** | **0.1** | **0.5** | **0.6** | **0.4** | **–0.1** | **0.9** | **1.3** |
| **Purchasing power of gross disposable income** | **0.5** | **0.2** | **0.7** | **0.2** | **0.2** | **0.7** | **0.5** | **0.1** | **–0.3** | **0.4** | **1.8** | **1.6** | **0.6** |
| **Household purchasing power by consumption** | **0.4** | **0.1** | **0.6** | **0.1** | **0.1** | **0.6** | **0.4** | **0.0** | **–0.4** | **0.3** | **1.4** | **1.2** | **0.2** |

Forecast

How to read it: the figures in parentheses give the structure of the year 2016.

1. The gross operating surplus (GOS) of sole proprietors is the balance of the operating accounts of sole proprietorships. It is mixed income, because it remunerates the work performed by the sole proprietor, and possibly the members of his family, but also contains the profit achieved as an enterpreneur.
*Source: INSEE*

The gross operating surplus of pure households[1] should slow down at the beginning of 2018, dropping from +1.3% in H2 2017 to +0.8% in H1 2018, as the effects of lower interest rates fade after an exceptional wave of loan renegotiations in 2016 and 2017.

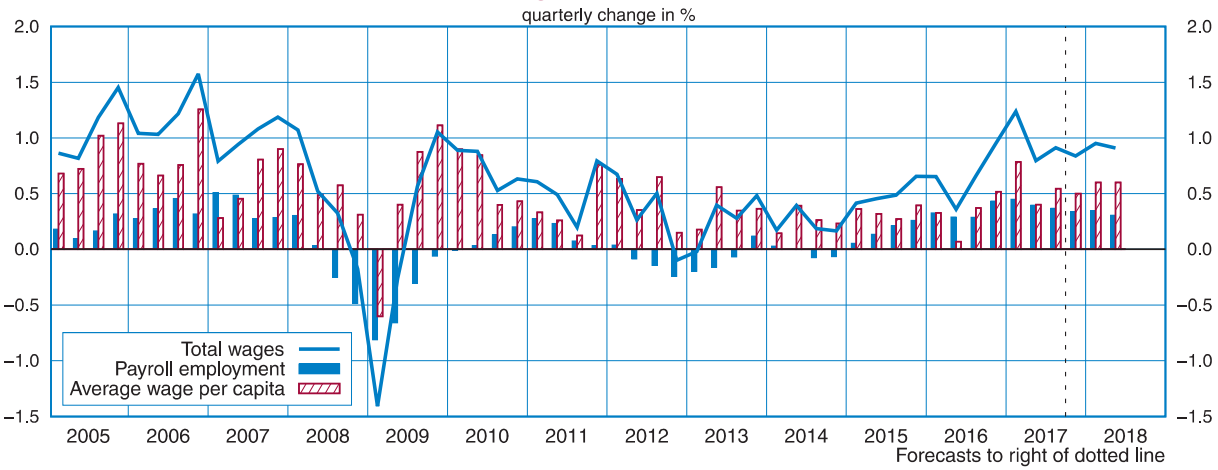
## Social benefits are expected to slow down slightly in 2017

In 2017, social benefits should slow down very slightly (+1.6% after +1.8%; *Table 3*). Social security benefits should weaken (+1.3% after +1.8% in 2016). Unemployment benefits are expected to drop in particular, in line with the drop in unemployment in 2017. Social assistance benefits are also expected to slow down in 2017 (+1.9% after +2.8%) with the end of the ramp-up phase of the activity bonus. Conversely, "other social insurance benefits" should accelerate in 2017 (+2.4% after +1.6%).

In H1 2018, social security benefits are expected to accelerate a little: +1.1% half-year on half-year after +0.9%. Pension benefits should return to growth rates similar to previous trends, under the effect of the end of the shift of the legal retirement age. 2018 is expected to be the first year since 2011 in which those retiring represent an entire generation. Conversely, family benefits are expected to suffer from the projected reduction in the early childhood benefit beginning on 1st April 2018 and the past decline in the birth rate. Social assistance benefits should remain dynamic. All in all, social benefits in cash are expected to accelerate a little in H1 2018 compared to H2 2017 (+1.1% after +1.0% half-year on half-year).

1. In the national accounts, the gross operating surplus of pure households takes account, among other things, of housing services: the added value is the difference between the rent (actually paid by tenants or imputed for home owners) and the intermediate consumption of the owners, notably banking margins on real-estate loans.

**Breakdown of the total gross wages received by households in the non-agricultural market sector**




*Source: INSEE*

Table 2

**From the payroll of non-financial enterprises to that received by households**

| | Quarterly changes in % | | | | | | | | | | Annual changes in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | T1 | T2 | T3 | T4 | T1 | T2 | T3 | T4 | T1 | T2 | | | |
| Non-financial enterprises (67%) | 0.7 | 0.4 | 0.6 | 0.9 | 1.2 | 0.8 | 0.9 | 0.8 | 1.0 | 0.9 | 2.5 | 3.7 | 2.9 |
| Financial corporations (4%) | 0.0 | –0.1 | 1.0 | 1.0 | 0.6 | 0.4 | 0.6 | 0.9 | 1.0 | 1.0 | 1.5 | 2.6 | 2.8 |
| General government (22%) | 0.0 | 0.2 | 0.8 | 0.5 | 0.9 | 0.6 | 0.3 | 0.2 | 0.7 | 0.2 | 0.8 | 2.5 | 1.4 |
| Households excluding sole proprietors (2%) | –1.2 | 0.0 | –0.7 | –0.4 | 1.0 | –0.5 | 0.2 | 0.0 | 0.0 | 0.0 | –1.8 | 0.1 | 0.0 |
| **Total gross wages received by households (100%)** | **0.5** | **0.3** | **0.7** | **0.8** | **1.1** | **0.7** | **0.7** | **0.7** | **0.9** | **0.7** | **2.0** | **3.3** | **2.5** |
| *including: Non-agricultural market sectors* | *0.7* | *0.4* | *0.7* | *1.0* | *1.2* | *0.8* | *0.9* | *0.8* | *1.0* | *0.9* | *2.4* | *3.7* | *2.9* |

Forecast

How to read it: the figures in parentheses give the structure of the year 2016.
*Source: INSEE*

# French developments

## Taxes and social contributions are expected to pick up in 2017 and should remain dynamic in H1 2018

Over 2017 as a whole, taxes and social contributions borne by households are expected to accelerate (+2.3% after +1.5%). Social contributions borne by households should grow at a more sustained pace than in 2016 (+2.5% after +2.2%). Those paid by employees should increase, in line with payroll, whereas contributions from the self-employed should decrease. Taxes on income and wealth should accelerate more significantly in 2017 (+2.2% after +1.1%), with a lesser effect of tax cut measures (20% reduction in income tax for modest households in particular) than in 2016. In addition, the wealth tax (ISF) was more dynamic than in 2016, driven by the recovery in property prices and the introduction of a mechanism aiming to restrict tax base optimisation possibilities.

At the beginning of 2018, social contributions and taxes should remain dynamic (+1.6% in H1 2018 after +1.5%). Numerous measures will be implemented in 2018, with a significant calendar effect (*Focus*). The increase in the general social security contribution (CSG) by 1.7 points on 1st January 2018 should be only partially offset by the reduced contribution rate (by 2.2.points for private sector employees and 2.15 points for the self-employed) and the end to the exceptional solidarity contribution of civil servants. The contribution rate should again be reduced at the end of 2018.

Furthermore, households should benefit from tax cuts, with the introduction of the single flat-rate tax and the adjustments to the wealth tax (ISF). The effects of the housing tax are expected to be felt primarily in H2 2018. All in all, due to this tax calendar, the mid-2018 growth overhang from taxes and social contributions should reach a high level (+2.7%).

## Purchasing power is expected to slow down significantly at the beginning of 2018

In 2017, nominal gross disposable household income should accelerate significantly (+2.5% after +1.7%) with earned income. However, inflation[2] should have increased significantly as an annual average (+0.9% after –0.1%), causing the purchasing power of gross disposable income to slow down a little (+1.6% after +1.8%). Reduced to an individual level in order to take account of demographic changes, purchasing power per consumption unit appears to have slowed down in a similar proportion in 2017 (+1.2% after +1.4%).

In H1 2018, despite dynamic earned income, the purchasing power of gross disposable income is expected to stall, due to the tax calendar and especially the increase in indirect taxes on energy products and tobacco. Its growth overhang is expected to be +0.6% at the end of H1 2018, compared to +1.3% one year before. ■

2. Inflation is measured here by the variation in household consumer prices, provided by the quarterly national accounts.

Table 3

**Social transfers received and paid by households**

| | Quarterly changes in % | | | | | | | | | | Annual changes in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | T1 | T2 | T3 | T4 | T1 | T2 | T3 | T4 | T1 | T2 | | | |
| **Social cash benefits received by households (100%)** | **0.4** | **0.5** | **0.5** | **0.3** | **0.4** | **0.3** | **0.5** | **0.5** | **0.5** | **0.6** | **1.8** | **1.6** | **1.6** |
| Social Security benefits in cash (72%) | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 0.5 | 0.6 | 1.8 | 1.3 | 1.6 |
| Other social insurance benefits (19%) | 0.7 | 0.3 | 0.5 | 0.4 | 0.6 | 0.6 | 0.9 | 0.4 | 0.5 | 0.5 | 1.6 | 2.4 | 1.9 |
| Social assistance benefits in cash (8%) | –1.0 | 3.3 | 0.6 | 0.0 | 0.3 | 0.2 | 0.2 | 0.5 | 0.1 | 0.4 | 2.8 | 1.9 | 0.9 |
| **Total social contribution burden by households (100%)** | **0.6** | **–0.1** | **0.4** | **0.8** | **0.7** | **0.8** | **0.7** | **0.7** | **–2.3** | **0.7** | **1.5** | **2.6** | **–0.7** |
| Actual social contributions paid | 0.7 | –0.1 | 0.4 | 0.9 | 0.7 | 0.8 | 0.7 | 0.8 | –2.7 | 0.8 | 1.6 | 2.7 | –1.0 |
| *including: Employers contributions*[1] *(63%)* | *0.6* | *–0.6* | *0.4* | *0.9* | *0.9* | *0.9* | *0.7* | *0.9* | *0.8* | *0.7* | *1.2* | *2.9* | *2.6* |
| *Contributions of households (37%)* | *0.7* | *0.6* | *0.5* | *0.8* | *0.6* | *0.6* | *0.7* | *0.6* | *–8.5* | *0.8* | *2.2* | *2.5* | *–7.1* |

Forecast

How to read it: The figures in parentheses give the structure of the year 2016.
1. Employer contributions are both received and paid by households in the national accounts: they therefore have no effect on gross disposable income.

## Tax and social contribution measures to have a marked calendar effect on household purchasing power in 2018

In 2018, numerous tax and social contribution measures voted in the Finance Bill (PLF) and the Social Security Financing Bill (PLFSS) for 2017 and 2018, will shift household purchasing power either upwards or downwards. The generalised social contribution (CSG) rate is to be increased by 1.7 points on 1st January while in return, contributions payable by employees and the self-employed are to be reduced. In addition, three direct taxes will fall substantially: the local residence tax, the wealth tax (ISF), transformed into a property tax (IFI), and fixed levies on capital income (PFO-PFU). Lastly, the tax credit to employ a person for in-home services will be extended to inactive persons paying little or no tax, on the basis of expenditure incurred in 2017. Regarding indirect taxation, the price of tobacco will increase in Q4 2017 then in March 2018, and energy prices will rise in January 2018. These measures will take effect at different times of year (*Table 1*), with the result that the quarterly profile of household purchasing power is likely to be very heavily dependent on the tax calendar in 2018.

**On average over 2018, taxes and social contributions for households are set to rise slightly, most notably as a result of indirect taxation**

The increases in the rate of the CSG and taxes on tobacco and energy are expected to be largely offset throughout 2018 by the measures planned for employees and the self-employed. On the one hand, households' gross disposable income (GDI) is likely to decrease by €20.4 billion[1] with the rise in the CSG (i.e. a contribution of –1.4 points to its annual change), and price rises (tobacco, energy) are expected to reduce purchasing power by around 0.5 points. On the other hand, households should receive about €24.4 billion, with the reductions in social contributions and contributions on earned income (+€15.6 billion or +1.1 points of GDI), the decrease in the wealth tax and the introduction of the PFU (+€4.5 billion or +0.3 points of GDI), the reduction in the local residence tax (+€3.0 billion or +0.2 points of GDI), and the generalisation of the tax credit for employing a person for in-home services (+€1.0 billion or +0.1 points of GDI).

All in all, over 2018 the combination of these increases and decreases is expected to raise taxes and social contributions for households by around €4.5 billion, which would take –0.3 points off the growth in purchasing power (the contribution of direct tax measures looks set to be positive at +0.2 GDI points, but that of indirect taxation is likely to be –0.5 points).

1. Figures for direct tax measures come from the PLF and the PLFSS 2018. However, the effect of indirect taxation on the consumption deflator is an estimate produced for this edition of Conjoncture in France and may therefore differ from that given in the PLF.

**Table 1 - Main measures planned for taxes and social contributions for households in 2018**

| Measures | Details (for 2018) | Date of implementation |
|---|---|---|
| ***Effect on gross disposable income*** | | |
| Family allowance contributions (self-employed) | Reduction in rate by 2.15 points | 1st January 2018 |
| Health insurance contribution (employees) | Abolition of contribution (0.75%) | 1st January 2018 |
| Unemployment insurance contribution (employees) | Abolition of contribution (2.4%) | Exemption of 1.45 points for this contribution on 1st January 2018, then an additional 0.95 points on 1st October 2018 |
| Generalised Social Contribution | 1.7 point rise | 1st January 2018 |
| Local residence tax | 30% reduction for 80% of households | 1st January 2018 but tax paid in November for households not paying in monthly instalments |
| ISF-IFI | Repeal of wealth tax and introduction of property tax | Tax paid from Q2 onwards |
| PFO-PFU | Introduction of a single fixed levy of 30% of capital income (12.8% of income tax and 17.2% of social contributions) | 1st January 2018 |
| Exceptional solidarity contribution (civil servants and public agents) | Abolition of this contribution at a rate of 1% | 1st January 2018 |
| Contributions for civil servants' pensions | 0.27 point increase | 1st January 2018 |
| Tax credit for employing a person for in-home services | Generalisation of tax credit | Reimbursement in H2 2018 |
| ***Effect on household consumption deflator*** | | |
| Tobacco | Increase in consumption duties applied to tobacco | November 2017 and March 2018 |
| Energy | Rise in domestic tax on energy products (TICPE) | 1st January 2018 |

*Sources: Finance Law project (PLF) 2017 and 2018, Social Security Financing Act project (PLFSS) 2017 and 2018*

**Increases in levies are likely to be concentrated more in H1, whereas some of the decreases are unlikely to be applied before the end of the year**

Nevertheless, these different measures do not all have the same timetable for implementation in 2018: the reduction in employees' contributions in the private sector will probably be implemented in two stages (a drop of 2.2.points in the contribution rate on 1st January, then a drop of 0.95 points on 1st October); the reduction in the tax on property income is likely to affect the wealth tax in Q2 and to be spread across the whole year for the flat tax. All in all, in H1 alone, these reductions should almost completely offset the increase in the CSG rate, which is to be implemented on 1st January, but not the increases in indirect taxation planned at the same time.

All in all, the contribution that the measures applied to taxes and social contributions will make to the change in purchasing power is likely to be –0.7 points in Q1 then +0.1 points in Q2. Purchasing power should be at a standstill throughout H1 2018 (–0.3% in Q1 then +0.4% in Q2). The growth overhang for purchasing power mid-year is also likely to be relatively low (+0.6% after +1.6% in 2017 and +1.8% in 2016), mainly due to the effect of indirect tax measures (–0.5 points) (*Table 2*).

In Q3 2018, the generalisation of tax credits for employing a person to work in the home is expected to add an extra +0.1 points to GDI. Next, the reduction in the local residence tax will benefit households, especially at the end of the year, as two thirds of those who pay this tax, which is due in November, do not do so in monthly instalments.[2] In Q4 2018, this should represent a rise of +0.6 points in quarterly purchasing power. In addition, the second tranche of the decrease in employees' unemployment insurance contributions, which should be introduced at the beginning of October, is likely to add +0.4 points to purchasing power in Q4 2018. All in all, the contribution of taxes and social contribution measures to purchasing power growth is likely to be very positive in Q4 2018 (+1.0 point). ■

2. The reduction will probably not be automatic for eligible households paying in monthly instalments. The assumption is that two thirds of eligible households paying in monthly instalments will adjust their monthly payment from 1st January to take advantage of the reduction in their local residence tax. All the rest (those not paying monthly and the remaining third who are paying monthly) will then only benefit from the reduction at the end of the year.

**Table 2 - Contributions to purchasing power growth by taxes and social contribution measures announced for 2018**

*Contribution to quarterly and annual variation of purchasing power of households in points*

| | 2018 | | | | Annual average 2018 | Overhang mid-year |
|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | | |
| Indirect taxation | –0.4 | –0.2 | 0.0 | 0.0 | –0.5 | –0.5 |
| *of which Tobacco* | –0.1 | –0.2 | 0.0 | 0.0 | –0.3 | –0.3 |
| *Energy* | –0.2 | 0.0 | 0.0 | 0.0 | –0.2 | –0.2 |
| Direct taxation and contributions | –0.3 | 0.3 | 0.2 | 1.0 | 0.2 | –0.1 |
| *of which CSG* | –1.4 | 0.0 | 0.0 | 0.0 | –1.4 | –1.4 |
| *Contributions on wages except CSG* | 1.0 | 0.0 | 0.0 | 0.4 | 1.1 | 1.0 |
| *Local residence tax* | 0.1 | 0.0 | 0.0 | 0.6 | 0.2 | 0.1 |
| *ISF and PFU* | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 | 0.3 |
| *Tax credit for employing a person for in-home services* | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 |
| **Total** | **–0.7** | **0.1** | **0.2** | **1.0** | **–0.3** | **–0.6** |

*Source: INSEE*

# Household consumption and investment

*Household consumption picked up slightly in Q3 2017 (+0.6% after +0.3%), with increased expenditure on goods, particularly manufactured goods and energy, as well as services.*
*In Q4 2017 consumption is expected to slow down (+0.3% after +0.6%), largely due to a major reduction in expenditure on goods (0.0% after +0.6%). Energy consumption should fall, as should spending on clothing. Nevertheless, consumption of services should continue to grow at a steady rate (+0.5%, after +0.6% in Q3). In H1 2018 household consumption should continue to grow at a reduced rate (+0.3% per quarter), as a result of the dip in household purchasing power.*
*On average in 2017, household consumption expenditure should experience a sharp slowdown in comparison with 2016 (+1.2% after +2.1%); more so than purchasing power (+1.6% after +1.8%), with the savings ratio standing at 14.3%. By mid-2018, the savings ratio should fall to 13.9%, as households should compensate for the effects of the temporary slowdown in their purchasing power.*
*Household investment should accelerate sharply in 2017 (+5.2%), after a first rebound in 2016 (+2.4% after –2.1%). However it is expected to slow down in H1 2018, due to the delayed impact of the stabilisation in the number of new housing sales.*

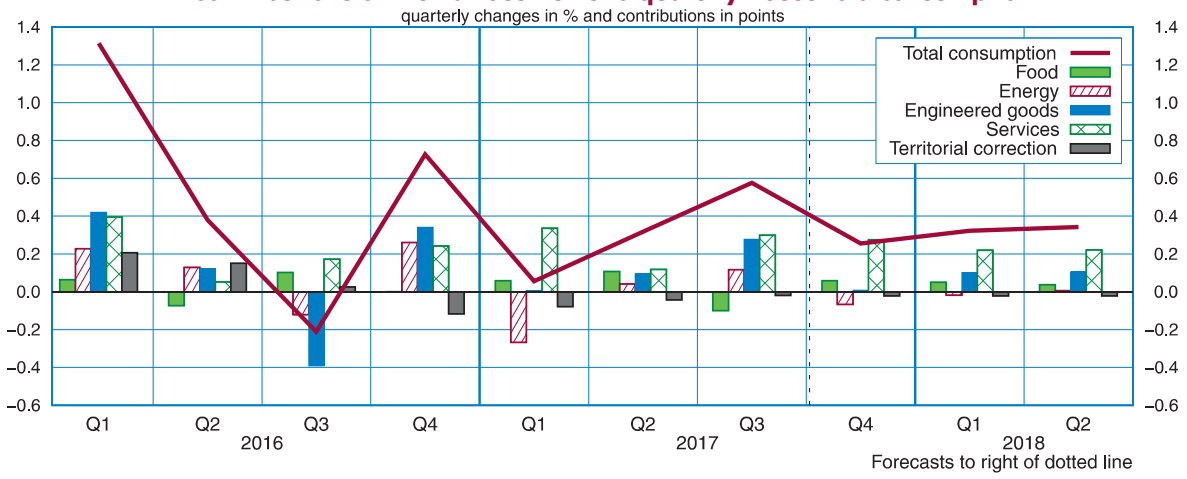
## Consumption accelerated again in Q3 2017

Household consumption accelerated again in Q3 2017 (+0.6% after +0.3% in Q2 and +0.1% in Q1; *Graph 1*). Consumption of goods remained buoyant (+0.6% after +0.5%), while consumption of services increased sharply (+0.6% after +0.2%).

The decline in food consumption (–0.6% after +0.6%) was offset by the dynamism of expenditure on manufactured goods (+1.3% after +0.5%). In particular, expenditure on household durables other than cars and on clothing increased, as a result of the change in the dates of the summer sales. Automobile purchases remained solid (+0.6% after +1.3%), while the consumption of other durable goods also bounced back (+1.0% after –0.1%). Finally, energy consumption experienced a sharp acceleration (+1.5% after +0.5%), as temperatures in September were relatively low for the time of year.

Consumption of services has picked up sharply (+0.6% after +0.2%), in particular due to the rebound in consumption of accommodation and food services and the dynamic consumption of leisure services.

**1 - Contributions of the various items to quaterly household consumption**




*Source: INSEE*

## In Q4 2017, consumption should slow down along with purchasing power

Total household consumption is expected to slow down sharply in Q4 2017 (+0.3%; *Table*), just like the purchasing power (+0.1% after +0.5%).

Consumption of goods should stabilize (0.0% after +0.6%): energy expenditure is likely to decrease (–0.8% after +1.5%), particularly spending on gas and electricity, in reaction to the preceding quarter and the fact that temperatures in October were well above the seasonal average. Purchases of durables should slow down (+0.7% after +1.5%). On the one hand, expenditure on automobiles should be very vigorous. On the other hand, consumption of household durables other than cars is expected to decrease (–0.4% after +3.1%) as an after-effect of the later summer sales period. Similarly, spending on clothing should decline sharply. Nevertheless, food consumption is expected to rebound after dropping off in Q3. All in all, consumption of manufactured goods is expected to stall in Q4 (+0.1% after +0.6%). Consumption of services should remain buoyant (+0.5% after +0.6%): indeed the upturn in consumption of transport services (+0.8% after 0.0%) should offset the slowdown in consumption of food and accommodation services (+0.7% after +1.1%).

## Consumption should continue to grow at a reduced rate in H1 2018

The growth rate of household consumption should remain moderate in H1 2018 (+0.3% per quarter), albeit higher than the one of the purchasing power (–0.3% in Q1 2018 and +0.4% in Q2). Household consumption of goods should recover (+0.3% after +0.0%), whereas consumption of services should slow down slightly, to +0.4% per quarter, sustained by the accommodation and food services sector and by the consumption of leisure services.

## The savings ratio is expected to fall to 13.9% by mid-2018, returning to its level of early 2016

In the final months of 2017 and the first half of 2018, households are expected to reduce their savings ratio in order to compensate for the slowdown in their purchasing power. The ratio should stand at 13.9% in Q2 2018, after 14.4% in Q3 2017 (*Graph 2*). This smoothing behaviour is natural when households face a slowdown in their purchasing power. This behaviour seems all the more logical since households should expect an upturn in income next year in relation with the second phase of reductions in social security contributions and the reduction of local taxes scheduled for late 2018.

**Household consumption and investment expenditure**

*at chain-link previous year prices, SA-WDA*

| | Quarterly changes in % | | | | | | | | | | Annual changes in % | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2015 | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | | |
| **Total household consumption expenditures (1)+(2)+(3)** | **1.3** | **0.4** | **–0.2** | **0.7** | **0.1** | **0.3** | **0.6** | **0.3** | **0.3** | **0.3** | **1.3** | **2.1** | **1.2** | **1.1** |
| **Services (1)** | **0.7** | **0.1** | **0.3** | **0.5** | **0.6** | **0.2** | **0.6** | **0.5** | **0.4** | **0.4** | **0.8** | **1.6** | **1.7** | **1.4** |
| **Goods (2)** | **1.5** | **0.4** | **–0.9** | **1.3** | **–0.4** | **0.5** | **0.6** | **0.0** | **0.3** | **0.3** | **1.9** | **1.8** | **0.9** | **1.0** |
| including: | | | | | | | | | | | | | | |
| **Food** | **0.4** | **–0.4** | **0.6** | **0.0** | **0.3** | **0.6** | **–0.6** | **0.3** | **0.3** | **0.2** | **1.1** | **0.9** | **0.8** | **0.6** |
| Agriculture goods (AZ) | 2.6 | –1.2 | –0.6 | 0.4 | –2.0 | 3.4 | –1.3 | –0.5 | 0.3 | 0.3 | –0.4 | 2.2 | –0.6 | 0.3 |
| Agri-food products (C1) | –0.1 | –0.3 | 0.8 | –0.1 | 0.8 | 0.0 | –0.4 | 0.5 | 0.3 | 0.2 | 1.4 | 0.6 | 1.1 | 0.6 |
| **Energy** | **2.8** | **1.6** | **–1.5** | **3.2** | **–3.3** | **0.5** | **1.5** | **–0.8** | **–0.2** | **0.1** | **1.4** | **2.1** | **–0.4** | **0.1** |
| Energy, water and waste (DE) | 4.1 | 3.5 | –3.5 | 4.5 | –4.8 | 0.2 | 1.9 | –0.5 | 0.0 | 0.0 | 2.0 | 2.8 | –1.5 | 0.6 |
| Coke and refined petroleum (C2) | 1.3 | –0.9 | 1.2 | 1.6 | –1.2 | 0.9 | 1.0 | –1.4 | –0.5 | 0.2 | 0.9 | 1.3 | 1.2 | –0.7 |
| **Engineered goods (C3 to C5)** | **2.0** | **0.6** | **–1.9** | **1.6** | **0.0** | **0.5** | **1.3** | **0.0** | **0.5** | **0.5** | **2.6** | **2.4** | **1.5** | **1.6** |
| ***Manufactured goods (C1 to C5)*** | **1.2** | **0.1** | **–0.6** | **1.0** | **0.2** | **0.3** | **0.6** | **0.1** | **0.3** | **0.3** | **2.0** | **1.6** | **1.3** | **1.0** |
| **Territorial correction (3) = (4)–(5)** | **–49.8** | **–73.2** | **–48.4** | **408.3** | **54.8** | **19.6** | **6.9** | **7.4** | **7.0** | **6.6** | **–2.0** | **–78.6** | **150.3** | **27.2** |
| Imports of touristic services (4) | 3.4 | 2.1 | 0.6 | –1.4 | –0.3 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 | –5.2 | 5.2 | 0.2 | 0.9 |
| Exports of touristic services (5) | –3.0 | –2.6 | –0.2 | 2.2 | 2.1 | 1.9 | 1.0 | 0.8 | 0.8 | 0.8 | –4.7 | –6.9 | 5.2 | 3.0 |
| **Investment expenditure** | **0.7** | **0.7** | **1.0** | **1.3** | **1.6** | **1.4** | **1.1** | **1.0** | **0.8** | **0.6** | **–2.1** | **2.4** | **5.2** | **2.9** |

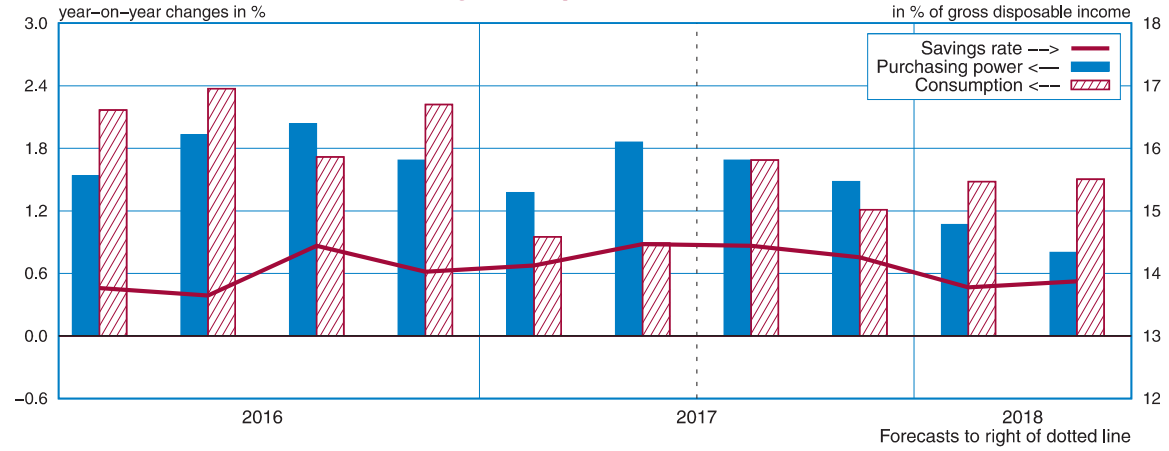
Forecast

*Source: INSEE*

## Household investment should slow in 2018, after exceptional growth in 2017

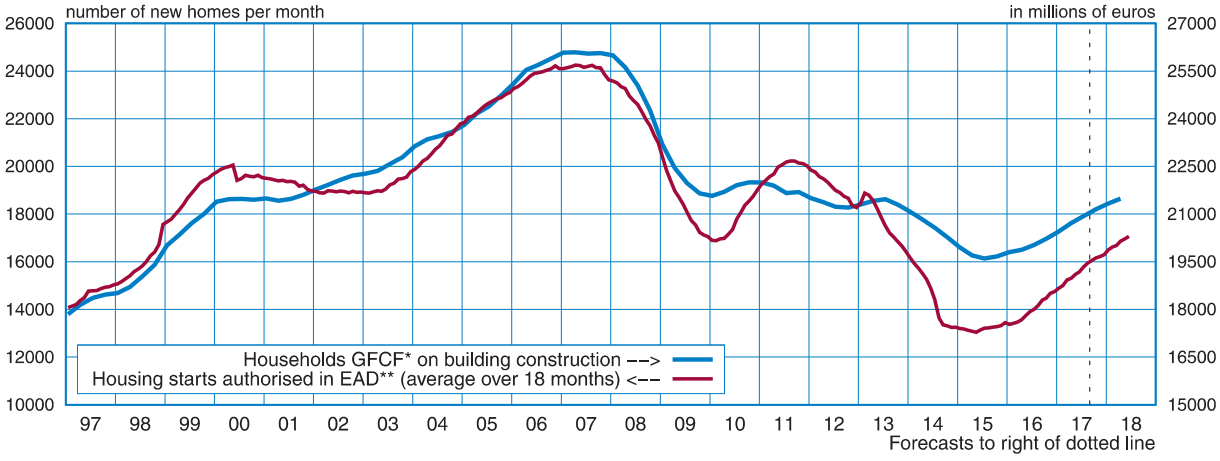
Household investment was slightly down in Q3 2017, although it remained dynamic (+1.1%, after +1.4%). Sales of new homes have stopped growing since the beginning of the year (after two years of substantial increase): this has had a knock-on effect on building permits, which have stabilised over the past six months. Given the usual time lags between permits being granted and construction work actually starting, household investment is expected to slow down gradually until mid-2018 (*Graph 3*). Furthermore, household investment in services (primarily agency fees and notarial costs) is expected to diminish from Q4 2017 onwards. The number of property transactions hit record levels in 2017, and should not increase any further in 2018. On average, household investment should rise in 2017 (+5.2% after +2.4%) and decline the following year: by mid-2018, the annual growth overhang of household investment should be +2.9%. ■

**2 - Savings ratio and variations in consumption and in purchasing power of gross disposable income**




*Source: INSEE*

**3 - Household investment on construction and housing starts**




*GFCF: gross fixed capital formation
**EAD+: estimated actual dates

*Sources: INSEE, SDES*

# Enterprises' earnings

*At the end of 2017, the margin rate of non-financial corporations (NFC) should remain stable at the same level as the previous year, i.e. 31.6%. The rate dipped slightly earlier in the year (31.5% in Q1 after 31.8% on average in 2016), in particular due to the fall in oil prices. The margin rate should stabilise at around 31.5% in H2, as productivity gains counterbalance the dynamism of wages and the slight upturn in crude oil prices.*
*In 2018 the margin rate should pick up to reach 31.8% by mid-year, largely thanks to the increase in the rate of the CICE tax credit.*

## The margin rate at the end of 2017 should be unchanged from the end of 2016

After rising steadily throughout 2015 (an average of +1.5 points year-on-year), the margin rate virtually stabilised in 2016 at 31.8% (*Table*). After falling to 31.5% in Q1 2017 as a result of increasing oil prices, it recovered to 31.6% in the spring as the price of Brent crude fell. Over the first half of the year, the acceleration in productivity counterbalanced the one in wages. In Q3 2017, wage increases would appear to have outstripped productivity gains and the margin rate should have shrunk (31.4%). Real wages should come to a standstill in Q4 as a result of the increase in inflation, while productivity should accelerate and help to push the margin rate up. By the end of the year, the rise in oil prices should nevertheless drive the rate down by –0.1 points. All in all, the margin rate is only expected to grow slightly, rallying to 31.6%, exactly the same level of a year ago. It should nonetheless remain below the average seen over the period 1988 - 2007, largely due to the service branches (*Graph 1* and *Special Analysis* p. 39). In industry, the rate should continue to be at its highest level since 2000 (*Graph 2*).

On average, the margin rates of NFCs are expected to decrease more in 2017 than they did in 2016 (–0.3 points after –0.1 points), following two years of robust increases (+0.5 points in 2014 and +1.5 points in 2015). Real wages should once again outstrip productivity gains, and the increase in oil prices is expected to eat away at margins.

**Breakdown of the margin rate of non-financial corporations (NFCs)**

*in % and in points*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Margin rate (in level)** | **32.3** | **31.9** | **31.6** | **31.6** | **31.5** | **31.6** | **31.4** | **31.6** | **31.8** | **31.8** | **31.8** | **31.5** | **31.8** |
| **Variation in margin rate** | **0.2** | **–0.4** | **–0.2** | **0.0** | **–0.1** | **0.1** | **–0.1** | **0.2** | **0.2** | **0.0** | **–0.1** | **–0.3** | **0.2** |
| **Contributions to the variation margin rate** | | | | | | | | | | | | | |
| Productivity gains | 0.2 | –0.4 | –0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.0 | 0.5 | 0.8 |
| Real wage per capita | –0.4 | 0.0 | –0.1 | –0.2 | –0.2 | –0.4 | –0.3 | –0.1 | –0.1 | –0.2 | –0.9 | –0.8 | –0.5 |
| Employer contribution ratio | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| Ratio of the value-added price to the consumer price | 0.4 | –0.2 | 0.0 | 0.0 | –0.2 | 0.2 | 0.0 | –0.1 | –0.1 | 0.0 | 0.6 | –0.2 | –0.2 |
| Other factors | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 |

Forecast

Note: The margin rate (TM) measures the share of value-added which remunerates capital. Its variation is broken down in accounting terms between:
- productivity changes (Y/L), with Y value-added and L employment, and the ratio of the value-added price to the consumer price, or terms of trade (Pva/Pc), which play a positive role;
- changes to the real average wage per head (SMPT/Pc) and the employer contribution ratio (W/SMPT, where W represents all compensation), which play a negative role.
- others factors: taxes on production net of operating subsidies, including CICE and the emergency plan for employment:[1]

$$TM = \frac{EBE}{VA} \approx 1 - \frac{W.L}{Y.P_{va}} + other\ factors = 1 - \frac{L}{Y}\frac{W}{SMPT}\frac{SMPT}{P_c}\frac{P_c}{P_{va}} + \text{other factors}$$

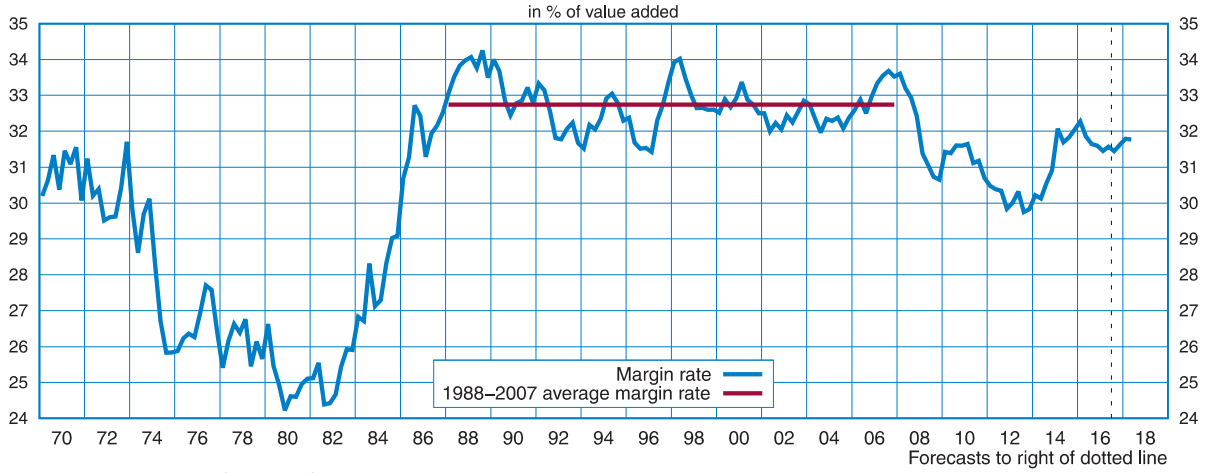
1. The CICE reduces companies' corporation tax, but in the national accounts it is recorded as a subsidy to companies, as recommended in the latest version of the European System of Account (ESA 2010).

*Source: INSEE*

## The margin rate is set to increase in H1 2018

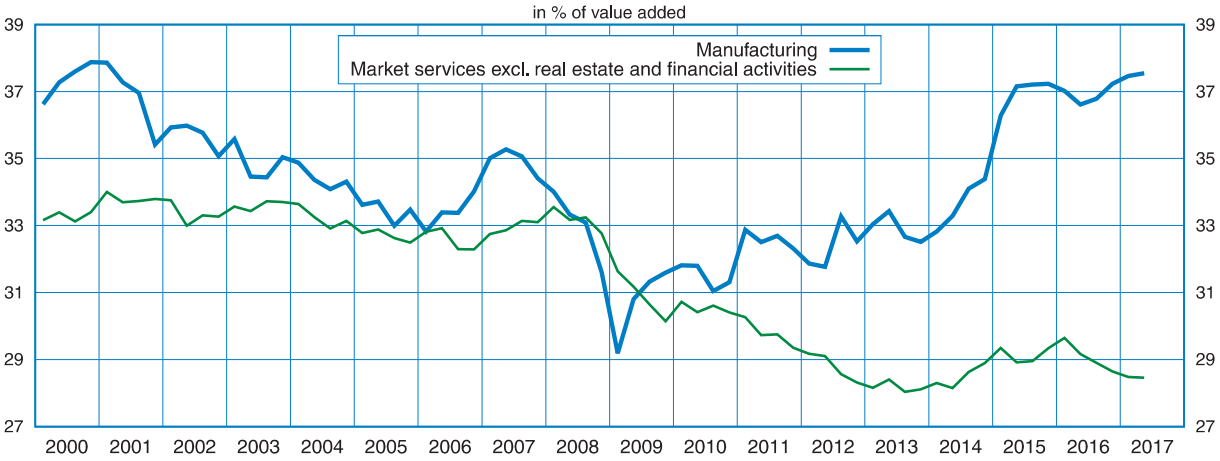
In H1 2018 the margin rate for NFCs should increase anew, reaching 31.8% by mid-year. Productivity gains should contribute 0.2 points to this increase, while real wages are expected to remain sluggish. Conversely, consumer prices should increase more rapidly than value-added prices, as a result of the increase in energy taxes on 1st January followed by taxes on tobacco on 1st March. This is expected to have an impact on the margin rate, contributing –0.1 points in Q1. Finally, the tax credits granted in 2018 under the CICE initiative should increase sharply, with the rate increasing from 6% to 7% of total payroll costs in 2017. This increase will be partially offset by the reduced cost of the hiring premium offered to SMEs, as the closing date for subscriptions to this programme was 30th June 2017. ■

**1 - Margin rate of non-financial corporations (NFCs)**




*Source: INSEE, quarterly national accounts*

**2 - Margin rate in industry and services**




*Source: INSEE, quarterly national accounts*

# Corporate investment and inventory

*Corporate investment remained healthy in Q3 2017 (+1.1% after +1.2%). Investment in manufactured goods accelerated (+2.0% after +1.2%) and that in services slowed slightly while remaining sustained (+1.0% after +1.2%). However, investment in construction has slowed sharply (+0.2% after +1.0%) due to a backlash effect in civil engineering expenditure. The investment rate remains high.*

*Through to mid-2018, corporate investment should remain very buoyant (+1.2% at the end of 2017 then +1.1% in Q1 2018 and +0.9% in Q2), still sustained by favourable demand prospects and financing terms. As an average over the year as a whole, investment should increase by 4.4% in 2017, more than it did in 2016 (+3.4%). For 2018, the growth overhang at the mid-year point is expected to be +3.7%. The investment rate should increase further to reach 22.7% by mid-2018.*

*In Q3 2017 changes in inventories made a positive contribution on growth (+0.5 GDP points), a reversal of the results from the previous quarter (–0.5 points). Changes in inventories in manufactured goods (+0.6 points after –0.4 points), and particularly transport equipment, account for the majority of this turnaround. In Q4, the catch-up effect of deliveries in the aeronautical sector is expected to push the contribution of inventory change to growth back into the negative (–0.3 points overall). In spite of this effect, for 2017 as a whole changes in inventories should make a positive contribution to growth (+0.5 points). This contribution should be neutral in Q1 2018, then slightly positive in Q2 (+0.2 points).*

## In Q3 2017, corporate investment remained healthy

In Q3 2017, investment by non-financial enterprises (NFEs) grew at virtually the same robust pace as that recorded in Q2 (+1.1% after +1.2%; *Table 1*). Investment in manufactured goods picked up (+2.0% after +1.2%), despite the end of the one-off additional depreciation allowance in April. Investment in services increased again (+1.0% after +1.2%). This category was once again buoyed by investment expenditure on information and communication, which has slowed but remains dynamic (+1.6% after +3.3%). On the other hand, investment in construction came to a standstill (+0.2% after +1.0%) due to a backlash effect in civil engineering expenditure. Overall, the investment rate of NFEs remained high in Q3, at 22.3% (*Graph 1*). In early 2017 it exceeded the previous high, recorded in 2008, driven by the trend increase in investment in services in value added since the beginning of the1980s.

## Investment should rise once again in late 2017 and remain sustained in H1 2018

According to the business tendency survey for industry, the demand placed on production capacities is increasing. The number of industrial firms reporting production bottlenecks increased in October, and is now well above the long-term average (*Graph 2*). According to the October survey of investments in industry, although business managers have reduced their investment forecasts for 2017, they remain positive (+4% in value in 2017 compared with 2016). The number of firms

Table 1

**Investment by non-financial enterprises (NFEs)**

*at chain-link previous year prices, SA-WDA*

| | Quarterly changes | | | | | | | | | | Annual changes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Manufactured products (34%) | 3.2 | –1.5 | –2.6 | 0.6 | 3.0 | 1.2 | 2.0 | 1.5 | 1.3 | 1.1 | 4.2 | 4.1 | 4.6 |
| Construction (24%) | 0.4 | 0.6 | –0.1 | 0.8 | 0.4 | 1.0 | 0.2 | 0.8 | 0.8 | 0.4 | 1.9 | 2.1 | 2.1 |
| Other (42%) | 1.0 | 0.3 | 2.2 | 0.7 | 2.4 | 1.2 | 1.0 | 1.3 | 1.2 | 1.1 | 3.7 | 5.9 | 3.8 |
| **All non-financial enterprises (100%)** | **1.6** | **–0.2** | **0.0** | **0.7** | **2.1** | **1.2** | **1.1** | **1.2** | **1.1** | **0.9** | **3.4** | **4.4** | **3.7** |

Forecast

*Source: INSEE*

increasing their level of investment outstripped those reducing investments in H2 2017. In the service branches, the balances of opinion on past investments and investment prospects are well above their long-term average levels.

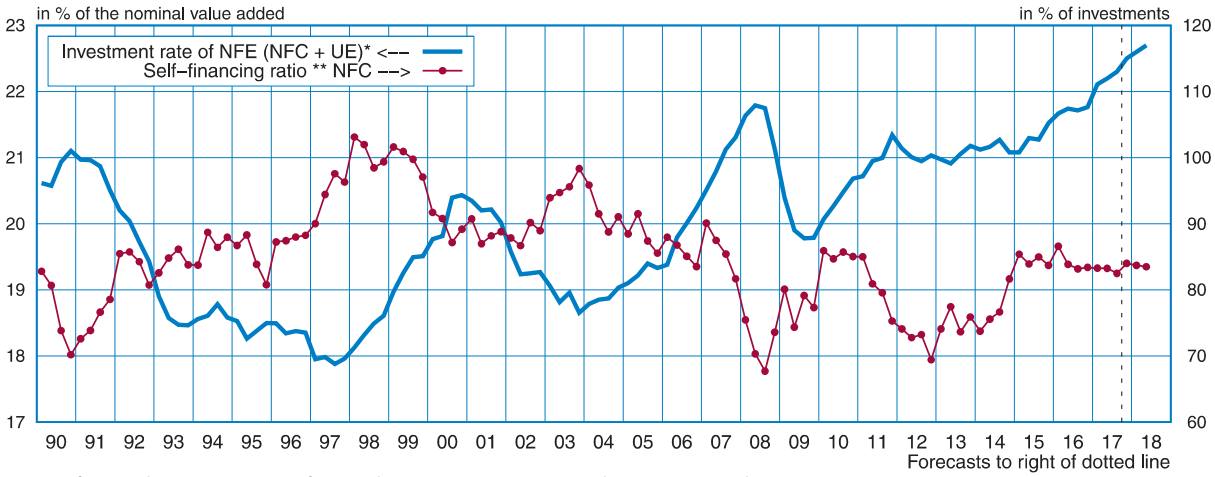
Financing terms are still favourable to investment in late 2017. On the one hand, corporate margins have benefited from robust activity and the decision to extend schemes aimed at reducing the cost of labour. Margins should rise again in 2018 thanks to the increase in the rate of the CICE, with the self-financing ratio remaining high. Additionally, real interest rates have returned to a particularly low level after a slight increase in late 2016 and early 2017, so credit terms remain conducive to investment.

Investment expenditure by NFEs is expected to grow steadily in Q4 2017 (+1.2%). This dynamism should continue in H1 2018 (+1.1% in Q1 then +0.9% in Q2). As an annual average, investment by NFEs should pick up pace in 2017: +4.4% after +3.4% in 2016. For 2018, the growth overhang at the mid-year point should be +3.7%. The investment rate of NFEs should see another slight increase to reach 22.7% by mid-2018.

## Investment in manufactured goods should remain very solid between now and mid-2018

Investment in manufactured goods by NFEs is expected to slow slightly in Q4 2017 (+1.5% after +2.0%). Vehicle registrations recorded in October suggest a sharp upturn in investment in automobiles during Q4, but investment in other transport equipment is expected to shrink as an after-effect of the extremely vigorous figures seen in Q3. Investment in capital goods should slow down but remain buoyant, as the production capacity utilisation rate hits high levels. As an annual average, investment in manufactured goods should grow at a similar pace in 2017 to 2016 (+4.1% after +4.2%). In 2018, the growth overhang at the mid-year point should be +4.6%.

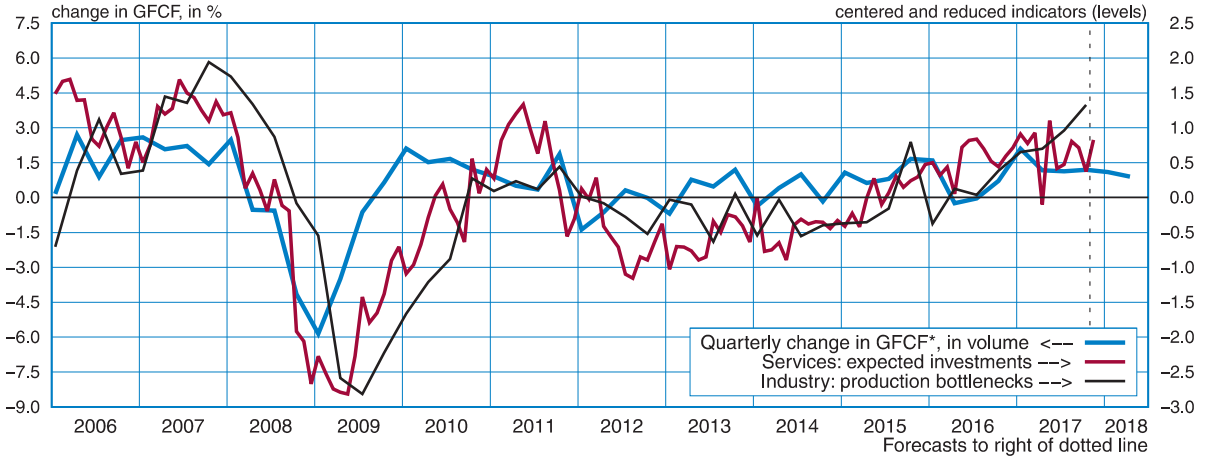
**1 - Investment rate and self-financing rate**




* Non-financial enterprises: non-financial corporations (NFCs) and unincorporated enterprises (UEs)
** Self-financing rate: ratio of non-financial enterprises savings to their investments.

*Source: INSEE, quarterly national accounts*

**2 - Opinion on the future trend in investment in services and production bottlenecks in industry**




*GFCF: Gross fixed capital formation
*Sources: INSEE, monthly survey in services and industry, quarterly national accounts*

## Investment in construction is expected to accelerate in Q4 then slow by mid-2018

Investment in construction by businesses should accelerate in Q4 2017 (+0.8% after +0.2%) then slow in H1 2018 (+0.8% in Q1 then +0.4% in Q2). Building starts have stabilised since the start of the year, but the past increase has led to a rise in the level of spending on construction for Q4 2017 and Q1 2018. This expenditure is expected to come to a standstill in Q2 2018. Investment in civil engineering work should bounce back in Q4 after declining in Q3, then remaining dynamic until mid-2018. Companies in this sector responding to the business tendency surveys have reported that their order books are very full. All in all, investment in construction should pick up slightly in 2017 (+2.1% after +1.9% in 2016). The growth overhang for 2018 should stand at +2.1% at the mid-year point.

## Investment in services should remain robust through to mid-2018

Investment in services should continue to grow steadily. It is expected to increase again in Q4 (+1.3%) and only slow very slightly through to mid-2018 (+1.2% in Q1 then +1.1% in Q2). In 2017, investment in services should make a strong contribution to the overall acceleration of investment and the increase in the NFE investment rate. Average annual growth is expected to be 5.9%, after +3.7% in 2016. For 2018, the growth overhang at the mid-year point should be +3.8%.

## As an average for the year 2017, the contribution of inventory change to growth should be clearly positive

After hindering growth of gross domestic product (GDP) in Q2 2017 (–0.5 points), the contribution of changes in inventory became clearly positive in Q3 2017 (+0.5 points), largely thanks to transport equipment.

In the monthly business tendency survey for industry conducted in November 2017, inventory levels are still deemed to be lower than normal: businesses therefore feel the need to increase their stocks of manufactured goods. Nonetheless, the catch-up effect of aeronautical deliveries scheduled for the end of the year should see inventory change make a negative impact on overall activity levels in Q4 (–0.3 points). In spite of this effect, for 2017 as a whole changes in inventory should make a clearly positive contribution to growth (+0.5 points), primarily *via* inventory change in transport equipment.

In Q1 2018 the contribution of inventory to growth is expected to be neutral, but this masks two contrasting trends: on the one hand, the return of aeronautical deliveries to normal levels should lead to a positive contribution from inventory change, and on the other hand the delivery of a large ocean liner should reduce inventory levels in the shipbuilding sector. In Q2, changes in inventory in shipbuilding should be positive in reaction to Q1, which explains the slightly positive contribution of inventory change to overall activity. ■

Table 2

**Contribution of inventory changes to growth**

*in GDP points*

| | Quarterly changes | | | | | | | | | | Annual changes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Agricultural products** | **–0.1** | **0.0** | **0.1** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **–0.1** | **0.1** | **–0.1** |
| **Manufactured products** | **–0.1** | **–0.6** | **0.4** | **–0.4** | **0.7** | **–0.4** | **0.6** | **–0.2** | **0.1** | **0.2** | **0.0** | **0.4** | **0.2** |
| Agrifood products | –0.1 | 0.0 | –0.1 | –0.1 | –0.1 | 0.0 | 0.0 | | | | | | |
| Coke and refined petroleum products | 0.1 | –0.1 | 0.1 | –0.1 | 0.1 | 0.0 | –0.1 | | | | | | |
| Machinery and equipment goods | –0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | | | | | | |
| Transport equipment | 0.1 | –0.3 | 0.1 | 0.0 | 0.5 | –0.4 | 0.7 | | | | | | |
| Other industrial goods | –0.1 | –0.1 | 0.1 | –0.3 | 0.3 | 0.0 | 0.0 | | | | | | |
| **Energy, water and waste** | **–0.2** | **–0.1** | **0.2** | **0.2** | **–0.1** | **–0.1** | **–0.1** | **–0.1** | **0.0** | **0.0** | **0.0** | **0.0** | **–0.1** |
| **Others (construction, services)** | **–0.1** | **0.1** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** |
| **TOTAL**[1] | **–0.4** | **–0.6** | **0.7** | **–0.2** | **0.7** | **–0.5** | **0.5** | **–0.3** | **0.0** | **0.2** | **–0.1** | **0.5** | **0.1** |

Forecast

1. Changes in inventories include acquisitions net of sales of valuables.

*Source: INSEE*

# International developments

# Oil and raw materials

## A market in equilibrium

*In Q3 2017, the price of Brent hovered around $52 per barrel on average, up 3% on Q2. Supply increased slightly, driven by the three OPEC countries exempted from reducing their output. Demand fell sharply after bouncing back in Q2, particularly in the United States. All in all, equilibrium was reached in the physical market.*
*This balance should be maintained through to mid-2018: the production of OPEC countries should rise slightly, still driven by the upturn in the production of countries exempted from the agreement. American supply is also likely to rise, boosted by the slight rise in the price of Brent. In line with the overall improvement in activity, demand should rise a little faster than its trend growth rate, driven by the emerging countries and China in particular. Stocks are expected to remain at a high level.*
*Through to the end of Q2 2018, the conventional assumption is that oil prices will stabilise at around $60. The physical market should remain in equilibrium and the level of stocks is expected to remain high. This forecast is subject to several uncertainties. Firstly, this scenario is based on compliance with the thresholds set out in the agreement of the OPEC countries to reduce output in November, extended for nine months. Any failure to comply with the terms of the agreement could lead to a surplus on the physical market, exerting downward pressure on prices. Unconventional production in the United States could also recover more quickly than expected and weigh down on prices. Conversely, a greater reduction in OPEC production and a slower recovery in American production could increase the deficit on the physical market, which would raise the upward pressure on prices.*
*Commodity prices in euros fell slightly in Q3 2017. In particular, the prices of cereals and textile fibres dropped sharply.*

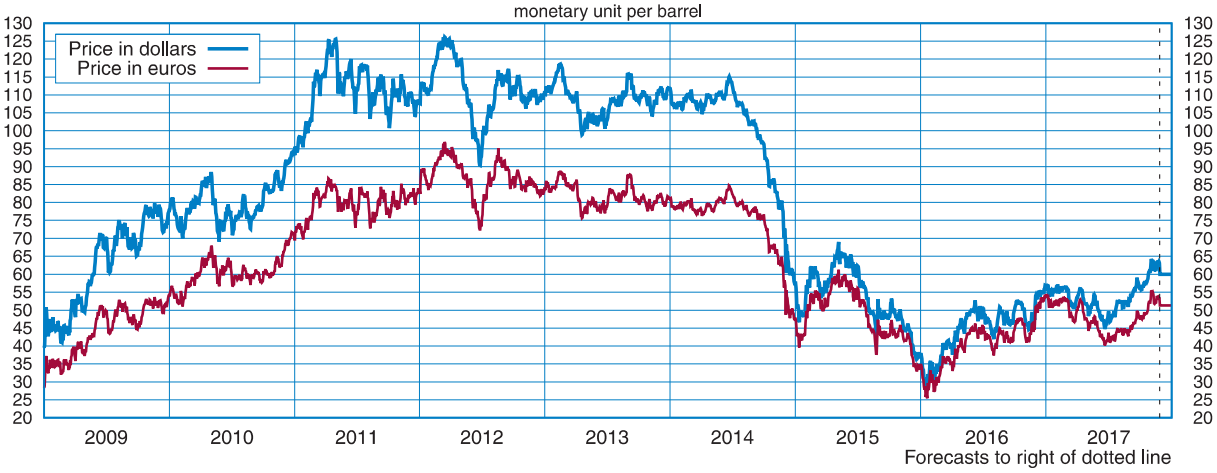
### In Q3, the price of Brent was $52

In Q3 2017, with the agreement in force on reducing the output of OPEC countries, oil prices stood at an average of $52 per barrel of Brent (*Graph 1*), up 2.8% on Q2 2017 ($51) and 12% on Q3 2016 ($46).
Over the forecasting period, the oil price has been set at $60.

### Demand is expected to pick up between now and June 2018

After accelerating in Q2, world demand slipped back in Q3 2017, weakened by American demand. Indeed, the demand for vehicle fuel was low and the damage that Hurricane Harvey wreaked on refineries reduced their demand for crude.
Through to the end of the year, demand is set to increase slightly faster than its trend rate and is likely to pick up pace in H1 2018, driven by demand from non-OECD countries (excluding China). All in all in 2017, it is expected to rise by 1.10.Mbpd (Million barrels per day), a smaller rise than in 2016 (+1.51 Mbpd) but higher than that in 2015 (+0.92 Mbpd).

**1 - Price of Brent in euros and in dollars**




*Source: DataInsight*

## Supply should increase moderately through to mid-2018, provided that OPEC maintains its efforts to reduce output

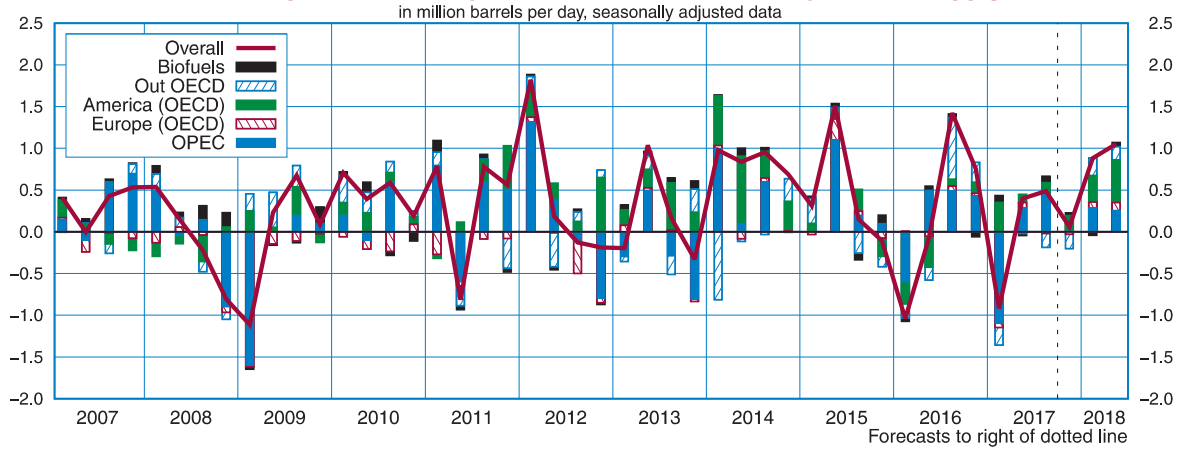
The global supply increased in Q3 2017: +0.5 Mbpd according to data corrected for seasonal variations (*Graph 2*). Indeed, the OPEC supply rose, despite the agreement to reduce production in force since 1st January, due to the upturn in production by those OPEC countries[1] exempted from the agreement. Libyan production continued to pick up after the reopening of the Sharara platform, and the drop in the number of attacks against the oil sector enabled Nigeria to increase its production further. In the United States, Hurricane Harvey caused production to plummet by 0.4 Mbpd, without actually inflicting major damage on platforms, which quickly resumed production.

1. In addition, Equatorial Guinea joined OPEC in Q3 2017, automatically leading to a rise of 0.12 Mbpd in the cartel's production and an equivalent drop in the production of non-OPEC countries.

In Q4 2017, OPEC production is expected to increase slightly. Libyan and Nigerian production should continue to rise. Saudi Arabian and Iranian production are likely to stabilise. Iraqi production is expected to suffer slightly from tensions with Iraqi Kurdistan. Russia, which is also bound by the agreement with OPEC, should stabilise its production at the planned level. In the United States, conventional production is likely to pick up after the slowdown caused by Harvey in Q3.

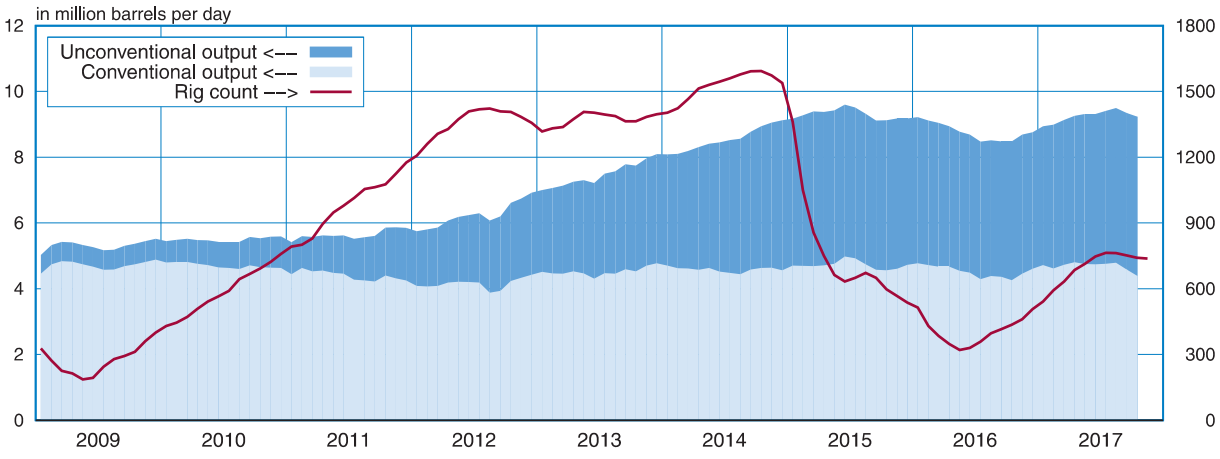
In H1 2018, assuming the agreement is renewed, OPEC production should continue to rise due to the Libyan and Nigerian contributions. In the United States, the upswing in the rig count should lead to a significant recovery in unconventional production, as forecast by both the United States Department of Energy and the International Energy Agency (IEA). Nevertheless, this potential recovery remains the main uncertainty concerning the price of Brent, bearing in mind the drop in the rig count since August (*Graph 3*).

**2 - Principal contributing factors to the variation in global oil supply**




*Sources: IEA, INSEE*

**3 - Production and rig count in the United States**




*Sources: Baker Hughes and IEA*

All in all, world production is likely to rise over the forecasting period, but this increase should correspond to an equivalent rise in demand, with the result that the market is expected to remain in equilibrium until Q2 2018 (*Graph 4*).

## The high stock level should curb price rises

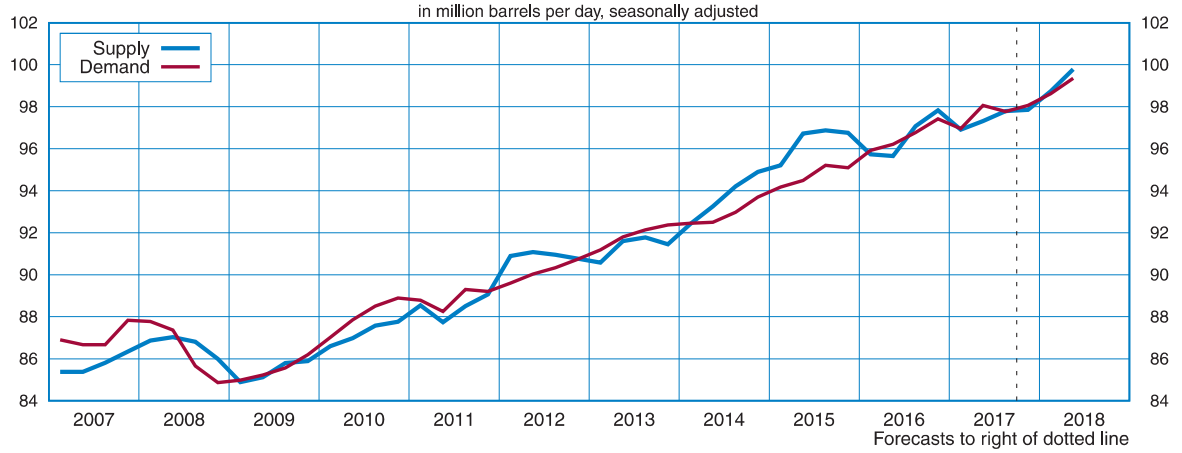
Crude oil stocks in the United States fell to 457.7 million barrels in October – a level below that recorded in October 2016. However, they remain well above the average (+16%) for 2011-2014. Even in the event of an unexpected demand shock, this high level of trade reserves should contain the upward pressure on prices.

## Commodity prices edge down

In Q3 2017, the prices of all commodities expressed in euros were down slightly (–2.0%; *Graph 5*). Cereal prices plummeted in Q3 (–6.5%), especially for maize and rice, in addition to the prices of textile fibres (–7.0%). ■

**4 - World oil market**

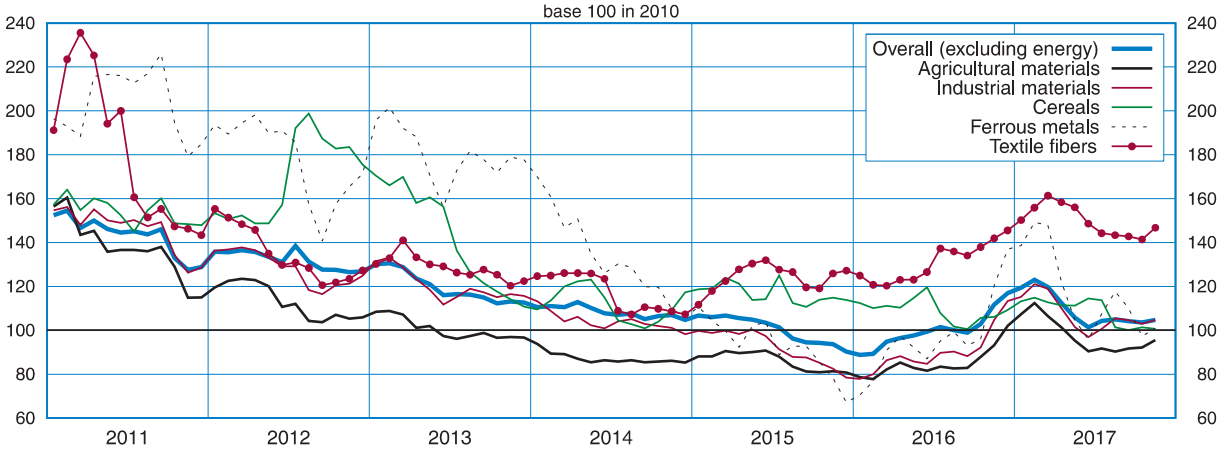
in million barrels per day, seasonally adjusted




*Sources: IEA, INSEE*

**5 - Prices of non-energy commodities in euros**

base 100 in 2010




*Source: HWWI*

# Financial markets

## *A cautious normalisation of American monetary policy*

*Monetary policies continue to diverge on either side of the Atlantic. On the American side, the Federal Reserve raised its base rate in June 2017 and is expected to do so again following the meeting of its Monetary Committee on 12 and 13 December 2017, reassured by the prospect of American inflation hitting the target of 2% and a buoyant labour market. The Federal Reserve also began reducing its balance sheet in October 2017 and will step up this process progressively over the next 12 months. On the European side, the ECB is extending its quantitative easing until at least September 2018, although it is halving its net security purchases, and has announced that interest rates are to be maintained at their current levels for an extended period "well beyond" the end of the asset purchase programme.*

*As a whole, the credit market in the Eurozone continues to improve. However, situations vary between European countries. Outstanding loans to the private non-financial sector, businesses and households are rising strongly in France and Germany, but remain stable in Spain. The situation in France is distinctly more dynamic that in its partner countries although the same interest rates apply. After easing credit terms in the last quarter, European banks are expecting to stabilise their terms. The proportion of non-performing loans is declining in all countries.*

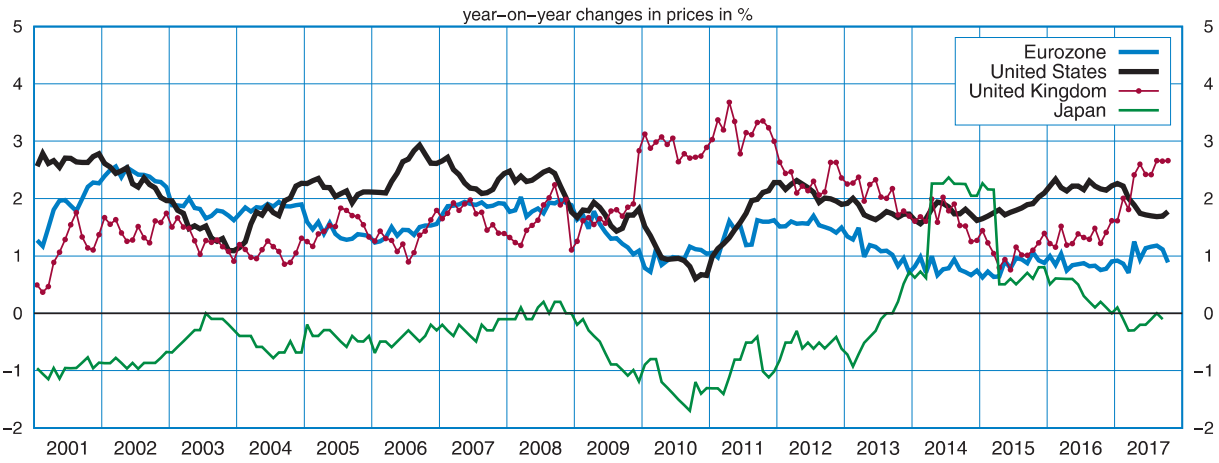
*The Euro appreciated against other currencies from January 2017 until September 2017, when it topped $1.20 due to an improvement in the economic outlook in the Eurozone. Since then, it has stabilised at around $1.17. Consequently, the real effective exchange rate for French exporters appreciated strongly in Q3 2017. The Euro exchange rate has been set at $1.17, £0.88 and 130 yen for forecasting purposes.*

### The Fed cautiously normalises its monetary policy

The Federal Reserve raised its base rate in December and is expected to do so again in 2017. It has also been reducing its balance sheet, amounting to $4,500 billion, at a rate of $10 billion per month since October 2017. The rate of this reduction will increase progressively until it reaches $50 billion per month between now and the end of 2018. The Fed has been encouraged to pursue this policy by the drop in unemployment to 4.1% and dynamic inflation – both headline and core – nearing the target of 2% (*Graph 1*).

The appointment of Jerome Powell, who takes over from Janet Yellen as the new Chairman of the Federal Reserve, does not seem to indicate a dramatic change in short-term monetary policy.

**1 - Core inflation in the world**




*Sources: Eurostat, BLS, JSB, ONS*

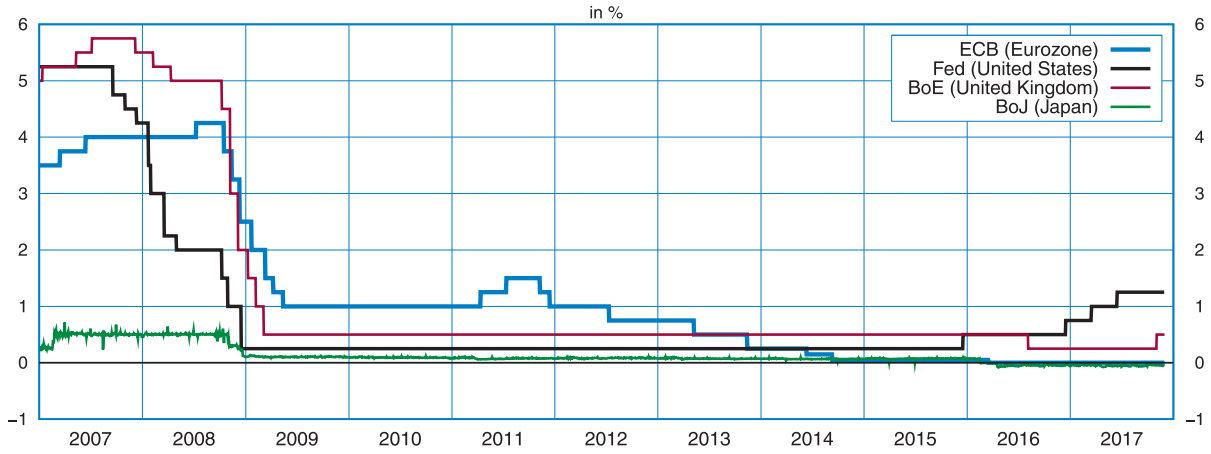
## The ECB continues its accommodating monetary policy

In October, meanwhile, the European Central Bank confirmed that it is extending its accommodating policy. Indeed, core inflation remains close to 1% – below the target of 2%. Base rates are maintained at a historically low level: the deposit facility rate has been at –0.40% since March 2016. The Governor of the ECB, Mario Draghi, has announced that the three base rates would remain at their current levels for "an extended period (…) well beyond" the end of the security purchase programme. This programme will be maintained until at least September 2018, at a more moderate rate: €30 billion per month from January 2018, instead of €60 billion up to now.

## European sovereign yields remain stable

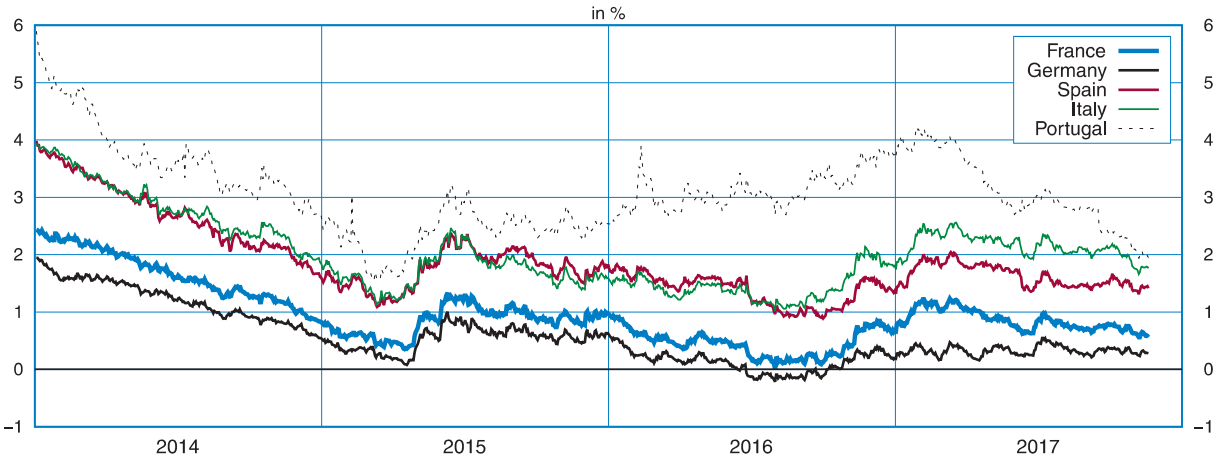
Sovereign yields of the advanced countries remain stable, and do not appear to be affected by uncertainties relating to the political crisis in Catalonia or the Italian elections (*Graph 3*). Spreads are decreasing slightly: the French-German spread fluctuated between 30 and 40 basis points, whereas the Italian-German spread now comes to approximately 140 basis points, against the 200 points recorded in Q1 2017.

**2 - Base rates of the main central banks**




*Source : ECB, BoJ, BoE, Fed*

**3 - Ten-year European sovereign yields**




*Source: DataInsight*

## Credit is very buoyant in the Eurozone, and especially in France

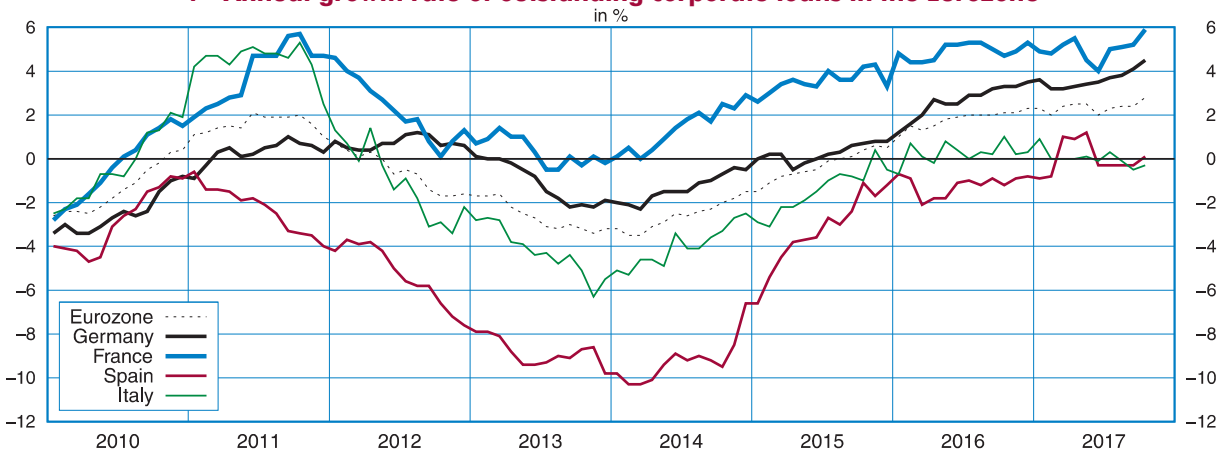
Credit terms continue to improve in the Eurozone as a whole, with disparities between countries. Outstanding loans to non-financial corporations in the Eurozone continue to increase strongly (*Graph 4*). In October 2017, their year-on-year growth rose to 5.9% in France (cf. *Special Analysis* p. 19) and 4.5% in Germany. However, outstanding corporate loans are stable in Spain (+0.1%) and are declining again in Italy (–0.3%). The interest rates for new loans to non-financial corporations are stabilising in these four countries: they are hovering around 1.5% in Germany, France and Italy and around 2% in Spain.

Regarding lending to households, France stands out from its main European partners with a lower interest rate and much more vigorous outstanding loans: the annual rise in these amounts outstanding reached 5.9% in October 2017 against +2.7% for the Eurozone as a whole. This trend does not seem to be adversely affected by the slight increase in the rates on new loans to households observed throughout the Eurozone.

## Stock markets are returning to historically high levels

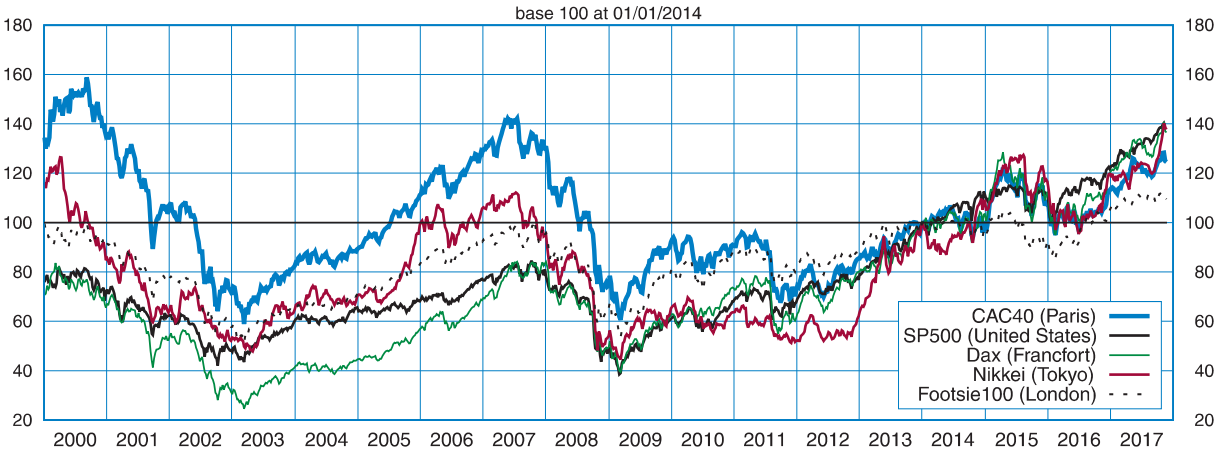
The low interest rates and the favourable economic outlook are pushing stock market indices to historically high levels (*Graph 5*). In Europe, prices

**4 - Annual growth rate of outstanding corporate loans in the Eurozone**




*Source: European central bank*

**5 - Stock market indices of the advanced countries**



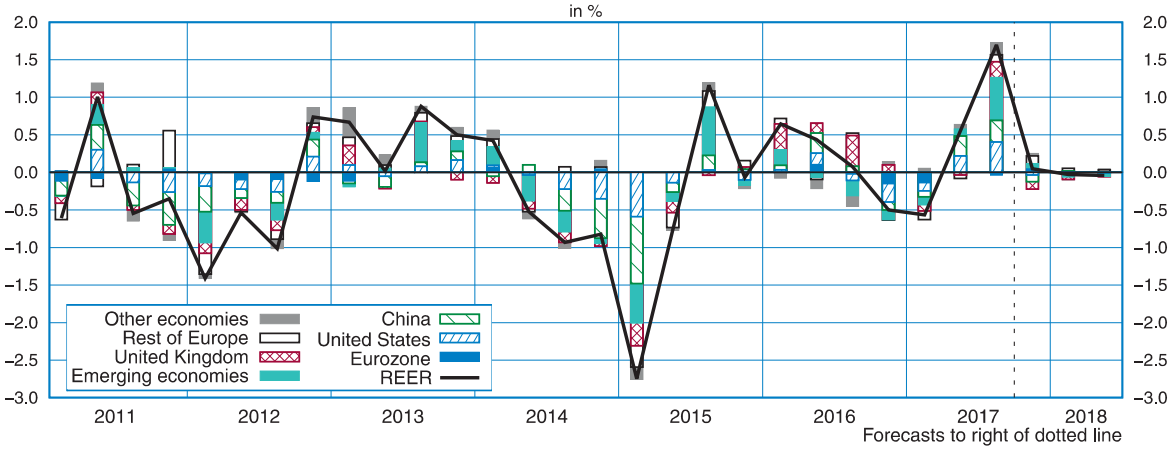

*Source: DataInsight*

are currently exceeding their peak of early 2008. In the United States, the S&P 500 is now at its highest level since its creation, driven by expectations of a more expansionary fiscal policy and against a backdrop of still-high profits for American enterprises.

## The euro appreciated in the summer of 2017

During Q2 and Q3 2017, the euro appreciated significantly against the dollar and the other currencies, driven by favourable economic prospects and by uncertainty over the conduct of American economic policy, which is leading to a significant appreciation of the real effective exchange rate for French exporters (*Graph 6*). By convention, the exchange rate of the euro has been set at £0.88, 130 yen and $1.17 through to the end of the forecasting period. ■

**6 - Quarterly change in real effective exchange rate (REER) of France and its contributing components**




*Sources: Banque de France, National statistical institutes*

# Eurozone

## *The business climate at a 17-year high*

*In Q3 2017, Eurozone GDP increased by 0.6%. It was once again buoyed by domestic demand, and by household consumption and investment in particular. Activity was vigorous in all major European countries: Germany (+0.8%), Spain (+0.8%), France (+0.5%) and Italy (+0.4%). The business climate in the autumn is at its highest level in 17 years. Consequently, growth is set to remain very strong, at 0.6% in Q4. In H1 2018, activity is expected to slow a little, with construction faltering somewhat and a slightly negative contribution from foreign trade. On an annual average basis in 2017, activity should pick up to +2.4% in 2017 after +1.7% in 2016, and the growth overhang for 2018 is expected to be 1.8% by mid-year. The pronounced drop in unemployment that began at the start of 2013 is likely to continue, with unemployment standing at 8.4% in June 2018, against 9.2% one year earlier.*

### Activity is growing at full speed in the Eurozone

In Q3 2017, activity once again grew at a sustained pace (+0.6% after +0.7%, *table*), as in the previous quarter, and slightly above the rate forecast at the start of October (+0.5%). It was vigorous in all major European countries: Germany (+0.8%), Spain (+0.8%), France (+0.5%) and Italy (+0.4%). In the autumn, confidence surveys remain very positive (*Graph 1*) – at the highest level since 2001 – and this despite the political crisis in Catalonia and the uncertainty surrounding the outcome of the elections scheduled for March in Italy. Growth is therefore expected to remain very strong in Q4 2017 (+0.6%) and should barely slacken at the start of 2018 (+0.5% per quarter). Consequently, job creations are likely to continue at a strong pace and unemployment should continue to fall, at a slightly slower rate than at the start of 2015 (–0.1 to –0.2 points per quarter), to 8.4% in June 2018 (against 9.7% at the end of 2016 and 10.7% at the end of 2015).

As an annual average, activity should gather pace strongly in the Eurozone in 2017 (+2.4% after +1.7% in 2016 and +1.5% in 2015). This acceleration should be common to the three main Eurozone countries: Germany (+2.6% after +1.9%), France (+1.9% after +1.1%) and Italy (+1.5% after +1.1%), while growth is likely to remain very strong in Spain (+3.1% after +3.3%).

### Households should continue to adjust to the decline in their precautionary savings

Private consumption is expected to remain vigorous through to mid-2018 (around +0.5% per quarter), as suggested by the high level of household confidence. Nominal wages are likely to be strengthened in all countries thanks to the improvement in the labour market and the past rise in inflation. Indeed, driven by energy prices, inflation rose to +1.4% year-on-year in Q3 2017, against +0.7% in late 2016. It is likely to increase slightly through to mid-2018 (+1.6%). Core inflation, which is expected to have risen tentatively from +0.8% at the end of 2016 to +1.1% in late 2017, should also remain stable at this level.

**Gross domestic product and main aggregates of Eurozone economies**

*quarter-on-quarter and year-on-year changes in %*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Eurozone*** | **0.5** | **0.3** | **0.4** | **0.5** | **0.7** | **0.7** | **0.6** | **0.6** | **0.5** | **0.5** | **1.7** | **2.4** | **1.8** |
| *France* | *0.6* | *–0.1* | *0.1* | *0.6* | *0.5* | *0.6* | *0.5* | *0.6* | *0.5* | *0.4* | *1.1* | *1.9* | *1.7* |
| *Germany* | *0.6* | *0.5* | *0.3* | *0.4* | *0.9* | *0.6* | *0.8* | *0.7* | *0.6* | *0.5* | *1.9* | *2.6* | *2.0* |
| *Spain* | *0.7* | *0.8* | *0.7* | *0.7* | *0.8* | *0.9* | *0.8* | *0.8* | *0.8* | *0.7* | *3.3* | *3.1* | *2.5* |
| *Italy* | *0.3* | *0.1* | *0.2* | *0.4* | *0.5* | *0.3* | *0.4* | *0.4* | *0.4* | *0.4* | *1.1* | *1.5* | *1.2* |
| Household purchasing power in the Eurozone (year-on-year changes) | 0.1 | –0.1 | 0.3 | 0.7 | 1.8 | 1.5 | 1.4 | 1.5 | 1.3 | 1.6 | 0.2 | 1.6 | 1.3 |
| ILO unemployment rate in the Eurozone | 10.3 | 10.1 | 9.9 | 9.7 | 9.5 | 9.2 | 9.0 | 8.7 | 8.5 | 8.4 | 10.0 | 9.1 | 8.4 |

Forecast

* Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015

*Sources: Eurostat, national statistical institutes, INSEE forecast*

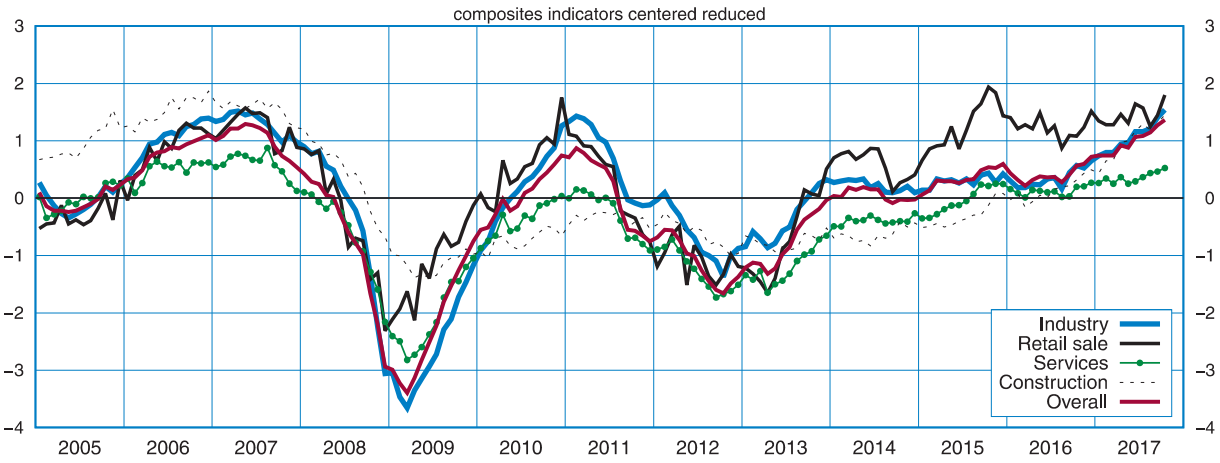
This rise in prices is undermining purchasing power gains: after +1.9% in 2016, it is likely to slip back again to +1.6% in 2017. Purchasing power is expected to maintain a moderate rate at the start of 2018 and its growth overhang should reach +1.3% by mid-2018. European households are likely to increase their consumption at a slightly faster pace because their precautionary savings should continue to be adjusted downwards.

### Faced with supply constraints, enterprises should continue to increase their production capacities

Equipment investment accelerated in Q3 2017 (+2.9% after +1.2%). It is expected to remain very buoyant, driven by demand prospects, the flourishing situation of European enterprises and a context of growing tensions on production capacity (*Graph 2*).

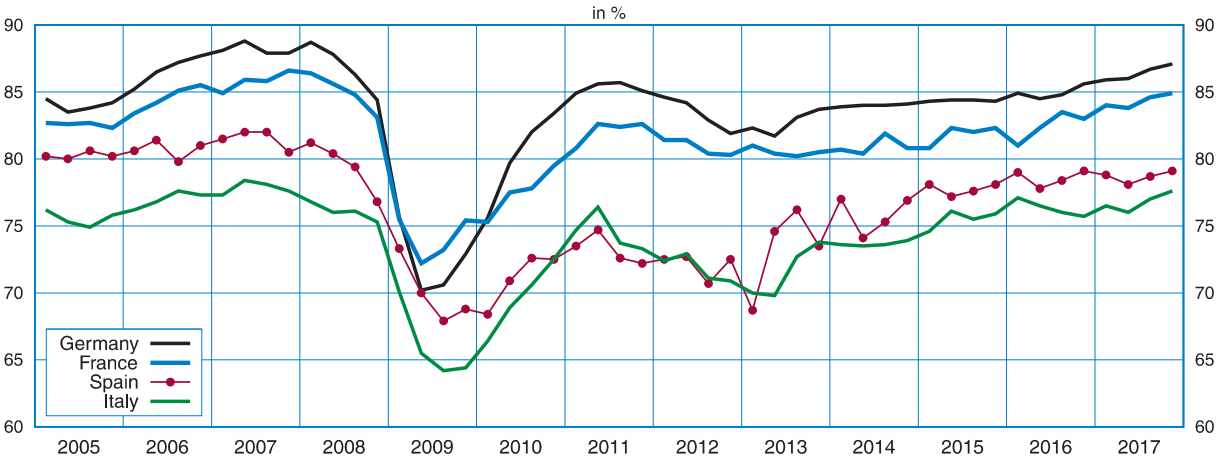
In Q3, construction investment slowed (+0.1%) after an already-weak Q2 (+0.3%). It should pick up in Q4 2017 before slowing again through to mid-2018: building permits remain on an upward trend but are tailing off slightly, which is likely to be reflected in construction investment over the forecasting period. As an annual average, construction expenditure should continue to sustain activity (+1.9% mid-year growth overhang for 2018 after +3.5% in 2017).

**1 - Business climate in Eurozone**




*Source: European Commission (DG Ecfin)*

**2 – Production capacity utilisation rates in Europe**

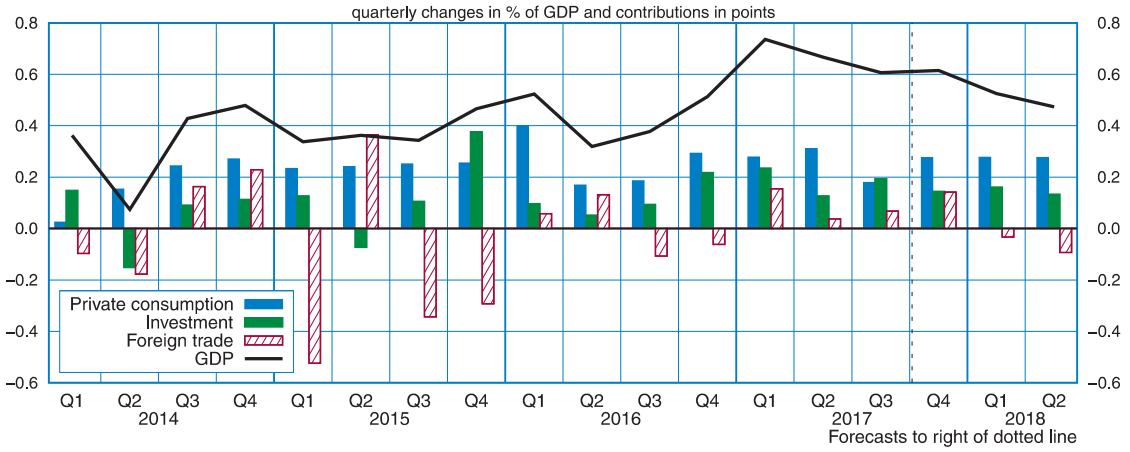



*Sources: IFO, Istat, European Commission (DG Ecfin), INSEE*

## Foreign trade is set to hamper growth slightly at the start of 2018

In Q3 2017, exports picked up slightly (+1.2% after +1.1%). They should maintain this pace in Q4, driven by sustained demand from the rest of the world. They are then likely to slacken progressively in early 2018 (+0.8% in Q2) due to the appreciation of the euro in the summer of 2017. Imports remained vigorous in Q3 2017 (+1.1%). Through to mid-2018, they are expected to remain steady in response to domestic demand, particularly in Germany (+0.9% in Q4 and then +1.1% per quarter). All in all, the contribution of foreign trade should again be positive at the end of 2017 and then slightly negative at the start of 2018 (*Graph 3*). ■

**3 - GDP and contributions to GDP growth in Eurozone (except Ireland)**




*Sources: Eurostat, INSEE forecast*

# Germany

## *Is the German economy overheating?*

*In Germany, activity accelerated sharply in Q3 2017 (+0.8% after +0.6%), buoyed by foreign trade and inventory (+0.4 points for each), whereas domestic demand stalled. GDP is expected to slow somewhat but should remain very vigorous for the forecasting period (+0.7% in Q4, then +0.6% in Q1 2018 and +0.5% in Q2), driven once again by domestic demand but held back by growing production capacity tensions. Annual GDP should increase by 2.6% in 2017, after +1.9% in 2016.*

### Corporate equipment investment should remain very buoyant

For the last three quarters, corporate equipment investment has been particularly buoyant (+7.2% in 9 months). At the end of 2017, the business climate is still progressing and has reached its highest level since reunification, particularly in industry. In this sector, the production capacity utilisation rate is at its highest level since 2008 and equipment investment is expected to remain very vigorous through to mid-2018 (+1.2% to +2.0% per quarter), all the more so since the self-financing ratio is still well above 100%.
However, construction expenditure should progressively reflect the stabilisation of the number of building permits since the start of the year and it is expected to lose momentum between now and mid-2018.

### Employment and wages should bolster consumption again

Private consumption stagnated in Q3 after rising very sharply for two quarters (–0.1% after +0.9% and +0.8%).

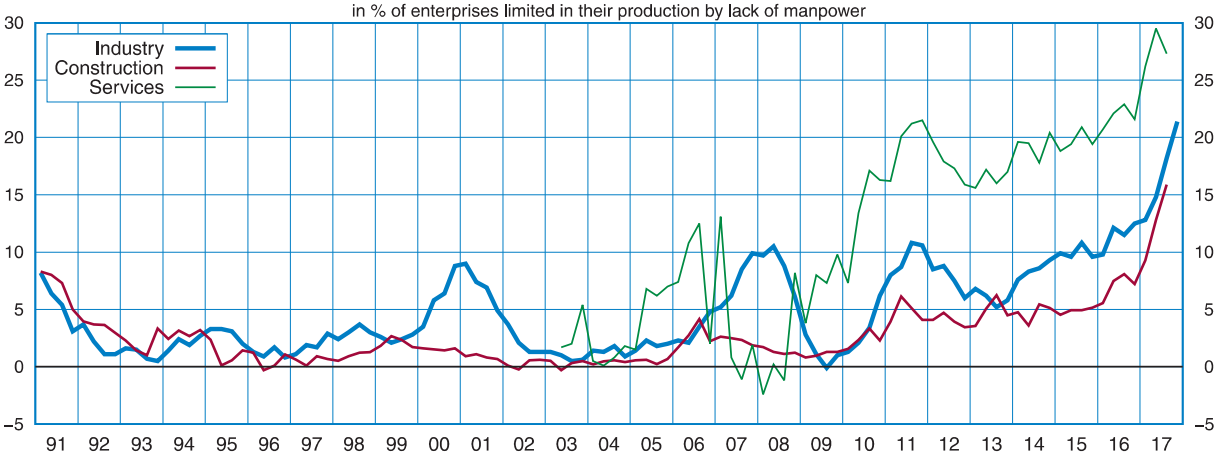
Through to mid-2018, despite unemployment rate being at its lowest level since reunification (3.4%), employment should rise strongly, with the gradual integration of refugees into the labour force (*Focus*). Recruitment difficulties have never been greater in all sectors (*Graph*) and wages are likely to gather pace. For all that, inflation has risen slightly but remains contained (1.8% year-on-year in November) thanks to productivity gains and the tightening of corporate margins. Consequently, through to mid-2018, purchasing power is expected to be lively and household expenditure should be vigorous (+0.6% per quarter).

### Imports should benefit from the rise in domestic demand

Activity was strongly bolstered by foreign trade in Q3 2017 (+0.4 points). Exports are expected to remain very steady through to mid-2018 (+1.1% per quarter), in line with demand for German products, and should barely be affected by the recent appreciation of the euro. However, imports are likely to gather pace in response to domestic demand (+1.4% per quarter), with the result that the contribution of foreign trade is expected to be slightly negative.

All in all, activity is set to remain very buoyant (+0.7% in Q4 2017 after +0.8%, and then +0.6% in Q1 2018 and +0.5% in Q2) and growth is expected to rise to +2.6% in 2017 after +1.9% in 2016. The growth overhang for 2018 should already stand at +2.0% by mid-year.■

**Recruitment difficulties have never been greater in all sectors of activity**




*Source: European Commission*

## The arrival of refugees in Germany since 2015: a positive short-term demand shock and a positive medium-term supply shock

### In Germany, the migration balance has offset the negative natural balance since 2010 and has risen sharply since 2015

The migration balance in Germany has increased sharply since 2010, resulting in an increase in the total population. Between 2010 and 2014, this was due mainly to migrants from Eastern Europe (predominantly Poland and Romania), but from Western Europe too (especially Italy and Spain): on average over these years, the migration balance stood at 300,000 per year. In 2015 and 2016, numbers entering Germany accelerated as a result of the country's open-door policy for refugees: the migration balance stood at 1.1 million people in 2015, according to Destatis (See Focus in the December 2015 *Conjoncture in France*), and around 800,000 in 2016. This additional influx compared to the 2010-2014 trend, which was around 1.3 million people over two years, came mainly from countries at war, primarily Syria. All in all, the German population grew by 1.8% between 2014 and 2016: such an increase in two years had never been seen before in the history of the Federal Republic since reunification.

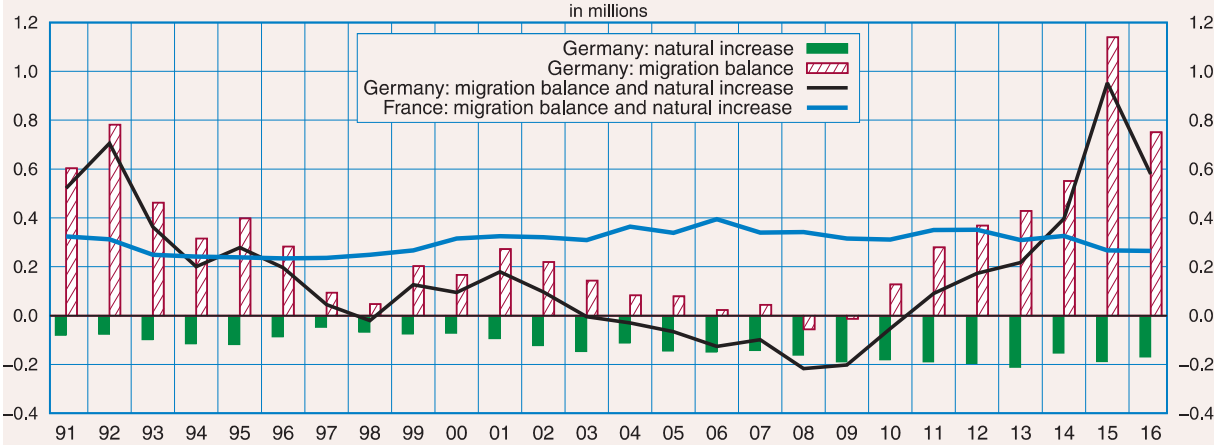
Germany's negative natural balance has therefore been offset by its migration balance. Population growth in the country was higher than in France from 2013, for the first time since 1995 (*Graph 1*). However, arrivals into the country have declined, according to the German Federal Office for Migrants and Refugees (BAMF), and the migration balance looks set to return gradually to a lower level, while still remaining very positive.

### In the short term, this influx stimulated activity *via* an increase in government consumption and in construction

To cope with this massive influx, the German government increased spending from 2016: the German Ministry of Finance[1] estimated that the rise in public expenditure associated with refugees was about 18 billion euros per year (or 0.6% of GDP) for their support and help with integration. In the national accounts this has resulted in a sharp acceleration not only in public spending, which has seen its greatest rise since 1992, just after reunification (+3.7%, *Graph 2*), but also in benefits to households, which increased by 3.1% in 2016 and 3.7% in 2017, contributing to the upswing in private consumption. In 2017, this effect is already starting to wane and public consumption is likely to slow to +1.1%. In addition, the arrival of refugees has contributed to the recovery of construction in Germany (+2.5% in 2016 then +4.3% in 2017 after –2.0% in 2015), through the buoyancy of housing starts for collective accommodation, for example (*Graph 3*).

1. "Bund kalkuliert bis 2020 mit rund 94 Milliarden Euro Kosten", *Der Spiegel*, May 2016.

**1 - Comparison of migration balance and natural balance in Germany and France**




*Sources: Destatis and INSEE*

**In the medium term, the integration of refugees into the labour market is a positive supply shock as it increases the labour force**

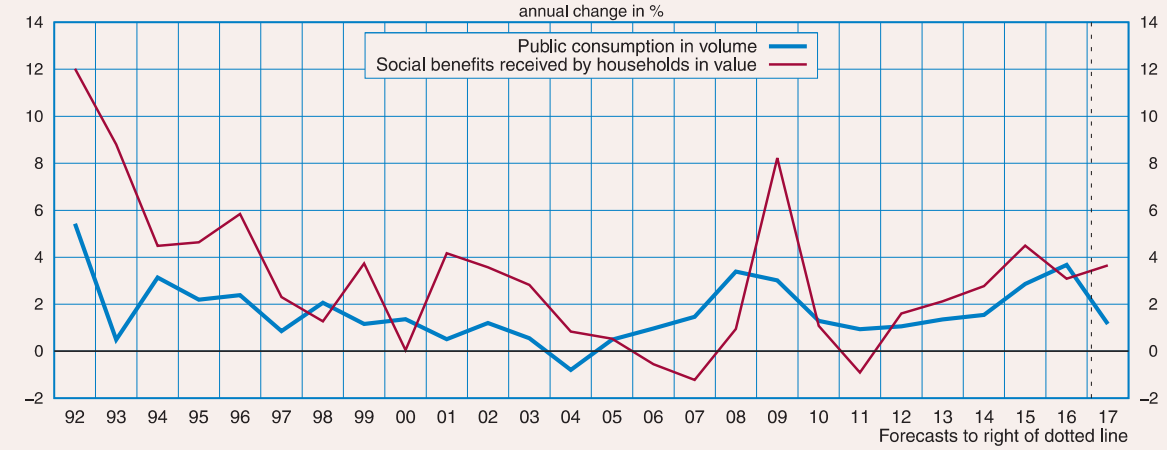
According to the LFS[2] published by Eurostat, the arrival of foreigners accounts for virtually all of the increase in the labour force in Germany since 2011. The contribution of the foreign labour force to this rise was +0.4 points per year from 2011 to 2014, whereupon it suddenly accelerated to +0.7.points in 2015 and +1.1 points in 2016, thus confirming the gradual integration of refugees into the labour market. This represents an average annual rise of 8.8% for the foreign labour force between 2014 and 2016, after +5.2% between 2011 and 2014 (*Graph 4*). However, at this stage, only some of the refugees have entered the labour market: the foreign inactive population has increased more rapidly than the foreign active population: +12.3% per year between 2014 and 2016, against only +3.8% per year between 2011 and 2014.

2. Labour Force Survey: household sample survey in the European countries. This survey gives information on the activity of nationals and foreigners. The LFS applies the definitions of the ILO, where an active person is considered to be employed if they work at least one hour per week. However, although the LFS trend is similar to that of the German accounts series, it is much more volatile.

All in all, according to the same source, between Q1 2015 and Q2 2017 the foreign population aged 15 to 64 increased by 1.2 million (*Table 1*), of whom around 710,000 were active and 530,000 were inactive. The vast majority of the increase in the foreign labour force was due to people in employment, while the number of unemployed remained very low. Thus the arrival of refugees in Germany caused the labour force to rise but without increasing the unemployment rate. Comparing these figures with those for the period 2011-2014, to identify the specific effect of the arrival of refugees and assuming that the flows of other types of migrants remained constant, clearly a large proportion of refugees aged 15 to 64 who arrived since 2015 are inactive (about 410,000 inactive people by mid-2017) while only 250,000 had entered the labour market by mid-2017. Most of these migrants are men of working age, therefore this inactive population constitutes a potential recruitment pool of future employees.

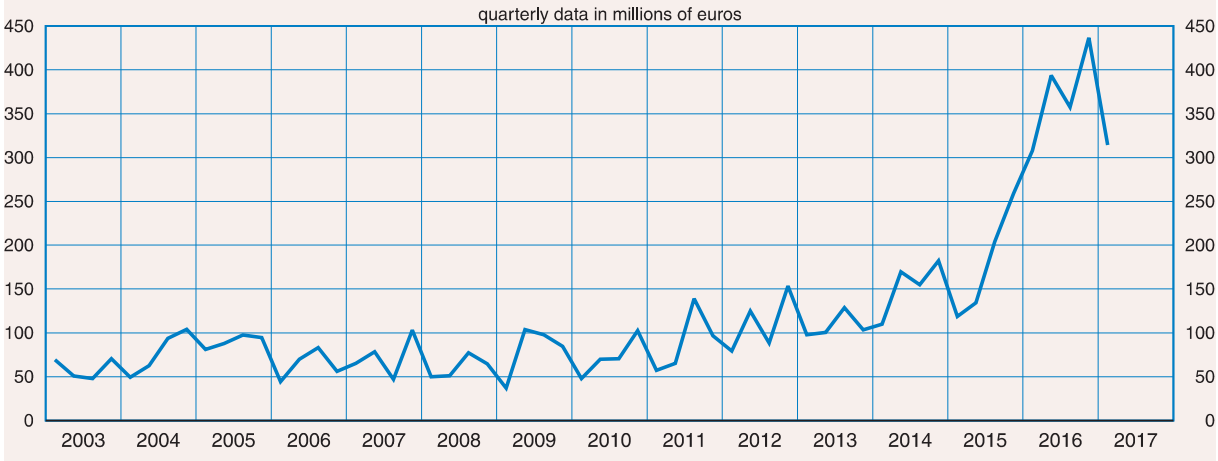
The LFS survey do not accurately identify those migrants who have arrived from war-torn countries, unlike the Federal Employment Agency (BA) data, which do differentiate within the foreign population between refugees from countries at war (Afghanistan, Eritrea, Iraq, Iran, Nigeria, Pakistan, Somalia, Syria) and other foreigners.

**2 - Government consumption and social benefits as an annual variation**




*Source: Destatis*

**3 – Estimated costs related to new building permits for hotel residences**




*Source: Destatis*

However, the BA data are not aligned with the ILO concept and cannot therefore be perfectly tied to the change in the labour force and employment in the national accounts. Thus the unemployment rate as a national concept according to the BA is 5.6%, against 3.4% for ILO unemployment. The BA also counts jobseekers, of which there are twice as many as there are unemployed.

After arriving on German soil, refugees of working age receive a basic social allowance of at least €350[3] (mid-2017, at least 1.5 million recipients) but they are not all immediately available to take up employment: most are therefore considered to be inactive. Training courses are organised, especially German language learning, while mini-jobs, created specifically to assist their integration, may be offered. Integration into the German labour force is very gradual.

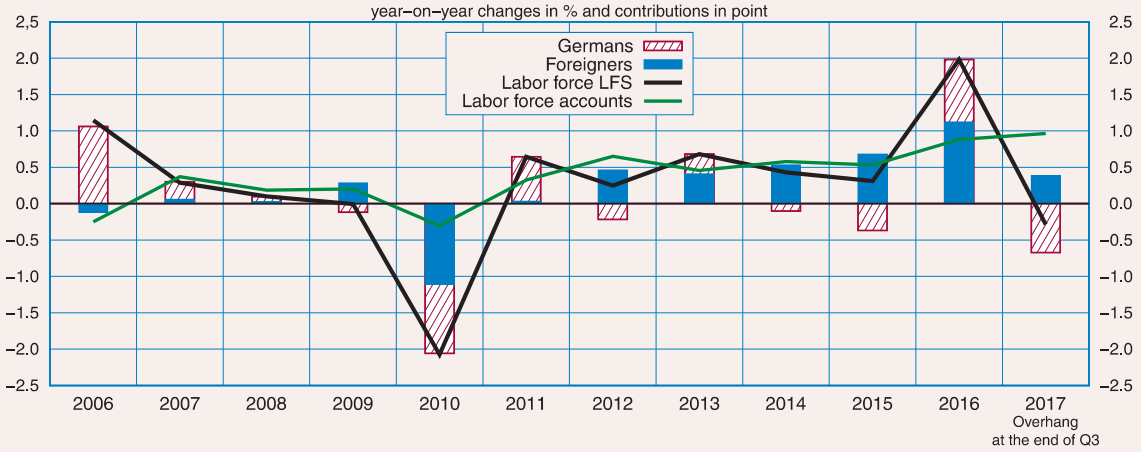
3. Those who are fit for work, aged between 15 and the normal legally established retirement age, usually resident in Germany and in need of assistance, are entitled to the basic social allowance (or unemployment benefit II, Grunsicherung). The amount is adjusted according to family composition.

The BA data highlight different trajectories according to where foreigners originate from: currently, the vast majority of refugees of working age are jobseekers or are under-active as defined by the BA, whereas the majority of non-refugees who entered the country during the period 2015-2017 are employees subject to social contributions (*Table 2*). Thus, since 2015, the integration of non-refugee foreigners has continued as before, whereas refugees are still largely on the fringes of the German labour market.

However, although their integration is slow, it is ongoing: the number of refugees who are employees and paying social contributions increased from 70,000 at the beginning of 2015 to about 160,000 by mid-2017. In addition, around 350,000 refugees who have entered the territory since 2015 are under-active and are therefore in precarious forms of work (mainly mini-jobs). Although some of them are already counted as being active they may increase their contribution to the supply of labour in the coming months. Lastly, the number of people arriving from war-torn countries who are looking for work (but who are mainly inactive within the meaning of the ILO) increased by 390,000.

**4 – Change in the labour force in Germany**

year–on–year changes in % and contributions in point




Note: The employment serie derived from the LFS on households is more volatile than that of accounts from company administrative sources. Nevertheless, the trend over the last seven years is similar in both. Unemployment in the national accounts is taken from the LFS: the difference in employment numbers as measured in the LFS and in the national accounts results in a difference in the labour force.

*Source: Destatis*

**Table 1 - Breakdown of variation in foreign population aged between 15 and 64 in Germany (LFS)**

*in thousands people*

| | Variations between Q4 2014 and Q1 2011 (1) | Variations between Q2 2017 and Q1 2015 (2) | Increase at the period 2 (10 quarters) compared to the period 1 (16 quarters) (2)–(1)*10/16 |
|---|---|---|---|
| Foreign population | 929 | 1,240 | 659 |
| Labour force | 745 | 713 | 247 |
| *in employment* | *778* | *709* | *222* |
| *unemployed (ILO definition)* | *–33* | *4* | *25* |
| Inactive population | 184 | 527 | 412 |

*Source: Destatis*

All in all, depending on whether the LFS or the BA data are used, there should be about 400,000 people to be gradually integrated into the German labour force. The German government is relatively optimistic that the majority of refugees will find a job in the next five years[4]. Assuming that 400,000 refugees can be integrated into the labour market in 4 years at a rate of 100,000 per year between now and 2021, then refugees would contribute 0.2 to 0.3 points on average to the annual growth of the labour force. Given that since 2010 migrants from other countries (especially Eastern Europe) have already contributed +0.5 points, the German labour force looks set to continue to increase at about 0.8% per year, simply as a result of immigration.

This integration is made possible by the very favourable context of the German labour market: the ILO unemployment rate stands at 3.4%, its lowest level since reunification, and never have so many of the enterprises interviewed in the business tendency surveys said they had difficulties with recruitment (*Graph sheet Germany*). The arrival of refugees is therefore a positive supply shock for the German economy, at precisely the time when the country is considerably constrained in terms of labour supply. ■

4. "Bund kalkuliert bis 2020 mit rund 94 Milliarden Euro Kosten", *Der Spiegel*, May 2016

**Table 2 - Breakdown of population according to employment situation, as defined by the German Federal Employment Agency**

*in thousands people*

| | Variations between June 2017 and January 2015 | Level in June 2017 |
|---|---|---|
| **Entitled to minimun coverage (*Grundsicherung*)** | **282** | **10,527** |
| Of which foreigners | 1,131 | 3,488 |
| *Of which refugees* | *1,156* | *1,512* |
| *Of which foreigners except refugees* | *–25* | *1,976* |
| Of which German | –867 | 6,981 |
| **Jobseekers (*Arbeitsuchende*)** | **–298** | **4,706** |
| Of which foreigners | 389 | 1,393 |
| *Of which refugees* | *394* | *508* |
| *Of which foreigners except refugees* | *–4* | *885* |
| Of which German | –696 | 3,298 |
| **Subject to social contributions (*Sozialversicherungspflichtige Beschäftigte*)** | **1,905** | **32,180** |
| Of which foreigners | 855 | 3,486 |
| *Of which refugees* | *86* | *157* |
| *Of which foreigners except refugees* | *769* | *3,330* |
| Of which German | 1,049 | 28,694 |
| **In under-activity (*Unterbeschäftigung*)** | **–336** | **3,482** |
| Of which foreigners | 311 | 1,050 |
| *Of which refugees* | *345* | *437* |
| *Of which foreigners except refugees* | *–34* | *613* |
| Of which German | –655 | 2,418 |

*Source: German Federal Employment Agency (BA)*

# Italy

## A growth rate not seen since 2010

*In Q3 2017, Italian activity picked up (+0.4% after +0.3% in Q2), thanks to investment. Growth should remain solid through to mid-2018, at +0.4% per quarter, driven by household consumption. As an annual average, GDP is expected to rise by 1.5% in 2017, a growth rate not seen since 2010.*

### Household consumption is set to remain solid, driven by the rise in employment

Household consumption picked up slightly in Q3 (+0.3% after +0.2%) and should remain lively at the end of 2017 (+0.5%), driven by still-high consumer confidence (*Graph*). In H1 2018, employment is likely to maintain its momentum (+0.4% per quarter). After stabilising at around 11.2% in Q3, the unemployment rate is expected to drop to 10.5% in mid-2018. It remains high, however, limiting employees' bargaining power: real wages should barely rise through to mid-2018. In a context of inflation stabilising at around 1%, purchasing power is likely to rise by 0.3% to 0.4% per quarter, driven solely by employment, with fiscal policy becoming neutral after fostering purchasing power in 2017. Households are expected to reduce their precautionary savings a little more, and consumption should remain solid in H1 2018 (+0.4% per quarter).

### Construction investment is set to recover

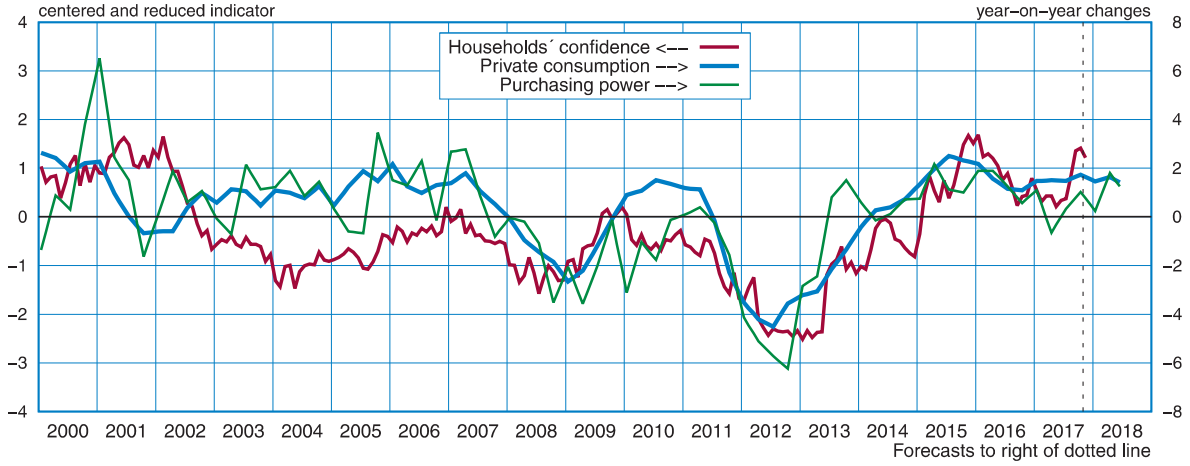
After stumbling in Q2 2017 (–0.3%), construction investment bounced back in Q3 (+0.3%). It is likely to gather pace through to mid-2018 (+0.5% per quarter), as the business climate is at a high level.

Equipment investment was exceptionally vigorous over the summer of 2017 (+8.2%). In reaction, it is expected to slip back at the end of 2017 (–2.0%) before increasing steadily in early 2018 (+1.2% per quarter). The conditions are indeed very favourable: industrialists' investment intentions are at their highest level in ten years, and the corporate self-financing ratio, at well above 100%, is at a twenty-year high. In this way, the mid-year growth overhang for equipment investment in 2018 is expected to reach +5.4%.

### Foreign trade should make a neutral contribution to activity

Through to mid-2018, exports are likely to benefit from the buoyancy of world demand but could be slightly held back by the recent appreciation of the euro. They should rise at a rate of approximately +0.8% per quarter and their growth overhang for 2018 is expected to be +2.8% by mid-year, after +5.1% in 2017. Imports should rise at a similar rate, boosted by domestic demand. Consequently, the contribution of foreign trade is likely to be neutral, but the trade surplus is expected to decline slightly due to the rise in oil prices; nevertheless, it is set to remain high, at around 2.6% of GDP. ■

**Household consumption should remain solid**




*Sources: Istat, DG Ecfin, INSEE forecast*

# Spain

## *Growth should resist the Catalonian crisis*

*In Spain, activity remained vigorous in Q3 2017, although slightly down on the previous quarter (+0.8% after +0.9%). Activity should remain solid until June 2018, driven by the buoyancy of domestic demand. The contribution of foreign trade should weaken somewhat due to the appreciation of the euro. All in all, the mid-year growth overhang for 2018 is expected to stand at +2.5% after +3.1% in 2017.*

### The business climate remains positive despite the Catalonian political crisis

In November the business climate remained positive, in both services and the manufacturing industry, and even continued to pick up in construction (*Graph*). Growth should therefore remain high in Q4 (+0.8%) despite the political crisis in Catalonia. As an annual average, activity should slow only very slightly (+3.1% in 2017, after +3.3%). In H1 2018, activity is set to remain robust (+0.8% in Q1 and then +0.7%) and the growth overhang should climb to +2.5% by mid-2018.

### Consumption is not expected to gather pace despite a drop in inflation

Household consumption continued to rise sharply in Q3 2017 (+0.7%). Consumer confidence indices suggest that it will remain virtually stable in Q4. However, inflation, which rose sharply in Spain in early 2017, has undermined purchasing power: since the start of the year, only the drop in the savings ratio has enabled households to maintain their consumption rate. Through to mid-2108, inflation should edge down slightly to +1.6% against +2.1% one year earlier, but households are likely to use this as an opportunity to partially rebuild their savings, and their expenditure is not expected to pick up.

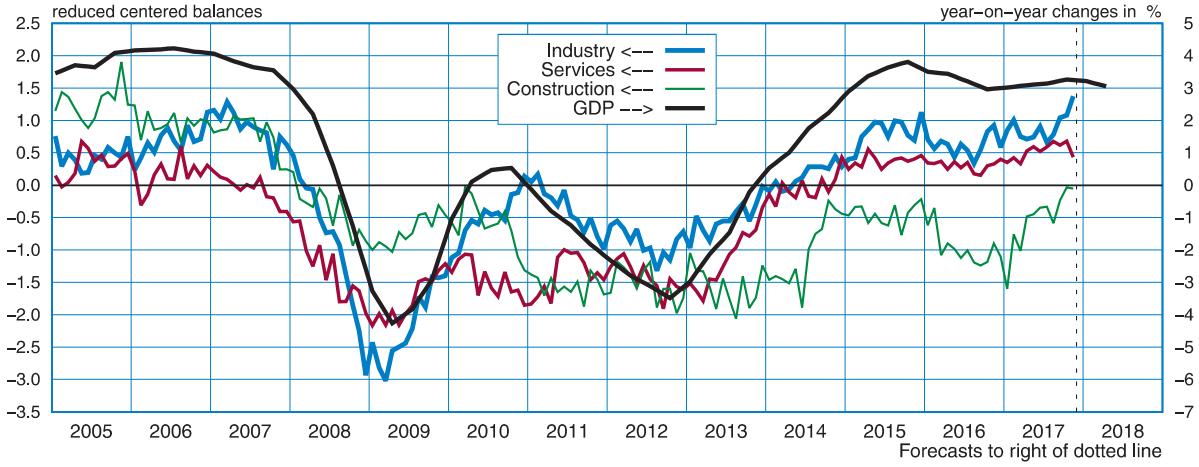
### Investment is set to remain very vigorous

Investment in capital equipment bounced back in Q3 2017 (+2.5%) after declining in Q2 (–0.1%). With the investment rate nearing its 2008 level, the catch-up effect is expected to run out of steam, all the more so since the rise in corporate taxes announced in late 2016 (approximately +4 billion euros for 2017) is likely to affect their savings. In this way, investment should slow slightly in late 2017 and early 2018, while remaining very vigorous (+1.0% in each quarter). In construction, non-residential investment should remain brisk, reflecting the previous rise in building permits.

### The contribution of foreign trade to growth should decline slightly

Thanks to the ramp-up of world demand and gains in market shares, foreign trade should continue to foster growth but to a lesser extent than in 2017 due to the appreciation of the euro. The contribution of foreign trade to the growth overhang for 2018 is expected to be +0.3 points, after +0.5 points throughout 2017 as a whole, and +0.7 points in 2016. ■

**The business climate remains favourable despite the political crisis in Catalonia**




*Sources: MINETUR, SIMPLE LOGICA, INE, INSEE forecast*

# United Kingdom

## *Temporary acceleration in a wait-and-see climate*

*In the United Kingdom activity picked up slightly, to +0.4% in Q3 2017, after +0.3% in both Q1 and Q2. Household consumption received a temporary boost (+0.6% after +0.2%) from a rise in new vehicle registrations. Activity should continue to grow by 0.4% at the end of 2017, before slowing to +0.3% per quarter in H1 2018. Indeed, the past drop in purchasing power should continue to hold back household consumption, with households slowly building up their savings. On an annual average basis, growth is nonetheless expected to come to +1.5% in 2017, after +1.8% in 2016, and the mid-year growth overhang for 2018 is likely to be +1.1%.*

### Temporary rebound in consumption amid the slowdown

In Q3 2017, British activity would appear to have accelerated slightly (+0.4% after +0.3%), buoyed by private consumption (+0.6% after +0.2%). Indeed, new vehicle registrations bounced back (+4.2%) during the summer. They had plummeted by 12.4% in Q2 after an increase in the tax on new vehicles. Consumption is expected to slow again from Q4 2017. Purchasing power is likely to rise, however, bolstered by the buoyancy of employment and the gradual slowdown in prices. However, households are likely to gradually build up their savings ratio, which should reach 5.4% in mid-2018 after falling to 3.8% in early 2017 (*Graph*).

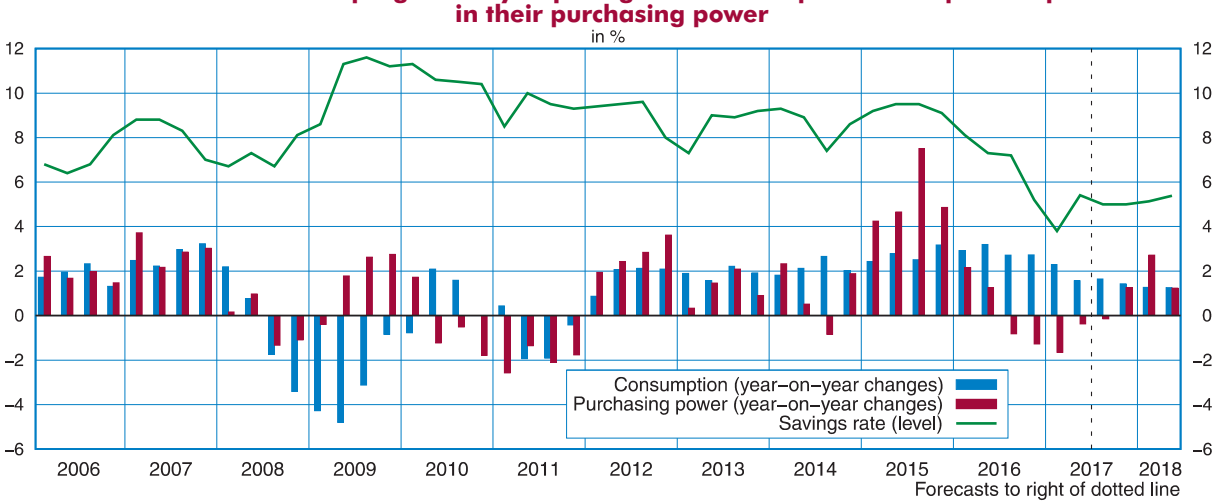
### The wait-and-see attitude to Brexit should slow down private investment

For companies, meanwhile, investment slowed during the summer (+0.2% after +0.5%), but should remain resilient in late 2017 (+0.7%), as suggested by the improvement in order books and investment intentions, according to surveys conducted by the Bank of England. However, the uncertainties associated with the UK's exit from the European Union are expected to weigh down on corporate investment in H1 2018 (+0.5% per quarter). Meanwhile, household investment picked up slightly in the summer (+0.4% after –2.9%) but it is likely to slip back in this climate of uncertainty (–0.5% per quarter).

### Foreign trade is out of step with the rest of the EU

Lastly, exports declined in Q3 (–0.7% after +1.7%), and imports gathered pace (+1.1% after +0.2%), cutting GDP growth by 0.5 points. In reaction, exports are likely to bounce back in late 2017 and imports should stabilise. In early 2018, exports should continue to rise strongly (+0.8% per quarter) in line with world demand, and imports should increase at a more moderate level (+0.6% per quarter). The contribution of foreign trade should therefore be slightly positive, reflecting the divergence with the rest of the European Union. On an annual average basis, British growth is likely to reach +1.5% in 2017 after +1.8% in 2016. In 2018, the mid-year growth overhang is expected to be only +1.1%. ■

**Households are progressively adjusting their consumption to the past drop in their purchasing power**




*Source: ONS*

# United States

## *Purchasing power gets back on track*

*In Q3, activity remained very vigorous in the United States (+0.8%, as in Q2). Corporate consumption and investment remained solid. However, government expenditure stagnated once again and residential investment slipped back further.*
*Through to mid-2018, growth should remain strong (+0.8% and then +0.6% per quarter), driven by consumption, corporate investment and an upswing in government expenditure.*
*As an annual average, activity should accelerate in 2017, to +2.3% after +1.5% in 2016. The growth overhang for 2018 should climb to +2.2% by mid-year*

### Real wages and tax cuts should bolster consumption

In the United States, consumption slowed only very slightly in Q3, to +0.6% after +0.8%, despite the hurricanes in September. Employment is set to remain buoyant (+0.4% per quarter) and unemployment should stabilise at the level recorded in October (4.1%), the lowest since 2000. After two years of near-stagnation, real wages should gather a little momentum in 2018. Lastly, the tax reform adopted in December should lead to household tax cuts of around $35 billion (0.4 GDP points) in H1 2018. All in all, purchasing power is expected to gather pace in 2018: its mid-year growth overhang should stand at +1.8% after +1.2% in 2017. In its wake, household consumption should remain solid, at +0.7% in Q4 and then +0.5% but it is not expected to pick up further, with households gradually building up their savings (*Graph*).

After remaining slack during the summer, government expenditure is set to pick up through to mid-2018, all the more so since the federal government has released funds to assist the states hit hard by the hurricanes.

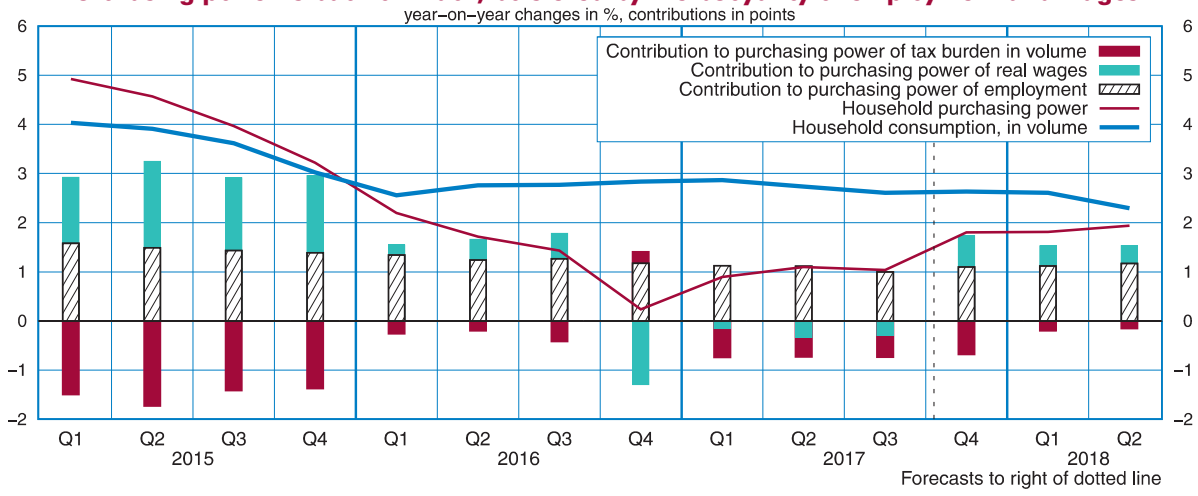
### Corporate investment drives growth

Corporate investment remained solid in Q3 (+1.2% after +1.6%). The business climate remains very favourable, particularly in industry. Corporate expenditure should accelerate gradually through to mid-2018 (+1.1% at the end of 2017, then +1.2% and +1.3%), bolstered by the margin rate stabilising at a high level. In addition, the tax reform provides for a reduction in corporation tax combined with a temporary additional depreciation allowance measure equivalent to 0.2 GDP points. On an annual average basis, corporate investment is expected to bounce back in 2017 (+4.6% after –0.6%), and its growth overhang for 2018 should stand at +4.0% by mid-year.

### Foreign trade should no longer hamper activity

Exports are set to remain vigorous, in line with world demand for American products. On average over the year, they are expected to gather pace sharply in 2017, to +3.2% after -0.3% in 2016. With a growth overhang for 2018 that should climb to +3.2% by mid-year, exports should gather pace throughout 2018 as a whole, as they will no longer by held back by the past appreciation of the dollar. As American imports should follow a similar pattern due to the momentum generated by domestic demand, foreign trade should no longer hold back American growth through to June 2018. ■

**Purchasing power is back on track, bolstered by the buoyancy of employment and wages**




*Source: U.S. Bureau of Economic Analysis*

# Japan

## *Consumption taking off again*

*In Q3 2017, Japanese activity remained vigorous (+0.6%) after a sharp acceleration in Q2 (+0.7%). It was driven by foreign trade (contributing +0.5 points) whereas domestic demand remained at a standstill (+0.1% after +1.0%) along with household and government expenditure. In reaction, activity is expected to slow at the end of 2017 (+0.2%), before increasing moderately in early 2018 (+0.3% each quarter): foreign trade is likely to no longer sustain activity but domestic demand, and consumption in particular, should hold firm.*

### Activity is set to slow slightly

In Q3, activity remained vigorous after gathering pace in the spring (+0.6% after +0.7%). The business climate remains favourable in both industry and services. In reaction, activity is expected to slow at the end of the year (+0.2%) and should remain lively in H1 2018 (+0.3% per quarter). Over 2017 as a whole, it is expected to accelerate sharply, to +1.8% after +0.9%, driven by a rebound in domestic demand and exports (*Graph*). Its growth overhang for 2018 should stand at +1.2% by mid-year.

### Domestic demand should be back on the rise

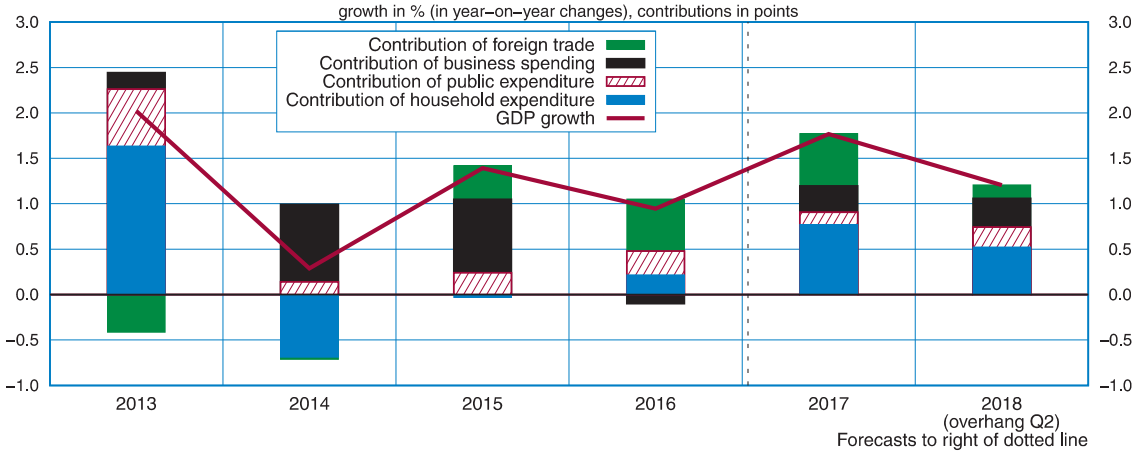
Employment should continue to rise (+0.1% at the end of the year and then +0.2% per quarter through to mid-2018) despite unemployment being at its lowest level since 1990, thanks to the rise in the labour force participation rate. With wages having picked up a little momentum in a context of near-zero inflation, household consumption is expected to rise steadily through to mid-2018 (+0.6% in Q4 after –0.5%, and then +0.4% per quarter). Over 2017 as a whole, it is expected to pick up quite substantially (+1.2% after +0.1%). Corporate investment is likely to be solid (+0.5% to +0.6% per quarter through to mid-2018), bolstered by an all-time high profit rate (12.0% of GDP). Lastly, government investment, after a sharp rise in the spring of 2017 under the impetus of the fiscal stimulus plan announced in late 2016, is expected to remain at a high level, despite dropping off in Q3. All in all, domestic demand should remain vigorous and continue to sustain Japanese activity.

### Foreign trade is expected to stop bolstering activity at the start of 2018

Exports bounced back in Q3 (+1.5% after –0.1%) with the upswing in Chinese imports. They should then rise moderately (+0.9% at the end of 2017, followed by +0.8% per quarter through to mid-2018). As an annual average, they should accelerate markedly in 2017 (+6.0% after +1.3%), but their mid-year growth overhang for 2018 (+2.8%) could point towards a slowdown, in line with slackening Chinese imports.

Imports declined in Q3 (–1.6% after +1.5%) with the slowdown in domestic demand. They are expected to recover at the end of the year (+1.0%), and should then remain vigorous (+1.0% per quarter). On an annual average basis, imports are likely to be in a much healthier position in 2017 (+2.6% after –1.9%), and their growth overhang for 2018 should stand at +2.1% by mid-year. After two years of very positive contributions, foreign trade should almost entirely cease to sustain activity. ■

**Domestic demand should take over from foreign trade in sustaining growth**




*Source: Cabinet Office of Japan*

# Emerging economies

## China slows down but the other BRIC countries bounce back

*In China, activity grew by 1.7% in Q3, at a constant pace since the start of the year. Imports are in much better shape after stalling in the spring, contributing to the upswing in world trade. Exports are at a standstill after accelerating strongly in Q2. Chinese activity is expected to slow down a little at the end of the year to +1.5%, in the wake of domestic demand, and should then grow by 1.6% per quarter through to mid-2018. On an annual average basis, growth is likely to be +6.8% in 2017, as in 2016, and the growth overhang for 2018 should stand at +5.3% by June.*
*In Brazil, Russia and India, the sharp drop in inflation brought about by the appreciation of the local currencies is facilitating the recovery of domestic demand, and consumption in particular. Nevertheless, the return of growth remains more tentative in Brazil than in Russia and, above all, in India. In Turkey, the business climate has picked up significantly after suffering from the consequences of the failed coup in mid-2016, and activity is likely to remain vigorous through to mid-2018. Lastly, the Eastern European countries are expected to maintain their buoyancy, driven by demand from the Eurozone.*

### China: domestic demand has been slowing since the spring

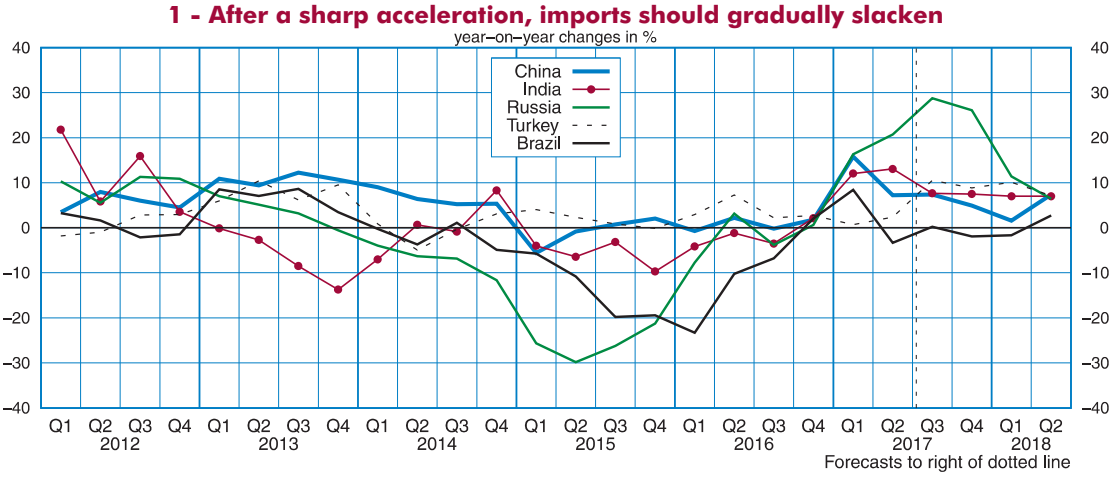
In China, activity was reported to have grown by 1.7% in Q3, as it has been since the start of 2017. It should slow down slightly to +1.5% between now and the end of the year, in the wake of domestic demand. On an annual average basis, it is set to increase by 6.8% – a very similar rate to the last two years. Its growth overhang for 2018 should stand at +5.3% by mid-year.

Domestic demand slackened again in the summer, coming to a standstill after three quarters of acceleration through to the start of 2017. Since the summer, the business climate indicators have been hovering barely above their expansion threshold in the manufacturing sector. Corporate profits, which bounced back dramatically in late 2016 and early 2017, after dropping in 2015 and growing only weakly in 2016, are generally in a slowdown phase, due to public-sector firms in particular. In real estate, sales continue to slow down sharply, as is the case for housing starts, and prices have been plummeting for several quarters. Retail sales are also slowing and consumer prices have been picking up over the last two quarters. They had significantly declined at the beginning of the year, due to their food component in particular.

Exports fell back in Q3 (–2.9%), in reaction to a strong acceleration in the spring. They should gradually recover, bolstered by world demand for Chinese products and by the stabilisation of the yuan after several months of appreciation; they should stabilise at the end of the year and then increase by 1.5% per quarter through to mid-2018. However, as has been the case overall for the last three years, China is not expected to gain any more market share.

Chinese imports gained momentum over the summer (+1.2%). They had slumped in the spring, to –3.5%, after rising strongly for four consecutive quarters. They should gather pace through to mid-2018, to +2.0% per quarter, as they will no longer be adversely affected by the drop in the

**1 - After a sharp acceleration, imports should gradually slacken**




*Sources: NBSC, Rosstat, TurkStat, MOSPI, IBGE, INSEE calculations*

share of assembly trade. On an annual average basis, imports are set to bounce back in 2017, to +8.7% after +0.8%, making China one of the main drivers of the recovery of world trade this year. Their growth overhang for 2018 – expected to stand at +4.8% by mid-year – could indicate a gradual slowdown in Chinese imports, in the wake of domestic demand (*Graph 1*).

### Russian imports are set to slacken after the rebound induced by the recovery

Growth picked up in Q3 (+0.7% after +0.1%). It should remain steady through to mid-2018: the business climate is favourable and the drop in inflation triggered by the appreciation of the ruble (*Graph 2*) is sustaining the rise in purchasing power. After a post-crisis rebound (+14.9% in Q1, Focus), imports slowed significantly in Q2 (+6.2%). This deceleration is expected to continue, settling at a rate more in line with activity. In 2017, activity is likely to pick up, to +1.6% as an annual average, and the growth overhang should stand at 1.8% by mid-2018.

### In India, growth should rise after a slowdown in early 2017

In H1 2017 growth slowed in India, following the surprise demonetisation of 500- and 1,000-rupee banknotes in late 2016. In Q3, the implementation of a single VAT regime on 1st July prompted a wait-and-see attitude, and drove producers to sell off their stocks. Industrial output edged down in June and July, but bounced back in August, and purchasing managers surveys point to an improvement in activity to come. From the end of 2017 onwards, India is expected to regain a vigorous growth rate, driven mainly by substantial public stimuli. Indian growth is likely to pick up a little in early 2018.

### Brazil: activity is set to rise again gradually

After two years of recession, Brazilian growth turned around in H1 2017. The drop in inflation continues to boost purchasing power and retail sales. The business climate improved significantly in both industry and services, and industrial production continued to progress over the summer. Activity is expected to accelerate at the end of 2017 and this should continue at a sustained pace through to mid-2018. In 2017, positive growth (+1.1%) should return to Brazil, and the growth overhang by mid-2018 is likely to be significantly higher (+1.6%).

### Investment should remain vigorous in Turkey

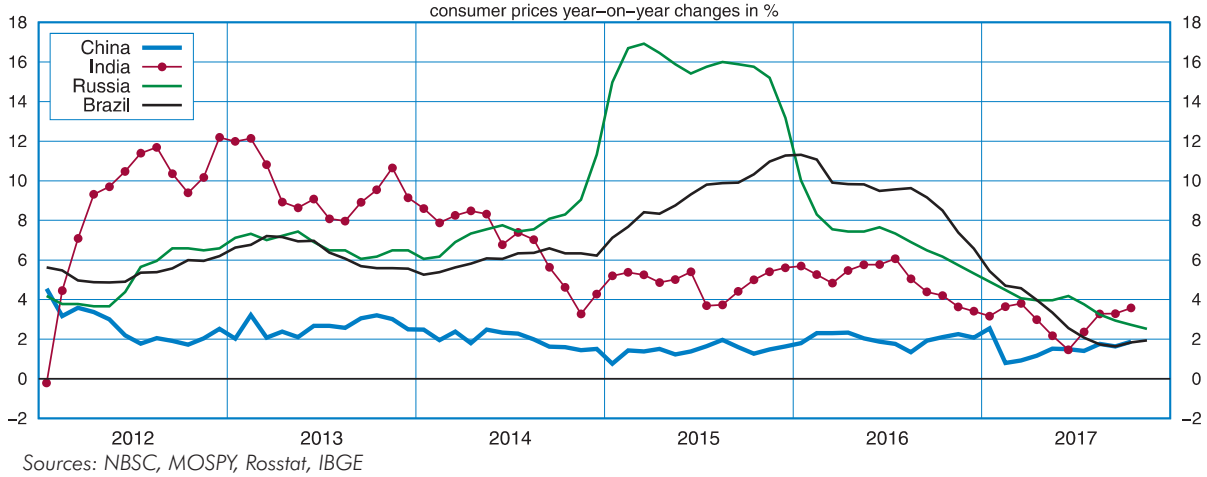
After the attempted coup in mid-2016 that brought production to a temporary halt, growth has returned. In H1 2017 growth remained buoyant thanks to government spending. The business climate remained positive in the summer, with industrial production continuing to rise. In the wake of domestic demand, imports are likely to remain vigorous but should slow down slightly in early 2018. From late 2017 through to mid-2018, activity is set to rise at a sustained rate. As annual average, growth is expected to reach +6.0% in 2017, and the growth overhang for 2018 should increase to +2.8% by mid-year.

### CEEC: growth holds firm

In H1 2017, growth accelerated to +1.3% per quarter in the Central and Eastern European Countries (CEEC), in the wake of industrial production. Growth should continue at a vigorous rate, driven by demand from the Eurozone. As annual average in 2017, GDP is expected to accelerate to +4.6%, and the mid-year growth overhang for 2018 should rise to +3.5%. ■

**2 - Inflation is falling in Russia and Brazil**

consumer prices year–on–year changes in %




*Sources: NBSC, MOSPY, Rosstat, IBGE*

## The embargo accounts for about half of the decline in Russian imports from the European Union

Between 2013 and 2016, Russian imports by volume shrank by 32.5% according to the national accounts. Part of the reason for this decline is the Russian economic crisis: it was caused by the fall in oil prices in 2015, and has resulted in a severe recession and a fall in domestic demand. It is also the result of the sharp depreciation of the rouble which raised the price of imports, making them less attractive for Russian consumers. In addition, the embargo on food products from the European Union (EU), the United States and Australia from Q3 2014 onwards has also affected imports, and led in return to economic sanctions by the EU, especially on arms, energy and the financial sector. As a result of these different factors, the decline in Russian imports has affected all of its partners and all types of imported product, although to varying degrees.

### Russian imports from the countries under embargo fell by almost half, ten points more than for other partners

All sectors combined, and according to data from UNCTAD (see Sources), Russian imports of goods from China declined by 23.7% in value between 2013 and 2016, from Brazil by 22.0% and from the rest of South America by 25.6% (*Graph 1*). The drop in imports was significantly greater for countries targeted by Russian sanctions: over the same period, the EU lost 47.9% of its exports to Russia, Australia lost 41.9% and the United States 39.5%.

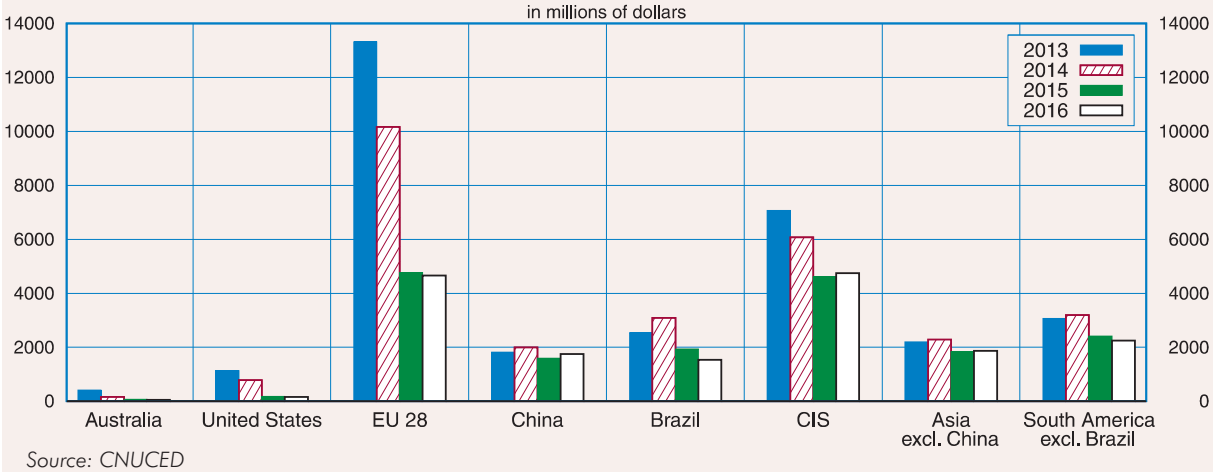
Russian imports of beverages and food products, which were targeted by the embargo, have been particularly badly hit, at –45.9% for all partners, which represents a cumulated fall of $17.1 billion over the period. However, they fell more than twice as fast for the countries under embargo than for the rest of the exporting countries: the United States (–$1.0 billion) and Australia (–$360 million) saw their food exports to Russia drop by over 80% and the EU by 65% (or –$8.7 billion), against –31.7% on average for the other countries (–$7.1 billion).

Among Europe's leading suppliers of agrifood to Russia, Germany is the foremost European exporter of food products and beverages to this country, and has seen its exports fall by more than half. Food exports from the Netherlands, the second exporter, and France, fifth, declined by more than 60% between 2013 and 2016. Finally, Russian food imports from Poland, the country's third largest supplier, and Lithuania, fourth, decreased by more than three quarters.

### The decline in imports from the EU has affected all products

The decrease in Russian imports has also affected products not placed under embargo. Imports of European transport equipment shrank by 51.8% between 2013 and 2016 and other manufactured goods by 44.9%. On average, this is a sharper downturn than for imports from other Russian partners, (–39.1% for transport equipment and –40.5% for other manufactured goods), suggesting that purchases from Europe have been particularly neglected (*Graph 2*). Thus the decline in Russian imports from the EU was 11.points higher than the total decline in imports: the greatest difference did indeed concern the food sector (–30 points), but also transport products (–13 points) and, to a lesser extent, other manufactured products (–4 points).

**1 - Russian imports of food and beverages by country of origin**




*Source: CNUCED*

To account for this decline, the factors mentioned in the introduction were probably at work: the fall in domestic demand generated by the Russian economic crisis of 2015, decline in price-competitiveness of European products on the Russian market due to the depreciation of the rouble against the euro, but also to the cooling of political relations between Russia and the EU.

**An econometric model is used to identify the respective influences of the embargo and purely economic factors**

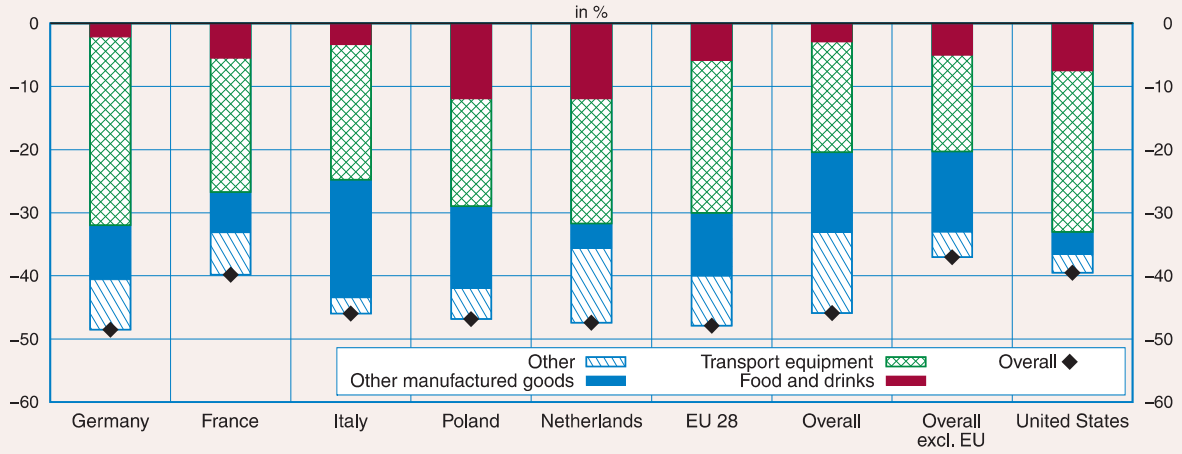
To go further and in particular to identify specific contributions of the exchange rate against the euro, Russian imports by volume from the European Union can be modelled using an error correction model. The estimate is carried out in a single step and the response forces are significant within the meaning of Ericsson and MacKinnon (2002) (see *Method*).

Using econometrics, a cyclical factor was revealed (elasticity of GDP close to 1 in the long term but greater in the short term), a contribution from relative import prices to capture the price-competitiveness effect, and a binary variable starting from 2014 to capture the decline linked specifically with the embargo and the cooling of relations between the EU and Russia (*Graph 3*).

**The Russian embargo appears to have restricted European Union exports to Russia by €10 billion annually compared with 2013**

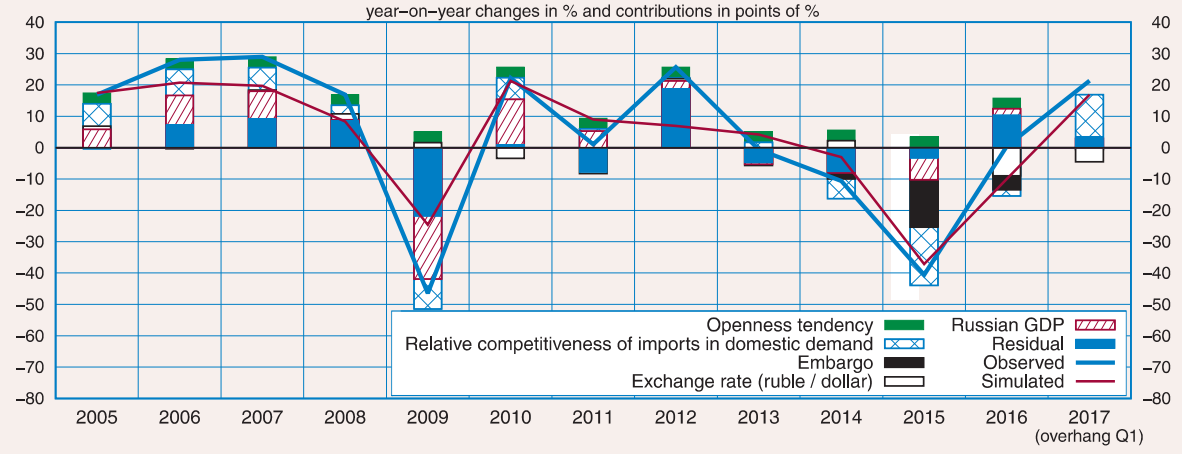
According to this model, in 2014, the introduction of the embargo appears to have accounted for the removal of 1.9 points from Russian imports from the EU, of a total decline of 9.9%. Then in 2015, Russian sanctions appear to have contributed around 13.9 points of the 33.4% drop in imports, or twice as much as the decrease in domestic demand generated by the Russian crisis, and one and a half times more than the increase in the price-competitiveness of domestic products compared with imports. Finally, in 2016, the effect of the embargo appears to have eased: –4.4 percentage points, while imports stabilised (+0.3%). In 2017, the embargo seems to have still had a slight effect on the annual growth overhang for imports.

**2 - Change in Russian imports from European Union countries and contribution by sector between 2013 and 2016**




*Source: CNUCED*

**3 - Equation of Russian imports from the European Union**




*Sources: IMF, Rosstat, INSEE calculations*

All in all, at the start of 2017, Russian imports from the EU declined in volume by 39.9% compared with 2013, of which 19 points are probably linked with the embargo, or the equivalent of €10 billion over a full year. This means that about half of the collapse of European sales to Russia between 2013 and the beginning of 2017 was due to cyclical causes (income slashed by the collapse in oil prices, the rouble and national activity) but that the other half was probably linked with geopolitical causes. In the case of France, geopolitical factors appear to have led to an average loss of about €1.5 billion per year of exports to Russia between 2013 and the beginning of 2017. ■

## Method

To identify the contributions of the Russian embargo, the fall in domestic demand generated by the Russian crisis of 2015, and the gain in competitiveness of domestic production over imports, an error correction model was estimated. The embargo was modelled using a dummy variable with a value of 1 in Q3 2014. As it was not possible to construct a weighted global demand that takes into account the composition of the demand, this was measured from the Russian GDP. The relative competitiveness of imports was measured using the ratio of the import deflator to consumer prices.

The equations obtained were as follows (Student statistics are given in brackets below the relevant coefficients):

$$\Delta\_Importations\_UE28_t = \underset{(-2,4)}{-0,259} - \underset{(-5,3)}{0,357} \times Importations\_UE28_{t-1} + \underset{(5,3)}{0,357} \times PIB_{t-1} - \underset{(-1,5)}{0,043} \times Rouble\_Dol_{t-1}$$

$$- \underset{(-1,7)}{0,080} \times Embargo_{t-1} - \underset{(-5,5)}{1,808} \times Compétitivité_{t-1} + \underset{(2,1)}{0,003} \times Trend + \underset{(4,9)}{2,820} \times \Delta\_PIB_t + \underset{(2,1)}{0,269} \times \Delta\_Rouble\_Dol_t$$

$$- \underset{(-6,2)}{4,215} \times \Delta\_Compétitivité_t$$

$$R^2 = 0.62$$

Estimation period : Q1 1995 - Q3 2016

where:
- *Importations_UE28* are Russian imports from the European Union by volume;
- *PIB* is Russian GDP by volume;
- *Rouble_Dol* is the exchange rate between the rouble and the dollar;
- *Embargo* is a dummy variable with a value of 1 in Q3 2014;
- *Competitiveness* is the import deflator divided by the consumer price index.

Imports, GDP and the exchange rate are expressed in logarithms and the coefficients can be interpreted approximately as elasticities.

The operator Δ shows that the associated variable appears with quarterly variations.

## Sources

Import statistics by country and by product were obtained using data from the United Nations Conference on Trade and Development (UNCTAD). They are expressed in current dollars and are produced from customs data from each country.

The import data used in the econometric models derive from the International Monetary Fund (IMF) which estimates them by value. They are converted into data by volume using the deflator produced by Rosstat, assuming that the deflator is the same for all countries of origin, excluding exchange rates.

# Statistical French Appendix

## Goods and services: sources and uses at chain-linked previous year prices

*billion euros and percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Gross domestic product (GDP)** | 529.3 | 529.0 | 529.6 | 532.5 | 535.3 | 538.5 | 541.4 | 544.8 | 547.4 | 549.7 | 2120 | 2160 | |
| % change | 0.6 | –0.1 | 0.1 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 1.1 | 1.9 | 1.7 |
| Imports | 174.6 | 172.9 | 177.5 | 179.0 | 181.1 | 181.6 | 186.7 | 187.1 | 188.6 | 190.2 | 704.1 | 736.5 | |
| % change | 0.5 | –1.0 | 2.6 | 0.9 | 1.2 | 0.3 | 2.8 | 0.2 | 0.8 | 0.8 | 4.2 | 4.6 | 3.1 |
| Total resources | 1165 | 1161 | 1167 | 1176 | 1184 | 1192 | 1204 | 1212 | 1220 | 1226 | 4669 | 4793 | |
| % change | 0.5 | –0.4 | 0.6 | 0.8 | 0.7 | 0.7 | 1.0 | 0.7 | 0.6 | 0.5 | 1.5 | 2.6 | 2.2 |
| Household consumption expenditure | 283.0 | 284.1 | 283.5 | 285.5 | 285.7 | 286.6 | 288.3 | 289.0 | 289.9 | 290.9 | 1136 | 1150 | |
| % change | 1.3 | 0.4 | –0.2 | 0.7 | 0.1 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 2.1 | 1.2 | 1.1 |
| General government consumption expenditure* | 138.8 | 139.2 | 139.7 | 140.1 | 140.6 | 141.2 | 141.9 | 142.3 | 142.8 | 143.2 | 557.8 | 566.0 | |
| % change | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.2 | 0.4 | 0.3 | 1.2 | 1.5 | 1.1 |
| General government individual consumption expenditure | 84.2 | 84.5 | 84.9 | 85.2 | 85.5 | 85.9 | 86.4 | 86.6 | 86.9 | 87.2 | 338.8 | 344.4 | |
| % change | 0.4 | 0.3 | 0.5 | 0.3 | 0.4 | 0.4 | 0.6 | 0.3 | 0.4 | 0.3 | 1.5 | 1.6 | 1.2 |
| Collective consumption expenditure | 43.8 | 43.9 | 43.9 | 44.1 | 44.2 | 44.4 | 44.6 | 44.7 | 44.9 | 45.0 | 175.8 | 178.0 | |
| % change | 0.1 | 0.2 | –0.1 | 0.5 | 0.2 | 0.5 | 0.4 | 0.2 | 0.5 | 0.2 | 0.7 | 1.2 | 1.1 |
| Gross fixed capital formation (GFCF) | 115.7 | 115.9 | 116.1 | 116.8 | 118.5 | 119.8 | 120.9 | 122.2 | 123.5 | 124.5 | 464.5 | 481.5 | |
| % change | 1.0 | 0.1 | 0.2 | 0.6 | 1.5 | 1.1 | 0.9 | 1.1 | 1.0 | 0.8 | 2.7 | 3.7 | 3.2 |
| *of which: Non-financial enterprises (incl. unincorporated enterprises)* | *65.9* | *65.8* | *65.7* | *66.2* | *67.6* | *68.4* | *69.2* | *70.0* | *70.8* | *71.5* | *263.6* | *275.1* | |
| *% change* | *1.6* | *–0.2* | *0.0* | *0.7* | *2.1* | *1.2* | *1.1* | *1.2* | *1.1* | *0.9* | *3.4* | *4.4* | *3.7* |
| *Households* | *25.3* | *25.5* | *25.7* | *26.1* | *26.5* | *26.9* | *27.2* | *27.4* | *27.6* | *27.8* | *102.6* | *107.9* | |
| *% change* | *0.7* | *0.7* | *1.0* | *1.3* | *1.6* | *1.4* | *1.1* | *1.0* | *0.8* | *0.6* | *2.4* | *5.2* | *2.9* |
| *Government* | *18.4* | *18.5* | *18.4* | *18.2* | *18.1* | *18.1* | *18.1* | *18.2* | *18.4* | *18.6* | *73.5* | *72.6* | |
| *% change* | *–0.8* | *0.2* | *–0.5* | *–0.7* | *–0.8* | *0.2* | *–0.2* | *0.7* | *1.1* | *0.9* | *–0.1* | *–1.2* | *2.3* |
| Exports | 158.5 | 158.1 | 159.4 | 161.4 | 160.3 | 163.8 | 165.5 | 168.6 | 169.8 | 170.2 | 637.4 | 658.2 | |
| % change | 0.5 | –0.2 | 0.8 | 1.3 | –0.7 | 2.2 | 1.1 | 1.8 | 0.7 | 0.2 | 1.9 | 3.3 | 3.4 |
| **Contributions to GDP growth: (in percentage points)** | | | | | | | | | | | | | |
| Domestic demand excluding inventory changes** | 1.0 | 0.3 | 0.0 | 0.6 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 2.0 | 1.8 | 1.6 |
| Inventory changes** | –0.4 | –0.6 | 0.7 | –0.2 | 0.7 | –0.5 | 0.5 | –0.3 | 0.0 | 0.2 | –0.1 | 0.5 | 0.1 |
| Net foreign trade | 0.0 | 0.3 | –0.6 | 0.1 | –0.6 | 0.5 | –0.6 | 0.5 | 0.0 | –0.2 | –0.8 | –0.5 | 0.0 |

Forecast

*Includes consumption expenditures by non-profit institutions serving households (NPISHs)
**Inventory changes include acquisitions net of sales of valuables

## Manufactured goods: sources and uses at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Output of the branches of activity | 0.3 | –0.8 | 0.7 | 0.7 | –0.1 | 0.8 | 0.8 | 1.5 | 0.6 | 0.3 | 0.8 | 1.9 | 2.5 |
| Value added | 0.4 | 0.0 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 1.5 | 0.6 | 0.6 | 1.4 | 1.7 | 2.6 |
| Intermediate consumption | 0.2 | –1.1 | 0.8 | 0.8 | –0.2 | 0.9 | 0.9 | 1.5 | 0.6 | 0.1 | 0.5 | 2.0 | 2.5 |
| Imports | 0.8 | –0.8 | 1.7 | 0.2 | 2.8 | 0.4 | 4.4 | 0.2 | 1.0 | 1.0 | 4.4 | 6.3 | 4.2 |
| Taxes on products excluding subsidies | 1.1 | –0.6 | 0.0 | 0.5 | 0.7 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 1.5 | 1.8 | 1.3 |
| Trade and transport margins | 0.9 | –0.3 | –0.5 | 1.0 | 0.4 | 0.7 | 0.5 | 0.6 | 0.5 | 0.4 | 1.5 | 1.8 | 1.7 |
| Total resources | 0.6 | –0.7 | 0.7 | 0.6 | 0.9 | 0.6 | 1.7 | 0.8 | 0.7 | 0.5 | 1.9 | 3.1 | 2.7 |
| Intermediate uses | 0.3 | –0.4 | 0.2 | 0.9 | 0.6 | 0.9 | 1.0 | 1.1 | 0.6 | 0.4 | 0.8 | 2.7 | 2.4 |
| Household consumption expenditure | 1.2 | 0.1 | –0.6 | 1.0 | 0.2 | 0.3 | 0.6 | 0.1 | 0.3 | 0.3 | 1.6 | 1.3 | 1.0 |
| General government individual consumption expenditure | 1.2 | 1.0 | 1.3 | 1.1 | 1.1 | 1.4 | 2.0 | 0.8 | 1.2 | 1.2 | 3.6 | 5.2 | 4.1 |
| Gross fixed capital formation (GFCF) | 2.9 | –0.5 | –2.0 | –0.2 | 1.8 | 0.5 | 1.5 | 1.4 | 1.5 | 1.3 | 6.1 | 2.0 | 4.5 |
| Non-financial enterprises (incl. unincorporated enterprises) | 3.2 | –1.5 | –2.6 | 0.6 | 3.0 | 1.2 | 2.0 | 1.5 | 1.3 | 1.1 | 4.2 | 4.1 | 4.6 |
| Other | 1.6 | 5.3 | 1.2 | –4.5 | –5.0 | –3.8 | –1.9 | 0.9 | 2.7 | 2.8 | 18.1 | –9.8 | 3.5 |
| *Contribution of inventory changes* to manufactured production* | *–0.2* | *–1.7* | *1.0* | *–1.0* | *2.1* | *–1.3* | *1.8* | *–0.6* | *0.2* | *0.5* | *–0.1* | *1.3* | *0.7* |
| Exports | 0.0 | 0.7 | 1.5 | 1.8 | –1.8 | 2.8 | 1.0 | 2.3 | 0.7 | –0.1 | 3.0 | 3.7 | 3.5 |
| Domestic demand excluding inventory changes* | 0.9 | –0.2 | –0.3 | 0.8 | 0.6 | 0.7 | 0.9 | 0.7 | 0.6 | 0.5 | 1.6 | 2.2 | 2.1 |

Forecast

*Changes in inventories include acquisitions net of sales of valuables

## Goods and services: sources and uses, chain-linked previous year prices index

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Gross domestic product (GDP) | 0.1 | –0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 | 0.4 | 0.3 | 0.4 | 0.8 | 0.9 |
| Imports | –2.0 | 0.5 | 0.5 | 1.1 | 1.6 | –0.8 | –0.3 | 0.9 | 0.2 | 0.2 | –2.4 | 2.3 | 0.6 |
| Total resources | –0.6 | 0.1 | 0.3 | 0.5 | 0.7 | –0.2 | –0.1 | 0.6 | 0.4 | 0.2 | –0.6 | 1.2 | 0.9 |
| Household consumption expenditure | –0.2 | 0.1 | 0.1 | 0.3 | 0.6 | –0.1 | 0.1 | 0.5 | 0.6 | 0.4 | –0.1 | 0.9 | 1.3 |
| General government consumption expenditure | –0.1 | 0.0 | 0.2 | 0.1 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.5 | 0.2 |
| Gross fixed capital formation (GFCF) | –0.1 | 0.1 | 0.4 | 0.2 | 0.5 | 0.3 | 0.1 | 0.5 | 0.4 | 0.3 | 0.5 | 1.3 | 1.2 |
| *of which: Non-financial enterprises (incl. unincorp. enterprises)* | *0.0* | *0.1* | *0.3* | *0.2* | *0.4* | *0.3* | *0.0* | *0.4* | *0.4* | *0.2* | *0.6* | *1.0* | *1.0* |
| *Households* | *–0.1* | *0.3* | *0.6* | *0.2* | *0.5* | *0.5* | *0.4* | *0.4* | *0.6* | *0.6* | *0.8* | *1.8* | *1.7* |
| Exports | –1.3 | –0.5 | 0.4 | 1.0 | 0.9 | –0.3 | –0.5 | 0.7 | 0.4 | 0.2 | –1.7 | 1.4 | 0.7 |
| Domestic demand excluding inventory changes* | –0.2 | 0.1 | 0.2 | 0.2 | 0.5 | 0.0 | 0.1 | 0.4 | 0.4 | 0.3 | 0.1 | 0.9 | 1.0 |

Forecast

*Changes in inventories include acquisitions net of sales of valuables

## Manufactured goods: sources and uses, chain-linked previous year prices index

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Output of the branches of activity | –1.3 | –0.1 | 0.2 | 0.9 | 1.0 | –0.1 | –0.1 | 0.7 | 0.3 | 0.2 | –2.0 | 1.7 | 0.9 |
| Value added | –0.5 | –1.1 | –0.1 | 0.8 | 0.5 | 0.3 | 0.2 | 0.4 | 0.0 | 0.1 | –1.2 | 1.2 | 0.5 |
| Intermediate consumption | –1.7 | 0.3 | 0.4 | 0.9 | 1.1 | –0.3 | –0.2 | 0.9 | 0.5 | 0.2 | –2.3 | 2.0 | 1.1 |
| Imports | –1.6 | 0.2 | 0.6 | 1.0 | 1.2 | –0.6 | –0.3 | 0.6 | 0.1 | 0.1 | –2.2 | 1.9 | 0.3 |
| Total resources | –1.1 | 0.1 | 0.3 | 0.8 | 0.9 | –0.3 | –0.1 | 0.7 | 0.5 | 0.2 | –1.6 | 1.6 | 1.0 |
| Intermediate uses | –1.6 | 0.4 | 0.5 | 0.9 | 1.1 | –0.3 | –0.1 | 0.7 | 0.6 | 0.2 | –2.3 | 2.0 | 1.1 |
| Household consumption expenditure | –0.6 | 0.3 | –0.1 | 0.3 | 0.7 | –0.3 | 0.0 | 0.8 | 0.6 | 0.5 | –0.7 | 1.0 | 1.6 |
| General government individual consumption expenditure | –0.3 | –0.9 | –0.8 | –0.5 | –0.4 | –1.0 | –0.7 | –0.4 | –0.4 | –0.4 | –2.8 | –2.6 | –1.5 |
| Gross fixed capital formation (GFCF) | 0.0 | –0.2 | 0.3 | 0.1 | 0.2 | 0.3 | –0.3 | 0.3 | 0.2 | 0.1 | 0.0 | 0.6 | 0.4 |
| *of which: Non-financial enterprises (incl. unincorp. enterprises)* | *0.1* | *–0.1* | *0.4* | *0.1* | *0.2* | *0.3* | *–0.3* | *0.3* | *0.2* | *0.1* | *0.0* | *0.6* | *0.5* |
| *General government* | *–0.5* | *–0.3* | *–0.2* | *0.3* | *0.4* | *0.0* | *–0.7* | *0.1* | *0.1* | *0.1* | *0.8* | *0.2* | *–0.1* |
| Exports | –1.3 | –0.5 | 0.2 | 0.9 | 1.0 | –0.3 | –0.4 | 0.6 | 0.3 | 0.2 | –2.1 | 1.5 | 0.7 |
| Domestic demand excluding inventory changes* | –1.1 | 0.3 | 0.2 | 0.6 | 0.8 | –0.3 | –0.1 | 0.7 | 0.6 | 0.3 | –1.5 | 1.4 | 1.1 |

Forecast

*Changes in inventories include acquisitions net of sales of valuables

## Output by sector at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agriculture | –2.3 | –1.4 | –0.6 | 0.5 | 1.1 | 1.3 | 0.8 | 0.4 | 0.1 | 0.0 | –5.6 | 2.3 | 1.1 |
| Manufacturing | 0.3 | –0.8 | 0.7 | 0.7 | –0.1 | 0.8 | 0.8 | 1.5 | 0.6 | 0.3 | 0.8 | 1.9 | 2.5 |
| Energy, water and waste | 1.3 | 1.3 | –2.4 | 2.4 | –0.8 | 0.4 | 1.7 | –0.2 | 0.3 | 0.3 | 0.8 | 1.2 | 1.2 |
| Construction | 0.1 | –0.2 | 0.3 | 0.8 | 0.6 | 1.2 | 0.3 | 0.8 | 0.7 | 0.5 | 0.1 | 2.6 | 2.2 |
| Trade | 1.0 | –0.3 | –0.2 | 0.7 | 0.4 | 0.9 | 0.9 | 0.7 | 0.6 | 0.5 | 1.5 | 2.2 | 2.2 |
| Market services excluding trade | 0.5 | –0.3 | 0.4 | 0.7 | 1.0 | 0.7 | 0.7 | 0.8 | 0.6 | 0.6 | 1.3 | 2.8 | 2.2 |
| Non market services | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.3 | 0.2 | 1.0 | 1.3 | 1.0 |
| **Total** | **0.4** | **–0.3** | **0.2** | **0.7** | **0.6** | **0.7** | **0.7** | **0.8** | **0.6** | **0.4** | **0.9** | **2.3** | **2.0** |

Forecast

## Value added by sector at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agriculture | –4.1 | –2.7 | –1.2 | 0.6 | 1.7 | 1.8 | 1.2 | 0.6 | 0.3 | 0.3 | –9.8 | 2.9 | 2.0 |
| Manufacturing | 0.4 | 0.0 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 1.5 | 0.6 | 0.6 | 1.4 | 1.7 | 2.6 |
| Energy, water and waste | 1.9 | 1.3 | –3.0 | 2.0 | –1.2 | 0.3 | 1.2 | –0.2 | 0.3 | 0.3 | 1.2 | –0.2 | 1.0 |
| Construction | 0.0 | 0.1 | –0.1 | 0.6 | 0.4 | 0.9 | 0.4 | 0.6 | 0.6 | 0.4 | 0.1 | 1.8 | 1.8 |
| Trade | 0.9 | –0.4 | –0.3 | 0.5 | 0.2 | 0.7 | 0.7 | 0.7 | 0.4 | 0.3 | 1.1 | 1.3 | 1.6 |
| Market services excluding trade | 0.7 | –0.2 | 0.3 | 0.6 | 0.8 | 0.6 | 0.5 | 0.7 | 0.6 | 0.5 | 1.4 | 2.3 | 1.9 |
| Non market services | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.9 | 0.9 | 0.8 |
| **Total** | **0.5** | **–0.1** | **0.1** | **0.5** | **0.5** | **0.6** | **0.5** | **0.6** | **0.5** | **0.4** | **1.0** | **1.7** | **1.7** |

Forecast

## Investment (non-financial incorporated and unincorporated enterprises) at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Manufactured goods | 3.2 | –1.5 | –2.6 | 0.6 | 3.0 | 1.2 | 2.0 | 1.5 | 1.3 | 1.1 | 4.2 | 4.1 | 4.6 |
| Construction | 0.4 | 0.6 | –0.1 | 0.8 | 0.4 | 1.0 | 0.2 | 0.8 | 0.8 | 0.4 | 1.9 | 2.1 | 2.1 |
| Other | 1.0 | 0.3 | 2.2 | 0.7 | 2.4 | 1.2 | 1.0 | 1.3 | 1.2 | 1.1 | 3.7 | 5.9 | 3.8 |
| **Total** | **1.6** | **–0.2** | **0.0** | **0.7** | **2.1** | **1.2** | **1.1** | **1.2** | **1.1** | **0.9** | **3.4** | **4.4** | **3.7** |

Forecast

## Imports (CIF) at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agricultural goods | 4.6 | –0.4 | 5.1 | –0.4 | 0.0 | 1.3 | –2.0 | –1.0 | –1.0 | 0.0 | 7.2 | 1.9 | –2.4 |
| Manufactured goods | 0.8 | –0.8 | 1.7 | 0.2 | 2.8 | 0.4 | 4.4 | 0.2 | 1.0 | 1.0 | 4.4 | 6.3 | 4.2 |
| Energy, water and waste | –6.0 | –14.7 | 26.9 | 9.9 | –8.3 | 1.4 | –6.2 | –2.0 | 0.0 | –2.0 | 1.2 | 3.2 | –5.8 |
| Total goods | 0.3 | –1.7 | 3.3 | 1.0 | 1.8 | 0.5 | 3.6 | 0.0 | 0.9 | 0.8 | 4.2 | 6.0 | 3.5 |
| Total services | 0.7 | 1.0 | 0.8 | 1.1 | –0.6 | –0.8 | 0.6 | 0.8 | 0.8 | 1.0 | 3.9 | 0.8 | 2.2 |
| **Total*** | **0.5** | **–1.0** | **2.6** | **0.9** | **1.2** | **0.3** | **2.8** | **0.2** | **0.8** | **0.8** | **4.2** | **4.6** | **3.1** |

Forecast

*Including territorial correction

## Exports (FOB) at chain-linked previous year prices

*percentage changes from previous period and previous year*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agricultural goods | 6.5 | 0.8 | –17.6 | –4.2 | 2.5 | 3.9 | 7.5 | 2.0 | 2.0 | 1.0 | –6.6 | –3.7 | 9.0 |
| Manufactured goods | 0.0 | 0.7 | 1.5 | 1.8 | –1.8 | 2.8 | 1.0 | 2.3 | 0.7 | –0.1 | 3.0 | 3.7 | 3.5 |
| Energy, water and waste | –3.4 | –0.3 | 4.5 | –11.2 | 19.6 | 6.5 | 10.5 | 0.0 | 0.0 | 0.0 | –8.6 | 23.4 | 6.5 |
| Total goods | 0.1 | 0.7 | 0.9 | 1.3 | –1.3 | 2.9 | 1.3 | 2.2 | 0.7 | –0.1 | 2.4 | 3.8 | 3.8 |
| Total services | 2.6 | –2.3 | 0.5 | 0.8 | 0.8 | –0.2 | 0.2 | 0.8 | 0.8 | 1.0 | 2.6 | 1.2 | 2.2 |
| **Total*** | **0.5** | **–0.2** | **0.8** | **1.3** | **–0.7** | **2.2** | **1.1** | **1.8** | **0.7** | **0.2** | **1.9** | **3.3** | **3.4** |

Forecast

*Including territorial correction

## Changes in inventories at chain-linked previous year prices

*Contributions (in percentage points)*
*working-day and seasonally adjusted data*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agricultural goods | –0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | –0.1 | 0.1 | –0.1 |
| Manufactured goods | –0.1 | –0.6 | 0.4 | –0.4 | 0.7 | –0.4 | 0.6 | –0.2 | 0.1 | 0.2 | 0.0 | 0.4 | 0.2 |
| Energy, water and waste | –0.2 | –0.1 | 0.2 | 0.2 | –0.1 | –0.1 | –0.1 | –0.1 | 0.0 | 0.0 | 0.0 | 0.0 | –0.1 |
| Other (construction, services) | –0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **Total** | **–0.4** | **–0.6** | **0.7** | **–0.2** | **0.7** | **–0.5** | **0.5** | **–0.3** | **0.0** | **0.2** | **–0.1** | **0.5** | **0.1** |

Forecast

## Household consumption expenditure at chain-linked previous year prices

*working-day and seasonally adjusted data, percentage changes from previous period and previous year*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Agricultural goods | 2.6 | –1.2 | –0.6 | 0.4 | –2.0 | 3.4 | –1.3 | –0.5 | 0.3 | 0.3 | 2.2 | –0.6 | 0.3 |
| Manufactured goods | 1.2 | 0.1 | –0.6 | 1.0 | 0.2 | 0.3 | 0.6 | 0.1 | 0.3 | 0.3 | 1.6 | 1.3 | 1.0 |
| Energy, water and waste | 4.1 | 3.5 | –3.5 | 4.5 | –4.8 | 0.2 | 1.9 | –0.5 | 0.0 | 0.0 | 2.8 | –1.5 | 0.6 |
| Trade | 1.8 | 0.3 | 0.8 | 0.9 | 0.8 | –0.6 | –0.2 | 1.8 | 0.3 | 0.3 | 3.3 | 1.8 | 1.6 |
| Market services excluding trade | 0.8 | 0.1 | 0.3 | 0.5 | 0.7 | 0.2 | 0.6 | 0.5 | 0.4 | 0.4 | 1.7 | 1.9 | 1.5 |
| Non market services | 0.6 | –0.1 | 0.2 | 0.0 | 0.2 | 0.3 | 0.8 | 0.4 | 0.3 | 0.3 | 0.9 | 1.1 | 1.3 |
| Territorial correction | –49.8 | –73.2 | –48.4 | 408.3 | 54.8 | 19.6 | 6.9 | 7.4 | 7.0 | 6.6 | –78.6 | 150.3 | 27.2 |
| **Total consumption expenditure** | **1.3** | **0.4** | **–0.2** | **0.7** | **0.1** | **0.3** | **0.6** | **0.3** | **0.3** | **0.3** | **2.1** | **1.2** | **1.1** |
| Total consumption | 1.1 | 0.4 | 0.0 | 0.6 | 0.1 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 2.0 | 1.3 | 1.1 |

Forecast

## Household income account

*working-day and seasonally adjusted data, percentage changes from previous period and previous year*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Gross operating surplus | 0.5 | 0.2 | 0.4 | 0.5 | 0.2 | 0.6 | 0.4 | 0.7 | 0.4 | 0.3 | 1.9 | 1.7 | 1.6 |
| Unincorporated enterprises | 0.7 | –0.2 | 0.2 | 0.0 | –0.1 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 1.6 | 0.5 | 1.3 |
| Households excluding unincorporated enterprises | 0.3 | 0.6 | 0.6 | 0.8 | 0.4 | 0.7 | 0.4 | 0.9 | 0.5 | 0.3 | 2.2 | 2.4 | 1.8 |
| Gross wages and salaries | 0.5 | 0.3 | 0.7 | 0.8 | 1.1 | 0.7 | 0.7 | 0.7 | 0.9 | 0.7 | 2.0 | 3.3 | 2.5 |
| Net interests and dividends | –1.0 | –0.9 | –0.5 | –0.2 | 0.0 | 0.9 | 1.0 | 0.0 | 0.9 | 0.9 | –3.2 | 0.5 | 2.3 |
| Social benefits (in cash) | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 | 0.5 | 0.5 | 0.5 | 0.6 | 1.8 | 1.6 | 1.6 |
| Total ressources | 0.4 | 0.3 | 0.5 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 1.7 | 2.5 | 2.1 |
| Income and wealth taxes | 1.2 | 0.3 | –1.3 | 1.0 | 0.7 | 0.7 | 1.3 | 0.3 | 9.1 | –0.9 | 1.1 | 2.2 | 9.6 |
| Households' contributions | 0.7 | 0.6 | 0.5 | 0.8 | 0.6 | 0.6 | 0.7 | 0.6 | –8.5 | 0.8 | 2.2 | 2.5 | –7.1 |
| Total charges | 1.0 | 0.4 | –0.6 | 0.9 | 0.6 | 0.7 | 1.0 | 0.4 | 1.8 | –0.2 | 1.5 | 2.3 | 2.7 |
| **Gross disposable income** | **0.3** | **0.3** | **0.8** | **0.5** | **0.7** | **0.6** | **0.7** | **0.7** | **0.3** | **0.9** | **1.7** | **2.5** | **1.9** |
| Consumption deflator | –0.2 | 0.1 | 0.1 | 0.3 | 0.6 | –0.1 | 0.1 | 0.5 | 0.6 | 0.4 | –0.1 | 0.9 | 1.3 |
| **Real gross disposable income** | **0.5** | **0.2** | **0.7** | **0.2** | **0.2** | **0.7** | **0.5** | **0.1** | **–0.3** | **0.4** | **1.8** | **1.6** | **0.6** |
| Social benefits (in kind) | 0.3 | 0.3 | 0.6 | 0.3 | 0.6 | 0.5 | 0.6 | 0.3 | 0.5 | 0.4 | 1.3 | 2.0 | 1.5 |
| Adjusted gross disposable income | 0.3 | 0.3 | 0.8 | 0.5 | 0.7 | 0.6 | 0.6 | 0.6 | 0.3 | 0.8 | 1.6 | 2.4 | 1.8 |

Forecast

## Main ratios (households)

*working-day and seasonally adjusted data, in percentage points*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Saving ratio | 13.8 | 13.6 | 14.4 | 14.0 | 14.1 | 14.5 | 14.4 | 14.3 | 13.8 | 13.9 | 14.0 | 14.3 | 13.9 |
| Financial saving ratio* | 4.7 | 4.4 | 5.2 | 4.7 | 4.6 | 4.7 | 4.7 | 4.6 | 4.0 | 4.0 | 4.7 | 4.6 | 4.0 |
| Weight of taxes and social contributions** | 21.4 | 21.4 | 21.2 | 21.3 | 21.2 | 21.3 | 21.3 | 21.3 | 21.5 | 21.4 | 21.3 | 21.3 | 21.4 |
| Gross wages and salaries/gross disposable income | 62.6 | 62.6 | 62.5 | 62.7 | 63.0 | 63.1 | 63.1 | 63.1 | 63.5 | 63.4 | 62.6 | 63.1 | 63.4 |
| Social benefits (cash)/gross disposable income | 35.2 | 35.3 | 35.2 | 35.1 | 35.0 | 34.9 | 34.8 | 34.8 | 34.8 | 34.7 | 35.2 | 34.9 | 34.8 |

Forecast

*Savings excluding dwelling/gross disposable income
**Taxes and social contributions/gross disposable income before taxes and social contributions

## Operating account of non-financial corporations and unincorporated enterprises

*working-day and seasonally adjusted data, percentage changes from previous period and previous year*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Value added | 1.0 | –0.5 | 0.2 | 0.8 | 0.8 | 1.0 | 0.7 | 1.1 | 0.9 | 0.8 | 2.0 | 2.8 | 3.0 |
| Subsidies | –0.4 | 0.9 | 0.9 | 1.5 | 1.7 | 1.6 | 0.0 | –0.5 | 6.3 | 0.0 | –0.1 | 4.6 | 6.3 |
| Total ressources | 1.0 | –0.5 | 0.2 | 0.8 | 0.9 | 1.0 | 0.7 | 1.0 | 1.1 | 0.8 | 1.9 | 2.9 | 3.1 |
| Compensation of employees | 0.8 | 0.1 | 0.6 | 1.0 | 1.1 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 2.2 | 3.6 | 3.0 |
| of which: Gross wages and salaries | 0.7 | 0.4 | 0.6 | 0.9 | 1.2 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 2.5 | 3.7 | 3.0 |
| Employers' social contributions | 0.9 | –0.7 | 0.4 | 1.0 | 0.9 | 1.1 | 0.8 | 1.0 | 0.9 | 0.8 | 1.4 | 3.2 | 3.0 |
| Taxes on production | –0.5 | –0.3 | 0.3 | 0.6 | 1.2 | 1.1 | 0.7 | 0.2 | 0.8 | 0.9 | –0.2 | 3.0 | 2.3 |
| Total charges | 0.7 | 0.1 | 0.6 | 0.9 | 1.1 | 0.9 | 0.9 | 0.8 | 1.0 | 0.9 | 2.0 | 3.5 | 3.0 |
| Gross operating surplus | 1.5 | –1.4 | –0.3 | 0.6 | 0.3 | 1.2 | 0.4 | 1.4 | 1.2 | 0.7 | 1.8 | 1.7 | 3.4 |
| Unincorporated entreprises | 0.7 | –0.2 | 0.2 | 0.0 | 0.0 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 1.6 | 0.6 | 1.4 |
| Non-financial corporations | 1.7 | –1.8 | –0.4 | 0.7 | 0.5 | 1.4 | 0.4 | 1.7 | 1.5 | 0.8 | 1.9 | 2.0 | 4.0 |

Forecast

## Non-financial corporations' income account

*working-day and seasonally adjusted data, percentage changes from previous period and previous year*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Value added | 1.0 | –0.5 | 0.2 | 0.9 | 0.9 | 1.1 | 0.8 | 1.1 | 1.0 | 0.9 | 2.1 | 3.1 | 3.2 |
| Subsidies | –0.4 | 1.0 | 1.0 | 1.6 | 1.9 | 1.8 | 0.0 | –0.6 | 7.0 | 0.0 | –0.2 | 5.0 | 7.0 |
| Total ressources | 1.0 | –0.5 | 0.3 | 0.9 | 1.0 | 1.1 | 0.7 | 1.1 | 1.1 | 0.9 | 2.0 | 3.1 | 3.3 |
| Compensation of employees | 0.8 | 0.2 | 0.6 | 1.0 | 1.2 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 2.3 | 3.7 | 3.0 |
| Taxes | –4.0 | 1.6 | 0.8 | 0.9 | –2.6 | 2.6 | 1.0 | –1.4 | 0.5 | –1.1 | 1.6 | 0.9 | –0.3 |
| *of which: Taxes on production* | *–0.5* | *–0.3* | *0.3* | *0.6* | *1.1* | *1.1* | *0.7* | *0.2* | *0.8* | *0.9* | *–0.2* | *2.9* | *2.3* |
| *Corporate taxes* | *–9.0* | *4.5* | *1.5* | *1.4* | *–8.1* | *5.1* | *1.5* | *–4.0* | *0.0* | *–4.2* | *4.4* | *–2.0* | *–4.2* |
| Net interests and dividends | –1.0 | –0.8 | –1.1 | –0.8 | –1.0 | –0.3 | 0.8 | –0.8 | 3.1 | 3.0 | –2.7 | –2.4 | 5.1 |
| Other net charges | –2.1 | –1.3 | –0.5 | 0.4 | 1.3 | 1.1 | –1.0 | 0.7 | 2.3 | 0.6 | –5.1 | 1.5 | 3.0 |
| Total charges | 0.0 | 0.2 | 0.4 | 0.8 | 0.6 | 1.0 | 0.9 | 0.5 | 1.1 | 0.8 | 1.6 | 2.8 | 2.8 |
| Gross disposable income | 5.2 | –3.3 | –0.6 | 1.2 | 2.4 | 1.4 | 0.2 | 3.6 | 1.2 | 1.0 | 3.9 | 4.3 | 5.1 |

Forecast

## Breakdown of non-financial corporations' profit share

*working-day and seasonally adjusted data, percentage changes from previous period and previous year*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| **Margin rate* (in %)** | **32.3** | **31.9** | **31.6** | **31.6** | **31.5** | **31.6** | **31.4** | **31.6** | **31.8** | **31.8** | **31.8** | **31.5** | **31.8** |
| Margin rate % change | 0.2 | –0.4 | –0.2 | 0.0 | –0.1 | 0.1 | –0.1 | 0.2 | 0.2 | 0.0 | –0.1 | –0.3 | 0.2 |
| Contributions to margin rate variation | | | | | | | | | | | | | |
| Productivity (+) | 0.2 | –0.4 | –0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.0 | 0.5 | 0.8 |
| Real wages (–) | –0.4 | 0.0 | –0.1 | –0.2 | –0.2 | –0.4 | –0.3 | –0.1 | –0.1 | –0.2 | –0.9 | –0.8 | –0.5 |
| Employers' social contributions rate (–) | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| Ratio of value added price and consumption price (+) | 0.4 | –0.2 | 0.0 | 0.0 | –0.2 | 0.2 | 0.0 | –0.1 | –0.1 | 0.0 | 0.6 | –0.2 | –0.1 |
| Other items | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 |

Forecast

*Gross operating surplus / value added

## Main ratios (non-financial corporate sector)

*working-day and seasonally adjusted data, in percentage points*

| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Wage costs / Value added (VA) | 65.2 | 65.7 | 65.9 | 66.0 | 66.1 | 66.0 | 66.1 | 66.0 | 66.0 | 66.0 | 65.7 | 66.1 | 66.0 |
| Taxes on production / VA | 5.2 | 5.2 | 5.3 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Margin rate (GOS* / VA) | 32.3 | 31.9 | 31.6 | 31.6 | 31.5 | 31.6 | 31.4 | 31.6 | 31.8 | 31.8 | 31.8 | 31.5 | 31.8 |
| Investment rate (GFCF** / VA) | 23.3 | 23.3 | 23.4 | 23.4 | 23.7 | 23.8 | 23.9 | 24.1 | 24.2 | 24.3 | 23.3 | 23.9 | 24.2 |
| Saving ratio (savings / VA) | 20.1 | 19.6 | 19.4 | 19.5 | 19.8 | 19.8 | 19.7 | 20.2 | 20.2 | 20.3 | 19.7 | 19.9 | 20.3 |
| Tax pressure (Income taxes / gross disposable income before taxes) | 14.2 | 15.2 | 15.4 | 15.5 | 14.1 | 14.5 | 14.7 | 13.8 | 13.6 | 13.0 | 15.1 | 14.3 | 13.2 |
| Self–financing ratio (cash earnings)*** | 86.6 | 83.9 | 83.2 | 83.4 | 83.3 | 83.3 | 82.5 | 84.0 | 83.7 | 83.6 | 84.3 | 83.3 | 83.6 |

Forecast

*Gross operating surplus
**Gross fixed capital formation
***Savings / Gross fixed capital formation

# Countries Accounts

| Eurozone[1] | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.5** | **0.3** | **0.4** | **0.5** | **0.7** | **0.7** | **0.6** | **0.6** | **0.5** | **0.5** | **1.7** | **2.4** | **1.8** |
| Private consumption (56%) | 0.7 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 | 0.3 | 0.5 | 0.5 | 0.5 | 1.9 | 1.9 | 1.6 |
| Investment (20%) | 0.4 | 0.5 | 0.7 | 0.6 | 1.8 | 1.0 | 1.1 | 0.8 | 0.9 | 0.7 | 3.0 | 4.2 | 2.9 |
| Public consumption (21%) | 0.8 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 1.7 | 1.1 | 1.0 |
| Exports (45%) | 0.5 | 1.4 | 0.4 | 1.5 | 1.4 | 1.1 | 1.2 | 1.2 | 0.9 | 0.8 | 3.2 | 4.9 | 3.3 |
| Imports (41%) | 0.4 | 1.2 | 0.7 | 1.8 | 1.2 | 1.1 | 1.1 | 0.9 | 1.1 | 1.1 | 4.1 | 5.0 | 3.5 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.6 | 0.3 | 0.4 | 0.5 | 0.7 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 2.0 | 2.1 | 1.7 |
| Changes in inventories | –0.2 | –0.1 | 0.1 | 0.1 | –0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | –0.1 | 0.1 | 0.1 |
| Foreign trade | 0.1 | 0.1 | –0.1 | –0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | –0.1 | –0.2 | 0.2 | 0.0 |

Forecast

## Consumer prices in Eurozone

*changes in a % and contributions in points*

| | Q3 2017 | | Q4 2017 | | Q1 2018 | | Q2 2018 | | Annual averages | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CPI groups** (2015 weightings) | **yoy** | **cyoy** | **yoy** | **cyoy** | **yoy** | **cyoy** | **yoy** | **cyoy** | **2017** | **2018*** |
| **All (100.0%)** | **1.4** | | **1.5** | | **1.3** | | **1.6** | | **1.6** | **1.3** |
| **Food (including Alc. and Tobacco)** (19.6%) | 1.6 | 0.3 | 2.3 | 0.5 | 1.7 | 0.3 | 2.5 | 0.5 | 1.8 | 1.8 |
| **Energy** (10.6%) | 3.4 | 0.3 | 3.3 | 0.3 | 1.1 | 0.1 | 2.8 | 0.3 | 4.9 | 2.3 |
| **"Core" inflation** (69.8%) | 1.1 | 0.8 | 1.1 | 0.8 | 1.2 | 0.8 | 1.1 | 0.8 | 1.0 | 1.0 |

Forecast

**The 2018 figure is the growth overhang at the end of H1*

| France (21%)[2] | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.6** | **–0.1** | **0.1** | **0.6** | **0.5** | **0.6** | **0.5** | **0.6** | **0.5** | **0.4** | **1.1** | **1.9** | **1.7** |
| Private consumption (55%) | 1.3 | 0.4 | –0.2 | 0.7 | 0.1 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 2.1 | 1.2 | 1.1 |
| Investment (22%) | 1.0 | 0.1 | 0.2 | 0.6 | 1.5 | 1.1 | 0.9 | 1.1 | 1.0 | 0.8 | 2.7 | 3.7 | 3.2 |
| Public consumption (24%) | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.2 | 0.4 | 0.3 | 1.2 | 1.5 | 1.1 |
| Exports (29%) | 0.5 | –0.2 | 0.8 | 1.3 | –0.7 | 2.2 | 1.1 | 1.8 | 0.7 | 0.2 | 1.9 | 3.3 | 3.4 |
| Imports (31%) | 0.5 | –1.0 | 2.6 | 0.9 | 1.2 | 0.3 | 2.8 | 0.2 | 0.8 | 0.8 | 4.2 | 4.6 | 3.1 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 1.0 | 0.3 | 0.0 | 0.6 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 | 0.4 | 2.0 | 1.8 | 1.6 |
| Changes in inventories | –0.4 | –0.6 | 0.7 | –0.2 | 0.7 | –0.5 | 0.5 | –0.3 | 0.0 | 0.2 | –0.1 | 0.6 | 0.1 |
| Foreign trade | 0.0 | 0.3 | –0.6 | 0.1 | –0.6 | 0.5 | –0.6 | 0.5 | 0.0 | –0.2 | –0.8 | –0.5 | 0.0 |

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.
yoy: year-on-year
cyoy: contributions year-on-year

1. Eurozone excluding Ireland, as this country's accounts present a break in series in Q1 2015
2. Share in Eurozone GDP in 2016

*Sources: Eurostat, INSEE*

| Germany (29%)[1] | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.6** | **0.5** | **0.3** | **0.4** | **0.9** | **0.6** | **0.8** | **0.7** | **0.6** | **0.5** | **1.9** | **2.6** | **2.0** |
| Private consumption (54%) | 0.6 | 0.2 | 0.4 | 0.6 | 0.8 | 0.9 | –0.1 | 0.6 | 0.6 | 0.6 | 1.9 | 2.4 | 1.7 |
| Investment (20%) | 1.2 | –1.2 | 0.5 | 0.0 | 2.9 | 1.5 | 0.4 | 1.1 | 0.8 | 0.7 | 2.9 | 4.4 | 2.8 |
| Public consumption (20%) | 1.5 | 0.7 | 0.2 | 0.5 | 0.2 | 0.2 | 0.0 | 0.5 | 0.4 | 0.4 | 3.7 | 1.2 | 1.1 |
| Exports (47%) | 1.0 | 1.3 | –0.2 | 1.3 | 1.7 | 1.0 | 1.7 | 1.1 | 1.1 | 1.1 | 2.4 | 4.9 | 3.8 |
| Imports (40%) | 1.7 | –0.2 | 0.7 | 2.5 | 0.4 | 2.4 | 0.9 | 1.4 | 1.4 | 1.4 | 3.8 | 5.3 | 4.7 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.9 | 0.0 | 0.3 | 0.4 | 1.1 | 0.8 | 0.0 | 0.7 | 0.6 | 0.5 | 2.3 | 2.4 | 1.7 |
| Changes in inventories | 0.0 | –0.2 | 0.4 | 0.4 | –0.8 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | –0.1 | 0.0 | 0.4 |
| Foreign trade | –0.2 | 0.7 | –0.4 | –0.4 | 0.6 | –0.4 | 0.4 | –0.1 | –0.1 | –0.1 | –0.4 | 0.1 | –0.1 |

Forecast

| Italy (16%)[1] | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.3** | **0.1** | **0.2** | **0.4** | **0.5** | **0.3** | **0.4** | **0.4** | **0.4** | **0.4** | **1.1** | **1.5** | **1.2** |
| Private consumption (61%) | 0.3 | 0.2 | 0.3 | 0.2 | 0.7 | 0.2 | 0.3 | 0.5 | 0.4 | 0.4 | 1.5 | 1.5 | 1.3 |
| Investment (17%) | 0.9 | –0.4 | 2.1 | 2.7 | –2.2 | 1.1 | 3.0 | –0.5 | 0.7 | 0.7 | 2.9 | 2.9 | 2.6 |
| Public consumption (19%) | 0.9 | –0.3 | –0.2 | 0.5 | 0.4 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.5 | 0.9 | 0.6 |
| Exports (30%) | –0.7 | 1.7 | 0.9 | 1.9 | 1.8 | 0.1 | 1.6 | 0.8 | 0.8 | 0.8 | 2.6 | 5.1 | 2.8 |
| Imports (27%) | –0.5 | 1.8 | 0.8 | 2.5 | 0.7 | 1.6 | 1.2 | 0.9 | 0.9 | 0.9 | 3.3 | 5.5 | 3.3 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.5 | 0.0 | 0.5 | 0.7 | 0.1 | 0.4 | 0.7 | 0.2 | 0.4 | 0.4 | 1.5 | 1.6 | 1.4 |
| Changes in inventories | –0.1 | 0.1 | –0.4 | –0.2 | 0.1 | 0.4 | –0.5 | 0.2 | 0.0 | 0.0 | –0.1 | –0.1 | –0.1 |
| Foreign trade | –0.1 | 0.0 | 0.1 | –0.1 | 0.4 | –0.4 | 0.2 | 0.0 | 0.0 | 0.0 | –0.2 | 0.0 | 0.0 |

Forecast

| Spain (10%)[1] | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.7** | **0.8** | **0.7** | **0.7** | **0.8** | **0.9** | **0.8** | **0.8** | **0.8** | **0.7** | **3.3** | **3.1** | **2.5** |
| Private consumption (58%) | 1.0 | 0.6 | 0.8 | 0.4 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 3.0 | 2.5 | 2.2 |
| Investment (20%) | 0.6 | 1.6 | –0.3 | 0.8 | 2.7 | 0.6 | 1.3 | 1.3 | 1.1 | 1.0 | 3.3 | 5.0 | 3.7 |
| Public consumption (19%) | 0.1 | 0.0 | 0.5 | –0.6 | 0.8 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.8 | 1.2 | 0.9 |
| Exports (33%) | 1.4 | 2.1 | –0.5 | 1.5 | 3.2 | 0.1 | 0.0 | 1.0 | 0.9 | 0.8 | 4.8 | 5.0 | 2.3 |
| Imports (30%) | 0.8 | 1.9 | –1.7 | 0.6 | 4.1 | –0.7 | 0.0 | 0.8 | 0.7 | 0.8 | 2.7 | 3.8 | 1.7 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.7 | 0.7 | 0.5 | 0.3 | 1.0 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 2.5 | 2.6 | 2.2 |
| Changes in inventories | –0.2 | 0.0 | –0.1 | 0.1 | –0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.5 | 0.3 |
| Foreign trade | 0.2 | 0.1 | 0.3 | 0.3 | –0.1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.
1. Share in Eurozone GDP in 2016

*Sources: Eurostat, Destatis, Istat, INE, INSEE forecast*

| United States of America | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.1** | **0.6** | **0.7** | **0.4** | **0.3** | **0.8** | **0.8** | **0.8** | **0.6** | **0.6** | **1.5** | **2.3** | **2.2** |
| Private consumption (68%) | 0.5 | 0.9 | 0.7 | 0.7 | 0.5 | 0.8 | 0.6 | 0.7 | 0.5 | 0.5 | 2.7 | 2.7 | 1.9 |
| Private investment (16%) | –0.1 | 0.3 | 0.4 | 0.4 | 2.0 | 0.8 | 0.6 | 1.0 | 1.1 | 1.2 | 0.7 | 3.7 | 3.2 |
| Government expenditures and public investment (18%) | 0.4 | –0.2 | 0.1 | 0.0 | –0.2 | 0.0 | 0.1 | 0.6 | 0.5 | 0.3 | 0.8 | 0.0 | 1.2 |
| Exports (13%) | –0.7 | 0.7 | 1.6 | –1.0 | 1.8 | 0.9 | 0.5 | 1.2 | 1.0 | 1.0 | –0.3 | 3.2 | 3.2 |
| Imports (17%) | 0.0 | 0.1 | 0.7 | 2.0 | 1.1 | 0.4 | –0.3 | 1.3 | 1.1 | 1.1 | 1.3 | 3.4 | 2.9 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.4 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | 0.8 | 0.6 | 0.6 | 2.2 | 2.5 | 2.1 |
| Changes in inventories | –0.2 | –0.2 | 0.0 | 0.3 | –0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | –0.4 | –0.1 | 0.2 |
| Foreign trade | –0.1 | 0.1 | 0.1 | –0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | –0.2 | –0.1 | –0.1 |

Forecast

| United Kingdom | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.2** | **0.5** | **0.4** | **0.6** | **0.3** | **0.3** | **0.4** | **0.4** | **0.3** | **0.3** | **1.8** | **1.5** | **1.1** |
| Private consumption (62%) | 0.8 | 0.9 | 0.6 | 0.4 | 0.4 | 0.2 | 0.6 | 0.2 | 0.2 | 0.2 | 2.9 | 1.7 | 0.9 |
| Investment (17%) | 0.6 | 1.9 | 0.8 | 0.4 | 0.5 | 0.6 | 0.2 | 0.3 | 0.2 | 0.4 | 1.3 | 2.4 | 1.0 |
| Public consumption (23%) | 0.9 | 0.0 | –0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 1.0 | 0.6 | 0.8 |
| Exports (30%) | –2.4 | 2.5 | –1.9 | 5.4 | –0.3 | 1.7 | –0.7 | 1.2 | 0.8 | 0.8 | 1.1 | 4.6 | 2.4 |
| Imports (32%) | –0.1 | 0.8 | 3.0 | –0.7 | 1.0 | 0.2 | 1.1 | 0.0 | 0.6 | 0.6 | 4.3 | 2.8 | 1.6 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.8 | 0.9 | 0.5 | 0.4 | 0.4 | 0.3 | 0.5 | 0.2 | 0.2 | 0.2 | 2.3 | 1.5 | 0.8 |
| Changes in inventories | 0.0 | –0.8 | 1.3 | –1.5 | 0.3 | –0.4 | 0.4 | –0.2 | 0.0 | 0.0 | 0.5 | –0.4 | 0.1 |
| Foreign trade | –0.6 | 0.4 | –1.4 | 1.7 | –0.4 | 0.4 | –0.5 | 0.3 | 0.1 | 0.1 | –0.9 | 0.4 | 0.2 |

Forecast

| Japan | Quarterly change in % | | | | | | | | | | Annual change in % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | 2016 | 2017 | 2018 ovhg |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | | | |
| Supply and use table (in real terms) | | | | | | | | | | | | | |
| **GDP** | **0.5** | **0.4** | **0.2** | **0.3** | **0.4** | **0.7** | **0.6** | **0.2** | **0.3** | **0.3** | **0.9** | **1.8** | **1.2** |
| Private consumption (60%) | 0.3 | –0.2 | 0.4 | 0.1 | 0.4 | 0.9 | –0.5 | 0.6 | 0.4 | 0.4 | 0.1 | 1.2 | 1.1 |
| Investment (21%) | 0.0 | 1.1 | 0.3 | 0.5 | 0.3 | 1.9 | 0.1 | 0.6 | 0.3 | 0.4 | 1.1 | 2.8 | 1.5 |
| Public consumption (21%) | 1.2 | –1.1 | 0.5 | –0.3 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 0.2 | 1.3 | 0.2 | 0.6 |
| Exports (15%) | –0.1 | –0.6 | 2.1 | 3.0 | 1.9 | –0.1 | 1.5 | 0.9 | 0.8 | 0.8 | 1.3 | 6.0 | 2.8 |
| Imports (17%) | –1.8 | –1.3 | 0.1 | 1.3 | 1.3 | 1.5 | –1.6 | 1.0 | 1.0 | 1.0 | –1.9 | 2.6 | 2.1 |
| **Contributions to GDP growth** | | | | | | | | | | | | | |
| Domestic demand excluding inventories | 0.4 | –0.1 | 0.4 | 0.1 | 0.3 | 1.0 | –0.3 | 0.5 | 0.3 | 0.3 | 0.6 | 1.4 | 1.1 |
| Changes in inventories | –0.1 | 0.4 | –0.5 | –0.1 | –0.1 | 0.0 | 0.4 | –0.2 | 0.0 | 0.0 | –0.2 | –0.2 | 0.0 |
| Foreign trade | 0.3 | 0.1 | 0.3 | 0.3 | 0.1 | –0.3 | 0.5 | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.1 |

Forecast

How to read it: % in brackets represent the weight in the nominal GDP in 2016.

*Sources: BEA, ONS, Japan Cabinet Office, INSEE forecast*