# In 2016 GDP increased by 1.2% and households' purchasing power accelerated

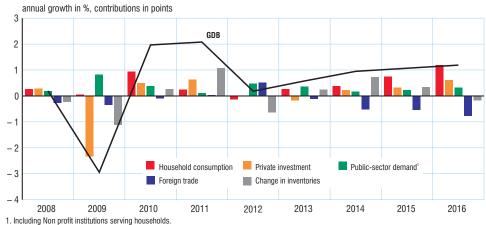
Clément Bortoli, Nicolas Boudrot, Clément Guillo\*

In 2016, the growth rate in France hardly increased at all: +1.2% in volume after +1.1% in 2015. This was nevertheless the strongest growth since 2011 (*Figure 1*). Domestic demand excluding changes in inventories accelerated sharply (contributing +2.1 points to GDP growth in 2016 against +1.3 points in 2015), driven by households: their consumption gained momentum (+2.3% after +1.4%) in the wake of their purchasing power and their investment rebounded after falling back for several years (+2.4% after -2.1%). On the government demand side, general government consumption picked up slightly (+1.3% after +1.1%) while the decline in the volume of government investment virtually ceased (-0.1% after -3.0%). Finally, investment by non-financial enterprises accelerated a little more (+3.6% after +3.1%).

However, changes in inventories affected growth slightly (contributing -0.2 points to annual growth, after +0.3 points in 2015) as did foreign trade (-0.8 points after -0.5 points): overall, exports slowed substantially while imports continued at a sustained pace.

Total employment picked up considerably in 2016, due to market payroll employment, which took advantage of both the slight acceleration in activity and the measures to reduce the cost of labour which boosted the growth in employment.

# 1. Contribution of the main aggregates to GDP growth



Scope: France.

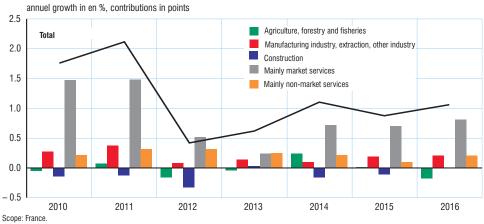
Source: Insee, national accounts, 2010 base.

<sup>\*</sup> Clément Bortoli, Nicolas Boudrot, Clément Guillo, Insee.

# Activity accelerated very little

In 2016, activity increased at virtually the same pace as in 2015: +1.2% after +1.1%. When adjusted for working days, GDP increased by 1.1% (after +1.0%). Value added grew in all branches (*Figure 2*) with the exception of agriculture, which affected activity adversely due to the historically poor harvests that summer (-0.2 points).

# 2. Contribution of primary branches to the growth in volume of total value added



Source: Insee, national accounts, 2010 base.

# Manufacturing value added accelerated

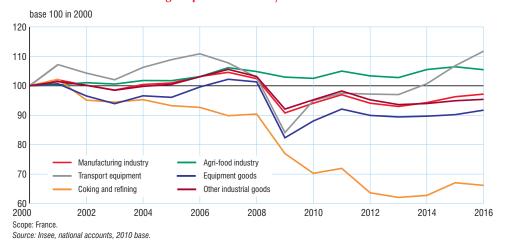
After growing steadily in 2015 (+2.1% after +1.4% in 2014), manufacturing output slowed in 2016 to +0.9% in volume (*Figure 3*). Intermediate consumption in the sector slowed further (+0.7% after +2.5% in 2015), with the result that value added in the manufacturing sector accelerated (+1.5% after +1.1%), contributing +0.2 points to GDP growth in 2016.

The slowdown in manufacturing output affected almost all sectors: agri-food output slipped back mainly due to some episodes of avian flu (-0.9% after +0.9%); coking-refining was disrupted by strikes in the spring (-1.3% after +6.8%); transport equipment output was again very vigorous, but was nevertheless slowed by problems with supplies in aeronautics (+4.6% after +6.1%). Output in "other industries" (+0.5% after +1.0%) also slowed, while in capital goods it accelerated sharply (+1.7% after +0.6%). Production in energy-water-waste maintained a similar pace to that of 2015 (+0.7% after +0.8%).

# Activity accelerated in the service sector

Market services output slowed in 2016 (+1.5% after +2.1% in 2015). However, intermediate consumption in the branches concerned slowed more (+1.5% after +3.0%), with the result that value added accelerated (+1.5% after +1.2%), contributing around +0.7 points to GDP growth in 2016.

#### 3. Variations in manufacturing output in volume by branch



The slowdown in market services output was due to trade (+1.7% after +3.2% in 2015), financial activities (-1.5% after +2.8%), services to businesses (+1.7% after +2.3%) and the services to households sector (+1.5% after +2.0%). Conversely, output in services to transport accelerated significantly (+1.8% after -0.5% in 2015), as was the case in accommodation and food services (+2.5% after +0.4%), whereas output in the information-communication (+3.0% after +3.1%) and housing branches (+1.3% after +1.2%) maintained the same pace as

Output in non-market services also maintained a similar pace to that of 2015 ( $\pm$ 1.0% after  $\pm$ 0.9%) but, due to the slowdown in intermediate consumption ( $\pm$ 1.4% after  $\pm$ 2.8%), value added accelerated ( $\pm$ 0.9% after  $\pm$ 0.4%), contributing more to GDP growth than in 2015 ( $\pm$ 0.2 points after  $\pm$ 0.1 points).

### Activity in construction was no longer in decline, agricultural activity tumbled

After a downturn lasting two years, construction output stabilised (0.0% after -1.4%). Value added in the sector increased, although only very slightly (+0.1% after -1.9%), and no longer pulled down GDP growth.

Finally, agricultural output fell drastically in volume (-5.5% after -1.5%), especially vegetable crops, as a result of the historically poor harvests in summer 2016. Value added in the agricultural sector fell even further (-9.7% after +0.6%), thus contributing -0.2 points to GDP growth in 2016.

# Foreign trade continued to affect activity

in 2015.

# French exports slowed, in the wake of world demand

World trade in goods slowed in 2016 ( $\pm 1.5\%$  after  $\pm 2.5\%$ , the slowest growth since 2009), mainly due to the persistent sluggishness of imports by the emerging economies and the US slowdown. World demand for French goods also slowed ( $\pm 2.5\%$  after  $\pm 3.5\%$  in 2015), but

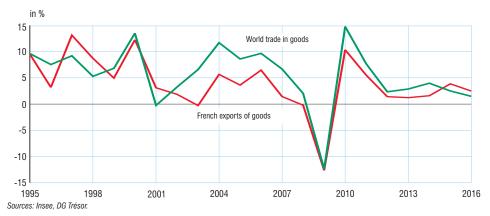
remained more buoyant than world trade because of the geographical composition of French exports.

World demand for French goods suffered mainly from the slowdown in imports by the Eurozone countries (contributing +1.8 points after +2.7 points in 2015), mainly Germany, Italy and Spain (+0.9 points after +1.7 points in 2016). Imports by other advanced economies also slowed, but to a lesser extent, contributing 0.6 points to world demand for French goods (against +1.0 point in 2015). Conversely, imports by the emerging economies bounced back (contributing +0.2 points after -0.3 points), with this increase due mainly to demand from Russia.

#### Exports of manufactured goods slowed in volume

In 2016, total exports slowed (+1.8% after +4.3%). This was particularly the case for exports of manufactured goods (+3.0% in volume after +4.1%), which represented more than two thirds of sales. In the wake of domestic production, sales of refined products tumbled (-9.7% after +10.8%). For all other manufactured products, exports also slowed, with the exception of transport equipment, where sales accelerated (+7.8% after +5.0%). In line with the decline in production, sales of agricultural products fell back sharply (-6.3% after +5.2%), as did energy-water-waste exports (-8.5% after -9.5%) as they were affected by shutdowns for maintenance at the end of the year in some nuclear reactors. All in all, exports of goods slowed (+2.5% after +3.8%), showing a similar profile to that of demand for French goods. Thus France stabilised its share in the export markets. For the second consecutive year, exports of goods increased even more quickly than world trade (*Figure 4*).

### 4. Trends in French exports and world trade in goods in volume



Exports of services excluding tourism slowed substantially (+2.4% after +8.7%): all products were concerned, with the exception of transport services where exports accelerated considerably (+6.1% after -0.2%). Sales of services contributed +0.5 points to total export growth (after +1.8 point in 2015). Tourist exports once again impacted on activity (-6.9% after -4.8%), through a drop in numbers of foreign tourists following the terrorist attacks: their contribution to total exports was -0.4 points (after -0.3 points).

#### **Imports remained vigorous**

Imports of goods and services (including tourism) also slowed in 2016 ( $\pm$ 4.2% in volume after  $\pm$ 5.7%), but to a much lesser extent than exports. Imports of manufactured goods slowed slightly ( $\pm$ 4.4% in volume after  $\pm$ 5.5%). The reason this momentum was maintained is mainly due to purchases of transport equipment which continued to increase sharply ( $\pm$ 11.9% after  $\pm$ 9.2%), contributing  $\pm$ 2.1 points to the rise in manufacturing imports. Purchases of other manufactured goods slowed, especially refined products, which fell back ( $\pm$ 2.8% after  $\pm$ 0.5%). Energy-water-waste imports slowed a little ( $\pm$ 1.2% after  $\pm$ 2.0%), while agricultural products accelerated strongly ( $\pm$ 7.5% after  $\pm$ 1.0%), offsetting the drop in domestic production. All in all, purchases of goods slowed in volume ( $\pm$ 4.2% after  $\pm$ 5.0%), contributing  $\pm$ 3.1 points to the growth of imports overall.

Imports of services, excluding tourism, slowed substantially (+3.9% after +11.9%), especially in trade and services to businesses. All in all, purchases of services excluding tourism contributed +0.8 points to the buoyancy of total imports. Driven by the upturn in their purchasing power, French households' spending on tourism abroad bounced back (+5.2% after -5.2%).

Finally, for the whole of 2016, foreign trade impacted on activity for the fourth consecutive year (contributing -0.8 points after -0.5 points): whereas overall, exports followed the trend of world demand for French goods, imports remained more vigorous than domestic demand. A combination of unfavourable factors specifically affected this deficit, accounting for -0.4 points of growth in 2016: poor harvests affected agricultural trade, problems with the national nuclear plants affected energy-water-waste and the disaffection of foreign tourists affected the tourism balance. Trade in manufactured goods contributed -0.3 points, and services excluding tourism accounted for -0.1 points.

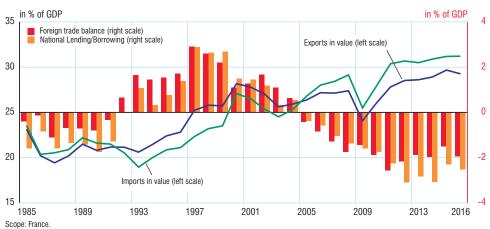
#### France's net borrowing increased

In value too, exports grew less rapidly (+0.2%) than imports (+1.7%). As a result, the foreign trade balance deteriorated by  $\leq$ 10.3 billion and remained largely in deficit at - $\leq$ 43.4 billion.

The energy deficit (including refined products) was reduced for the fourth consecutive year thanks to the drop in oil prices and reached - $\[ \le \] 29.0$  billion in 2016. Excluding energy, the balance of other products and services deteriorated and became negative for the first time since 1978, falling to - $\[ \le \] 14.4$  billion (after + $\[ \le \] 3.7$  billion in 2015). In particular, the balance of trade in manufactured goods excluding fuel deteriorated and fell to - $\[ \le \] 16.6$  billion after - $\[ \le \] 9.1$  billion in 2015, with the deterioration affecting all types of product. The balance in value of services (excluding tourism) also decreased (+ $\[ \le \] 0.4$  billion after + $\[ \le \] 3.7$  billion) and the tourism balance was at its lowest since 1989, although still slightly positive (+ $\[ \le \] 1.3$  billion after + $\[ \le \] 0.5$  billion). Finally, the balance of agricultural products deteriorated and, although still slightly positive (+ $\[ \le \] 0.5$  billion after + $\[ \le \] 3.0$  billion), dropped to its lowest level since 1981.

However, the balance of property income improved slightly (+€9.8 billion after +€8.4 billion): income paid to the rest of the world declined by €4.1 billion while income received contracted by only €2.7 billion. All in all, France's net borrowing went up by €5.8 billion, and represented 2.5% of GDP in 2016, after 2.3% in 2015 (*Figure 5*).

# 5. External balance

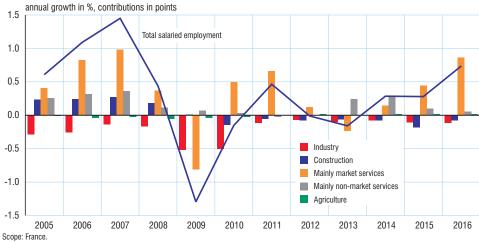


Source: Insee, national accounts, 2010 base...

# **Total employment accelerated**

As an annual average, payroll employment in the mainly non-agricultural market sectors accelerated sharply in 2016 (+1.0% after +0.2% in 2015), contributing to the increased buoyancy of total payroll employment (+0.7% after +0.3%) (*Figure 6*). Non-market sector employment slowed only slightly (+0.2% after +0.3%). As a result of this momentum in employment, the ILO unemployment rate decreased from 10.4% of the average active population in France in 2015 to 10.1% in 2016.

# 6. Trend in total salaried employment



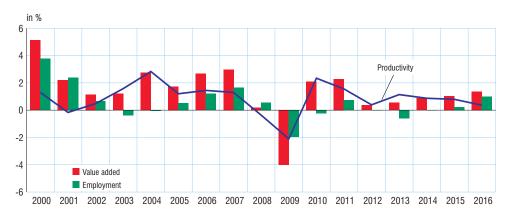
Source: Insee. national accounts. 2010 base.

### Market sector payroll employment regained its vigour

In the non-agricultural market sectors, payroll employment accelerated sharply as an annual average: +164,000 (or +1.0%), after +39,000 in 2015 (or +0.2%)<sup>1</sup>. This improvement is due to the slight acceleration in market value added (*Figure 7*) and to measures to reduce the cost of labour and improve job growth (tax credit for encouraging competitiveness and jobs, Responsibility and Solidarity Pact and the hiring premium for SMEs). Thus the productivity gains generated by the non-agricultural market sectors were less in 2016 (+0.4%) than in previous years (+0.8% in 2015 and +0.9% in 2014). When agricultural employment, non-market employment and self-employment are taken into account, total employment also accelerated sharply: +213,000 net job creations after +106,000.

The acceleration of market employment was mainly driven by market services (+212,000 jobs after +110,000 in 2015), especially in temporary employment. In construction, job destructions decreased a little (-19,000 in 2016 after -44,000 in 2015) whereas they maintained the same downward trend in industry (-28,000 jobs in 2016 after -26,000 in 2015). Concerning non-market employment, it slowed in 2016 (+13,000 after +24,000).

# 7. Growth in productivity, value added and employment in the non-agricultural market branches



Scope: France.

Source: Insee, national accounts, 2010 base

# **Unemployment decreased in 2016**

On average in 2016, the ILO unemployment rate dropped to 10.1% of the active population in France, after reaching a high point in 2015 (10.4% after 10.3% in 2013 and 2014). The female unemployment rate was stable (9.9% in 2016, the same as in 2015) whereas the rate for men decreased, while still remaining higher (10.2% after 10.8% in 2015): this divergence is explained by the difference in the employment situation in industry and construction on the one hand, sectors employing mainly men, and the tertiary sector on the other hand.

<sup>1.</sup> Employment calculated and published in the context of the national accounts differs from employment estimated directly in the sectors of activity, mainly because of the differences in the periods considered: the former is calculated as a quarterly (or annual) average, while the latter is estimated at the end of the period (end of quarter or end of year).

# **Purchasing power accelerated**

# Inflation remained very low

As an annual average, inflation<sup>2</sup> remained very low in 2016 ( $\pm$ 0.2% after 0.0% in 2015): the energy component in particular continued to decline ( $\pm$ 2.8% after  $\pm$ 4.7%) (*Figure 8*). Core inflation, *i.e.* excluding energy and food, remained very low in 2016 ( $\pm$ 0.6% after  $\pm$ 0.5%): on the one hand, the increase in the price of services remained limited by the moderate increase in rents, indexed against past inflation, and by the restrained rise in wages; on the other hand, in the manufacturing sector, the level of unemployment remained high and continued to contain the inflationary pressures, while the previous drop in the price of commodities continued to spread. The consumption deflator was similar to the consumer price index, and also remained very low in 2016 ( $\pm$ 0.1% after  $\pm$ 0.3%).

# 8. Overall consumer price index and core inflation



Scope: France.

Note: in december 2016, overall inflation was +0.6%, of which +0.1 point of percentage due to rising price index of agri-food products and 0,3 point to rising energetic prices, meanwhile core inflation was +0.4%. Source: Insee.

# The increase in the average wage per capita was almost identical to that in 2015

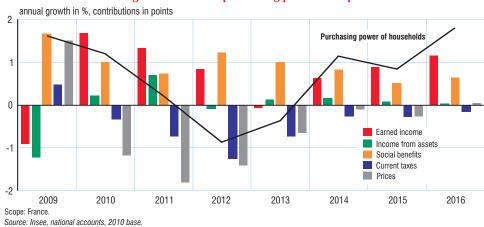
In 2016, the average wage per capita in the non-agricultural market branches increased in almost the same way as in previous years: +1.3% after +1.2% in 2014 and 2015. Due to the slight slowdown in consumer prices, it accelerated a little in real terms: +1.4% after +1.0%. In general government, the nominal wage per capita did not accelerate, despite the rise in the index point on  $1^{st}$  July: +0.9%, as in 2015 and 2014. In real terms, wages accelerated slightly (+0.9% after +0.6% in 2015).

<sup>2.</sup>The consumer price index referred to here differs from the consumption deflator, mainly due to differences in scope, and especially concerning financial products. The deflator fell slightly in 2016 (-0.1 %) whereas the consumer price index increased slightly (+0.2%). It is the consumption deflator that is used to calculate purchasing power.

# Household gross disposable income picked up

In 2016, households' gross disposable income picked up in nominal terms: +1.7% after +1.1% (Box~1). Its main component, net earned income, gained in vigour (+1.9% after +1.5%) (Figure~9); on the one hand net wage income gathered pace (+1.9% after +1.4%), due to the improvement in employment; on the other hand the net mixed income of sole proprietors increased for the second consecutive year (+2.6% in 2015 and 2016), despite the downturn in agricultural holdings

#### 9. Contributions to change in households purchasing power of disposable income



From the purchasing power of disposable income to the purchasing power of "arbitrable" income per consumption unit

Sylvain Billot, Alexandre Bourgeois \*

The term "purchasing power" is used extensively, but it can refer to very different concepts: the comprehensive and coherent framework of the national accounts provides a precise definition, based on data that is harmonised internationally. It is based on the purchasing power of gross disposable income of all households (or real disposable income). Gross disposable income refers to the part of income that remains available to households for consumption and savings, after social and fiscal tax contributions have been deducted<sup>1</sup>. Changes in the purchasing power of gross disposable income compare changes in gross disposable income to those in household consumption expenditure prices.

However, this macroeconomic measurement may differ from the perception that households have of the changes in their standard of living. In particular, they may perceive their purchasing power as having a more narrow range, by considering that in reality they have little power over some of their consumption expenditure, which must necessarily be paid: they are thus focused on the available leeway for freely making choices on consumption and savings. To understand this perception of purchasing power better, we can examine the changes in real "arbitrable" income, that of available income once all "pre-engaged" consumption expenditure has been deducted.

<sup>\*</sup> Sylvain Billot, Alexandre Bourgeois, Insee.

<sup>1.</sup> Gross disposable income includes earned income (wages and household gross pay, plus sole proprietors' profits), property income excluding capital gains, whether realised or not (dividends, interest, etc.), transfers (particularly net insurance premium benefits) and social benefits (retirement pensions, unemployment benefits, family allowances, statutory minimum wages, etc.). The gross disposable income excludes taxes and social contributions. The four main types of taxes taken into account are income tax, housing tax, the Generalised Social Contribution (CSG) and the Social Debt Repayment Contribution (CRDS). Inheritance tax, however, is not included in this total.

#### Box 1 (continued)

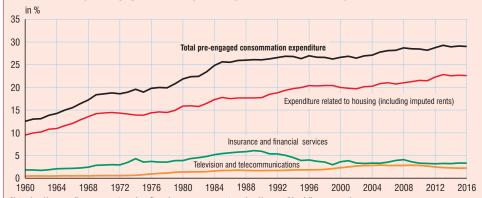
#### The growing weight of "pre-engaged" expenditure in households' budgets

"Pre-engaged" expenditure is that which is made within the framework of a contract that is not easily renegotiable in the short-term. This complementary approach, presented in particular in the 2007 edition of the French economy report as "constrained" expenditure, was adopted, refined and recommended by the "Measurement of Household Purchasing Power" Commission in its report, submitted on 6 February 2008 to the Minister for Economic Affairs, Industry and Employment. These expenditures are defined as follows:

- expenditure related to housing (including imputed rents<sup>2</sup>), as well as expenditure related to water, gas, electricity and other fuels used in dwellings;
  - telecommunications services;
  - canteen expenses;
  - television services (television royalty, subscriptions to pay channels);
  - insurance (except life insurance);
  - financial services (including the services of financial intermediation indirectly measured-FISIM3).

The portion of "pre-engaged" expenditure represents a growing fraction of household budgets: it went from 12.3% of their disposable income in 1959, to 29.0% in 2016, a rise of more than 16 points in fifty-seven years (Figure 1).

### 1. Household pre-engaged consumption expenditure at current pricess



Note : les dépenses d'assurances et services financiers ne comprennent pas les dépenses liées à l'assurance-vie.

Source: Insee, comptes nationaux, base 2010.

Expenditure related to housing accounts for over three quarters of this rise: its share in household income climbed from 9.3% in 1959 to 22.6% in 2016. The part of insurance and financial services (including FISIM) was more limited. It first increased, going from 1.9% in 1959 to 6.1% in 1989, before returning to 3.3% in 2016 due to the growing competition between banking institutions and the drop in interest rates, which was accompanied by tighter bank margins on deposits and loans. Expenditure on television and telecommunications services went from 0.5% in 1959 to 2.1% in 1999, then increased substantially over the course of the first half of the years 2000, to reach 2.9% in 2005 before falling back to 2.2% in 2016, due to more pronounced price decreases.

<sup>2.</sup>The national accounts consider that households that own and occupy their own dwelling pay themselves rent,  $referred to as \ "imputed", which is measured based on the prices of the private market sector. This rent raises their level and the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises their level are the private market sector. This rent raises the private market sector is the private market sector of the private market sector is the private market sector of the private market secto$ of disposable income as well as their consumption expenditure.

<sup>3.</sup> FISIM refers to the margin banks take on remunerations from deposits and loans.

#### Box 1 (continued)

Increased "pre-engaged" expenditure, particularly beginning in 2003, caused households to experience a certain sense of impoverishment, fed by their perception of a gap in the actual measurement of purchasing power. It is necessary to bear in mind, however, that in a long-term perspective, this strong increase was accompanied by a reduction in the burden of basic necessities (food and clothing) in their budget, taking into account the general increase in living standards.

# Purchasing power of disposable income and of "arbitrable" income by consumption unit were on a rising trend in 2015 for the third consecutive year

In the same way that purchasing power is calculated based on household disposable income, purchasing power on "arbitrable" income can also be defined. This involves comparing changes in disposable income after payment of "pre-engaged" expenditure, to those in the price of consumption expenditure that is not "pre-engaged".

Disposable income and "arbitrable" income are macroeconomic quantities. In order to relate them to a more individual concept of purchasing power, it is necessary to relate their changes to demographic growth; the growth of purchasing power per capita is absorbed when population growth is taken into account. The growth of purchasing power per household is absorbed to an even greater extent, due to the faster increase in the number of households than the increase in population (due to an ageing population and the trend towards undoubling). Ultimately, the best measurement of the average growth in purchasing power from an individual perspective consists of calculating the growth of purchasing power per consumption unit, in order to take not only the change in number into account, but also the composition of the households<sup>4</sup>.

Over a long period of time, cyclical developments in purchasing power of disposable income and in purchasing power of "arbitrable" income per consumption unit are very similar. Nevertheless, since 1974, gains in "arbitrable" purchasing power per consumption unit have been slightly lower due to the growing weight of "pre-engaged" expenditure in household budgets. These gains reached +0.9% on average over the year, against +1.1% in gains in real disposable income (*Figure 2*). In 2016, the gap between the two measurements remained, but the gap between the two moved in the opposite direction: purchasing power per consumption unit of disposable income increased by 1.4% and that of "arbitrable" income by 1.7%. The consumption of "pre-engaged" expenditure was less dynamic than household gross disposable income (+1.4% against +1.7%), due in particular to the sharp contraction in oil products prices and to the decline in consumption of insurance and financial services.

# 2. Trends in purchasing power of gross disposable income and that of arbitrable income per consumption unit



<sup>4.</sup> A household's needs do not grow in strict proportion to its size. The size of each household in consumption units is calculated in the following manner: the first adult counts for 1 consumption unit (CU), each additional person aged 14 years or older counts for 0.5 CU, and each child under 14 counts for 0.3 CU. The change in purchasing power per consumption unit therefore makes it possible to take the changes in households' structure into account...

Social benefits in cash received by households picked up a little (+1.8% after +1.5%). This slight increase came from social security benefits (+1.8% after +1.6%) and "other benefits" (+1.6% after +0.8%), especially health insurance reimbursements. Lastly, welfare benefits also increased (+2.8% after +2.3%), due to a stronger take-up rate of the activity bonus than of the measures it replaced (particularly the earned income supplement, RSA).

The balance of property income fell back more than in 2015 (-3.2% after -2.5%). In fact, the drop in interest rates impacted on property income received by households, whether via payments from bank accounts and savings accounts or life insurance policies. However, the gross operating surplus and the mixed income of pure households<sup>3</sup> continued to increase vigorously (+2.2%, as in 2015), with households taking full benefit of cuts in the interest rate thanks to a spate of renegotiation of existing mortgages.

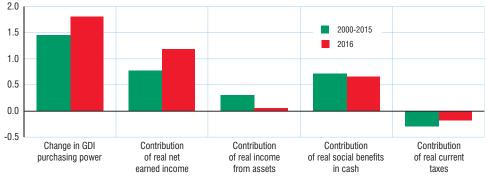
Income and wealth taxes slowed: +1.1% after +1.7% in 2014 and 2015, which was a smaller change than in the income on which they were calculated, mainly due to income tax cuts for less well-off households.

#### Purchasing power picked up strongly

The consumption deflator was very similar to the consumer price index and fell back slightly in 2016 (-0.1% after +0.3%). In addition, households' purchasing power picked up strongly in 2016: +1.8% (after +0.8% in 2015), recovering a pace slightly faster than its average annual increase since 2000 (+1.5%) (*Figure 10*).

Compared to the 2000-2015 average, real net earned income contributed more strongly to the gain in purchasing power in 2016, in contrast to real income from assets. The contribution of current taxes and social benefits received in cash in real terms was virtually identical in 2016 to the average from 2000 to 2015. Purchasing power per consumption unit, *i.e.* after adjustment to an average individual level, rose by 1.4% in 2016.

#### 10. Breakdown of GDI change in 2016, compared to the average on 2000-2015 period



Scope: France.

Note: purchasing power may be broken down like nominal GDI, when all GDI components are assessed in real terms, i.e. after taking into account consumption price increase. Thus this figure shows, for instance, that the contribution of real net earned income to the purchasing power growth reached +1.2 point in 2016, whereas it was +0.8 point on average for the period 2000-2015.

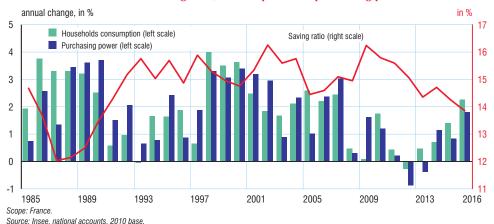
Source: Insee, national accounts, 2010 base.

<sup>3.</sup> This surplus derives mainly from renting out accommodation, including rents that property owners could receive if they rented out their property.

#### Household consumption experienced its strongest increase since the 2008-2009 crisis

On average over the year, household consumption picked up (+2.3% after +1.4%) more than their purchasing power: this was the strongest improvement since 2007. The household savings ratio decreased from 14.2% in 2015 to 13.9% in 2016, its lowest level since 1990 (*Figure 11*).

#### 11. Evolution in households saving ratio, consumption and purchasing power



Households' spending on manufactured goods slowed slightly (+1.8% after +2.1%) but for the second consecutive year its pace of growth was similar to that observed before the great recession (+1.8% on average between 1980 and 2007), after several sluggish years. Like last year, this buoyancy was mainly the result of purchases of cars (+6.7% after +4.6%) and capital goods (+5.9% after +4.6%), while consumption of other industrial goods was at a standstill (+0.2% after +1.7%).

Households' energy spending picked up slightly (+2.8% after +2.0%) and purchases of agricultural products bounced back (+2.6% after -0.4%).

Households' consumption of market services gathered pace ( $\pm 1.8\%$  after  $\pm 0.9\%$ ). This was mainly the result of spending on accommodation and food services ( $\pm 3.0\%$  after  $\pm 0.4\%$ ) and transport services ( $\pm 3.1\%$  after  $\pm 0.4\%$ ). More generally, consumption of other services also gained momentum, especially information and communication ( $\pm 0.9\%$  after  $\pm 0.2\%$ ), leisure services ( $\pm 3.1\%$  after  $\pm 1.3\%$ ) and administrative services ( $\pm 3.3\%$  after  $\pm 1.6\%$ ).

Lastly, the tourism balance continued to deteriorate in 2016. Spending by French tourists abroad bounced back strongly (+5.2% after -5.2%), but foreigners' spending in France once again decreased significantly (-6.9% after -4.8%). With the change in purchases within France, the tourism balance helped to adjust household consumption by +0.4 points in 2016, after being neutral in 2015.

# Household investment rebounded

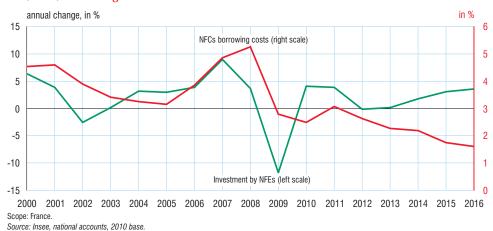
After a downturn lasting four years, household investment bounced back in 2016 ( $\pm$ 2.4% after -2.1%). This was particularly the case for investment in construction ( $\pm$ 1.3%) after two years of net decline (-4.5% in 2015 and -3.1% in 2014). Moreover, the upswing in real estate transactions resulted for the second consecutive year in a vigorous increase in household investment in services (including "notary fees" in particular):  $\pm$ 7.0% after  $\pm$ 9.1%.

# Corporate investment gathered pace, the margin ratio remained virtually stable

#### Corporate investment continued to gather pace

Corporate investment continued to accelerate for the fourth consecutive year (+3.6% in volume after +3.1% in 2015) thus increasing their investment rate a little more (23.3% in 2016 after 22.9%), to its highest level since 2008 (*Figure 12*). In a context of improving production prospects, the industrial production capacity utilisation rate rose by 0.6 points, reaching 82.5% in 2016, which was slightly short of the average between 1980 and 2015 (82.8%). The increase in investment by non-financial enterprises was facilitated by the decrease in their financing costs: their average borrowing rate has dropped constantly since 2011 and reached 1.6% in 2016 (after 1.8% in 2015).

# 12. Non-financial enterprises (NFEs) investment growth rate and non-financial corporations (NFCs) borrowing costs



The ramp-up of investment by non-financial enterprises concerned expenditure on services (+3.9% after +3.2% in 2015) and construction (+1.9% after +0.4%), while their investment in goods slowed although remaining very buoyant (+4.5% after +5.0%).

Investment in market services picked up as a result of spending on information and communication (+6.2% after +4.6%) while investment in scientific and technical activities (especially R&D) slowed slightly (+1.5% after +1.7%). Corporate investment in manufactured goods slowed but nevertheless remained very buoyant (+4.5% after +5.2%), sustained by vehicle purchases, which were very vigorous (+8.4% after +10.4%), and expenditure on capital goods (+3.4% after +4.8%) boosted by the depreciation scheme in force in 2016. Investment in other manufactured goods increased more moderately (+2.0% after +1.4%).

#### Changes in inventories impacted on activity

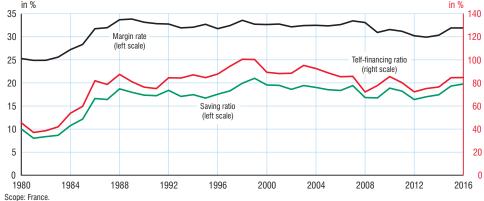
After three years when changes in inventories contributed favourably to GDP growth, in 2016 their contribution was negative (-0.2 points, after +0.3 points). All in all, through their investment expenditure and changes in inventories, corporate demand contributed +0.3 points to GDP growth after +0.7 points in 2015.

#### The margin rate remained stable

After two years of real improvement, the margin rate of non-financial corporations (NFCs) stabilised at 31.9% (*Figure 13 and Box 2*). Looking at the detail, several phenomena balance each other out. On the one hand the margin rate of NFCs was sustained by the rapid rise in their value added prices compared with consumer prices and by the reduction in employers' contributions. On the other hand, it suffered from a much stronger increase in real wages (+1.4%) than in gains from apparent labour productivity (+0.2%).

In addition, NFCs' balance of income from property rose by €2.1 billion. This improvement was due to the rise in interest, with the balance increasing by €5.2 billion in 2016. Interest paid continued to decline due to the fall in interest rates, from which NFCs, as structural debtors, were able to benefit fully. However, the balance of dividends worsened by €2.5 billion as a result of dividends paid, which increased by €6.0 billion. Lastly, income and wealth taxes for NFCs bounced back in 2016 after falling dramatically in 2015 (+4.4% after -4.9%) and in the end the NFC savings ratio improved by 0.5 points, reaching 19.8%, its highest level since 2000, and the self-financing ratio reached 84.7%.

#### 13. Non-financial corporations rate, saving ratio, self-financing ratio



Note: margin rate is the ratio of gross operating surplus (GOS) of the year to value added (VA) of the year. Saving ratio is the ratio of saving to VA. Self-financing ratio is the ratio of saving to gross fixed capital formation.

Sources: Insee, Banque de France.

# Due to the drop in interest rates, financial corporations improved their net lending in 2016

In 2016, the value added of financial intermediaries decreased for the second consecutive year. This decline was due mainly to the production in value of Financial Intermediation Services Indirectly Measured (FISIM, -6.6%), and hence indirectly to a decrease in the global margin of intermediation, because the fall in the remuneration rate from deposits was greater than the fall in the average refinancing rate. Excluding FISIMs, however, the value added of financial intermediaries increased slightly in 2016 (+€700 million). Against this backdrop of a fall in rates, interest, adjusted by the output of FISIMs, continued to fall (-6.8% for interest received and -7.1% for interest paid, compared to -9.8% and -8.8% respectively in 2015). Thus the net balance of interest received remained stable in 2016 (+€100 million). However, dividends received increased more than

#### Box 2

# The fall in oil prices and measures to reduce the cost of labour account for the upturn in the margin rates of non-financial corporations since 2013

Bruno Patier\*

The margin rate of non-financial corporations (NFCs) corresponds to the share of gross operating surplus in their value added. It therefore measures the share that remunerates capital, in the broadest sense: in particular, NFCs use gross operating surplus to cover corporation taxes, financial costs and investment expenditure.

The margin rate of NFCs can be broken down into the sum of contributions from apparent labour productivity, real wages, contributions, taxes and subsidies paid or received by the enterprises, and the ratio of the value added price to the consumer price, which is affected by changes in the terms of trade (ratio of the price of exports to the price of imports). Variations in the margin rate therefore depend on changes in each of these factors.

Fluctuations in the margin rate are generally procyclical: in periods of economic expansion, it has a tendency to grow, especially since productivity increases faster than real wages. Conversely, in periods of recession, the remuneration of capital bears the brunt of the adjustment, since variations in payroll are not as strong or rapid as variations in production prices and volumes.

#### 1. Margin rate of non-financial corporation (NFC)



# Between 2008 and 2013, the margin rate of non-financial corporations fell substantially

The margin rate of NFCs nosedived after the first oil shock then started to rally from 1983. It remained relatively stable from 1987 to 2007 around an average of 32.7%, then dropped from 2008 (*Figure 1*). In 2009, it lost 2.2 points, and stood at 30.9%. The drop in the value added of non-financial corporations in volume in fact resulted in a considerable decline in productivity of labour, which contributed -1.9 points to the drop in their margin rate (*Figure 2*). In addition, the increase in average wage per capita contributed -1.5 points, and the contribution of the terms of trade was unusually high at +1.5 points. The margin rate saw a short-lived upturn in 2010 (+0.6 points), as productivity recovered. However, the rise in oil prices, which had raised imports and worsened the terms of trade from 2010 to 2013, and the slowdown in activity from 2012, once again weighed heavily on the margin rate which stood at 29.9% in 2013, its lowest level since 1985.

<sup>\*</sup> Bruno Patier, Insee.

# 2. Décomposition des variations du taux de marge des sociétés non financières (SNF)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Margin rate (in %)	33.1	30.9	31.6	31.2	30.2	29.9	30.4	31.9	31.9
Variation in margin rate (in points)	-0.5	-2.2	0.6	-0.4	-1.0	-0.3	0.4	1.6	0.0
Contributions to the variation margin rate (in points):									
Productivity gains	-0.2	-1.9	1.8	1.0	-0.1	0.7	0.7	0.6	0.1
Real wage per capita	-0.3	-1.5	-1.4	0.1	-0.3	-0.5	-0.8	-0.6	-0.9
Employer contribution ratio	0.1	0.0	0.2	-0.4	-0.1	-0.2	-0.2	0.2	0.2
Ratio of the value-added price to the consumer price	0.0	1.5	-0.8	-0.7	-0.3	-0.1	0.0	0.7	0.6

Note: The margin rate (TM) measures the share of value-added which remunerates capital. Its variation is broken down in accounting terms between:

- productivity changes (Y/L), with Y value-added and L employment, and the ratio of the value-added price to the consumer price, or terms of trade (Pva/Pc), which play a positive role;
- changes to the real average wage per head (SMPT/Pc) and the employer contribution ratio (W/SMPT, where W represents all compensation), which play a negative role.
- others factors: taxes on production net of operating including CICE (which reduces companies' corporation tax, but in the national accounts it is recorded as a subsidy to companies)

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

Scope: France.

Source : Insee, national accounts, 2010 base.

# Since 2014, the margin rate has picked up due to the fall in oil prices and measures to reduce the cost of labour

Over the last three years, the margin rate has recovered, reaching 31.9% in 2016, or +2.0 points compared with 2013. In a context of moderate recovery in growth, productivity gains improved, contributing an increase in the margin rate of +1.4 points in three years. However, they increased less than the real per capita wage, which resulted in a drop in the margin rate of 2.3 points at the same time. In 2015 and 2016, nominal wages did indeed rise once again despite virtually zero inflation.

Since 2014, policies to reduce employers' social contributions and corporation taxes (tax credit for encouraging competitiveness and jobs (CICE), Responsibility and Solidarity Pact (PRS) and the recruitment incentive for SMEs) have also had an impact: all in all, contributions, taxes and corporate subsidies contributed +1.2 points to the upturn in the margin rate from 2014 to 2016.

The improvement in terms of trade, especially as a result of the considerable drop in oil prices between mid-2014 and the end of 2015, also allowed for a significant improvement in the margin rate, of +1.2 points in 3 years.

It should be noted that this accounting breakdown of the margin rate does not take into account the ultimate effect of measures to reduce the cost of labour like the drop in oil prices. For example, companies were able to award higher wage increases because the cost of labour, like the cost of their energy supplies, was decreasing. In the business tendency surveys, 26% of industrial companies and 41% of service enterprises indicated that, among other things, they would use the CICE to increase wages (Gorin and Renne, 2014).

#### An improvement in the margin rate concentrated in industry and transport services

Changes in the margin rate can be broken down into major branches of activity by extending the scope of companies to cover non-financial enterprises (NFE), which also includes unincorporated enterprises (UE). As UE pay is not treated in accounting terms in the same way as a wage, but rather as "mixed income", similar to gross operating surplus, the margin rate of NFEs is necessarily higher (37.7% in 2016) than that of NFCs alone. Its long-term trends are affected by changes in the salarisation of the economy, but short-term changes are similar: from 2013 to 2016, the upturn in the margin rate of NFEs (+1.8 points) was close to that of NFCs alone (+2.0 points).

#### Box 2 (continued)

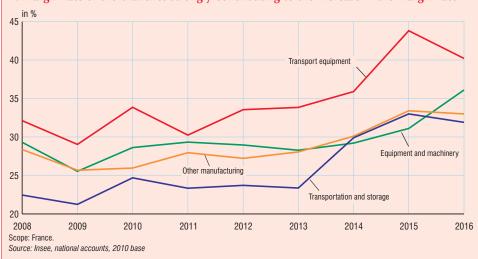
Since 2013, the increase in the margin rate has been stronger in industry (+4.1 points, exceeding its average pre-crisis level) than in market services (+0.3 points) (*Figure 3*). At a more detailed level, it is very strong in four branches: capital goods (+7 points), transport equipment (+13.5 points), other industrial branches (+4 points) and transport services (+5.8 points) (*Figure 4*).

The branches of transport equipment manufacture and transport services have been able to benefit fully from the improvement in the terms of trade since 2013. On the one hand, these branches are more intensive consumers than average of petroleum products, whose prices have tumbled; on the other hand, the transport equipment branch benefitted specifically from the fall in the euro: the vast majority of export contracts, especially in aeronautics, are drawn up in dollars, which accounts for the strong increase in export prices. For the other industrial branches, the fall in the cost of labour contributed more significantly than the improvement in the terms of trade.

# 3. Margin rate in market services and manufacturing industry (ENF))



# 4. Margin rate of the branches strongly contributing to the increase in the margin rate



#### Box 2 (continued)

In general, measures to reduce the cost of labour focused on wages of up to 2.5 times the minimum wage, and benefitted the most labour-intensive branches: this was particularly the case in trade (+1.4 points) and accommodation and food services (+3.3 points). However, in these branches, the buoyancy of wages virtually cancelled out the earlier favourable effect of the CICE and the PRS, and overall the margin rate stagnated during this period.

#### In 2016, the savings ratio of NFCs stood at its highest level since 1999

Finally, although in 2016 the margin rate was not back to its average pre-crisis level, conditions for self-financing NFC investment were nevertheless more favourable. The share of savings (which notably excludes gross operating surplus, financial charges and corporate taxes) in their value added increased more from 2013 to 2016 (+2.3 points in 3 years) than the margin rate (+2.0 points) and was significantly higher than its pre-2008 level, even reaching its highest level since 1999 (Figure 5). This change is due to the drop in interest rates up until 2016: in 2016, NFCs spent €27.1bn in interest charges, compared with €30.3bn in 2013. This sharp improvement in savings by NFCs was reflected in their self-financing rate (ratio of savings to investment): it stood at 84.7% in 2016, its highest level since 2010, and close to its average for the period 1987-2007 (87.4%).

#### 5. Ratio between gross saving and value added of non-financial corporations



#### Pour en savoir plus

Gorin Y., Renne C., « Comment les entreprises comptent utiliser le CICE », Insee Focus  $n^\circ$  10, septembre 2014.

dividends paid (+15.2% for dividends received and +13.7% for dividends paid). All in all, financing capacity continued to increase, reaching €7 billion in 2016 after €5 billion in 2015, mainly due to the improvement in the balance of dividends and a fall in corporate taxes.

FISIMs had no impact on the balance of the primary income of financial intermediaries, but they enabled the banks to raise the value added of their interest margins, which are considered as output of services. When the loan or deposit rates offered to bank customers remain unchanged, any fall in the refinancing rate leads to an increase in the banks' margin rate on loans and a decrease in this margin on deposits. In 2016, massive renegotiations of home loans led to apparent rates on loans falling below the reference rate, which reduced the margin on loans. As a result, FISIMs on loans decreased by 4.3 billion.

In 2016, the value added of insurance companies fell by 19.8% in value following a rise of 10.5% in 2015. This decrease was mainly attributable to life insurance income distributed, which is included in the calculation of output of insurance services. In fact, the rate of return on life insurance policies continued to fall: policies in euros saw their rate of return drop from an average of 2.3% in 2015 to 1.6% in 2016.

The competitive effects of the Hamon Law continued into 2016 and limited any increase in the output of non-life insurance despite a buoyant automobile market. As was the case for FISIMs, property income received by insurers (interest, income from investment funds and dividends) fell sharply in 2016 (-6 billion). All in all, the insurance sector recorded net borrowing of €6.5 billion in 2016 (or an €8 billion decline compared with 2015).

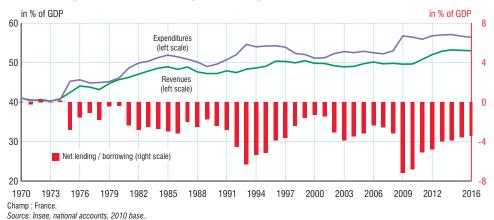
When financial auxiliaries were added, financial corporations ultimately saw their value added fall in 2016 (-5.6%) and their net lending decrease.

# The government deficit declined once again, and debt increased

#### In 2016, the government deficit represented 3.4% of GDP

In 2016, the government deficit according to the Maastricht definition stood at 3.4% of gross domestic product (GDP), after 3.6% in 2015 (*Figure 14*). It continued to improve after its sharp fall in 2009, because, as a share of GDP, spending declined more than revenue. Public revenue slowed (+1.4% in 2016 after +2.0% in 2015), as did public expenditure (+1.1% after +1.4% in 2015). Measures to control expenditure, especially those introduced in the framework of the 2015-2017 economic plan, and the further decline in interest charges (2.1% of GDP after 2.2%) resulted in a reduction of the share of public expenditure in the GDP from 56.7% in 2015 to 56.4% in 2016. The increase in primary expenditure in volume (excluding interest charges) was +1.1% after +1.7% in 2015.

# 14. General government net lending / borrowing



All in all, the government deficit was reduced by €2.8 billion compared with 2015. Between 2015 and 2016, the local government authorities (APULs) balance increased by €3.1 billion, that of the Social Security administrations by €1.8 billion and, to a lesser extent, that of other government bodies (ODACs) by €0.3 billion. However, the State balance deteriorated (-€2.5 billion).

### The compulsory levies ratio was stable in 2016

In 2016, the general government compulsory levies ratio stood at 44.4% of GDP, the same as in 2015. Compulsory levies increased spontaneously by +2.0%, a faster pace than GDP growth. Nevertheless, the impact of tax and social measures in 2016 contributed to reducing the level of compulsory levies by  $\in 3.9$  billion (Box 3). On the one hand, several measures helped reduce the social and tax burden on enterprises and households, the main ones being the ramp-up of measures in the Responsibility and Solidarity Pact, especially reductions in social contributions, the abolition of the exceptional additional corporate tax and the lowering of income tax. Moving in the opposite direction, other measures were taken, notably the abolition of the tax credit for low earners and the ramp-up of the ecology tax, which partly offset the effect of the tax relief.

Box 3

# Main fiscal and social measures and their impact on change in tax and social contributions in 2016

Matthieu Bourasseau, Alexandre Fischman, Camille Sutter\*

In 2016, fiscal and social measures helped to reduce government taxes and social contributions (-€3.9bn). This trend was in line with attempts started in 2014 to reduce tax and social contributions after four years of increases due to the upturn in public finances. Changes to the tax structure begun in 2014 (see *French economy*, edition 2015, INSEE) continued by extending the policy of reducing direct corporate taxation, while at the same time increasing environmental taxation.

#### The new measures have increased indirect taxation by €2.8bn, mainly by raising energy taxes.

In 2016, the ramp-up of the carbon component of fossil fuel energy taxation led to a  $\leq$ 1.8bn increase in indirect taxation, under the combined effect of its impact on domestic consumption taxes ( $+\leq$ 1.6bn), and on value added tax (VAT) ( $+\leq$ 0.2bn). The increase in the domestic tax on final electricity consumption (TICFE), whose base and rate were extended to offset the abolition of the public electricity service contribution (CSPE), resulted in arise in indirect taxation of  $\leq$ 0.5bn.

The new measures reduced direct corporate taxation and employer contributions by 6.7 billion euros in 2016, mainly as a result of the reform of the Responsibility and Solidarity Pact.

By continuing to implement the Responsibility and Solidarity Pact, the tax burden on companies was reduced by  $- \le 6.6$ bn, under the combined effect of a decrease in social contributions ( $- \le 3.0$ bn), the abolition of the exceptional contribution to corporation tax (IS) ( $- \le 2.6$ bn) and the abolition of a second tranche of the corporate social solidarity levy(C3S) ( $- \le 1.0$ bn). This reduction in direct corporate taxation was nevertheless tempered by the impact of tax reductions on corporation tax( $+ \le 1.8$ bn).

<sup>\*</sup> Matthieu Bourasseau, Alexandre Fischman, Camille Sutter, direction générale du Trésor.

#### Box 3 (continued)

Direct taxation on households and contributions by employees and the self-employed remained more or less stable (+€0.2bn) as a result of the new measures.

The trend to reduce income tax (IR) for households with average or low incomes continued into 2016 and was increased by the strengthening of tax relief, resulting in a  $\leq$ 2.0bn drop in taxes and social contributions. The energy transition tax credit contributed to a reduction in direct household taxation of a further  $\leq$ 0.8bn. However, the abolition of the tax credit for low earners represented  $+\leq$ 2.1bn of taxes and social contributions, which was offset by the creation of the working bonus.

#### Measures related to taxes and social contributions

	billion euros
Measures related to taxes and social contributions	-3,9
of which: Indirect taxation	2,8
Ramp-up in the carbon component (LFI2014)	1,8
Increase in the public electricity public service contribution (CSPE) (LFR2015)	0,5
Others	0,5
Direct taxation of corporations * and employers' contributions	-6,7
Reduction in social contributions under the Responsibility and Solidarity Pact	-3,0
Abolition of the exceptional contribution to IS under the Responsibility and Solidarity Pact	-2,6
Abolition of C3S under the Responsibility and Solidarity Pact	-1,0
Effect on IS of reductions in contributions under the Responsibility and Solidarity Pact	1,8
Others	-1,9
Direct taxation of households * and employees/self-employed contributions	0,2
Abolition of tax credit for low earners (LFR 2014)	2,1
Drop in income tax (IR) (LFI 2016) under the Responsibility and Solidarity Pact	-2,0
Introduction of an energy transition tax credit (LFI 2015)	-0,8
Others	0,9
Autres	-0,2
Service for processingamended tax returns(STDR, anti-fraud measures)	-0,2

<sup>1.</sup> The division of the effects of the new measures between households and corporations is partly based on conventions. Firstly, it is a "static" division as it does not take into account the macroeconomic impact of the taxes and social contributions concerned: certain taxes may be paid by corporations, but in the final analysis weigh on households as corporations pass them on to consumers in their prices or in the salaries of their employees, which can take several years. The approach presented here therefore does not take into account the medium-term impact of these measures. Secondly, this division does not take into account the tax burden on households and corporations due to indirect taxes.

Source: direction générale du Trésor.

#### The central general government deficit deteriorates

The net borrowing of central general government, the State and other government bodies (ODACs), deteriorated by €2.2 billion, reaching -€76.0 billion in 2016. In particular, budgeting for the contribution to the public electricity service, incorporated into the ODACs until 2015, had an impact of -€0.6 billion on the State balance.

The revenues of central general government slowed (+1.1% in 2016 after +1.3% in 2015) while expenditure increased at the same pace as in 2015 (+1.4%).

Concerning expenditure, intermediate consumption decelerated (+2.0% in 2016 after +6.1% in 2015), while military expenditure (excluding heavy armaments) slowed after a strong increase in 2015 (+€0.6 billion in 2016, after +€1.3 billion in 2015).

Expenditure on personnel was buoyant (+0.9% in 2016). The creation of posts in primary and secondary education continued, and at the same time at the Ministry of Defence the abolition of posts was stopped. In addition, the civil service index point was revised upwards by 0.6% on 1st July 2016.

Current transfers to other general government departments decreased by rather less than in 2015 (-£2.4 billion in 2016 compared with -£4.0 billion in 2015). The reduction in the general

operating grant (DGF) as part of local authorities' participation in the effort to restore public accounts continued (-€3.3 billion in 2016), but was partly offset by an increase in transfers to *Pôle emploi* and the regions as part of the "500,000 additional training places" training scheme introduced in 2016 (+€0.6 billion).

Subsidies on payroll (+€2.2 billion) increased less than in 2015 (+€8.2 billion). The ramp-up of the tax credit for encouraging competitiveness and jobs (CICE) slowed (+€0.8 billion in 2016 after +€7.4 billion in 2015), while the increase in expenditure by the agency for services and payment (ASP) remained at +€1.0 billion, as in 2015 (as a result mainly of single integration contracts and new measures in 2016 to assist with hiring in small and medium enterprises).

Interest on the debt burden decreased at the same pace as in the previous year as a result of the fall in interest rates (-5.1% in 2016 against -4.8% in 2015).

Social benefits increased substantially (+6.2%) due to benefits paid by the national housing assistance fund (FNAL) (+€4.7 billion), which now funds the family housing benefit (ALF), taking over from the national fund for family benefits (CNAF) (+€3.4 billion). In addition, the employment activity bonus (+€4.1 billion) replaced the tax credit for low earners (-€2.1 billion) and the earned income "activity" supplement (RSA) (-€1.9 billion).

Investment spending remained buoyant (+3.1%) due to the major increase in deliveries of military equipment (+\$2.7 billion). However, deliveries of goods purchased via public-private partnership contracts declined by \$1.2 billion, after the rise in 2015 due to the delivery of the Ministry of Defence Balard site. The granting of licences for 4G frequency bands reduced total expenditure by \$0.6 billion.

Capital transfers paid decreased once again in 2016 (-2.7% after -3.2% in 2015) as a result of conflicting trends: the non-renewal of 2015 expenditure relating to the refusal of Community clearance for €0.8 billion (European Commission decision of 16 January 2015) and the signing of a debt reduction and development contract with Cameroon for €0.4 billion.

Regarding revenue, taxes and social contributions collected also slowed (+1.0%, after +3.1% in 2015).

Taxes on production and imports decelerated (+€3.5 billion against +€8.8 billion in 2015). VAT increased by €2.1 billion as a result ofthe increase in taxable jobs (a slowdown compared with 2015, a year marked by a lower VAT allocation to Social Security bodies), whereas the domestic tax on energy products grew by €1.7 billion, driven by the ramp-up of the carbon tax and the alignment of the tax on diesel and petrol. Revenue from the public electricity service contribution increased by €0.5 billion. The national fund for social bulding assistance (FNAP), created in 2016, received €0.3 billion in contributions from the social rental housing guarantee fund (CGLLS). In return, the tax on high earners was abolished (-€0.3 billion), the exceptional levy of additional tax on the value added of companies on chambers of commerce and industry was zero in 2016 (after €0.5 billion in 2015) as was the tax on the profit of railway companies (after €0.4 billion in 2015).

Income taxes rose by 0.7%. Despite a decrease for households with average and low earnings, for natural persons, income tax increased (+€0.9 billion) due to changes in the different income sources in 2015: the private wage bill, retirement pensions and capital gains on transferable assets. Corporation tax increased by €0.9 billion, held back by the abolition of the exceptional contribution but driven by the measures included in the Responsibility and Solidarity Pact; the new reductions in contributions increased companies' taxable income.

Other current taxes fell by  $\le 0.5$  billion, due to the reduction in revenue from the wealth tax ( $-\le 0.2$  billion) and the gradual abolition of the systemic banking risk tax in favour of a tax to finance a support fund for local authorities that have taken out high-risk structured loans and financial contracts.

In 2016, the State received a particularly high payment (€2.0 billion) from the French foreign trade insurance company (COFACE).

Property income slipped down by 12.3% after a 3.0% increase in 2015, mainly as a result of a  $\leq$ 0.6 billion decrease in dividends received by the State.

# Local government finances rallied, as a result of a marked slowdown in operating expenses and a further drop in investment

In 2016, local government authorities had a surplus of €3.0 billion, after net borrowing of €0.1 billion in 2015. Expenditure decreased once again (-0.8%, after -0.9% in 2015), while revenues slowed (+0.4%, after +0.9% in 2015). Financial transfers from the State continued to decline.

On the expenditure side, intermediate consumption fell back 1.3% (after -0.8% in 2015), in a context of weak inflation (+0.2% in 2016). Pay slowed in 2016 (+0.8% after +1.7%), despite the rise in the civil service index point. Spending on social benefits and transfers continued to decelerate (+1.8%, after +3.1% in 2015 and +4.5% in 2014). Local investment declined again in 2016, but less strongly than in previous years (-3.3% after -9.7% in 2015 and -8.3% in 2014).

On the revenue side, taxes and social contributions by local government increased by €4.6 billion. Their spontaneous growth was faster than that of GDP, driven mainly by the buoyancy of revenue from property transfer duty in a context of a strong rise in prices and in the number of transactions on the real estate market. Once again, municipal and departmental tax rates increased significantly in 2016, in line with the election cycle and to enable the departments to cope with their social expenditure. Revenue from the local residence tax was put under strain by the ramping-up of exemption measures in favour of pensioners on modest incomes. Concerning financial transfers from the State, the general operating grant fell by €3.3 billion in 2016, after already dropping €3.5 billion in 2015.

# Social accounts continued their turnaround

In 2016, the balance of the social security administrations stood at -€2.9 billion, after -€4.7 billion in 2015. The deficit in the social accounts continued to come down thanks to expenditure increasing less sharply than revenues.

The increase in social security administration revenues was slightly greater than in 2015 (+1.3% after +1.1%). However, it was less than the increase in the private wage bill, which rapidly gathered pace (+2.4% after +1.5% in 2015) due to the reduction in contributions associated with the second phase of the PRS, concerning employers' family contributions for wages between 1.6 and 3.5 times the minimum wage, resulting in almost €3 billion. However, contributions remained more buoyant in 2016 than in 2015 (+1.5% after +1.0%), due largely to the effect of continuing to increase the rate of old-age insurance contributions provided for in the decree of 2012. The increase in tax revenues slowed slightly (+1.3% after +1.5%) with the implementation of the PRS, and the introduction of a new allowance on the corporate social solidarity levy (C3S).

Expenditure picked up slightly (+0.9% after +0.6%). Benefits slowed (+0.9% after +1.6%), as they were automatically reduced with the transfer to the State of the funding of family housing benefit to offset the losses associated with the PRS. In addition, their momentum was limited in a context of very low inflation which restricted legal increases. Spending on family benefits slipped back, mainly due to a slight decline in the birth rate and the end of ramping-up the modulation of family allowances according to income.

Old-age pensions continued to increase at a relatively moderate pace, mainly due to the small increase awarded on 1<sup>st</sup> October 2015 and the freeze placed on them in 2016. The increase in health insurance spending was kept in check, in line with the national objective on health insurance spending (ONDAM) respecting the objective that was voted (+1.8%). However, spending on unemployment benefit continued to grow, in line with the increase in the average annual number of jobseekers and the improvement in their coverage by unemployment insurance.

#### Government debt increased by 0.7 points to 96.3% of GDP

Government debt according to the Maastricht definition stood at €2,147.2 billion at the end of 2016 after €2,098.0 billion one year earlier (*Figure 15*). It reached 96.3% of GDP, after 95.6% at the end of 2015 (*Box 4*).

#### 15. Government debt as defined by the Maastricht Treaty



The State's contribution to government debt was €1,709.9 billion, an increase of €48.6 billion. This increase was less than the State's net borrowing (€74.1 billion) due to a high amount of issue premiums and adjustments for accounting lags in 2016.

The contribution of ODACs to the debt decreased by €6.9 billion in 2016 to stand at €12.7 billion. A large part of this decrease (€4.8 billion) was due to budgeting for the contribution to the public electricity service for which the debt was transferred from the ODACs to the State.

The contribution to the debt by local government authorities stood at €199.6 billion at the end of 2016, a rise of €2.9 billion compared with 2015, despite their net lending of €3.0 billion. The difference is due mainly to an increase of €3.9 billion in deposits with the Treasury by local authorities. They also used part of the borrowed money to pay €1.6 billion in indemnities as part of the renegotiation of the most risky structured loans (after already paying €0.9 billion in 2015). Payment of these indemnities did not affect their net borrowing.

Lastly, the contribution to the government debt by social security administrations increased by €4.6 billion to stand at €225.0 billion at the end of 2016. The difference

between the variation in the debt and the net borrowing (€2.9 billion) was largely due to accounting lags on non-financial transactions.

At the end of 2016, the net general government debt amounted to €1,957.3 billion (or 87.5% of GDP), up €50.7 billion on 2015. At the same time, the gross government debt increased by €49.2 billion. Movements of assets were relatively low in 2016. The cash position of the State, the ODACs and social Security administrations decreased by €0.4 billion, €1.1 billion and €3.5 billion respectively. On the other hand, social security administrations increased their holdings of long-term securities by €7.2 billion and short-term securities by €0.8 billion. The State's outstanding long-term debts decreased by €3.0 billion (including €2.6 billion early repayment by the French Development Agency (AFD)). Similarly, the French motorways fund (CNA) received €1.4 billion in loan reimbursements.

Box 4

#### Who holds the negotiable State debt?

Charles-Marie Chevalier, Olivier Simon\*

On 31 December 2016, general government debt in the meaning of Maastricht Treaty stood at €2,147bn, or 96.3% of GDP<sup>1</sup>. It consists mainly of negotiable State debt, managed by Agence France Trésor which publishes the composition of the debt on a regular basis, in particular by group of holders. The negotiable State debt measures the State's financial commitments contracted in the form of financial instruments tradable on the financial markets (BTFs, BTANs or OATs )<sup>2</sup>. On 31 December 2016, the negotiable State debt represented €1,621bn [Agence France Trésor, 2017] which included €1,487bn medium-/long-term securities (BTANs or OATs) and €134bn short-term securities (BTFs).

At the end of 2016, 41.5% of the negotiable State debt was held by residents in France: 17.8% by insurance companies, 7.8% by credit institutions, 1.7% by French undertakings in collective investments in transferable securities (UCITS) and 14.2% by other groups of holders<sup>3</sup> (Figure 1). The insurance companies' share reflects the proportion in French households' wealth of life insurance policies, mostly invested in bonds [Coppoletta-Solotareffet al., 2015]. Since the 2007 crisis, a substantial increase occurred for credit institutions, as well as for other resident holders in relation with the successive quantitative easing programmes set up by the European Central Bank, notably in 2010 and 2015.

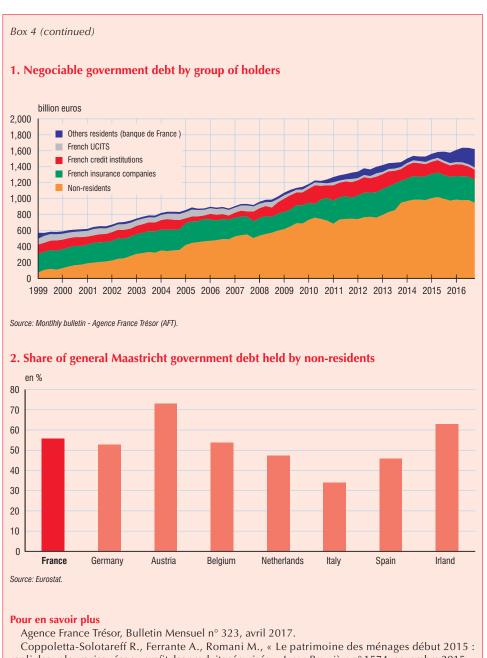
The share of the negotiable State debt held by non-residents amounted to 58.5% at the end of 2016. It increased steadily over the last twenty years, from 18.9% in 1999 to 65.1% in 2013, and has slightly decreased since then. At the European level, cross-country comparisons are feasible by considering the share of non-residents in terms of Maastricht general government debt-rather than negotiable State debt-:: in 2015, the share of non-residents settled at 55.7% for France, 52.8% for Germany, 34.1% for Italy and 45.8% for Spain (Figure 2).

<sup>\*</sup> Charles-Marie Chevalier, Olivier Simon, Insee.

<sup>1.</sup> The general government debt in the meaning of Maastricht Treaty covers all of general government's financial commitments as set out in the framework of the Stability and Growth Pact established by the European Union. It is measured according to the concepts of national accounting (European System of Accounts 2010). However, it differs from the negotiable State debt referred to in this Box and managed by Agence France Trésor both in its scope and its accounting method.

<sup>2.</sup> BTFs: negotiable fixed-rate discount Treasury bills (maturities of less than one year at issue BTANs: fixed-rate Treasury note with interest paid annually (maturity from 2 to 5 years); OATs: fungible Treasury bonds (maturity from 2 to 50 years). Since July 2017, there have been no more BTANs trading on the secondary market. The French government debt is now made up of just two types of securities: BTFs and OATs.

3. Essentially the Banque de France, which actually purchases securities through the European Central Bank.



repli des valeurs risquées au profit des produits sécurisés », *Insee Première* n° 1574, novembre 2015.

# Main revisions made to the National accounts in 2014 and 2015

Lorraine Aeberhardt, Étienne Debauche\*

#### Main revisions of the 2014 accounts

#### The resources and uses balance

In the final 2014 accounts, real GDP grew by 0.9%, compared to 0.6% in the semi-final accounts whilst nominal GDP grew by +1.5% compared to +1.2% in the semi-final accounts. This upward revision was mainly due to a greater dynamism in the value added (VA) of non-financial corporations (NFCs).

On the demand side, the contribution of domestic demand excluding inventory changes to real GDP growth was revised slightly upwards, to +0.8 points compared to +0.6 points in the semi-final accounts. Whereas it fell by 0.3% in the semi-final accounts, GFCF was now stable due, in particular, to the revision of non-financial corporations (+1.7% compared to +1.6%) after processing the ÉSANE (Annual Business Statistics System) data on tangible fixed assets. The drop in the general government's GFCF was less pronounced than in the semi-final accounts (-5.3% compared to -5.7%) after taking into account the latest data from the DGFiP (Public Finances Directorate General). Likewise, the households' GFCF fell by 3.0% in the final accounts compared to -3.5% in the semi-final accounts. All in all, the contribution of GFCF to GDP growth was zero in 2014, instead of -0.1 points in the semi-final accounts.

The real consumption expenditure of general government was revised very slightly upwards ( $\pm 1.3\%$  compared to  $\pm 1.2\%$ ) whilst the real household consumption expenditure was hardly revised, at  $\pm 0.7\%$ .

The upward revision on exports remained the same whereas imports were revised very slightly upwards, but the contribution of foreign trade to real GDP growth remained unchanged at -0.5 points.

Companies continued to replenish their inventories in 2014: the contribution of inventories to real growth was revised upwards to +0.7 points compared to 0.5 points in the semi-final accounts.

#### The account of non-financial corporations

The change in the value added of NFCs was revised upwards by 0.5 points (+1.3% instead of +0.8%). Growth in the wages paid by such companies was also higher (+1.7 points instead of +1.3%). Gross operating surplus (GOS) therefore was more vigorous (+2.7% instead of 2.2%). The balance of property income was barely changed. The increase in NFCs' gross savings was therefore stronger than in the semi-final accounts:+3.8% compared to +2.7%. The nominal GFCF was revised upwards (+0.5 points) to reach +2.1% in 2014.

As the upward revision of value added was accompanied by a revision of remuneration of similar magnitude, the margin rate of NFCs was unchanged (it grew by 0.4 points in 2014 and came out at 30.4%). The NFC investment rate was also unchanged, 22.8%, whilst the self-financing ratio was barely revised upwards (+0.5 points) in connection with the revision of savings: in the end it was 76.5%.

#### Households account

The change in gross disposable income(GDI) was revised up to +1.3% (+0.8% in the semi-final accounts), in connection with the revision of the mixed income of sole proprietors and property income. Given the moderate increase in the final consumption expenditure price index, the change in purchasing power was a little lower than the change in GDI, +1.1% compared to +0.7% previously. The increase in nominal household final consumption expenditure, however, didn't change:+0.8%. As a result, the savings rate was revised upward (+0.3 points) to reach14.7%.

Box 5 (continued)

#### Main revisions of the 2015 accounts

#### The resources and uses balance

Real GDP grew by 1.1% in the semi-final accounts for 2015, compared to +1.3% in the provisional accounts. Nominal GDP growth was revised upwards: +2.2% compared to +1.9%. The GDP deflator was revised very significantly upwards (+1.1% instead of +0.6%) following the change to the volume-price split in financial services and a better consideration of the effect of the depreciation of the Euro, in particular on aeronautics.

On the demand side, the contribution of domestic demand excluding inventory changes to GDP growth was revised slightly downwards, to +1.3 points instead of +1.4 points previously.

The contribution of GFCF was not revised because the upward revision of the GFCF of NECs (+3.1% instead of +2.8%) and general government (-3.0% instead of -3.8%) was offset by a more marked fall in the GFCF of households (-2.1% instead of +0.8%).

Real household consumption expenditure increased slightly less than in the provisional accounts (+1.4% compared to +1.5%). The same applied to the consumption expenditure of general government which increased to +1.1% in the semi-final accounts compared to -1.4% in the provisional accounts.

Foreign trade made a strong negative contribution to real growth, at -0.5 points compared to -0.3 points in the provisional accounts. Imports were revised downwards but less than exports, following the change to volume-price split in aeronautical foreign trade.

Companies continued to replenish their inventories. The phenomenon was accentuated compared to the provisional accounts, a consequence of the taking into account of the enterprise data. The contribution of inventories to growth was estimated at +0.3 points instead of +0.1 points in the provisional accounts.

#### The account of non-financial corporations

In 2015, growth in NFCs' VA stood at +2.6% instead of +2.4% in the provisional accounts. On the other hand, wage growth was revised downwards to +1.3% instead of +1.6%. while taxes on production net of subsidies fell more than in the provisional accounts from -5.1% to -7.0%. As a result, GOS came out significantly up (+7.9% compared to +6.1% in the provisional accounts. Likewise, the margin rate increased (+1.6 points compared to +1.1 points in the provisional accounts). In 2015, the margin rate of NFCs therefore reached 31.9%. Furthermore, the balance of property income deteriorated considerably (in particular the balance of interest), whilst conversely, taxes on income and transfers paid by NFCs were revised downward.

The GOS upward revision (+6.2 billion euros) was more than compensated by the deterioration of the balance of property income (almost 14 billion euros) so that, all in all, the gross savings of NFCs was revised downwards by -4.8 billion euros. In the semi-definitive account, the dynamism of NFCs' gross savings was thus somewhat attenuated (+13.9 % instead of +16.6% previously). the GFCF was revised from 0.3 points to +3.0% in 2015.

However, all these revisions did not affect the investment rate, which remained up slightly (+0.1 points) in 2015. The change in the self-financing ratio has been revised downwards in line with the deterioration in savings: it was up 8.1 points, compared with 10.3 points for the provisional accounts. It stood at 84.6% in 2015.

#### Households account

Households' nominal GDI grew by +1.1% in 2015 compared to +1.4% in the provisional accounts. Growth in earned income was less vigorous due to the fall in mixed income. Conversely, income from assets held came out better in the semi-final accounts. However, the revisions to benefits in cash received and current transfers received from the rest of the world adversely affected the GDI. The household final consumption expenditure price index having also been revised upwards (due mainly to a sharp revision of the consumer price index in financial services), growth in the purchasing power of GDI was revised downwards: it grew by +0.8% in 2015, compared to +1.6% in the provisional accounts. As nominal household consumption expenditure was more vigorous than in the provisional accounts (+1.7% compared to +1.3%), households' saving ratio was revised downward (-0.5 points to 14.2%) whereas it had been slightly up in the provisional accounts (+0.1 points). The financial savings rate was also revised downward to 5.0%.

A. GDP in volume, gross data (evolutions)	Old s	eries	New series		
	2014	2015	2014	2015	
ross domestic product	0,6	1,3	0.9	1,1	
nports	4,7	6,6	4,8	5,7	
ousehold consumption expenditure	0,7	1,5	0,7	1,4	
eneral government consumption expenditure	1,2	1,4	1,3	1.1	
otal gross fixed capital formation (GFCF)	-0,3	1,0	0,0	1,0	
of which: households	-3,5	-0.8	-3.0	-2,1	
non financial enterprises (NFE)	1,6	2,8	1,7	3,1	
general government	-5,7	-3.8	-5,3	-3.0	
xports	3,3	6,1	3,3	4,3	
ventories (contribution to GDP, in points)	0,5	0,1	0,7	0,3	
, , , , , , , , , , , , , , , , , , , ,	Old s	eries	New series		
B. GDP in value, gross data (evolutions)	2014	2015	2014	2015	
ross domestic product	1.2	1.9	1.5	2.2	
ports	2,6	3,5	2,8	3,2	
pusehold consumption expenditure	0,8	1,3	0,8	1,7	
neral government consumption expenditure	1,6	1,2	1,6	1,0	
tal gross fixed capital formation (GFCF)	-0,2	0,7	0,5	0.9	
of which: households	-2,0	-0.6	-0.7	-1,4	
non financial enterprises (NFE)	1,4	2,6	1.9	3,1	
general government	-5,8	-5,1	-5,5	-4,3	
ports	2,4	5.7	2,6	4,9	
ventories (contribution to GDP, in points)	0,5	0,1	0,6	0,4	
	Old s	eries	New series		
C. Prices of GDP, gross data (evolutions)	2014	2015	2014	2015	
oss domestic product	0,5	0,6	0,6	1,1	
ports	-2,0	-3,0	-1,9	-2,5	
usehold consumption expenditure	0,1	-0,2	0,1	0,3	
neral government consumption expenditure	0,4	-0,2	0,3	-0,1	
al gross fixed capital formation (GFCF)	0,2	-0,3	0,5	-0,1	
of which: households	1,6	0,2	2,3	0,6	
non financial enterprises (NFE)	-0,2	-0,2	0,2	0,0	
general government	-0,1	-1,4	-0,2	-1,4	
ports	-0,9	-0,4	-0,7	0,6	
ventories (contribution to GDP, in points)	0,0	0,0	-0,1	0,0	
Items of non financial enterprises account (evolutions and rate)	Old s	eries	New series		
J. Items of from initiaticial efficiencies account (evolutions and rate)	2014	2015	2014	2015	
lue added (VA)	0,8	2,4	1,3	2,6	
mpensation of employees	1,3	1,6	1,7	1,3	
oss operating surplus (GOS)	2,2	6,1	2,7	7,9	
oss saving	2,7	16,6	3,8	13,9	
CF	1,6	2,7	2,1	3,0	
argin rate (GOS/VA)	30,4	31,4	30,4	31,9	
restment rate (GFCF/VA)	22,8	22,9	22,8	22,9	
If-financing rate (saving/GFCF)	76,0	86,3	76,5	84,6	
tems of households account (evolutions and rate)		series	New series		
	2014	2015	2014	2015	
oss disposable income (GDI)	0,8	1,4	1,3	1,1	
nsumption expenditure	0,8	1,3	0,8	1,7	
rchasing power of GDI	0,7	1,6	1,1	0,8	
ving ratio (saving/GDI)	14,4	14,5	14,7	14,2	
ancial saving ratio (lending/GDI)	5,2	5,5	5,4	5,0	