MACROECONOMIC PROJECTIONS
FRANCE

BANQUE DE FRANCE
EUROSYSTÈME

June 2016

According to the Banque de France's macroeconomic projections for France – constructed as part of the Eurosystem projection exercise on the basis of assumptions with a cut-off date of mid-May 2016 – annual average GDP growth should increase from 1.2% in 2015 to at least 1.4% in 2016, then to 1.5% in 2017 and 1.6% in 2018.

Growth in France should benefit from the economic upturn in the euro area, which is notably being supported by the ECB's very accommodative monetary policy stance. Domestic demand is expected to pick up markedly, with a rise in private consumption, particularly in 2016, and confirmation of a lasting recovery in business investment. Household and government investment should gradually stop dragging on growth.

Past falls in oil prices are projected to keep French HICP inflation very low in 2016, at an annual average of 0.2%. The figure should then recover, rising to 1.1% in 2017 followed by 1.4% in 2018.

KEY PROJECTIONS FOR FRANCE

	2015 (30/05) wda	2015 (29/04) wda	2016	2017	2018
HICP	**0.1**	**0.1**	**0.2**	**1.1**	**1.4**
HICP excluding energy and food	**0.6**	**0.6**	**0.6**	**0.7**	**1.1**
GDP deflator	0.6	1.2	1.1	1.1	1.3
Real GDP	**1.2**	**1.2**	**1.4**	**1.5**	**1.6**
Contributions to GDP growth (in percentage points):[a)]					
Domestic demand (excluding changes in inventories)	*1.3*	*1.1*	*1.8*	*1.6*	*1.7*
Net exports	*-0.3*	*-0.2*	*-0.6*	*0.0*	*0.0*
Changes in inventories	*0.2*	*0.3*	*0.3*	*-0.1*	*0.0*
Private consumption	1.5	1.4	1.9	1.6	1.7
Government consumption	1.4	1.5	1.4	0.8	0.8
Total investment	0.9	0.0	2.0	2.4	2.4
Government investment	*-3.9*	*-3.0*	*1.2*	*1.4*	*1.9*
Household investment	*-0.8*	*-2.7*	*-1.2*	*0.9*	*0.1*
Business investment (NFCs-FCs-IEs)	*2.9*	*1.9*	*3.4*	*3.1*	*3.3*
Exports	6.0	6.1	2.9	4.6	4.5
Imports	6.4	6.4	4.9	4.5	4.5
Real household disposable income (RHDI)	1.6	1.8	2.1	1.4	1.6
ILO unemployment rate (France and overseas territories, % of labour force)	10.4	10.3	10.1	10.0	9.8

Sources: Insee data for 2015, published 29 April and 30 May 2016. Blue-shaded columns show Banque de France projections..
Annual percentage change except where otherwise indicated.
a) The sum of individual contributions may not add up to GDP growth as figures have been rounded

French activity already rebounded in 2015

After three years of subdued growth, French economic activity rebounded in 2015. Lower oil and imported goods prices translated into significant gains in purchasing power, leading to a sharp acceleration in private consumption. And after several years of steep falls, total investment stopped declining, with business investment in particular seeing a confirmation of the recovery. Nonetheless, foreign trade continued to make a negative contribution to growth in 2015 as the marked acceleration in exports, resulting from a rise in euro-area demand and the past euro depreciation, failed to offset the ongoing strength of imports.

Growth in France should increase gradually in 2016, 2017 and 2018

In annual average terms, French GDP growth is expected to increase from 1.2% in 2015 to at least 1.4%, in 2016 followed by 1.5% in 2017 and 1.6% in 2018. This projection updates our previous December 2015 forecast for 2016-2017 and extends it to 2018. It was finalised in mid-May as part of the Eurosystem staff macroeconomic projection exercise, and is based on international assumptions as at 10 May 2016, as well as on the quarterly national accounts published by Insee on 29 April 2016. For timing reasons linked to the coordination of Eurosystem projections, the forecast does not take into account the revised quarterly national accounts published by Insee on 30 May. These modified certain annual averages or quarterly profiles, and increased figures for the first quarter of 2016, as well as the contribution of certain items to growth (see also below on the implications for uncertainties surrounding the growth outlook). Nonetheless the growth rate of 1.2% for 2015 (working-day adjusted), which is the starting point for the 2016-2018 projections, was confirmed in the Insee revised publication.

Domestic demand, notably private consumption and business investment, should continue to drive growth

The renewed drop in oil prices at end-2015 should support domestic demand in 2016. In combination with low inflation, it should translate into significant gains in household purchasing power, particularly in the first part of the year. Private consumption is thus projected to rise sharply in 2016, remaining dynamic in 2017 and 2018 as households gradually spend their increased purchasing power.

Conditions should also underpin a continued acceleration in business investment, particularly thanks to the very accommodative monetary policy stance. In addition, wage moderation should allow firms to make further improvements in their profit share over 2016, and the latter is then expected to stabilise in 2018 at a level close to that seen in the first half of 2000s, before the crisis. After falling markedly in 2014 and 2015, government investment should once again make a positive contribution to growth between 2016 and 2018. Household investment should continue to fall in 2016, then rise slightly in 2017 and 2018.

Growth should be held back by a negative net contribution from foreign trade in 2016

Although remaining dynamic, global demand should only accelerate modestly in 2016 owing to the less-favourable-than-expected outlook in emerging countries. French export growth should also be hampered in 2016 and 2017 by the rise in the effective exchange rate since December, while import growth is expected to remain strong, buoyed by robust domestic demand. As a result, foreign trade is projected to make a significant negative contribution to GDP growth in 2016, turning neutral by the end of the projection horizon.

Inflation should remain weak in 2016, before rising gradually in 2017 and 2018

Headline 12-month inflation, as measured by the change in the Harmonised Index of Consumer Prices (HICP), should average 0.2% in 2016, after 0.1% in 2015. Our projections are then for a gradual rise to an annual average of 1.1% in 2017 and 1.4% in 2018, reaching 1.5% year-on-year in the fourth quarter of 2018. HICP inflation excluding energy and food is expected to remain stable versus 2015 at an annual average of 0.6%, before inching up very gradually to 0.7% in 2017 and 1.1% in 2018.

The sharp fall in the price of oil products since the second half of 2015 is expected to place a strong drag on overall inflation throughout 2016. Inflation excluding energy and food should also remain very moderate as a result of weak growth in unit labour costs and persistently high unemployment. In 2017, however, inflation should pick up in energy as well as in services, driven by an acceleration in nominal wages. In the industrial goods sector, however, price rises are expected to be held back by the lagged effect of the recent appreciation in the euro. These effects should dissipate in 2018 and inflation is projected to strengthen more sharply as the output gap narrows and the capacity utilisation rate gradually increases.

The outlook for activity and inflation remains subject to uncertainties

The integration of the revisions published on 30 May, and the uncertainties surrounding our baseline economic scenario could lead to a slight upwards revision to the growth projection for 2016. In its 30 May publication, Insee revised upwards the final GDP growth figure for Q1 2016, and the carry-over for 2016 is now 1.1% compared to 1.0% in the preliminary estimate. This makes it likely that annual average growth will be slightly higher in 2016. At the same time, however, Insee's 30 May publication revealed that the household saving ratio was markedly lower in 2015 and Q1 2016 than suggested in the end-April accounts. Private consumption could therefore prove slightly less dynamic than expected following the oil counter-shock, as it is less likely to be supported by a renewed fall in the saving ratio. This scenario could affect growth in 2017 and in 2018. Moreover, the projections for 2017 onwards do not take account of the impact of additional fiscal consolidation measures which could prove necessary in order to bring the budget deficit down to below the threshold of 3% of GDP as of 2017.

With regard to inflation, the risks are on the whole balanced. The risks to growth raise uncertainties over the extent of the pick-up in inflation over the projection horizon. However, stronger-than-expected growth in energy and imported goods prices would help to fuel a faster rise in inflation. In addition, the current very accommodative monetary policy stance could have a stronger impact on inflation than that integrated into our forecasts.

I| Technical assumptions and the international environment: less favourable conditions

The economic scenario is based on the technical assumptions (exchange rates, interest rates, commodity prices) and international environment projections prepared by the Eurosystem (see notes to Table 1).

The **effective exchange rate** has appreciated since December 2015, continuing the trend which began in the middle of last year. After depreciating sharply against the dollar between June 2014 and April 2015, the euro has remained well below the levels observed over the last decade. It has nonetheless strengthened slightly since December, and we now assume it will remain stable against the dollar at USD 1.14, compared with USD 1.09 in our December projection. The nominal effective exchange rate also declined considerably up to mid-2015, but has been rising continuously ever since. It is expected to increase by a notable 4.2% (annual average) in 2016, although to a level still below that of 2014.

After hitting a low at the start of 2016, **oil prices** are projected to recover in 2017 and 2018. In January 2016, the Brent price per barrel hit its lowest level since 2009, at EUR 29, but has since rebounded, reaching EUR 37.8 in April 2016. By convention, our forecasts for oil prices as of mid-May are derived from futures prices. These indicate that Brent crude should decline by an annual average of EUR 9 per barrel in 2016 versus 2015, before rising moderately in 2017 and 2018. The price should then average around EUR 44.9 in 2018, which remains well below that seen in 2015.

Table 1: Technical assumptions and the international environment[a)]

	2015	2016	2017	2018
Technical assumptions				
Brent oil price (USD/barrel)	52.4	43.4	49.1	51.3
Brent oil price (EUR/barrel)	47.2	38.4	42.9	44.9
Non-energy commodity prices in USD (annual percentage change)	-19.9	-3.3	4.3	4.6
USD/EUR exchange rate	1.11	1.13	1.14	1.14
Euro nominal effective exchange rate (annual percentage change)[b)]	-7.1	4.2	0.2	0.0
3-month Euribor[c)]	0.0	-0.3	-0.3	-0.3
10-year French government bond yields[c)]	0.8	0.6	0.7	1.0
International environment, annual percentage change				
Global CPI				
Extra euro-area competitors' prices on the export side (in EUR)	5.4	-4.9	3.0	2.6
World real GDP	2.9	2.9	3.4	3.5
World (excluding euro area) real GDP	3.1	3.1	3.7	3.8
Global (excluding euro area) trade	0.7	1.8	3.5	4.0
Foreign demand for French goods and services	3.2	3.3	4.2	4.4
Intra-euro area	*5.8*	*4.6*	*4.9*	*5.0*
Extra-euro area	*0.9*	*2.1*	*3.5*	*3.9*

Source: Eurosystem.

a) These technical assumptions and international environment projections were constructed by the ECB on 10 May for market data, and on 17 May for foreign demand for French goods and services, in accordance with the principles set out in *A guide to Eurosystem staff macroeconomic exercises*, ECB, June 2001, available at: *https://www.ecb.europa.eu/pub/pdf/other/staffprojectionsguideen.pdf*
Foreign demand corresponds to the weighted average imports of France's trading partners. The method of calculation is described in the Occasional Paper *Trade consistency exercise in the context of the Eurosystem projection exercises-an overview,* available at: *https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp108.pdf*

b) Calculated against 38 trading partners of the euro area.

c) The forecasts for interest rates were calculated using the yield curve.

With the ECB maintaining a highly accommodative monetary policy stance, market expectations are for **interest rates** to remain very low (see note c. to Table 1).

The international environment is expected to be less favourable than predicted in our December 2015 projections. **Demand for French exports** should nonetheless rise at a slightly faster pace in 2016 than in 2015, accelerating further in 2017 and 2018 to annual average growth of 4.4% by the end of the projection horizon. In light of the recovery in euro area activity, demand from other EMU countries should prove fairly robust, although it should increase at a slower pace than in 2015. Demand from non-euro area countries is expected to rise to a lesser extent, but at a faster pace than in 2015; it should then gradually gain momentum in 2017 and 2018, but the pace of growth is expected to remain below pre-crisis levels, albeit higher than the rates seen since 2011.

Box 1

REVISIONS TO THE GROWTH FORECASTS BETWEEN DECEMBER 2015 AND JUNE 2016

The Banque de France's June projection is for 1.4% growth in 2016 and 1.5% in 2017, close to the forecast of 1.4% in 2016 and 1.6% in 2017 made in December 2015.

From one period to the next, forecasts can be affected by two sources of changes: revisions to external technical assumptions regarding the international environment on the one hand, and changes in the assessment of macroeconomic trends, partly stemming from the publication of new national accounts data, on the other. Tables A1 and A2 in the Annex provide information on the revisions since our December 2015 forecast.

Overall, the international environment is less favourable in June than in December. For instance, the forecast is notably affected by a 4.0% appreciation in the nominal effective exchange rate in 2016 and, to a lesser extent, by a worsening of the outlook for demand for French exports (-0.5 percentage point in 2016 and -0.4 pp in 2017). The renewed fall in oil prices (down EUR 9.7 in 2016) only partially offsets these negative impacts on French growth. **Revisions to external technical assumptions mechanically reduce French growth by 0.3 pp in 2016 and by 0.2 pp in 2017.**

However, June's forecast is based on the quarterly accounts for Q4 2015 and Q1 2016 for France, published by Insee on 29 April 2016, which were not available to us in December 2015. These show a positive difference between the data published for Q4 2015 and Q1 2016, and the forecast made in December. As a result, the **growth carry-over for 2016 at the end of Q1 2016 was 0.2 pp higher in this projection than expected in December 2015, which offsets a large part of the negative impact of the external technical assumptions**.

Moreover, data from the additional two quarters, as well as other information, affect a certain number of forecasting judgements that result in a reduction or an increase in the mechanical carry-over effect. In addition to the impact of external assumptions, June's forecast is revised compared with that of December to take account of the following factors.

- The outlook for **government demand (government consumption and investment)** has been revised upwards by 0.4 pp (thus making a 0.2 pp contribution to GDP growth) in 2016, based on our analysis of the information contained in the French stability programme published in April 2016.

- The increase in housing starts since December 2015 suggests a slightly stronger recovery in **household investment**, and the latter has been revised upwards a little for end-2016 (contribution of 0.1 pp to annual average GDP growth).

- **Private consumption** has been revised upwards by 0.4 pp in 2016 and by 0.1 pp in 2017, in addition to the impact of technical assumptions which is ultimately very small, (thus 0.2 pp and 0.1 pp as a contribution to GDP) for two main reasons. After the cyclical rise in the saving ratio at end-2015 stemming from the temporary decline in private consumption (mild weather, repercussions of the terrorist attacks of 13 November 2015), households have a reserve of purchasing power compared with previous quarters, which should boost consumption in 2016. Furthermore, the slowdown in prices in 2016 cannot only be attributed to the impact of the fall in oil prices and the exchange rate appreciation, as inflation in service prices has also been low (as observed in the first months of the year), and this also benefits purchasing power and in turn private consumption.

- **Inventory changes** have contributed to growth in 2015 and to the upward revision to the growth carry-over for 2016. Overall, the 2016 contribution of inventory changes to GDP growth is 0.4 pp higher than in December's projection, and this is followed by a slight downwards correction in 2017 (-0.1 pp).

- Conversely, the carry-over for **the contribution of foreign trade** is strongly negative at the end of Q1 2016. Despite a slight expected rebound in market shares over the remainder of the year, this results in a -0.5 pp contribution from foreign trade to GDP growth in 2016 (and 0.1 pp in 2017), in addition to the impact of the revisions to technical assumptions.

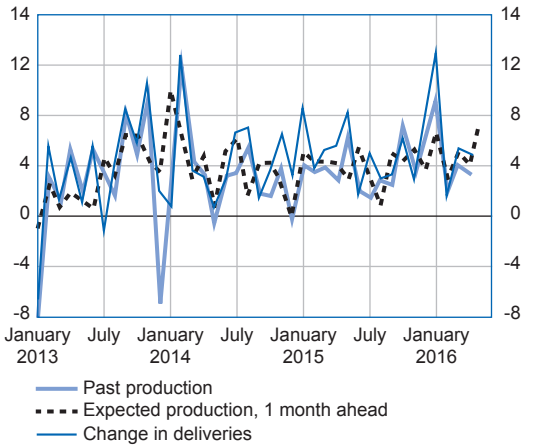
2| Growth should accelerate gradually, supported by euro area and domestic demand

The current economic environment

In the manufacturing industry, the latest Insee survey indicated an improvement in the business climate in April, while the Banque de France's survey concluded that conditions have stabilised close to long-term average. The expected production indicator in the Banque de France's survey also pointed to an increase in output in May. These positive indicators are tempered by the slump in industrial output seen in February and March. After making a significant positive contribution to growth in 2015, especially at the end of the year, inventories could therefore make a negative contribution in the coming quarters (as in Q1 2016).[1] However, the average contribution should be positive for the year due to the strong end to 2015, and is assumed to be closer to zero for the rest of the projection horizon.

Chart 1: Banque de France manufacturing survey

(balance of opinions)



In the construction sector, survey indicators are currently mixed: while demand for housing is improving, raising hopes of a more marked rebound in residential construction by the end of the year, other surveys, particularly Insee's survey of the building crafts sector, seem to indicate activity will remain weak in the short term.

On the whole, current economic indicators are consistent with a moderate 0.3% rise in GDP in the second quarter of 2016 (see also the implications of the latest revisions to the quarterly national accounts published on 30 May for the uncertainties surrounding our growth outlook, section 5).

Headline annual HICP inflation stood at -0.1% in April 2016, while inflation excluding energy and food was 0.6%. The previous sharp falls in energy prices are continuing to place downward pressure on all components of the index, while growth in service prices is also notably subdued (especially in rent prices). In contrast, in the industrial goods sector, inflation has firmed slightly since 2015; however, the slump in imported goods prices since the start of the year should make itself felt over the coming months.

Foreign trade should make a substantial negative contribution to growth in 2016, turning neutral in 2017 and 2018

Foreign trade is expected to have a sizeable downward impact on growth in 2016 (-0.6 pp), bigger than that seen in 2015. On the export side, France should feel the effect of the less favourable international environment over the year. Growth in demand for French exports both from euro area and emerging economies should be unchanged in 2016 versus 2015, and less dynamic than originally expected in our December projections. Meanwhile, the rise in the euro effective exchange rate should prevent France from continuing the significant market share gains made in 2015; as a result its export market shares are assumed to remain stable over the projection horizon. All in all, exports should slow significantly in 2016, rising at a relatively modest pace of 2.9%.

Imports, on the other hand, are projected to remain dynamic in 2016, supported by brisk domestic demand. France's import penetration rate (measured as the weighted average percentage of demand met by imports) should also continue to rise over the projection horizon. Imports are therefore expected to grow by 4.9% (annual average) in 2016.

In 2017 and 2018, the contribution of foreign trade to growth is expected to turn neutral again. Exports should pick up pace thanks to the acceleration in global demand, while imports should slow marginally due to slightly weaker domestic demand.

1 *Note that the contribution from changes in inventories could be revised further in subsequent quarterly accounts.*

Private consumption should make a strong contribution to growth, buoyed by gains in disposable income

Private consumption is projected to rise by 1.9% in 2016, before slowing slightly in 2017 (1.6%) and 2018 (1.7%). This projection is supported by the strong growth in household spending registered over the start of 2016.

For full-year 2016, private consumption should be supported by marked gains in purchasing power, largely stemming from low inflation caused by the oil counter-shock. The return to economic growth should also prompt sharper increases in household nominal disposable income over the year. As of 2017, however, although growth in nominal income is expected to gain further momentum, purchasing power should slow markedly as inflation firms.

Table 2: Change in private consumption and in real household disposable income

(annual average percentage change)	2015	2016	2017	2018
Real household consumption	1.4	1.9	1.6	1.7
Real disposable income	1.8	2.1	1.4	1.6
Nominal disposable income	1.6	2.1	2.3	2.9
Contributions to growth in nominal disposable income				
Gross operating surplus	*0.3*	*0.5*	*0.5*	*0.6*
Gross wages	*1.1*	*1.2*	*1.3*	*1.6*
Net property income	*0.1*	*0.4*	*0.4*	*0.4*
Current transfers	*0.0*	*0.0*	*0.0*	*0.0*
Social security benefits	*0.6*	*0.5*	*0.6*	*1.0*
Current taxes	*-0.2*	*-0.2*	*-0.3*	*-0.4*
Social contributions	*-0.2*	*-0.2*	*-0.2*	*-0.3*

Source: Insee quarterly national accounts published on 29/04/2016 for 2015 data. Blue-shaded area shows Banque de France projections. Does not take account of the national accounts published on 30 May.

The saving ratio is expected to increase in 2016 as households smooth out the gains in purchasing power. Consumer spending was weak at the end of 2015 as a result of the mild winter and the November terrorist attacks, adding to the increase in the saving ratio. Over the projection horizon, the saving ratio should return to levels comparable with or even slightly below the average observed for 2015, and this slight drop should help to support private consumption.

Household investment is expected to remain stable over the projection horizon as demographic factors weigh

Household investment should gradually stop declining in 2016 after several years of marked falls, and should subsequently make a modest contribution to growth. Housing starts increased in the final quarter of 2015 and first quarter of 2016, while the Pinel Law and recent changes to zero-interest loans should also breathe some life back into the market. This recovery should help to increase household investment in 2016, although with a lag of a few quarters. Moreover, the rise in transactions in existing dwellings seen in the last few quarters should help boost the "services" component of household investment in 2016. Nonetheless, the recovery in investment is expected to prove temporary, and structural conditions are unlikely to be very favourable over the medium-term, largely due to demographic factors (see Box 2).

Business investment should remain dynamic, helped by the low interest rate environment

The recovery in business investment began in 2014 and is expected to prove dynamic over the projection horizon. Business investment is anticipated to rise by 3-3.5% per year from 2016 to 2018. A number of tailwinds support this scenario: activity is accelerating, financial conditions are extremely favourable and corporate profits are improving. Moreover, the measure allowing companies to write down more than the original value of their assets (corresponding to a government transfer of EUR 2.5 billion to non-financial corporations – NFCs) provided strong support to investment at the end of 2015 and start of 2016, although its effects should subside over coming quarters. Gross fixed capital formation (GFCF) in equipment goods is therefore projected to rise by 5.8% in 2016, 3.1% in 2017 and 3.4% in 2018.

Table 3: Changes in factors determining corporate profit shares

(annual average percentage change)	2015	2016	2017	2018
Value added deflator	1.4	1.1	1.0	1.3
Unit labour costs	0.4	0.0	0.3	0.9
Productivity per capita	0.9	0.8	1.1	1.1
Per capita nominal wage	1.5	1.3	1.5	2.1

Source: Insee quarterly national accounts published on 29/04/2016 for 2015 data. Blue-shaded area shows Banque de France projections. Does not take account of the national accounts published on 30 May. Unit labour costs do not include the impact of the CICE.

Wage moderation, the recovery in activity and measures to reduce labour costs (the Tax Credit for Competitiveness and Employment or CICE, and the Responsibility and Solidarity Pact or PRS) should all help to drive a recovery in corporate profitability in 2016 and 2017. NFCs' profit share and self-financing rate should rise markedly over the projection horizon, returning to somewhere near pre-crisis levels. The only factor weighing on investment should be the high level of corporate debt, which has increased considerably since 2008 (around +25 pp of NFCs' value added between 2008 and 2015) and should start to stabilise at around 130% of value added.

The pick-up in economic activity should be accompanied by a slight decline in unemployment

Market sector employment is expected to improve progressively over the projection horizon. Government measures to cut labour costs (CICE and PRS) should offset the acceleration in productivity gains which typically accompanies a rebound in activity. Private sector employment should therefore rise by 0.8% in 2016 after growth of 0.3% in 2015. The trend will then continue into 2017 (+0.8%) and 2018 (+0.9%), as growth in activity gains pace, and despite the diminishing effects of the CICE and PRS measures.[2]

Non-market sector employment should continue rising in 2016, and subsequently stabilise in 2017 and 2018. The number of government-subsidised positions should increase in 2016. Then, assuming this number remains at its end-2016 level, non-market sector employment should stabilise as of 2017.

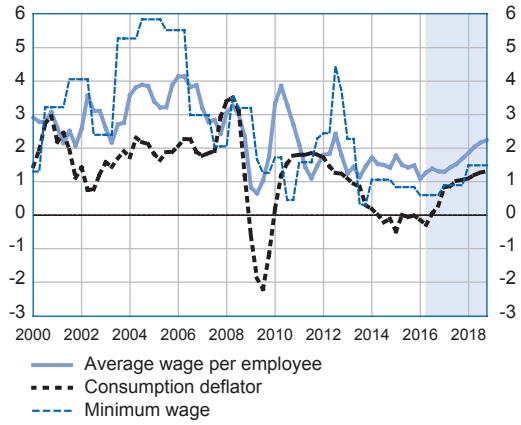
Total employment is thus expected to expand by 0.7% (in annual average terms) in 2016, supported by the rise in private sector jobs. The trend should then be confirmed in 2017 (+0.6%) and 2018 (+0.7%). With the labour force predicted to increase by 0.4% per year over the projection horizon, the unemployment rate (ILO rate, France and overseas territories) should edge down slightly, from 10.3% in 2015 to 10.1% in 2016 then to 10.0% in 2017 and 9.8% in 2018.

Wage moderation should limit the rise in employee compensation

Employee compensation is rising at a very modest pace as a result of weak inflation and high unemployment. Nominal wage growth has been subdued since 2011, and should continue to slow in 2016. In the private sector, the average wage per employee should pick up by 1.3% in 2016, which is notably in line with the latest available data on the basic monthly wage.[3] Despite the slowdown in nominal wage growth, households should still see significant gains in purchasing power in 2016 (up 1.3%) due to the low level of inflation.

Chart 2: Private sector wages and consumption deflator

(year-on-year percentage change)



Sources: Insee quarterly national accounts published on 29 April 2016 for the period 2000-2015, Banque de France projections.

In 2017 and 2018, higher inflation and the slight decline in unemployment should contribute to faster growth in nominal wages. In the private sector, they are seen rising by 1.5% in 2017 and by 2.1% in 2018. However, the acceleration should remain modest, especially given that, barring an exceptional boost from the government, minimum wage growth should be low. Real wage growth should be lower than in 2015 and 2016, at 0.5% in 2017 and 0.9% in 2018.

2 *The CICE and PRS are projected to boost growth in private sector employment by 0.3 pp in 2016 and by 0.1 pp in 2017 and 2018.*
3 *The basic monthly wage is the gross wage excluding bonuses and overtime. In the first quarter of 2016, it rose by 1.2% year-on-year.*

Box 2

EXPLANATIONS FOR CONTINUING LACKLUSTRE HOUSEHOLD INVESTMENT [1]

Since 2007, French household investment has declined by 20% in real terms, after rising by an annual average of 3% between 2000 and 2007.[2] In 2015, it accounted for 4.8% of French GDP, compared with 6.2% in 2007. The difficulties experienced by the construction sector, which is labour-intensive, have also affected employment in France: between Q4 2007 and Q4 2015, 192,000 salaried jobs were destroyed in the construction and real estate sectors.

The negative contribution to French GDP growth has therefore been around -0.14 percentage points (pp) on average per year since 2007, compared, for example, with a positive contribution in Germany over the same period of 9 pp on average per year (whereas from 2000 to 2007, the contribution of household investment to GDP growth was 0.09 pp in France and -0.15 pp in Germany). France currently differs from the main euro area economies in that the contribution of its household investment to GDP growth is still negative. While in 2015 household investment in the euro area remained 25% below the peak reached in 2007, household GFCF improved in most of the bloc's major economies in 2014 and 2015, except in Italy and France.

1 *This box incorporates the Banque de France – Insee analysis presented in the Insee note of June 2015. See Faubert (V.), Monnet (É.) and Sutter (C.), 2015: "Despite the recovery of purchasing power, housing construction should keep falling in 2015", Insee Conjoncture in France.*
2 *Throughout this box, the estimates for France are based on the revisions to GDP growth published by Insee on 30 May.*

…/…

It has taken longer to emerge from the crisis that has been affecting the construction sector for the past eight years than from the crisis at the start of the 1990s: household GFCF contracted between 1989 and 1993, before recovering again in 1994; in contrast, this time around, household GFCF temporarily returned to positive growth in 2010 and 2011 (1.5% and 1.0%) and then started to decline again. Moreover, the rebound in 2010-2011 can mainly be explained by the positive contribution of the "services" component of household GFCF (associated with the rise in transactions) whereas the contribution of the "construction" component remained negative. The downward cycle of 2007-2015 therefore appears to be twice as long as that of 1989-1993.

The decline in household GFCF observed since 2007 can be explained by the slowdown in household purchasing power, but also, largely, by changes in France's demographic structure, which is currently detrimental to the demand for housing.

Household purchasing power, defined as gross disposable income (GDI), deflated by the consumption deflator, has slowed significantly since 2007. After rising by an average of 2.4% per year between 2000 and 2007, household purchasing power grew by 0.5% per year between 2007 and 2015 against the backdrop of rising unemployment and moderate increases in nominal wages.[3]

Demographic trends have, over the recent period, been largely detrimental to the demand for housing. Falling household investment has coincided with a slowdown in population growth and a reduction in the age groups investing in propery.[4] After rising by an average of 0.7% per year between 2000 and 2007, the French population has returned to the slower rate of growth observed in the 1990s (0.5% per year). Furthermore, since 2007, the population of 30 to 59 year olds - the largest share of recent homebuyers[5]- has declined, after accounting for over half of total population growth between 2000 and 2007.

Despite the favourable financing conditions, it is therefore unlikely that household investment will return to its pre-crisis growth rate over the projection horizon. It should therefore grow at a slower pace than the other components of GDP. Indeed, demographic projections suggest that the population of a home-purchasing age will continue to decrease. Moreover, in spite of the low level of inflation, which is beneficial to household purchasing power, wage moderation and stubbornly high unemployment are unlikely to offset the unfavourable demographic effects. These negative factors could nonetheless be counterbalanced by some short-term positive effects, probably mainly temporary: the recovery in existing property transactions could underpin household GFCF, as in 2010 and 2011, as transfer taxes are notably recorded as household GFCF in the national accounts; furthermore, new tax incentives for rental investment under the Pinel Law – a measure implemented in September 2014 and in force until December 2016 – as well as the extension and simplification of the interest-free loan scheme, introduced in December 2015, could temporarily support household investment at end-2016 and the start of 2017.

3 Moreover, the structure of household income changed to the benefit of replacement income (pensions and unemployment benefits): the share of welfare benefits received by households rose considerably, from 31% of GDI in 2007 to 35% in 2015. This reflects the structural increase in pensions and, to a lesser extent, the cyclical rise in unemployment benefits. The increased share of replacement income in this period is consistent with the decline in household investment: elderly households or those in financial difficulty are indeed under-represented among homebuyers.

4 Household GFCF is a flow that represents net property purchases (new dwellings, transfer taxes and major repairs) by households over a given period. This flow therefore reflects new purchases and builds, rather than long-term owners, who hold the bulk of the stock of existing dwellings. According to the Wealth Survey, in 2010, in the case of 73% of households that have recently purchased their main home, the buyer was aged between 30 and 59 years old. The relative stability of this proportion between the 2004 and 2010 waves of the survey suggests that it is a generation effect, which is relatively constant over time, rather than a cohort effect.

5 In a study on the link between housing and demographics in OECD countries since 1980, Monnet and Wolf show that, ceteris paribus, a 1% decline in the 20-49 age group results in a 1pp fall in the real estate investment ratio. In the French case, since 2007, the population of this age group fell by 2% and the household investment ratio to GDP decreased by 1.5pp. The authors conclude that, given the future demographic trends (excluding migration), real estate investment as a share of GDP is expected to decline even if real estate investment returns to positive growth. According to this study (for 20 countries since 1980), it's the 20-49 age group that has the greatest effect but the results are close if we consider the 30-59 age bracket (such as in Insee's above-mentioned business survey). See Monnet (E.) and Wolf (C.) (2016): "Demographic Cycle, Migration and Housing Investment: a Causal Examination", Working papers*, 591, Banque de France.*

3| Inflation should be weak in 2016, rising gradually to 1.5% in the final quarter of 2018

Headline HICP inflation is expected to average 0.2% in 2016 (after 0.1% in 2015), before rising very gradually in 2017 (1.1%) and 2018 (1.4%). The upturn should be helped by the rise in the price of oil (as implied by futures prices as at 10 May 2016) and of non-energy imports, as well as by the recovery in domestic activity. Inflation excluding energy and food should also remain very low in 2016 (0.6%, as in 2015) and 2017 (0.7%), strengthening to 1.1% in 2018.

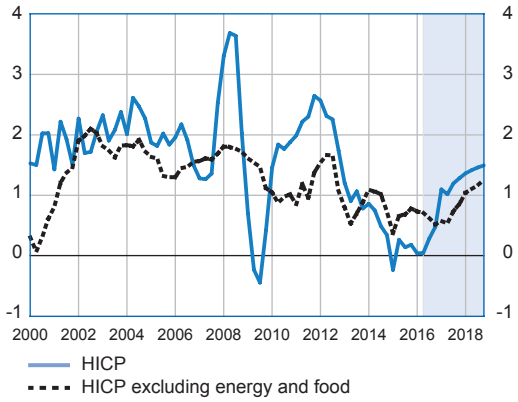
In 2016, the slump in oil prices should continue to weigh on inflation.

2015 saw further sharp falls in the price of oil, from around EUR 46 per barrel at the end of 2014 to EUR 29 at the start of 2016. This had a direct negative impact on the price of oil products consumed by households (petrol, heating oil etc.), resulting in a decline of 3.4% in the HICP energy component (which accounts for around 10% of the index) over 2016. The price of non-energy goods and services also edged lower as falls in the cost of companies' energy inputs were gradually passed down the production chain (see Box 3). This knock-on effect should help to limit non-energy, non-food inflation in 2016, keeping it close to the very low level seen in 2015.

In contrast, non-energy industrial goods inflation should be temporarily buoyed in 2016 by the rise in imported goods prices observed in 2015 after the depreciation of the euro between early 2014 and early 2015. Shocks to import prices generally have a lagged impact on industrial goods inflation. However, the rebound is expected to be limited and industrial goods inflation should turn negative again as of the end of 2016. In addition, the restrictions to public healthcare expenditure set out under the *Objectif national des dépenses d'assurance maladie* (ONDAM or National Objective for Health Insurance Spending) should prompt another marked fall in the price of medicines, similar to that seen in 2015 (annual average drop of 1.9%).

Chart 3: HICP and HICP excluding energy and food

(year-on-year percentage change)



Service price inflation is expected to average 1.0% in 2016 after 1.2% in 2015, well below its long-term average of 1.9% for the period 1999-2015. The decline in unit labour costs under the PRS and CICE, together with wage moderation resulting from high unemployment, should continue to limit inflationary pressures in labour-intensive activities in 2016. Rent prices should also continue to slow. Growth in rent prices, which is notably linked to past inflation, slowed from an annual average of 1.6% in 2012 to 0.6% in 2015, and is expected to be 0.5% in 2016.

Lastly, food inflation should remain muted, reflecting falls in major commodity prices and in agricultural production costs. As a result, it is only expected to make a small positive contribution to overall inflation.

Some of the factors weighing on inflation in 2016 should dissipate in 2017.

In 2017, the path of HICP inflation should largely be shaped by the energy component of the index. The rise in oil prices embedded in the futures curve as at 10 May 2016, as well as tax hikes on oil-related products, should translate into a 4.1% jump in the enery component of the HICP, resulting in a 0.4 pp contribution to inflation in 2017. Moreover, higher agricultural production costs should boost food inflation in 2017.

In contrast, inflation excluding energy and food should remain very low, at an annual average of 0.7%. Service prices are indeed expected to be more dynamic, rising 1.4%, as a result of the recovery in wages and hence in unit labour costs; however, the fall in imported goods prices observed at the start of 2016 and linked to the expected appreciation of the euro throughout 2016, should have a lagged downwards impact on industrial goods (-0.5% in 2017).

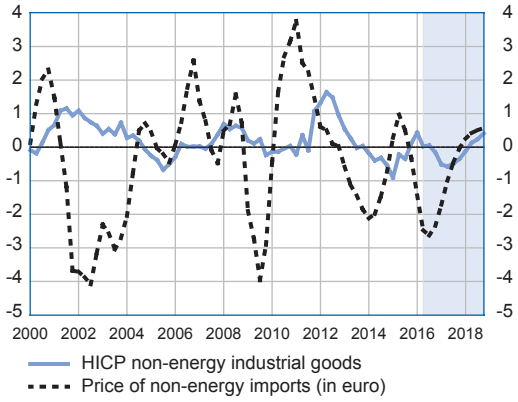
HICP inflation is projected to rise to 1.5% year-on-year in the final quarter of 2018.

In 2018, HICP inflation should largely be driven higher by a rebound in non-food, non-energy prices. Indeed, as macroeconomic conditions improve, inflation excluding energy and food should increase markedly in 2018 (to 1.1%), although it should still remain moderate and below the average for the period 1999-2015 (1.3%). Service price inflation should gather pace, fuelled by rising unit labour costs and lower unemployment. And non-energy industrial goods prices should also turn upwards, driven by the predicted rebound in imported goods prices. The increase in oil prices should also have a knock-on effect across the consumer price index.

The GDP deflator is projected to accelerate gradually to 1.3% (annual average) in 2018.

Chart 4: HICP non-energy industrial goods and non-energy imported goods prices

(year-on-year percentage change)



The impact of past oil price falls on the GDP deflator should gradually fade as of 2016 (see also Box 3). The deflator should then increase, albeit very gradually, helped by stronger import prices and a progressive pick-up in labour costs, and is expected to reach 1.5% year-on-year in the final quarter of 2018. It should continue to rise at a faster pace than unit labour costs, contributing to an improvement in corporate profit shares up to 2018.

Box 3

UNDERSTANDING THE IMPACT OF THE FALL IN OIL PRICES ON THE CONSUMER PRICE INDEX AND ON CORPORATE PROFIT SHARES

Between the second quarter of 2014 and the fourth quarter of 2015, the price of crude oil fell from EUR 80 to EUR 40 per barrel. Based on the net volume of oil imports in 2014[1] and assuming this volume remained stable throughout 2015, **this EUR 40 drop translated into a net gain of EUR 22 billion for the French economy. The main result of cheaper oil was lower inflation; however, it also had a positive impact on corporate profit shares, albeit to a much lesser extent. The current low level of inflation is largely the result of the decline in the energy component of the HICP index, and of the pass-through of cheaper oil to other components in the index. The favourable shock to oil prices also boosted the average corporate profit share by 0.4 percentage point (pp) or EUR 4.5 billion in 2015**.

Falls in oil prices have an immediate and positive impact for purchasers of crude and refined oil products. They also lead to a rapid decline in the energy component of the consumer price index, as well as to a reduction in the cost of oil-related intermediate products purchased by companies. Companies can hold onto these gains, helping to increase their profit share; or they can pass them on to the consumer through a cut in output prices. Cheaper oil can also put downwards pressure on wages, or lead to an increase in investment, etc. In particular, as well as having a direct impact on consumer energy prices, it can also have a more indirect impact on other (non-energy) consumer prices as the decline in input prices filters down the entire chain of production.[2]

From an accounting perspective, assuming that all of the gains are transmitted to consumer prices, the observed fall in oil prices should lead to a total impact of around -2.0 pp on HICP inflation by the end of the transmission period – which is estimated at two years.[3]

We carry out a counterfactual exercise based on an inflation model where the long-term response of consumer prices to the oil shock is equivalent to the accounting effect (i.e. -2.0 pp to HICP inflation for a downwards shock of EUR 40 per barrel), and the shock is assumed to be completely transmitted after a few quarters. Excluding the effect of the oil price fall, annual HICP inflation would have been 1.0% and 1.4% respectively in Q4 2014 and Q4 2015, that is 0.7 pp and 1.2 pp higher than the levels actually observed (0.3% in Q4 2014 and 0.2% in Q4 2015). Also without the oil price fall, annual average HICP inflation would have been 0.8% in 2014 (compared with an actual level of 0.6%) and 1.4% in 2015 (compared with an actual 0.1%), close to the levels observed before the mid-2014 shock. The aggregate effect on the annual averages (-1.5 pp) is slightly smaller than the accounting effect (-2.0 pp) as the calculation of annual averages underweights the impact of the oil price decline in the second half of 2015. **This approach therefore suggests that a near-total pass-through to consumer prices is likely, and that the current low level of inflation is the result of both a drop in the energy component and a significant pass-through of lower oil prices to other HICP index components.**

With regard to corporate profit shares, it is difficult to apply an accounting approach. A reduction in manufacturing input costs – caused by a downwards shock to oil prices – will not necessarily lead to an increase in a company's profit share. The impact will in fact depend on the extent to which the company passes on the fall in its intermediate goods prices to output prices: in an extreme case, for example, a company may pass all of the decline in its intermediate goods prices on to output prices, leaving its value added per unit and profit share unchanged.[4]

The evolution of corporate profit shares hence depends on the degree of competition in the market, as well as on how wages react both **to value added per unit and to consumer prices. In order to analyse the impact of an oil price shock on profit shares, therefore, we need to use a macroeconomic model – in our case the Mascotte model**, with a baseline scenario where the price of a barrel of oil remains unchanged at EUR 80 from mid-2014 to end-2015. Nominal wages would have been slightly more dynamic under our scenario, with year-on-year growth around 0.2 pp higher at end-2015. Growth in value added per unit would have been around 0.2 pp lower (1.2% year-on-year versus actual growth of 1.4 %). In all, compared with our baseline scenario, after 18 months, **the average corporate profit share was 0.4 pp or some EUR 4.5 billion higher thanks to the oil price shock** (of which around EUR 2.8 billion were attributable to the decline in wages deflated by the value-added deflator, and the rest to the global macroeconomic effects).

Our forecast for 2016-2018 assumes that these same mechanisms will continue to support corporate profit shares, especially in 2016.

1 Net energy imports were 76.7 million toe (tonne of oil equivalent) in 2014, or 548 million barrels (source: Bilan énergétique de la France en 2014*, July 2015, French Ministry of Ecology, Sustainable Development and Energy).*

2 A recent study by national statistics agency Insee showed that the chemicals industry passed around 90% of the reduction in its input prices through to output prices. See Bortoli (C.) and Milin (K.) (2016), "Who has benefited from the fall in oil prices?", Insee, Conjoncture in France, March.

3 The HICP basket of goods and services amounted to EUR 1,070 billion in 2013. The direct impact on the HICP index of a gain of EUR 22 billion is therefore calculated as 22/1070 = 2.1%. However, this calculation omits intermediate goods consumed by government administrations, and assumes that the crude oil content of imports is close to that of exports.

4 In national accounting, value added per unit corresponds to the value added deflator. It is equal to the value added per unit of production. Value added is the difference between the output price and the cost of intermediate consumption. All other things being equal, it is positively impacted by a rise in output prices, and negatively impacted by a rise in intermediate goods prices.

4| Public finances: fiscal consolidation is vital to bring the deficit back down to below 3.0% of GDP in 2017; public debt will only stabilise in 2018

Public finances improved to a greater extent than expected in 2015, resulting in a budget balance of -3.6% of GDP,[4] after –4.0% in 2014.

The year 2015 was marked by cuts to taxes and social security contributions, notably the phasing in of the CICE and the implementation of the PRS (reductions in employers' social contributions and taxation). As a result, the ratio of tax and social security receipts to GDP fell in 2015 for the first time since 2009. **This was offset by contained growth in overall public spending, notably with low debt service costs resulting from ultra-low interest rates.** Total debt service payments fell from EUR 54 billion in 2012 to EUR 44 billion 2015. Nominal spending, excluding tax credits, rose by 0.9% compared with average growth of 2.0% per year over the fiscal consolidation period from 2010 to 2014, while nominal primary spending rose by 1.1% compared with an average of 2.1 % per year from 2010 to 2014. In real terms (i.e. adjusted for CPI inflation excluding tobacco), primary spending rose by 1.1% compared with an average of 0.9% per year from 2010 to 2014, and a long-term average of 2.0% (from 1999 to 2014).

In 2016, the reduction in the public deficit will be contingent on the continuation of efforts to control spending. If efforts are maintained, the deficit should fall to 3.3% of GDP. As a share of GDP, tax and social security receipts are expected to fall by 0.4 pp versus 2015, while the ratio of public spending to GDP should decline by 0.6 pp (excluding tax credits).

Public spending restraint in 2016 should be made easier in particular by low debt service payments stemming from historically low interest rates.[5] However, real primary spending (adjusted for CPI excluding tobacco) is projected to increase by 1.6% in 2016. Indeed, while inflation will be very low, nominal primary spending (excluding tax credits) should rise by 1.7% under the impact of previously announced savings measures (notably the ONDAM), but also the new expenditures announced at the start of 2016 (notably the plan to boost employment). Public payroll costs should grow at a faster pace in 2015 (growth of 1.7% compared with an average of 1% in 2015), in part owing to the increase in the index points in the public sector pay grid as of 2016. Government investment is expected to stabilise at a low level. Spending restraint should also be helped to an extent by the lack of inflation, which will notably lead to more limited increases in social transfers (mechanical impact) and lower growth in government current expenditures (assuming the 2016 budget is managed in a similar way to recent years).

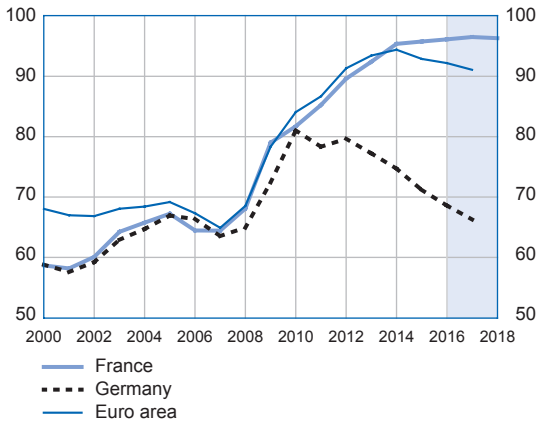
As regards public revenues in 2016, low inflation will have a mechanical downward impact, notably on VAT receipts. In the current context, however, this is partially offset by the fact that low inflation is stimulating real household consumption. As well as the spontaneous changes in the tax base, it is also important to take into account the additional cuts to corporate taxation and a new reduction in personal income tax. The ratio of tax and social security receipts to GDP should thus decline further (-0.4 pp).

The structural deficit is estimated to have been cut by between 0.2 pp and 0.3 pp in 2015 (based on the European Commission's estimate of potential growth), thanks to structural efforts regarding public spending (as in 2014 but in contrast with preceding years), combined with a decline in the ratio of tax and social security receipts to GDP. **In 2016 and 2017, however, despite lower interest payments (around 1.8% of GDP), we anticipate a negligible reduction in the structural deficit** (and even possibly a small increase in 2016). In our projections, the improvement in the public budget balance should therefore largely be attributable to the combined impact of very low interest rates and stronger growth, with no significant effort regarding the structural budget.

Based on the results achieved in 2015, and the assumption of contained public spending growth

Chart 5: Change in public debt to GDP ratio

(Amount of public debt as a percentage of GDP)



Sources: Banque de France for France, European Commission for Germany and the euro area.

4 *According to the quarterly national accounts published by Insee on 30 May 2016.*

5 *In our projections, future interest rates are calculated using the yield curve, see Table 1.*

incorporated into our projections for 2016 and 2017, France should meet the target of a deficit of 3.0% of GDP in 2017. It is important to bring the deficit down to below this level, notably to meet the target of 2.7% of GDP set out in the stability programme submitted to our European partners.

Public debt, meanwhile, remains high (at around 96% of GDP in 2015) and, given the limited cut in the structural deficit, it should continue to rise until 2017 before beginning to stabilise in 2018. In comparison, Germany's public debt, which was at the same level as France's in 2010 (81% of GDP), has been falling since that date and had already been cut to 71% in 2015 (this decline is expected to continue over our projection horizon). Aggregate public debt for the entire euro area was still expanding until recently, as in France, but has been on a downward trajectory since 2015.

5| Risks: a baseline scenario that remains subject to uncertainties

The baseline scenario of an acceleration in economic activity and a strengthening of inflation is subject to a number of uncertainties, illustrated in the fan charts and estimated on the basis of historical projection errors.

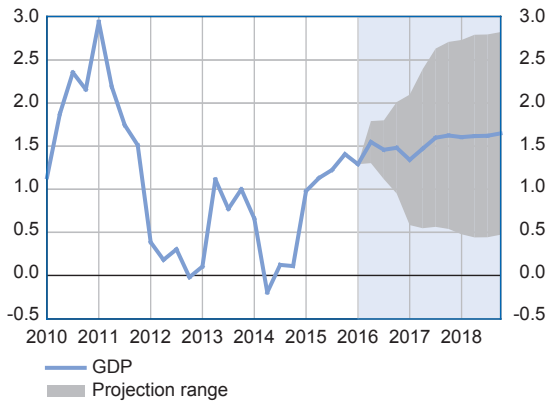
With regard to economic activity, a number of uncertainties could lead to a slight upwards revision growth in 2016, but could possibly slow the pace of recovery in the last two years of the projection horizon.

Growth for the first quarter of 2016 was revised upwards to 0.6% by Insee on 30 May (from 0.5% in the preliminary quarterly accounts published on 29 April). The growth carry-over for 2016 is now 1.1% compared to 1.0% in the preliminary estimate. All other things being equal, this would lead to an equivalent increase in annual average growth in 2016. At the same time, however, Insee's 30 May publication revealed that the household saving ratio was markedly lower in 2015 and Q1 2016 than suggested in the end-April accounts. Private consumption could therefore prove slightly less dynamic than expected following the oil counter-shock, as it is less likely to be supported by a renewed fall in the saving ratio. This scenario could affect growth in 2017, and in 2018, given the already sizeable carry-over for 2016.

With regard to business investment, the rise seen at the end of 2015 and start of 2016 appears to have been strongly supported by the measure allowing companies to write down more than the original value of their assets, which encouraged many companies to bring forward purchases. The backlash from this could therefore be much stronger than anticipated in our scenario, despite the extension of the measure up to April 2017. Conversely, the non-standard measures implemented by the European Central Bank could lend stronger-than-expected support to the business investment recovery, stimulating growth even further. Our deficit projections as of 2017 do not take account of the impact of the further fiscal consolidation measures which could be set out and adopted in forthcoming budgets in order to stick to the public spending trajectory specified in the stability programme.

Chart 6: Projection range for GDP growth

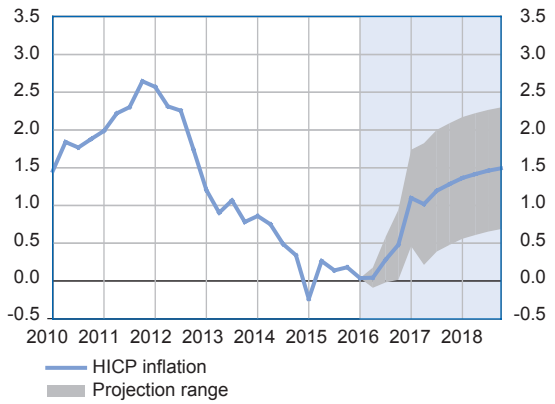
(year-on-year percentage change)



Sources: Insee quarterly national accounts published on 29 April 2016 for the period 2000-2015. Banque de France projections.

Chart 7: Projection range for annual HICP inflation

(year-on-year percentage change)



Sources: Eurostat, Banque de France projections.

6 *In our projections, future interest rates are calculated using the yield curve, see Table 1.*

Lastly, given the uncertainties surrounding the outcome and the consequences of the UK referendum on Europe, as well as over US growth and the Chinese growth model, the outlook for the international environment and for demand for French exports remain subject to downside risks. Commodity prices are also subject to various risks.

With regard to inflation, the risks are on the whole balanced. The uncertainties over growth raise questions as to the extent of the increase in inflation over the projection horizon. However, a stronger-than-expected rise in energy and imported goods prices would help to fuel a faster increase in inflation. In addition, the current highly accommodative monetary policy stance could have a stronger impact on inflation than that integrated into our projection.

Annex: Revision to projections since December 2015

Table A1: Revision to projections since the December BMPE

			June 2016 BMPE			Revisions since December 2015 BMPE	
	2015 30 May wda	2015 29 April wda	2016	2017	2018	2016	2017
HICP	**0.1**	**0.1**	**0.2**	**1.1**	**1.4**	**-0.8**	**-0.3**
HICP excluding energy and food	**0.6**	**0.6**	**0.6**	**0.7**	**1.1**	**-0.5**	**-0.6**
GDP deflator	0.6	1.2	1.1	1.1	1.3	0.0	-0.1
Real GDP	**1.2**	**1.2**	**1.4**	**1.5**	**1.6**	**0.1**	**-0.1**
Contributions to GDP growth (in percentage points):[a]							
Domestic demand (excluding changes in inventories)	*1.3*	*1.1*	*1.8*	*1.6*	*1.7*	*0.4*	*0.0*
Net exports	*-0.3*	*-0.2*	*-0.6*	*0.0*	*0.0*	*-0.7*	*-0.1*
Changes in inventories	*0.2*	*0.3*	*0.3*	*-0.1*	*0.0*	*0.4*	*-0.1*
Private consumption	1.5	1.4	1.9	1.6	1.7	0.4	0.1
Government consumption	1.4	1.5	1.4	0.8	0.8	0.3	-0.1
Total investment	0.9	0.0	2.0	2.4	2.4	0.5	0.1
Government investment	*-3.9*	*-3.0*	*1.2*	*1.4*	*1.9*	*2.5*	*0.0*
Household investment	*-0.8*	*-2.7*	*-1.2*	*0.9*	*0.1*	*0.5*	*1.0*
Business investment (NFCs-FCs-IEs)	*2.9*	*1.9*	*3.4*	*3.1*	*3.3*	*-0.1*	*-0.1*
Exports	6.0	6.1	2.9	4.6	4.5	-1.9	-0.4
Imports	6.4	6.4	4.9	4.5	4.5	0.5	-0.3
Real household disposable income (RHDI)	1.6	1.8	2.1	1.4	1.6	0.9	0.0
Household saving ratio (% gross disposable income)	14.5	15.4	15.6	15.4	15.3	0.6	0.5
ILO unemployment rate (France and overseas territories, % of labour force)	10.4	10.3	10.1	10.0	9.8	0.2	0.3

Annual percentage change except where otherwise indicated. Revisions to December BMPE are in percentage points.

a) The sum of the contributions does not necessarily correspond to GDP growth as figures have been rounded. This may also affect the calculation of revisions since the last BMPE.

Sources: Insee data for 2015, published 29 April and 30 May, the blue-shaded columns show Banque de France projections.

Table A2: Technical assumptions and international environment[a)]

	June 2016 BMPE				Revisions since December 2015 BMPE		
	2015	2016	2017	2018	2015	2016	2017
Technical assumptions							
Brent oil price (USD/barrel)	52.4	43.4	49.1	51.3	-1.4	-8.8	-8.4
Brent oil price (EUR/barrel)	47.2	38.4	42.9	44.9	-1.2	-9.7	-10.0
Non-energy commodity prices in USD (annual percentage change)	-19.9	-3.3	4.3	4.6	-1.3	1.9	0.3
USD/EUR exchange rate	1.11	1.13	1.14	1.14	-0.1	4.2	5.2
Euro nominal effective exchange rate (annual percentage change)[b)]	-7.08	4.17	0.23	0.00	0.0	4.0	0.2
3-month Euribor[c)]	0.0	-0.3	-0.3	-0.3	0.0	-0.1	-0.2
10-year French government bond yields[c)]	0.8	0.6	0.7	1.0	0.0	-0.5	-0.7
International environment, annual percentage change							
Global CPI							
Extra-euro area competitors' prices on the export side (in EUR)	5.4	-4.9	3.0	2.6	-1.1	-6.1	0.3
World real GDP	2.9	2.9	3.4	3.5	0.0	-0.5	-0.2
World (excluding euro area) real GDP	3.1	3.1	3.7	3.8	0.0	-0.5	-0.2
Global (excluding euro area) trade	0.7	1.8	3.5	4.0	0.2	-1.0	-0.3
Foreign demand for French goods and services	3.2	3.3	4.2	4.4	0.5	-0.5	-0.4
Intra-euro area	*5.8*	*4.6*	*4.9*	*5.0*	*0.5*	*-0.3*	*-0.6*
Extra-euro area	*0.9*	*2.1*	*3.5*	*3.9*	*0.5*	*-0.6*	*-0.2*

Notes: Revisions to December BMPE data are expressed as percentages for levels, and as percentage points for rates of growth.

a) These technical assumptions and international environment projections were constructed by the ECB on 10 May for market data, and on 17 May for foreign demand for French goods and services, in accordance with the principles set out in *A guide to Eurosystem staff macroeconomic projection exercises,* ECB, June 2001, available at: *https://www.ecb.europa.eu/pub/pdf/other/staffprojectionsguideen.pdf*
Foreign demand corresponds to the weighted average imports of France's trading partners. The method of calculation is described in the Occasional Paper *Trade consistency exercise in the context of the Eurosystem projection exercises-an overview,* available at: *https://www.ecb.europa.eu/pub/pdf/scpops/ecbocp108.pdf*

b) Calculated against 38 trading partners of the euro area.

c) The forecasts for interest rates were calculated using the yield curve.

Source: Eurosystem.