

Consumer prices

Inflation remained negative in May 2016, according to the provisional estimate, (-0.1% year on year after -0.2% in April), essentially due to the fall in energy prices driven by the past fall in Brent oil prices. Through to the end of 2016, energy prices should stop falling and weighing down on headline inflation which should return to positive territory to stand at +0.7% in December 2016.

After an unprecedented fall in late 2014, core inflation¹ gradually rose again in 2015, reaching +0.9% in January 2016, notably under the effects of the past depreciation of the Euro. Since February 2016, it has collapsed once again, to +0.6% in April, and is likely to remain close to this low level through to the end of 2016 (+0.5% in December): the effect of the past depreciation of the Euro on imported product prices is fading out and the fall in commodity prices should continue to spread.

Headline inflation to return to positive territory in the summer

Headline inflation remained negative in May 2016, according to the provisional estimate of the consumer price index (-0.1% year on year, *Graph 1*), as manufactured goods (-0.6%) and energy products (-5.9%) fell again. These falls

were only partly offset by moderate rises in the prices of food products (+0.9% year on year) and services (+0.9%).

Headline inflation is likely to become positive once again over the summer and reach +0.7% in December 2016, mainly because it will no longer be dragged downwards by energy prices.

Energy prices should rise again

After falling and contributing to the overall drop (-5.9% year on year in May), energy prices should put a halt to their slide from last year's levels and even start to rise again in the course of the year (+4.7% year on year in December 2016), based on the hypothesis that Brent prices level out at \$50 (€44.6) over the period. Past fluctuations in oil prices are the main contributor to this trend.

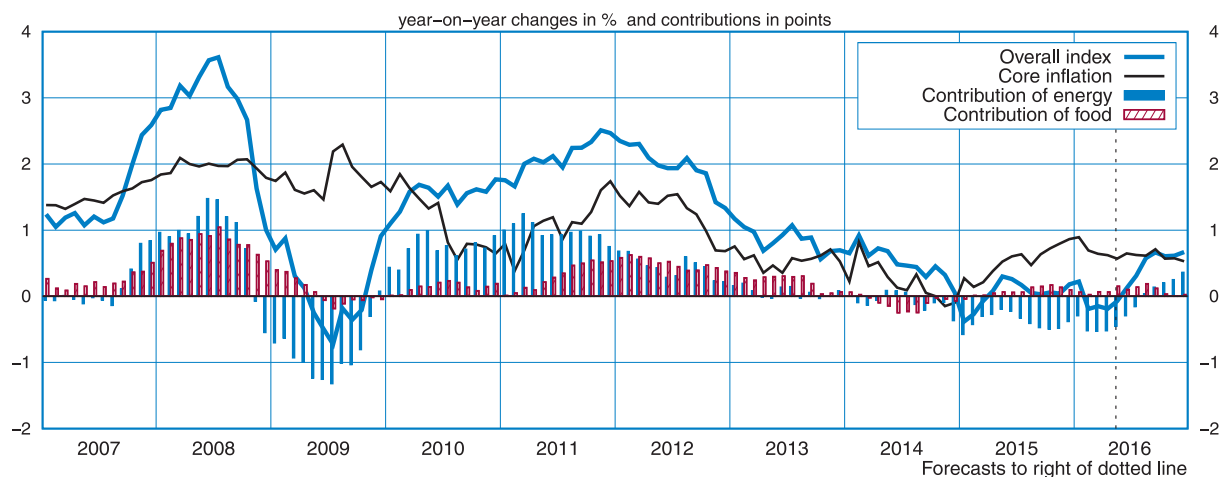
The rise in food prices to remain moderate

The rise in food prices should ease by the end of 2016: +0.1% year on year in December, after +0.9% in May 2016.

Driven by favourable weather conditions for production in 2015 and then unfavourable conditions from March to May 2016, fresh product prices accelerated in the spring (+5.9% in May 2016). They should then slow down again through to the end of the year (+1.3% year on year in December). The new processing of fresh food product data introduced in January, modifying the seasonality of the index, is likely to continue influencing the year-on-year figures (*box*).

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

1 - Inflation in France



Source: INSEE

French developments

Excluding fresh products, food prices are likely to continue being held back by past falls in food commodity prices: they are expected to be stable year on year in December 2016, after increasing by 0.1% in May.

The fall in manufactured product prices likely to continue

Manufactured product prices are likely to continue falling through to the end of 2016. The fall was accentuated in April and May 2016 (–0.6% year on year) due to big reductions on new cars, among other factors. Through to the end of 2016, the high level of unemployment combined with the effects of the past fall in commodity prices should continue to limit inflationary pressure. In addition to this, the effect of the past depreciation of the Euro on consumer prices of imported goods is fading out, pulling the year-on-year figures downwards. Manufactured product prices should therefore keep on falling, at almost the same rate in December (–0.5% year on year) as in May.

Health product prices in particular are set to continue falling significantly through to the end of 2016 (–3.1% year on year in December, after –3.6% in April 2016). This is a result of the moderation measures included in the Social Security Financing Act for 2016 to keep prices down to reasonable levels. The fall is likely to be accentuated by the continuing drop in the prices of spectacles and contact lenses under the effect of the 2014 “Consumption law”.

However, clothing and footwear prices should increase slightly in December 2016 (+0.4% year on year), after levelling out in April, following the rise in world textile fibre prices since the end of 2014 with a time lag.

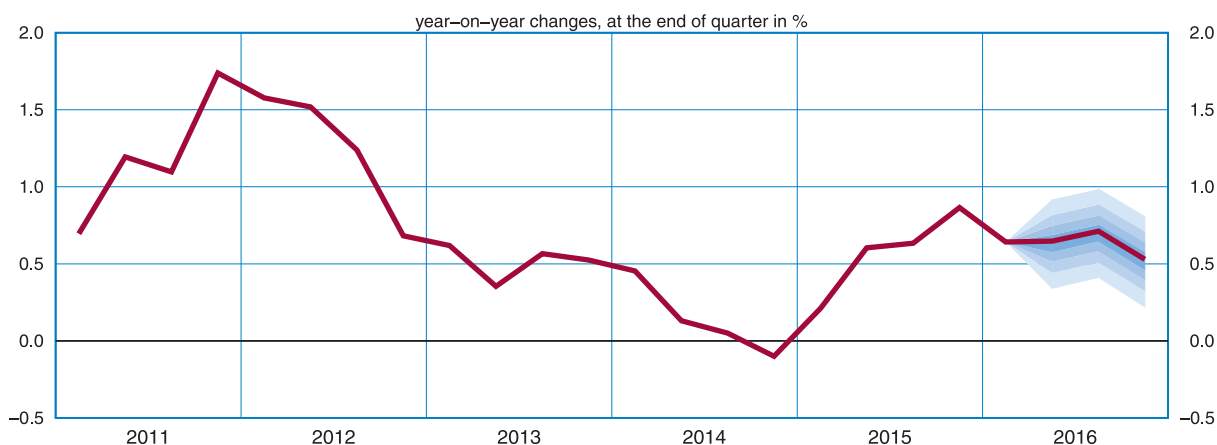
The rise in prices of services to remain moderate

The prices of services are likely to be up by 0.9% year on year in December 2016, as in May. This apparent consistency hides contrasting trends from one product to another. On the one hand, the fall in transport prices should ease, as the effect of the introduction of the “All-zones Navigo Pass” for Paris public transport in September 2015 disappears from the year-on-year figures. On the other, the prices of accommodation services are likely to accelerate on the occasion of the Euro 2016 football championships, before returning to normal at the end of the year. Finally, rents remain sluggish, with any increases being limited by the low levels of past inflation.

Core inflation almost stable

After an unprecedented fall in late 2014, core inflation rose gradually throughout 2015, reaching +0.9% in January 2016, against 0.3% one year earlier, notably under the effects of the past depreciation of the Euro. Since then, this effect has faded out, while the fall in commodity prices has been spreading, and core inflation has weakened again (+0.6% in April 2016). Through to the end of 2016, core inflation is likely to be almost stable (+0.5% in December). The likelihood of core inflation being below +0.3% in December 2016 is estimated to be about 20% (Graph 2). ■

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

Consumer prices

changes as %

CPI* groups (2016 weightings)	December 2015		April 2016		May 2016		December 2016		Annual averages	
	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	2015	2016
Food (16.2%)	0.6	0.1	0.4	0.1	0.9	0.2	0.1	0.0	0.5	0.5
including:										
fresh food (2.2%)	3.1	0.1	1.5	0.0	5.9	0.1	1.3	0.0	5.3	3.1
excluding:										
fresh food (14.0%)	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0	-0.2	0.1
Tobacco (2.0%)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1
Manufactured products (26.5%)	-0.3	-0.1	-0.6	-0.2	-0.6	-0.2	-0.5	-0.1	-0.9	-0.3
including:										
clothing and footwear (4.1%)	-0.3	0.0	0.0	0.0	0.2	0.0	0.4	0.0	-0.9	0.2
medical products (4.7%)	-4.0	-0.2	-3.6	-0.2	-3.6	-0.2	-3.1	-0.1	-3.5	-3.3
other manufactured products (17.7%)	0.6	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.3	0.2
Energy (7.7%)	-4.7	-0.4	-6.8	-0.5	-5.9	-0.5	4.7	0.4	-4.7	-2.0
including: oil products (4.2%)	-9.7	-0.4	-12.1	-0.5	-10.8	-0.5	8.6	0.4	-10.8	-4.0
Services (47.7%)	1.1	0.5	1.0	0.5	0.9	0.4	0.9	0.4	1.2	0.9
including:										
rent-water (7.7%)	0.7	0.1	0.4	0.0	0.4	0.0	0.3	0.0	0.9	0.4
health services (6.0%)	0.5	0.0	0.4	0.0	0.3	0.0	0.3	0.0	0.5	0.4
transport (2.8%)	-1.2	0.0	-3.1	-0.1	-2.2	-0.1	-1.0	0.0	0.9	-1.8
communications (2.5%)	1.8	0.0	2.1	0.1	2.1	0.1	1.7	0.0	1.2	1.4
other services (28.8%)	1.6	0.5	1.5	0.4	1.4	0.4	1.3	0.4	1.5	1.4
All (100%)	0.2	0.2	-0.2	-0.2	-0.1	-0.1	0.7	0.7	0.0	0.3
All excluding energy (92.3%)	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.5
All excluding tobacco (98.1%)	0.2	0.2	-0.2	-0.2	-0.1	-0.1	0.7	0.6	0.0	0.3
Core inflation (60.8%)**	0.9	0.5	0.6	0.4	0.6	0.3	0.5	0.3	0.5	0.6

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

The new method of calculating the fresh food price index changes the inflation profile very slightly in 2016

Since January 2016, the consumer price index (CPI) has been calculated with reference to 2015 (the average level of the base year is taken as 100).¹ This change in base is accompanied by a few methodological changes, in particular in the calculation of CPI for fresh food.

The method of calculating the fresh food price index has changed since January 2016

Since January 2016, the Rothwell aggregation method has been abandoned in favour of the Laspeyres method for calculating the fresh food CPI. The former, using 1998 as the base year, allowed the basket of fresh produce to be varied from one month to the next, whereas the latter, used for other products in the CPI, is fixed over the course of the year. However, unlike the Laspeyres aggregation, the Rothwell method prevented any change in the monthly composition of the basket and the monthly weight of the items from one year to the next, so that they were therefore fixed over the long term.

The prices of fresh food items are now aggregated like other products, with a seasonality treatment that is analogous to that applied to other seasonal products, i.e. by imputing changes observed to the level above: for example, the change in the price of strawberries in winter is imputed on the basis of the change in the price of all fresh fruit. In addition, every year, the basket of fresh food tracked can be modified in order to take account of changes in the structure of household consumption.

In 2016, this change in method has had an upward influence on the year-on-year change in fresh food prices

The new treatment of fresh food prices has had an impact on the seasonality of the index; it has affected the year-on-year price changes in 2016. Indeed, in the new series, the fresh food CPI is calculated with the Rothwell method until December 2015 (old method),

1. Cf. "A brand new base for the Consumer Price Index", *Conjoncture in France*, March 2016, p. 86-87.

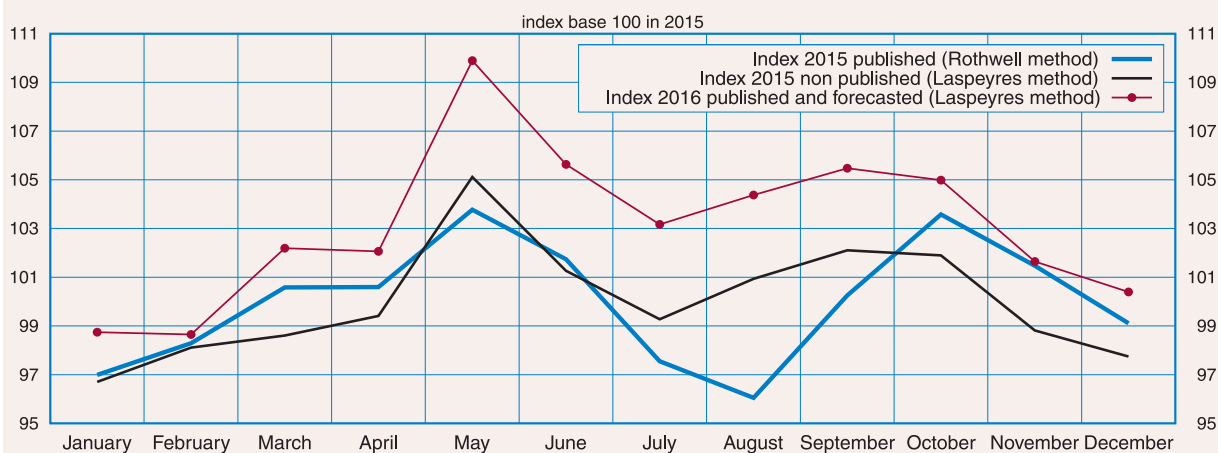
French developments

then with a Laspeyres index from January 2016 (new method). The change in seasonality that results from the change in method (*Graph 1*) therefore creates a break in the year-on-year change in the indices. The effect caused by the change in method can be quantified by comparing the year-on-year change in the index published with that of the series rebuilt without the methodological break (Laspeyres aggregation from January 2015).² This difference turns out to be greater in spring and summer: +2.8 points in May, and an expected increase to +3.3 points in July, then to +6.8 points in August and +3.3 points in September. The gap should dwindle at the end of the year (*Graph 2*).

2. The forecast used, which allows the effect of a change in method to be measured over the whole year, has only a minor effect on the measurement of the differences.

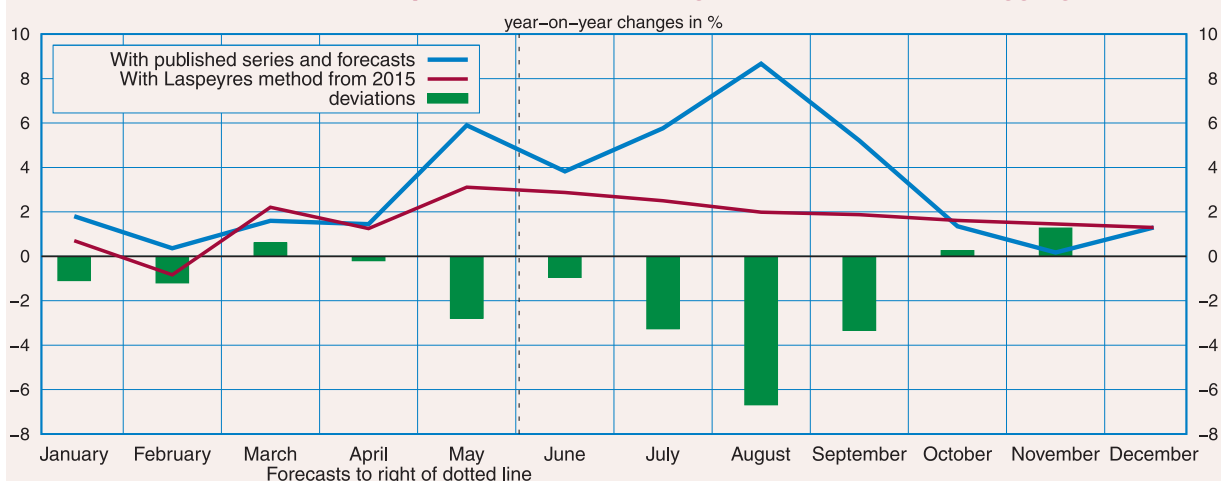
Since fresh food represents 2.2% of household consumption, the headline inflation figures published are expected to be very slightly different to an estimate calculated without the methodological break: it is thought that they will be higher in the year-on-year prices by about 0.06 points in May, 0.07 points in July and September and 0.15 points in August. Over the rest of 2016, the impact of the change in method on the year-on-year CPI should be lower. On average in 2016, this change is expected to have upward influence of 1.4 points on fresh food alone and 0.03 points on headline inflation. The effect is expected to disappear from 2017 onwards. ■

1 - The fresh food price index in 2015 and 2016 according to the two methods of aggregation



Source : Insee

2 - Variation in fresh food prices in 2016 according to the two methods of aggregation



Source : Insee

Wages

In 2016, nominal wages in the market sectors are likely to increase by almost as much as in 2015: +1.2% after +1.2% as an annual average for the basic monthly wage, and +1.5% after +1.6% for the average wage per capita.

Consumer prices are expected to rise again as an annual average, resulting in a smaller increase in wages, in real terms, than in 2015 (+1.2% after +1.8% for the average wage per capita).

In general government, the average nominal wage per capita is likely to accelerate in 2016 (+1.3% after +0.5% in 2015), driven by the effect of the mid-year rise in the index point for civil servants and statutory measures. General government purchasing power is expected to increase by 1.0% in 2016, a slightly sharper rise than in 2015 (+0.7%).

In 2016, nominal wages should increase at almost the same pace as in 2015

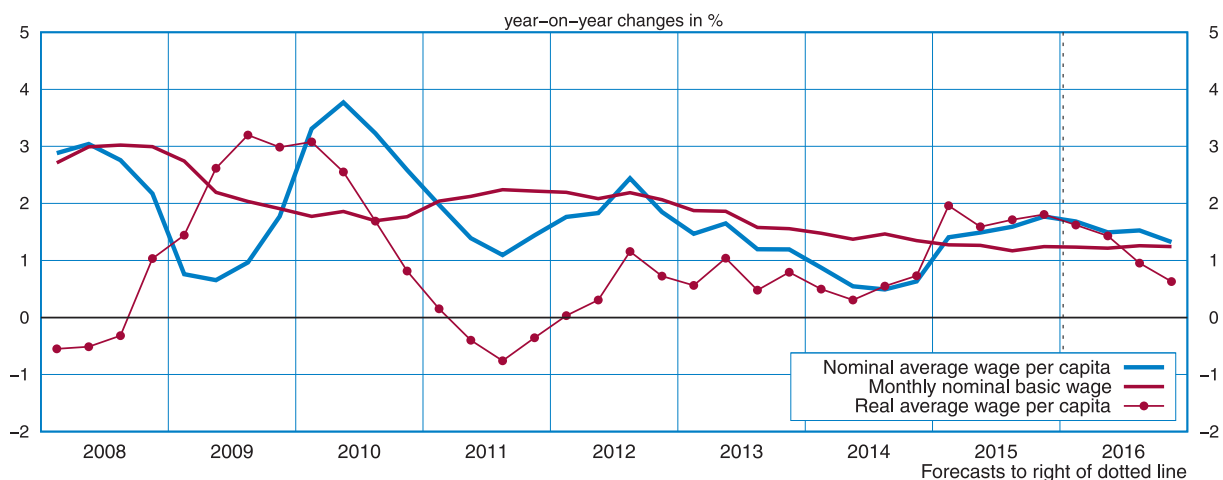
At the beginning of 2016, the increase in the minimum wage was a little lower (+0.6%) than one year earlier (+0.8%); unemployment remained high and inflation was close to zero, due to its energy component. Nonetheless, the basic

monthly wage¹ in non-agricultural market sectors should continue to rise at the same pace as in H2 2015 (+0.6% in H1; *Graph* and *Table*). In H2 2016, the expected fall in unemployment and the upturn in inflation (+0.5% forecast half-year on half-year after +0.2% expected in H1) are not likely to be sufficient to allow for a rapid rise in the basic monthly wage. On average over 2016, it should increase at the same pace as in 2015 (+1.2%).

The quarterly profile of the average wage per capita, which covers a broader scope of remunerations (bonuses, profit-sharing, overtime payments), is likely to be more uneven: it would appear to have increased strongly in Q1 (+0.6%), mainly as a result of bonuses, incentives and profit-sharing remunerations being paid sooner this year than in previous years, and is expected to slow down markedly in Q2 (+0.1%). In H2, the average wage per capita should increase at the same rate as the basic monthly wage (+0.3% per quarter). On average over the year, it should slow very slightly, thereby partly reflecting the past drop in inflation: +1.5% after +1.6% in 2015.

1. For a definition of basic minimum 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

French developments

In real terms, the average wage per capita should slow in H2 with the upturn in inflation

With a slight acceleration of prices expected in 2016 (+0.3% after -0.2%)², the purchasing power of the average wage per capita is likely to slow down over the year as a whole: +1.2% as an annual average after +1.8% in 2015. In the course of the year, it should slow significantly in H2 (+0.1% half-year on half-year) under the effect of the expected upturn in inflation, after a more dynamic H1 (+0.5%).

In the civil service, wages are likely to accelerate

In general government, the index point is expected to be raised on 1st July 2016 (+0.6%), for the first time since 2010. Furthermore, the civil servants' purchasing power guarantee scheme should be

renewed and the bonuses of teachers and police officers are likely to be increased before the end of 2016. Nevertheless, the pay rises negotiated in the framework of the October 2015 agreement on "professional career paths, careers and remunerations" should have only a limited effect on wages in 2016, as they will mainly be given by converting bonuses into index points.

In 2016, the average wage per capita in general government should accelerate more sharply over the year in nominal terms (+1.3% after +0.5% in 2015) than in real terms (+1.0% in 2016 after +0.7% in 2015). ■

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-agricultural market sector and in general government

Seasonally-adjusted data	Quarterly growth rates								Annual averages		
	2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Basic monthly wage	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.4	1.2	1.2
Average wage per capita in the non-agricultural market sector (NAMS)	0.7	0.3	0.3	0.5	0.6	0.1	0.3	0.3	0.6	1.6	1.5
Average wage per capita in general government (GG)									1.0	0.5	1.3
Household consumer price index (quarterly national accounts)	-0.1	0.2	-0.1	0.0	0.0	0.2	0.4	0.1	0.0	-0.2	0.3
Real basic monthly wage	0.4	0.1	0.4	0.3	0.3	0.1	0.0	0.2	1.3	1.4	0.9
Real average wage per capita (NAMS)	0.8	0.1	0.4	0.5	0.6	-0.1	-0.1	0.2	0.5	1.8	1.2
Real average wage per capita (GG)									0.9	0.7	1.0

Forecast

Sources: Dares, INSEE

Household income

In 2016, the purchasing power of household income should continue to progress at a sustained rate (+1.7% after +1.6% in 2015), despite the slight rebound in prices. In nominal terms, the expected acceleration in household income (+2.0% after +1.4%) should be driven mainly by earned income.

Earned income to accelerate moderately in 2016

In 2016, earned income received by households should accelerate slightly (+2.0% after +1.7%). On the one hand, payroll is likely to grow a little more quickly than in 2015 (+2.1% after +1.6%, *Table 2*), driven by the expected rise in employment in the non-agricultural market sectors (+0.8% as an annual average, after 0.0% in 2015, *Graph*). However, the average wage per capita should slow down slightly (+1.5% after +1.6%), under the effect of the past fall in inflation. On the other hand, operating income of sole proprietorships is likely to be less dynamic than last year (+1.5% after +2.4%), as is their added value. Property income is likely to recover (+1.7% after -1.2% in 2015; *Table 1*), notably the dividends paid out by companies. Finally, the gross operating surplus of pure households¹ should return to its trend (+1.2% after +0.1%).

Social benefits should barely accelerate in 2016

In 2016, social benefits in cash received by households should accelerate only barely (+2.0% after +1.9% in 2015). However, the pace of social assistance benefits should pick up (+2.0% in 2016

after +1.7%), notably on account of study grants being paid out for a period of four months after the end of university courses, as of this September, in order to help young graduates in their search for a job. In addition, the first feedback concerning potential beneficiaries of the “activity bonus”, which has replaced the activity component of the earned income supplement (RSA) and the employment bonus since January 2016, indicate there that they are applying for the bonus in larger numbers: on a comparable scope, the related expenditure should therefore accelerate. Finally, the core RSA will be increased by 2% on 1st September, as in previous years, as part of the fight against poverty and in favour of social inclusion.

Social security benefits should also increase in 2016 at the same pace as in 2015 (+2.0%, *Table 3*). Retirement benefits should slow down significantly in the absence of an increase in top-up pensions and it is assumed that pensions in the general regime and those aligned on them will not be increased on 1st October 2016, due to the low level of inflation. Family benefits should accelerate, however, and return to their trend growth rate after weakening in 2015 due to the modulation of the benefits paid out to well-off families.

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 competitive non-agricultural sector



Source: INSEE

French developments

Tax and contributions to increase almost at the same pace as pre-tax income

In 2016, the taxes and social contributions paid by households are set to increase almost as much as in 2015 (+1.6% after +1.8%). On the one hand, the social contributions paid by households should remain dynamic (+2.1% after +2.0% in 2015), due to the increases scheduled in the rates of retirement contributions, except for farmers whose rate of contribution has been lowered.² On the other hand, tax on income and wealth should decelerate slightly (+1.3% after +1.7%). The lowest-income households should benefit once again from measures to reduce their taxation via a further increase in their tax allowances.

As is the case every year, the measures decided on for 2016 will affect the quarterly profile of taxes on households' income and wealth in H2. Due to the reductions in income tax on the lowest-income families, taxes should fall in Q3 (-1.2%) and then rebound in Q4 (+1.8%).

In 2016, purchasing power to increase at close to the same pace as in 2015

In 2016, the nominal gross disposable income of households should accelerate (+2.0% after +1.4% in 2015) driven by earned income and property income. Inflation is likely to show a slight upturn on an annual average basis (+0.3% after -0.2% in 2015), with the result that the purchasing power of gross disposable income should increase at almost the same pace as in 2015 (+1.7% after +1.6%). When calculated on an individual basis to take account of population changes, purchasing power per consumption unit should progress, as in 2015, by 1.2% (box). ■

2. The contribution rate increased on 1st January 2016 by 0.1 points for private-sector employees and by 0.4 points for civil servants. The rate applied to farmers was cut by 0.7%, meanwhile.

Table 1

Household gross disposable income

	Quarterly changes in %								Annual changes in %	
	2015				2016				2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Gross disposable income (100%)	0.8	0.2	0.7	0.3	0.8	0.3	0.7	0.1	1.4	2.0
including:										
Earned income (71%)	0.7	0.3	0.4	0.6	0.7	0.3	0.5	0.4	1.7	2.0
Gross wages and salaries (62%)	0.6	0.4	0.4	0.6	0.7	0.3	0.5	0.4	1.6	2.1
GOS of sole proprietors ¹ (8%)	1.6	-0.7	0.5	0.7	0.2	0.5	0.4	0.4	2.4	1.5
Social benefits in cash (35%)	0.3	0.3	0.5	0.6	0.4	0.6	0.6	0.3	1.9	2.0
GOS of "pure" households (13%)	0.0	-0.1	0.1	0.5	0.3	0.4	0.2	0.5	0.1	1.2
Property income (8%)	-0.5	0.1	-0.1	0.6	1.4	-0.1	-0.1	-0.1	-1.2	1.7
Social contributions and taxes (-27%)	-0.7	0.7	-0.5	1.7	0.0	0.5	-0.5	1.2	1.8	1.6
Contributions of households (-11%)	0.3	1.0	0.5	0.8	0.3	0.4	0.5	0.5	2.0	2.1
Income and wealth tax (including CSG and CRDS) (-16%)	-1.3	0.4	-1.2	2.3	-0.2	0.5	-1.2	1.8	1.7	1.3
Income before taxes	0.5	0.2	0.4	0.6	0.6	0.4	0.4	0.4	1.5	1.9
Household consumer prices (quarterly national accounts)	-0.1	0.2	-0.1	0.0	0.0	0.2	0.4	0.1	-0.2	0.3
Purchasing power of gross disposable income	0.9	0.0	0.8	0.3	0.8	0.1	0.3	0.0	1.6	1.7
Household purchasing power by consumption	0.8	-0.2	0.7	0.2	0.7	0.0	0.2	-0.1	1.2	1.2

Forecast

How to read it: the figures in parentheses give the structure of the year 2015.

(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 entrepreneur.

Source: INSEE

Table 2

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

	Quarterly changes in %								Annual changes in %	
	2015				2016				2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Non-financial enterprises (67%)	0.7	0.4	0.5	0.6	0.9	0.3	0.4	0.5	1.7	2.2
including: Average wage per capita	0.7	0.3	0.3	0.4	0.6	0.1	0.2	0.3	1.6	1.3
Financial corporations (4%)	-0.3	0.0	0.3	1.0	0.7	0.5	0.7	0.7	-0.4	2.5
General government (22%)	0.1	0.1	0.3	0.4	0.5	0.2	0.9	0.2	1.0	1.6
Households excluding sole proprietors (2%)	0.7	0.6	-0.3	-0.1	-1.1	0.0	0.0	0.0	-0.3	-1.1
Total gross wages received by households (100%)	0.6	0.4	0.4	0.6	0.7	0.3	0.5	0.4	1.6	2.1
including: Non-agricultural market sectors	0.7	0.4	0.4	0.7	0.9	0.3	0.5	0.5	1.5	2.3

Forecast

How to read it: The figures in parentheses give the structure of the year 2015.

Source: INSEE

Table 3

Social transfers received and paid by households

	Quarterly changes in %								Annual changes in %	
	2015				2016				2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Social cash benefits received by households (100%)	0.3	0.3	0.5	0.6	0.4	0.6	0.6	0.3	1.9	2.0
Social Security benefits in cash (72%)	0.4	0.3	0.4	0.6	0.6	0.4	0.5	0.3	2.0	2.0
Other social insurance benefits (19%)	0.0	0.4	0.6	0.6	0.7	0.4	0.4	0.4	1.9	2.1
Social assistance benefits in cash (8%)	-0.1	0.3	0.5	0.6	-1.7	2.7	1.7	0.3	1.7	2.0
Total social contribution burden by households (100%)	-0.2	0.7	0.6	0.7	0.8	-0.4	0.5	0.5	1.3	1.8
Actual social contributions paid	-0.2	0.7	0.6	0.7	0.8	-0.5	0.5	0.5	1.4	1.8
including: Employers contributions ¹ (63%)	-0.5	0.6	0.6	0.6	1.1	-1.0	0.5	0.5	1.0	1.6
Contributions of households (37%)	0.3	1.0	0.5	0.8	0.3	0.4	0.5	0.5	2.0	2.1

Forecast

How to read it: The figures in parentheses give the structure of the year 2015.

1. Employer contributions are both received and paid by households in the national accounts: they therefore have no effect on gross disposable income.

Source: INSEE

Different ways of measuring purchasing power

The household income that is presented and analysed in *Conjoncture in France* includes all the income received by all households. This is the relevant reference in macro-economic terms, for example when constructing the balance between resources (GDP and imports) and uses (consumption, investment, exports...) or forecasting GDP. The purchasing power of all households, which represents the quantity of goods and services that households can purchase with their income, is calculated as income corrected for the growth in consumer prices. In order to measure the average purchasing power of the French population, this value has to be corrected in order to account for both the growth in the number of households and their composition. The most relevant correction in this respect consists in dividing income by the number of

consumption units in France, thereby taking account of demographic growth and also of the fact that some consumption may be shared within the household (for example, household appliances). A large household therefore makes certain "economies of scale" in relation to a smaller household.

In 2015, growth in the number of consumption units was +0.4% (as a comparison, growth in the population was +0.4% and growth in the number of households +0.7%).

Therefore, on the assumption that these trends will continue, purchasing power per consumption unit in 2016 should rise, as in 2015, by 1.2%. Per inhabitant, the rise should be 1.3% and per household it should be 1.0%. ■

Household consumption and investment

In Q1 2016, there was a sharp acceleration in household consumption (+1.0% after 0.0%), corresponding to the strongest growth since early 2006. Spending on manufactured goods rose once again, particularly housing equipment, and the consumption of recreational services was boosted by ticket purchases for the Euro 2016 football tournament.

In Q2 2016, there is likely to be a significant decline in consumption (+0.2%). Purchases of manufactured goods should remain virtually unchanged, with a significant slowdown in housing equipment purchases and a reduction in expenditure on clothing. In addition, a slowdown in the consumption of recreational services is expected due to a backlash effect. After another moderate increase in Q3 (+0.2%), consumption should pick up slightly in Q4 (+0.4%), growing at a pace in line with previous purchasing power gains. As an annual average, consumption is likely to increase by 1.6% in 2016 (after +1.5% in 2015), which would represent its highest rise since 2010.

In Q1 2016, the savings ratio looks likely to have decreased by 0.2 points, to 14.6%, partly cancelling out the rise of 2015 (+0.8 points from late 2014 to late 2015). Overall, it is expected to decrease between now and the end of 2016, to 14.3%, i.e. 0.6 points less than one year ago.

After a much smaller decline in 2015 (-0.8%) than in 2014 (-3.5%), household investment in accommodation should rise only slightly throughout 2016. As an annual average, it should remain virtually unchanged (+0.2%).

Consumption bounced back in Q1 2016

There was a sharp acceleration in household consumption in Q1 2016 (+1.0% after 0.0%; [Table](#)), which increased at its fastest rate since early 2006. This acceleration is explained mainly by increased expenditure on goods (+1.4% after -0.4%). Spending on household equipment rose strongly (+6.8% after +2.6%), boosted by the impact of the changeover in television broadcasting formats.¹ Furthermore, automobile sales bounced back (+2.0% after -0.1%), as did expenditure on clothing during the winter sales (+1.6% after -2.2%). Energy consumption also picked up (+1.6% after -2.6%), with winter temperatures approaching the seasonal averages after a particularly mild autumn.

1. The standard television broadcasting format will change on 5 April 2016. This changeover will render certain equipment obsolete, requiring an upgrade or the purchase of a new TNT-HD box; the effect could be similar in magnitude to that seen when terrestrial television switched to all-digital broadcasting in 2010.

Household consumption and investment expenditure

at chain-link previous year prices, SA-WDA

	Quarterly changes in %								Annual changes in %		
	2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Total household consumption expenditures (G+S)	0.5	0.1	0.4	0.0	1.0	0.2	0.2	0.4	0.7	1.5	1.6
Tourism balance	7.3	-2.8	29.9	6.9	-3.3	5.2	0.0	-1.7	-35.1	-11.3	17.8
Services (S)	0.2	0.1	0.4	0.3	0.7	0.3	0.4	0.4	1.0	1.0	1.7
Goods (G)	1.0	0.0	0.7	-0.4	1.4	0.3	0.0	0.4	-0.4	1.9	1.8
including:											
Food (AZ-C1)	0.2	0.8	0.0	0.2	0.4	-0.5	0.2	0.2	0.0	1.2	0.5
Agriculture goods (AZ)	1.0	-0.1	-1.5	-0.3	-0.6	-0.5	0.2	0.2	2.5	-0.3	-1.8
Agri-food products (C1)	0.0	1.0	0.3	0.3	0.6	-0.5	0.2	0.2	-0.4	1.5	1.0
Energy (DE-C2)	3.2	-2.4	2.1	-2.6	1.6	1.3	-1.3	0.1	-6.3	1.4	0.4
Energy, water and waste (DE)	7.3	-4.5	1.5	-2.4	2.6	2.3	-2.4	0.0	-9.2	2.1	0.8
Coke and refined petroleum (C2)	-1.2	0.1	2.6	-2.8	0.4	0.0	0.2	0.2	-3.1	0.7	-0.2
Engineered goods (C3-C5)	0.9	0.4	0.8	0.1	2.1	0.4	0.4	0.7	1.9	2.7	3.4
Manufactured goods (C1-C5)	0.3	0.6	0.8	-0.1	1.4	0.1	0.3	0.4	0.5	2.0	2.1
Investment expenditure	0.0	-0.3	-0.2	0.0	0.3	0.0	0.2	0.2	-3.5	-0.8	0.2

Forecast

Source: INSEE

Consumption of services also saw a marked acceleration (+0.7% after +0.3%), notably due to spending on recreational services, boosted by ticket purchases for the Euro 2016 football tournament. Spending on accommodation and food services increased significantly after a sluggish fourth quarter.² Indeed, tourist numbers gradually improved during Q1 2016 after slumping at the end of 2015, with a French clientele, rather than foreign visitors, stimulating this improvement, which was more pronounced in the provinces than the Paris region.

Consumption is likely to slow down sharply in Q2 2016

In Q2 2016, total household consumption is likely to run out of steam: +0.2% after +1.0% (Graph 1), due to the dissipation of the favourable factors that were present during Q1.

Purchases of manufactured goods should remain virtually unchanged. In particular, a sharp decline is expected in housing equipment purchases as the effect of the changeover in television broadcasting formats fades and is likely to be only partly offset by the rise in purchases of electronic goods coinciding with Euro 2016 – a common occurrence for this type of event. Moreover, expenditure on clothing looks set to decline after bouncing back in Q1. In addition, spending on energy should increase at a slightly slower rate (+1.3%) than during the previous quarter (+1.6%), due to the slowdown in spending on fuel, while expenditure on heating looks set to keep rising since spring temperatures have been cooler than the seasonal averages. A downturn is likely in food purchases (–0.5% after

+0.4%). Finally, there is likely to be a clear slowdown in the consumption of services (+0.3%), due to a decline in recreational expenditure after a very dynamic first quarter.

In Q3, household consumption (+0.2%) should be limited by the decline in energy expenditure (–1.3%), with temperatures returning to their seasonal norms. Nevertheless, the consumption of accommodation and food services should continue to pick up and recreational service consumption should approach its trend growth. In Q4, there is likely to be another slight acceleration in household consumption, which should increase in line with previous purchasing power gains (+0.4%).

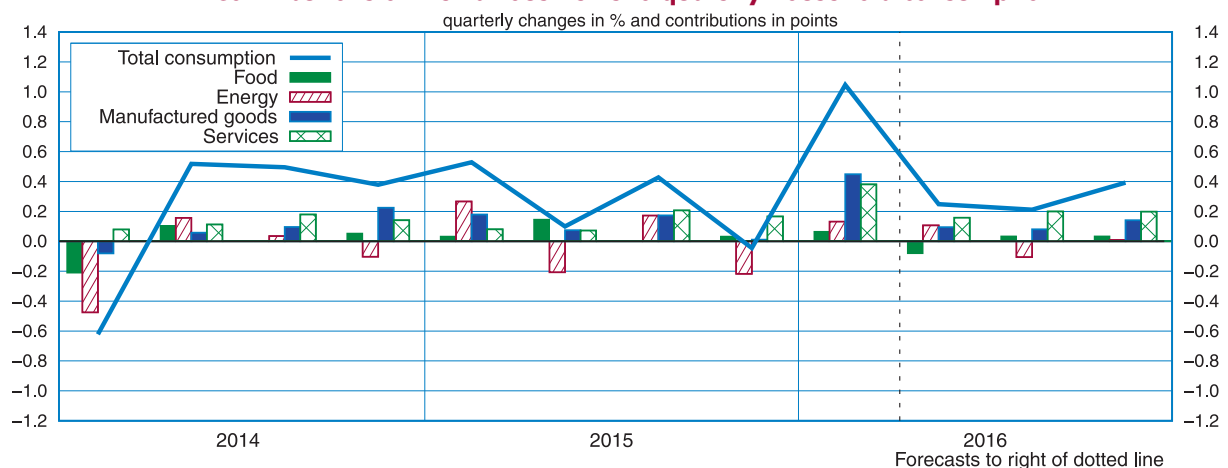
On average over the year, household consumption expenditure looks set to rise slightly more in 2016 (+1.6%) than in 2015 (+1.5%), reaching its highest growth rate since 2010.

At end 2016, the savings ratio should be 0.6 points lower than at end 2015

In Q1 2016, household consumption is expected to have increased at a faster rate than purchasing power: therefore, the savings ratio is expected to have decreased (–0.2 points to 14.6%), partly cancelling out the rise of 2015 (+0.8 points between late 2014 and late 2015; Graph 2). Over the rest of the year, purchasing power is likely to be irregular given the tendency of households to smooth their consumption in response to their tax and social security contributions. As well as these jolts, there looks likely to be a further decrease in the savings ratio between now and the end of 2016, when it should drop to 14.3%. It is expected to be 0.6 points below its late 2015 level and should return to its mid-2015 level. On average over the year, however, it should remain stable at 14.5%.

2. "After the attacks, consumption of market services should gradually recover during H1 2016", *Conjoncture in France*, Marche 2016, p. 96-98.

1 - Contributions of the various items to quarterly household consumption



Source: INSEE

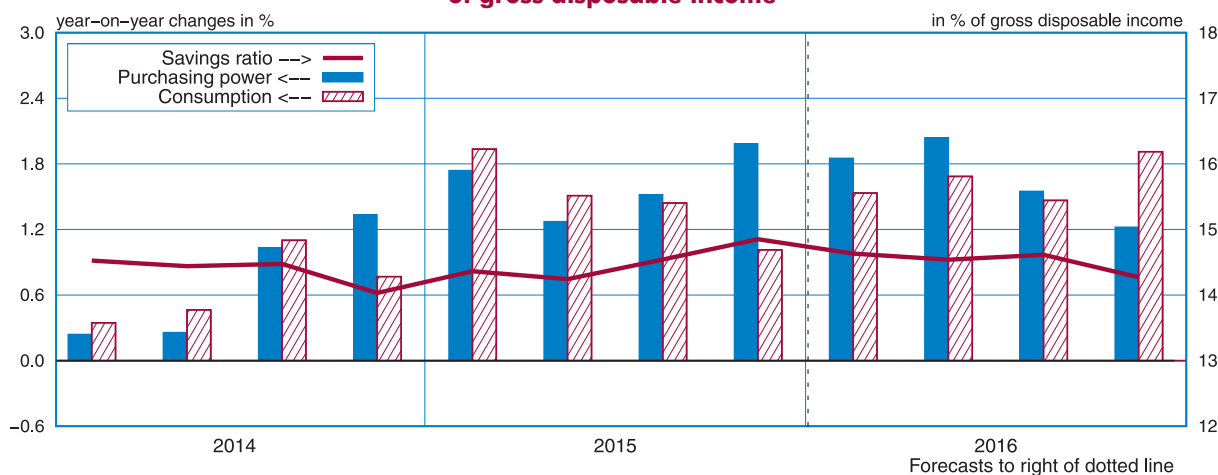
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Household investment should remain unchanged in 2016

In Q1 2016, household investment rose slightly (+0.3%), for the first time since the summer of 2013. The number of authorised housing starts declined once more at the beginning of 2016 (Graph 3); however, it looks likely to rise between now and the end of 2016, given the sharp rise in sales of new dwellings (Focus).

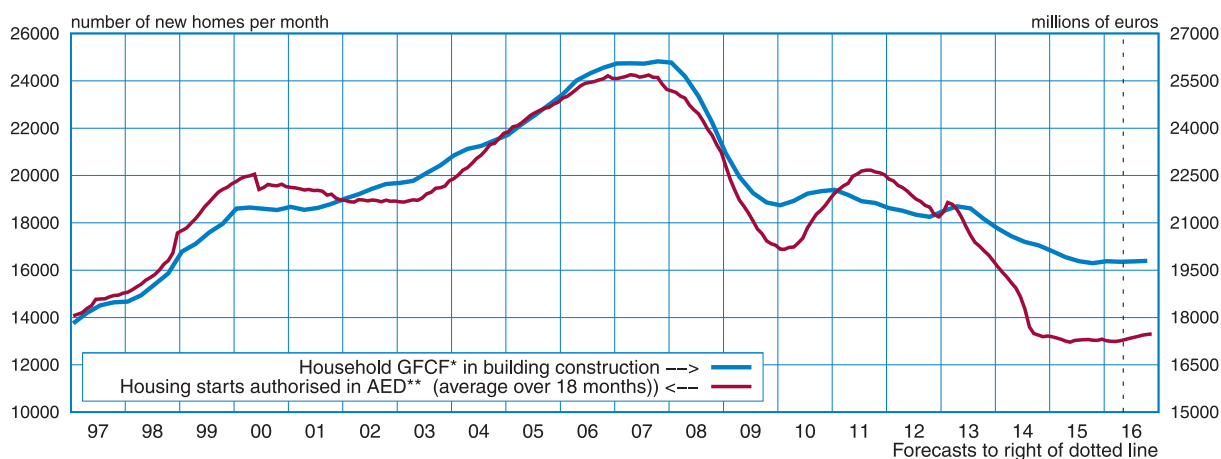
Bearing in mind the usual time lags between authorisations and actual construction work, household investment is likely to remain stable in Q2 2016, before rising slightly in H2. As an annual average, household investment is likely to remain virtually unchanged (+0.2%) after four years of decline (including -0.8% in 2015 and -3.5% in 2014). ■

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
 **AED+: actual estimated dates

Sources: INSEE, SOeS

How fluctuations in sales of new homes affect household investment in housing

In Q1 2016, household investment increased slightly, for the first time since mid-2013. The fall between mid-2013 and mid-2015 reached 5.2%. The majority of this fall in investment is in new housing (-8.3%), in particular the construction of single dwellings.

In level terms, the construction of single dwellings represents 30% of the volume of households' investment in construction (Table 1), i.e. a share smaller than that of major maintenance work on their homes (45%), but larger than investment in services (-19%, mainly the transfer duties paid by households when they purchase a home, whether new-build or old stock), and the investment corresponding to the purchase of a dwelling in collective housing (5%).

However, given its substantial fluctuations, household investment in single dwellings explain the majority (63%) of the variations in household investment (Graph 1).

To be able to predict household investment as accurately as possible, it is therefore essential to understand household investment in new-build single dwellings.

Short-term indicators of construction contracts, building permits and housing starts allow the level of activity in single dwelling building to be monitored

A household's purchase of a single dwelling goes through a number of stages; short-term indicators are available to estimate the number of housing units at each of these stages (Table 2).

In two cases out of three, the acquisition of a single dwelling begins with the signing of a construction contract with a housebuilder.

An application for a building permit is then filed at the town hall, approximately 3 to 4 months later. If the permit is granted, the building work then begins in the majority of cases (on average 15% of permits have been cancelled since 2013). When it does take place, the work begins most often between 3 and 6 months after obtaining the permit. The building work following on from the housing start is then accounted for all the way through the construction work. It correspond, from the national accounting point of view, to household investment in housing. Once the house is begun, it is produced progressively over a period ranging from 12 to 18 months on average.

To track this production activity, the ministerial statistics department at the Ministry of Housing, applies to each type of housing a table of lead times, calculated on the basis of the lead times observed in the past on comparable dwellings: the construction figures for the quarter therefore depend on the housing starts of the last 18 months. The production indicator in the construction of new dwellings thus created serves as an indicator of household investment in the quarterly accounts.

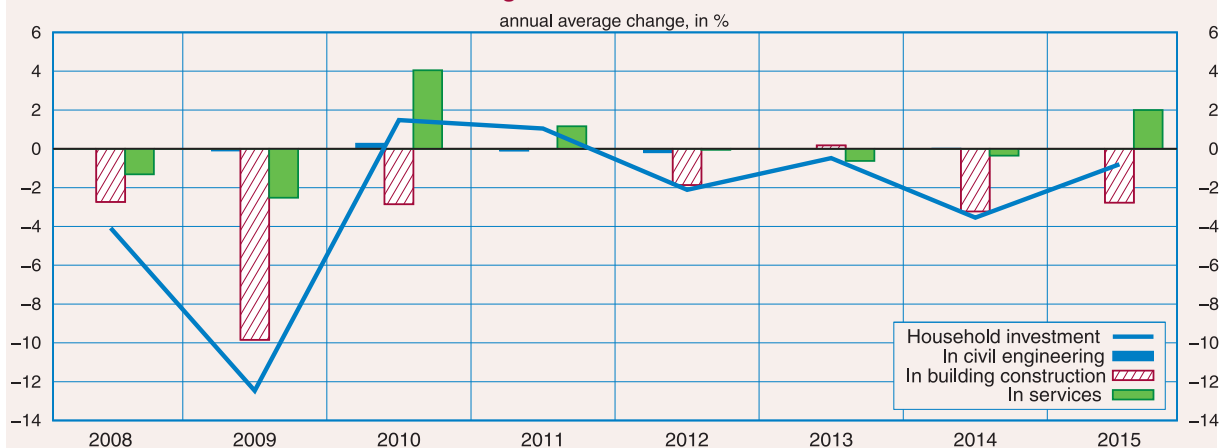
To model the different stages from construction contract through to households' finalised investment, the different lead times are estimated in the econometric models detailed in the appendix. These models are used to predict the household investment

Table 1 - Breakdown of household gross fixed capital formation

		Share of household investment in 2015		Factors contributing to households' GFCF quarterly fluctuations	
GFCF in building construction	Single dwellings	30	80	63	80
	Collective housing	5		6	
	Major maintenance work	45		11	
GFCF in civil engineering		1		1	
Housing-related expenses (services)		19		19	

Source: INSEE

1 - Factors contributing to the variation in household investment



How to read it: in 2014, the reduction in household investment (-3.5%) was explained by that of households' investment in building (contribution of -3.2 points) and that of investment in services (contribution of -0.4 points).

Source: INSEE

French developments

until the forecasting period presented in each Conjoncture in France and shed some light on how long it will take for an increase in sales to be passed on to household investment in the national accounts.

All in all, these models show that an increase in sales of new houses only begins to produce its first effects on household investment 6 months later. After a year, a 10% increase in sales is reflected by a 0.9% rise in household investment (Table 3).

The increase in house sales that occurred in 2015 allows a virtual stabilisation in household investment to be anticipated in 2016

In 2015, sales of single dwellings started to rise again substantially: according to the Markémétron indicator published by the *Union des maisons françaises* (UMF) and the *Fédération française du bâtiment* (FFB) (two home builders' federations), on average housebuilders signed 13% more contracts than in 2014 (Graph 2). The level of sales nevertheless remains far below the level seen before 2008. The increase was sustained from the end of 2014 to mid-2015; however, sales fell again at the end of the year, before picking up again at the beginning of 2016.

In line with the average lead times, this improvement only filtered through gradually to effective household housing investment. In 2015, the number of building permits for single dwellings thus increased slightly (+0.4% as an annual average after -16.6% in 2014) and the number of housing starts on new dwellings fell less significantly (-3.0%) than in 2014 (-19.0%). The ministerial statistical department's single dwelling activity indicator also fell less in 2015 than in 2014 (-11.8% after -17.4%). In Q1 2016, it rose again for the first time since mid-2013, after having reached its lowest level since the series has existed (Q1 1995) in Q4 2015.

On the basis of calibrating done using "bridge models" from a historical series of permits and housing starts known until April 2016, and then extrapolated using the Markémétron indicator of sales of new houses, the single dwelling production indicator is expected to stabilise during the course of 2016.

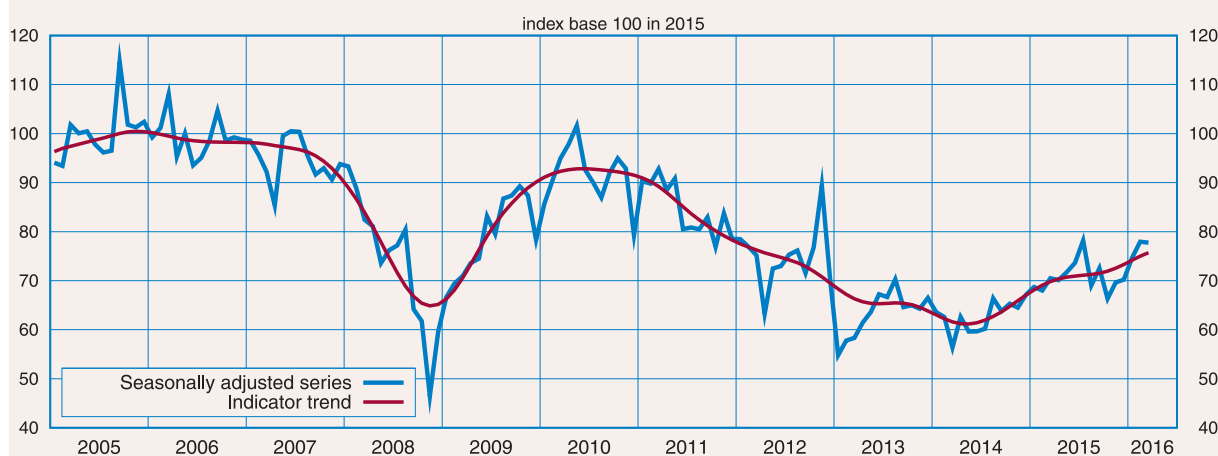
Overall, the increase in sales that occurred in 2015 is expected to be reflected in 2016 by a slight improvement in household investment in the national accounts: the annual average should stabilise (+0.2%) after four years of decline. ■

Table 2 - Short-term indicators corresponding to the stages of construction

Stage	Data provided	Frequency	Source
Construction contract	Number of construction contracts signed	Monthly	Markémétron (Union des maisons françaises / FFB)
Building permit applications	Number of permits granted	Monthly	
Start of construction of the dwelling	Number of housing starts	Monthly	SOeS
Housebuilding	Production/investment indicator	Quarterly	

Source: INSEE

2 - Markémétron indicator



Source: Fédération Française du Bâtiment

Table 3 - Average cumulative effect of a 10% increase in a given quarter Q in the Markémétron indicator
in %

Markémétron : +10%	Q	Q+1	Q+2	Q+3	Q+4	Q+5	Q+6	Q+7	Q+8
Building permits	0.0	5.1	6.1	6.9	7.5	8.0	8.4	8.7	9.0
Housing starts	0.0	1.4	3.8	5.2	6.3	7.0	7.3	7.7	8.2
Production/investment indicator	0.0	0.2	0.8	1.9	2.9	3.9	4.7	5.3	5.9
Household investment (quarterly national accounts)	0.0	0.1	0.2	0.6	0.9	1.2	1.4	1.6	1.8

How to read it: a 10% increase in the Markémétron indicator in quarter Q causes a 6.3% increase in housing starts after one year.
Source: INSEE

Table 4 - From new house sales to the prediction of household investment
in %

	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
Sales of new houses (Markémétron)	2.0	-6.2	11.7	0.0	0.0	0.0
Pure single dwelling building permits	2.0	-4.0	-2.0	4.6	0.0	-1.5
Pure single dwelling housing starts	8.2	-2.6	-3.7	2.3	-1.4	3.4
Single dwelling production index	-2.3	-1.6	0.4	-0.7	-0.2	0.0
Household investment	-0.1	0.0	0.2	0.0	0.1	0.1

Forecast

Sources: FFB, SOeS, INSEE

Technical appendix

Modelling the process of building a single dwelling makes it possible to estimate the effect of a rise in the number of construction contracts on household investment in housing.

The Markémétron has proven to be relevant for predicting building permits. The modelling method chosen (equation 1), written in the form of an error correction model, explains the majority of the fluctuations in building permits with the Markémétron indicator (for the current quarter and the previous quarter), the variation in the number of permits in the previous quarter and the difference between this indicator and the number of permits (the quantities are added up for the quarter and expressed as a logarithm). The long-term relationship describes the proportional relationship expected between the number of construction contracts signed and the number of permits actually implemented. Using indicator variables, the equation also isolates the specific effect attributable to the new thermal regulations that came into effect on 1 January 2013. The latter caused an increase in building permits in Q1 2013, before they fell back again in the next quarter.

Equation 1: prediction of the rate of growth in the number of permits

$$\Delta \text{permis}_t = \underset{(-2.51)}{-0.37} + \underset{(2.39)}{0.31} \times \Delta \text{markemetron}_{t-1} - \underset{(-2.47)}{0.20} \times (\text{permis} - \text{markemetron})_{t-1} \\ + \underset{(4.25)}{0.21} \times \mathbf{1}_{2013T1} - \underset{(-6.78)}{0.4} \times \mathbf{1}_{2013T2} + \varepsilon_t$$

$$R^2 = 85.6 \%$$

The equation modelling the time lags between the building permit being granted and building work starting (equation 2) is also written in the form of an error correction model; the variables are written as logarithms. The past quarters used for the permits variable describe the progressive transformation of the latter into housing starts. The long-term relationship reflects the relationship eventually expected between permits, housing starts and cancellation rate (which corresponds to the proportion of permits that do not end in actual building work). The dwellings started correspond to dwellings authorised whose permits have not been cancelled.

Equation 2: prediction of the rate of growth in housing starts

$$\Delta \text{mch}_t = \underset{(-3.71)}{-0.45} \times \Delta \text{mch}_{t-1} - \underset{(-3.89)}{0.43} \times \Delta \text{mch}_{t-2} - \underset{(-2.21)}{0.14} \times [\text{mch} - \text{permis} - \log(1 - \text{annul})]_{t-1} \\ + \underset{(8.27)}{0.28} \times \Delta \text{permis}_t + \underset{(5.2)}{0.43} \times \Delta \text{permis}_{t-1} + \underset{(4.83)}{0.41} \times \Delta \text{permis}_{t-2} + \underset{(4.63)}{0.31} \times \Delta \text{permis}_{t-3} + \underset{(2.82)}{0.12} \times \Delta \text{permis}_{t-4} + \varepsilon_t$$

$$R^2 = 80.8 \%$$

Finally, the last equation (equation 3) presents a relationship modelling the link between growth in the ministerial statistical department production indicator and the time-lagged values of the variations in housing starts; the long-term relationship reflects the long-term correspondence between the dwellings on which work has started and dwellings in the course of construction.

Equation 3: prediction of the rate of growth in the production indicator

$$\Delta ind_t = 0.68 + 0.51 \times \Delta ind_{t-1} + 0.12 \times \Delta mch_t + 0.16 \times \Delta mch_{t-1} - 0.05 \times (ind - mch)_{t-1} \\ + 0.03 \times \mathbf{1}_{1999T1} - 0.03 \times \mathbf{1}_{1999T2} - 0.03 \times \mathbf{1}_{2009T4} + 0.02 \times \mathbf{1}_{2010T2}$$

(2.93) (9.99) (7.38) (6.8) (-2.93)
(4.21) (-3.63) (-3.42) (3.11)

$$R^2 = 94.8 \%$$

Using the weight of single dwellings in household investment (30%), it is then possible to estimate that an increase of one point in the single dwelling indicator corresponds to an increase of 0.3 points in household investment.

Ultimately it emerges that a 10% increase in the Markémétron indicator eventually leads to an increase of 10% in building permits, housing starts and investments in single dwellings, but only a total increase of 3% in household investment. This is slow to filter through: it takes two years for half of the impact to be passed on to household investment; this increase is concentrated in the first year (+0.9%) and the second year (+0.9%), but then slows down after that (+0.5% during the third year and +0.3% during the fourth year). ■

Enterprises' earnings

The margin rate of non-financial corporations showed an upturn in 2015, reaching 31.4% on average over the year, after 30.4% in 2014, a rise on a scale not seen since 1998. It is being driven by the fall in oil prices, the ramp-up of the CICE (tax credit for encouraging competitiveness and jobs) and the reductions in social contributions within the framework of the Responsibility and Solidarity Pact (PRS). Non-financial corporations as a whole are now close to their pre-crisis margin rates (32.7% between 1988 and 2007). The industry branch, in which oil consumption is higher, has already returned to its pre-crisis level.

In H1 2016, the margin rate should continue to increase under the effect of the ramp-up of the PRS as of April, and because real wages are likely to grow a little more slowly than productivity. In H2, real wages and productivity are likely to slow down at a similar pace and margin rates almost stabilise. On average in 2016, the margin rate should increase again to 32.3%, coming closer to its pre-crisis average.

The margin rate increased significantly in 2015

The margin rate of non-financial corporations showed a marked upturn in 2015, to 31.4% on average after 30.4% in 2014 (Table). It began by increasing in H1 2015 (+0.4 points; Graph 1), essentially due to the rise in the tax credit for encouraging competitiveness and jobs (CICE) and the reductions of social contributions within the framework of the Responsibility and Solidarity Pact (PRS). In H2, it continued increasing to 31.7% by the end of 2015, mainly thanks to the fall in oil prices (terms of trade contribution of +0.8 points).

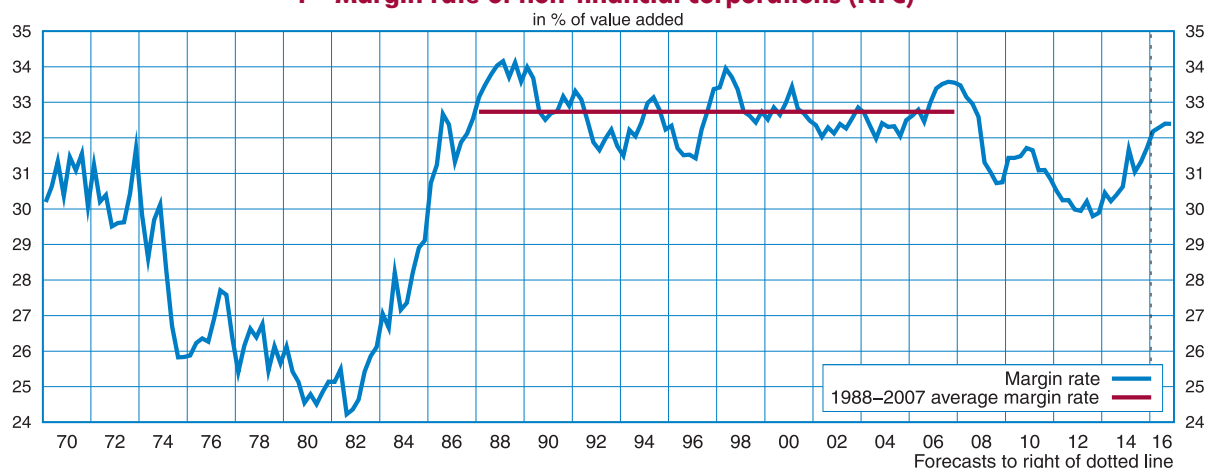
On an annual average basis, the margin rate therefore rose by 1.0 point in 2015 thanks to two main factors: the fall in oil prices on the one hand (contribution of +0.8 points), and the fall in contributions on the other (+0.7 points). Real wages were more dynamic than growth in productivity, however, knocking off 0.4 points. The improvement in the margin rate in 2015 was more pronounced in the branches that consume more oil, such as in manufacturing industry (+2.1 points) where it returned to its pre-crisis level.¹ The margin rate progressed more weakly in services (+0.2 points; Graph 2).

The margin rate should continue to recover in 2016

In H1 2016, the margin rate should progress once again (+0.6 points up on the end of 2015). In Q1, it would seem to have increased significantly (+0.5 points), notably thanks to the boost provided by a further fall in the oil price (+0.3 points), plus the effect of the ramp-up of the CICE, while the progression in real wages would seem to have been close to that in productivity. In Q2, the margin rate should progress moderately (+0.1 points), thanks to the ramp-up of the PRS on the one hand, resulting in a reduction in family contributions from April (contribution of +0.3 points), and due to a downturn in real wages on the other. The rise should be partly offset, however, by the rebound in the oil price (-0.3 points). The margin rate should therefore stand at 32.3% in mid-2016, coming even closer

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

1 - Margin rate of non-financial corporations (NFC)



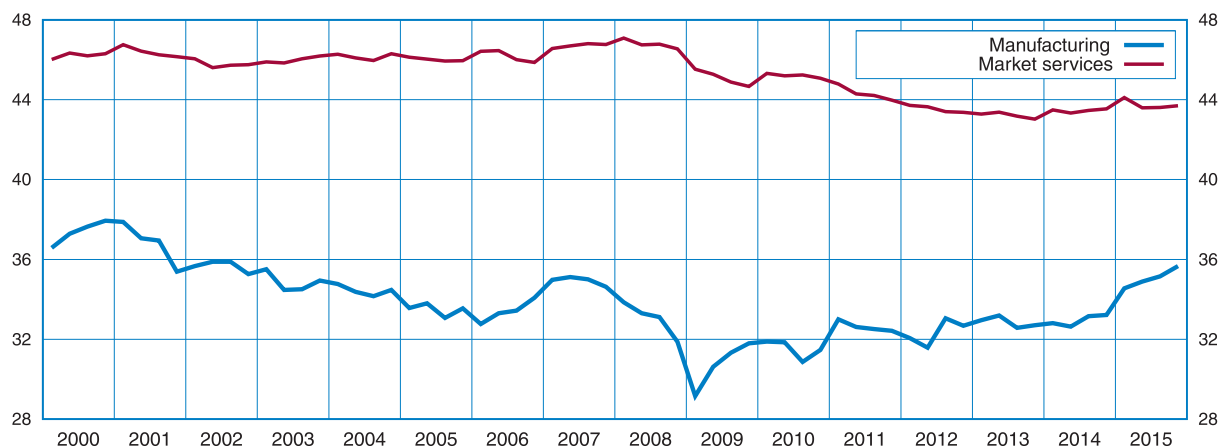
Source: INSEE, Quarterly national accounts

French developments

to its pre-crisis average (32.7% between 1988 and 2007). In H2, it should almost stabilise: businesses are likely to make more moderate productivity gains than in H1, while the purchasing power of wages will be hit by an upturn in inflation.

On an annual average basis, productivity should progress a little more quickly than real wages. In addition, the fall in oil prices (+0.4 points) and labour cost reduction schemes (+0.4 points) should contribute to a further rise in the margin rate to 32.3% on average in 2016, close to its pre-crisis average. ■

2 - Margin rate in industry and in services



Source: INSEE, Quarterly national accounts

Breakdown of the margin rate of non-financial corporations (NFC)

in % and in points

	2014				2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Margin rate (in level)	30.5	30.2	30.4	30.6	31.7	31.0	31.3	31.7	32.2	32.3	32.4	32.4	30.4	31.4	32.3
Variation in margin rate	0.6	-0.2	0.2	0.2	1.1	-0.6	0.3	0.4	0.5	0.1	0.1	0.0	0.5	1.0	0.9
Contributions to the variation margin rate															
Productivity gains	0.0	0.1	0.3	0.2	0.5	-0.2	0.2	0.2	0.5	0.1	0.1	0.1	0.5	0.8	0.8
Real wage per capita	0.3	-0.3	-0.2	-0.3	-0.6	-0.1	-0.3	-0.3	-0.4	0.1	0.1	-0.1	-0.3	-1.2	-0.6
Employer contribution ratio	-0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	-0.1	0.3	0.0	0.0	-0.3	0.1	0.1
Ratio of the value-added price to the consumer price	-0.3	0.0	0.1	0.4	0.3	-0.2	0.4	0.4	0.3	-0.3	-0.1	0.0	-0.2	0.8	0.4
Other factors	0.8	0.0	0.0	0.0	0.6	-0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.7	0.5	0.3

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.
- other factors: taxes on production net of operating subsidies, including CICE and the emergency plan for employment:¹

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

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

Corporate investment and inventory

Corporate investment accelerated sharply in Q1 2016 (+2.4% after +1.9%), both in manufactured goods (+4.5% after +3.6%) and in services (+1.8% after +1.4%). In particular, purchases of private vehicles and capital goods increased sharply. Investments in construction grew more moderately (+0.4% as in Q4 2015). In Q2 2016, corporate investment is likely to slow in reaction to these sharp increases (+0.2%), before gathering pace again in H2 (+0.5% in Q3 and then +0.6% in Q4). On average in 2016, investment is set to increase by 4.7%, a rate of growth not seen since 2007. In Q1 2016, changes in inventories contributed negatively to growth (-0.2 gross domestic product points), after two consecutive quarters of making a very positive contribution (+0.6 points in Q3, then +0.7 points in Q4 2015). Lower capital goods inventory levels are the main component here (-0.2 points of GDP). Through to the end of 2016, the contribution of inventories to activity is likely to reflect that of other transport equipment: it is expected to be negative again (-0.1 points) in Q2 2016, due to the delivery of a number of large contracts, then become slightly positive in Q3 2016 (+0.1 points) and finally end up neutral in Q4 2016. All in all over the year, changes in inventories are likely to contribute +0.4 points to GDP growth (after +0.1 points in 2015), mainly resulting from a strong carry-over effect at the beginning of the year.

In Q1 2016, corporate investment picked up

In Q1 2016, investment by non-financial enterprises (NFE) picked up: +2.4% after +1.9% in Q4 2015 (Table 1), i.e. its strongest growth since the start of 2008. Enterprises substantially increased their expenditure on manufactured goods (+4.5% after +3.6%), most notably transport equipment (+8.4% after +10.4%), mainly cars. Investment in services also gathered pace (+1.8% after +1.4%), mainly driven by buoyant spending on information-communication (+3.4% after +1.8%). Spending on construction grew more moderately (+0.4% as in Q4 2015). Investment expenditure in value having grown faster than value added, the NFE investment rate increased by 0.4 points in one year, to 21.4% at the end of 2015 (Graph 1).

Investment is set to slow sharply in Q2, but then pick up again

In Q2 2016, NFE investment is expected to slow significantly (+0.2%) in reaction to a vigorous Q1. The business tendency surveys provide contrasting pointers on NFE investment. In industry, production capacity tensions increased a little in April, in particular the production capacity utilisation rate and production bottlenecks (Graph 2). The investment revision indicator remains positive and more industrialists reported an increase than a fall in their investment over the course of Q1. In

Table 1

Investment by non-financial enterprises (NFE)

	Quarterly changes												Annual changes		
	2014				2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Manufactured products (34%)	-0.7	0.4	0.6	-0.6	1.1	1.0	0.5	3.6	4.5	0.1	0.8	0.8	2.4	3.0	8.6
Construction (26%)	-1.4	-1.2	-0.9	0.3	0.1	0.1	-0.2	0.4	0.4	-0.5	-0.3	0.0	-1.7	-0.3	0.1
Other (40%)	0.7	0.9	1.3	0.3	1.9	0.6	0.7	1.4	1.8	0.6	0.6	0.7	2.7	4.2	4.3
All non-financial enterprises (100%)	-0.3	0.2	0.5	0.0	1.2	0.6	0.4	1.9	2.4	0.2	0.5	0.6	1.4	2.7	4.7

Forecast

Source: INSEE

French developments

services, the balance of opinion on past investment fell in May, to its average long-term level, whilst the balance of opinion on investment prospects recovered, returning to a level above its long-term average.

Financing terms, however, continue to favour investments. On the one hand, the corporate margin rate looks set to continue to rise and by mid-2016 should reach its highest level since 2008, enabling enterprises to self-finance their purchases to a greater extent (*Graph 1*); on the other hand, real interest rates are expected to remain very low until the end of 2016 and credit terms should not limit the expansion of credit.

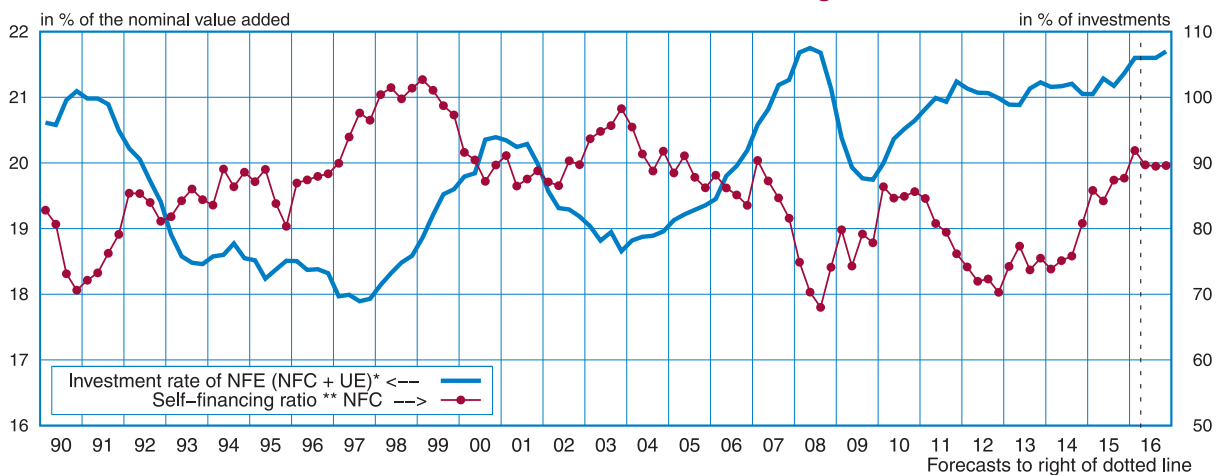
In H2 investment is expected to return to a rate of growth close to its 2015 average: +0.5% in Q3 and +0.6% in Q4. On average over the year, investment is likely to gather pace further in 2016: +4.7% after +2.7% in 2015. This would be the highest growth rate seen since 2007. After a further

increase in Q1 2016 (+0.2 points), the NFE investment rate is expected to remain at a high level (21.7% at the end of 2016 compared to 21.4% a year earlier.

Expenditure on manufactured goods is expected to stall in spring before returning to sustained growth

NFE investment in manufactured goods is expected to stall in Q2 2016 (+0.1% after +4.5%). Indeed, vehicle registrations in April and May suggest that investment in automobiles is stabilising in Q2 after having leapt up over the two previous quarters. Expenditure on capital goods is also likely to slow down, although these goods continue to benefit from the additional depreciation allowance measure, which has been extended for a year. In H2, as business prospects improve, investment in manufactured goods should return to solid growth (+0.8% per quarter).

1 - NFE investment rate and self-financing rate*

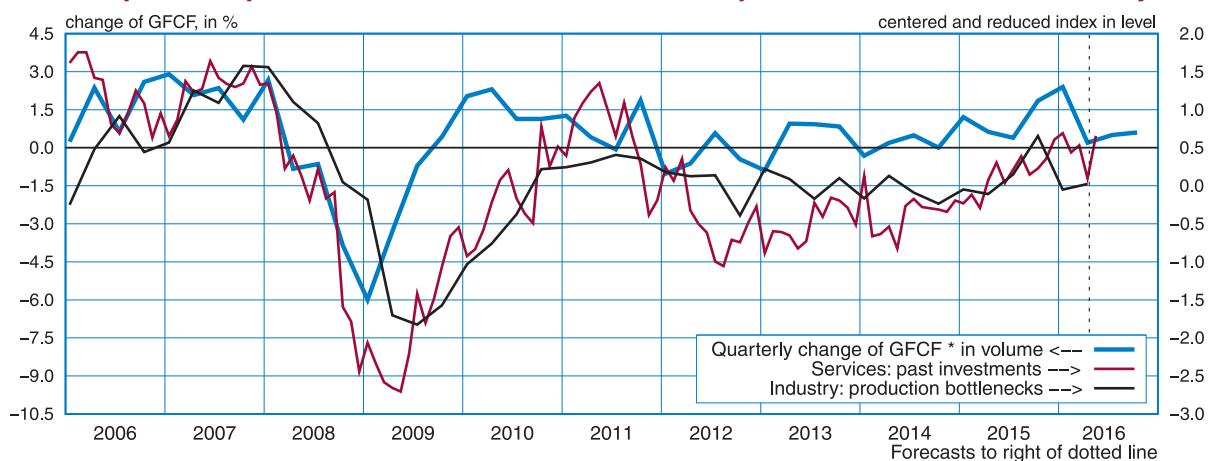


* Non-financial enterprises: non-financial corporations (NFC) and unincorporated enterprises (UE)

** Self-financing rate: ratio of non-financial enterprises savings to their investments.

Source: INSEE, Quarterly national accounts

2 - Opinion on past trend of 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 decline

Expenditure on construction is forecast to decline in Q2 (−0.5%) and Q3 2016 (−0.3%) before stabilising in the last quarter. In particular, given the past record of housing starts, spending on non-residential buildings is likely to decline again in Q2 and Q3 before stabilising at the end of the year. As for civil engineering, after the rebound that got underway at the end of 2015, activity looks set to fall sharply again from Q2 onwards. Indeed, according to business leaders, prospects for the sector started to look gloomy again in April.

Investments in services are expected to continue rising fast

After an expected slowdown in Q2 (+0.6%), with a slight reaction to the strong increase in Q1 (+1.8%), investments in services look likely to maintain this pace in H2: +0.6% in Q3 and then +0.7% in Q4.

On average over the year, the contribution of changes in inventories should be positive again in 2016

After two quarters in which changes in inventories made a strong positive contribution to GDP growth (+0.6 points in Q3 2015, then +0.7 points in

Q4), they fell in Q1 2016, thereby contributing negatively to GDP growth (−0.2 points; *Table 2*). This contribution was mainly the result of movements in inventories of capital goods (contribution of −0.2 points) and the sale of works of art (−0.1 points).

In Q2 2016, the contribution of inventories to growth is likely to remain negative (−0.1 points), due to the removal from inventories of a number of large shipbuilding contracts (in particular the delivery in May, of the cruise ship, the *Harmony of the Seas*), limited by the after-effect of the sale of works of art in Q1. Furthermore, in May the level of inventories was deemed close to its normal level in industry, which implies that changes in inventories should contribute little to the growth in activity, apart from the effects specific to transport equipment. In Q3 2016, changes in inventories are expected to contribute positively to growth in reaction to this (+0.1 points), before becoming neutral again at the end of the year. All in all over the year, they are likely to contribute +0.4 points to GDP growth (after +0.1 points in 2015), mainly resulting from a strong carry-over effect at the beginning of the year. ■

Table 2

Contribution of inventory changes to growth
in GDP points

	Quarterly changes												Annual changes		
	2014				2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Agricultural and agrifood products	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Manufactured products	0.4	0.0	0.3	−0.5	0.3	−0.5	0.6	0.5	0.1	−0.3	0.1	0.0	0.4	0.1	0.4
Agrifood products	0.1	0.0	0.0	−0.1	0.1	0.0	−0.1	0.0	−0.1						
Coke and petroleum products	0.2	−0.1	0.0	0.0	0.2	−0.2	0.0	0.1	0.0						
Machinery and equipment goods	0.0	0.0	0.0	0.0	−0.1	0.0	0.0	0.1	−0.2						
Transport equipment	−0.2	0.1	0.5	−0.5	0.2	−0.3	0.4	0.1	0.3						
Others industrial goods	0.3	−0.1	−0.2	0.1	0.0	0.0	0.1	0.1	0.0						
Energy, water and waste	0.0	0.0	−0.1	0.1	0.1	−0.1	0.0	0.2	−0.1	0.0	0.0	0.0	0.0	0.1	0.0
Others (construction, services)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	−0.1	0.1	0.0	0.0	0.0	0.0	0.0
TOTAL¹	0.4	0.0	0.2	−0.4	0.3	−0.6	0.6	0.7	−0.2	−0.1	0.1	0.0	0.6	0.1	0.3

Forecast

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

Source: INSEE