### The accounts of corporations, households and general government ten years after the financial crisis

Ronan Mahieu\*

The subprime crisis really got underway in 2007, before turning into global financial turmoil during 2008 and triggering a recession on a scale unprecedented since the end of the second world war. These events had major repercussions on the dynamic of incomes for different categories: corporations, households and, of course, general government. Between 2007 and 2017, gross disposable household income continued to grow fairly steadily but at a much slower pace than before the crisis: it grew nearly 17% in nominal terms (from 51% in the previous decade) and 8% in real terms (from 30% in the previous decade). Calculated per consumption unit, purchasing power practically did not rise (+0.7%) in ten years. The shock was more temporary for non-financial corporations. Their gross savings stagnated between 2007 and 2010, before returning to growth comparable to pre-crisis levels: they stabilised in 2017 at a little more than €60bn above their pre-crisis levels, an increase of 30% compared to 2007. This resilience contrasts with the situation of general government; its gross savings fell by €76bn between 2007 and 2009, and were even negative from 2009 to 2011. It was only in 2017 that they returned to pre-crisis levels. Fiscal policy actually led to a postponement of the rebalancing of public finances, firstly by avoiding a drop in household incomes, then by accelerating the improvement in corporate accounts.

This article aims to shed some light on growth in the income of the different categories of agents over the last ten years and the consequences of the economic crisis on their consumption and investment decisions, as well as on their indebtedness. The analysis is based on the 2014-base national accounts data published in May 2018, during which the accounts of agents from the rest of the world, households and non-financial corporations were thoroughly revised (Box 1).

It should be remembered that gross domestic product (GDP) is interpreted as all the income generated by production activities over a given period. The gross disposable income (GDI) of all resident agents only differs from GDP due to primary income flows (compensation, property income) and secondary income flows (contributions, taxes, social benefits, etc.) with the rest of the world. For France, the gap between GDP and the GDI of all resident agents is very small: 0.5% in 2017 (*figure 1*). This article will therefore seek to evaluate how the sharp contraction of GDP during the 2008-2009 recession impacted the income of the three main categories of agents, namely non-financial corporations (NFCs), households and general government.

<sup>\*</sup> Ronan Mahieu, Insee.

To analyse the changes in agents' accounts since the financial crisis, it is useful to break them down into four subperiods: the years preceding the crisis (2004-2007), then a period marked at once by a severe recession and an expansionary fiscal policy (2007-2010), a third period of fragile convalescence against a background of fiscal consolidation (2010-2013), and, finally, a fourth period that saw a stronger recovery in activity and a relatively neutral fiscal policy (2013-2017).

	Level 2017 (billion of euros)	Growth rate 1997-2007 (in %)	Growth rate 2007-2017 (in %)
GDP (in value)	2,291.7	+ 50.2	+ 18.0
GDI of all resident agents	2,302.9	+ 50.8	+ 18.4
GDI of non-financial corporations, households and general government	2,236.5	+ 51.2	+ 19.2

#### 1. Trends in gross domestic product (GDP) and gross disposable income (GDI)

Source: Insee, national accounts, 2014 base,

Box 1

#### Agents' accounts in the 2014 base

The revisions made when the 2014 base was published are mainly the result of the resorption of most of the differences accumulated between the rest of the world account in base 2010 and the balance of payments statistics drawn up by the Banque de France, and the efforts made to improve the estimates of property income in the national accounts, as recommended by the National Council for Statistical Information (CNIS) [Garnier *et al.*, 2015].

Other quantitatively more minor revisions were also made to the 2014-base national accounts, in connection in particular with the integration of drug production and trafficking, the inclusion of the results of the national housing survey (ENL) conducted in 2013, and a few methodological changes to the general government account in coordination with Eurostat. The estimate of gross domestic product (GDP), for its part, was not much altered, either in level or trend.

The revisions to the households account between the 2010 base and the 2014 base mainly concerned gross disposable income (GDI) and final consumption expenditure. Over the 2013 and 2014 base years, net interest received by households was revised downward by about €4bn, and dividends received were also revised downward by about €25bn. This therefore affected households' GDI, reducing it by almost €30bn over the base years. The impact was a little less significant over the years 2012 and earlier as the change in dividends received by households between 2012 and 2013 was revised substantially downward in the light of the data provided by the tax sources.

At the same time, however, as the foreign trade balance was revised substantially upward, to compensate, household final consumption expenditure was revised substantially downward over the base years, in particular on products where the estimates were uncertain or even erroneous. On the other hand, the expenditure level of household final consumption expenditure was only revised slightly at the beginning of the 2000s as its evolution had been revised downward since the beginning of the 2000s to take account of the results of the ENL 2013 housing survey on the consumption of housing services (rents imputed to owner-occupiers and rents paid to landlords).

The simultaneous downward revision of GDI and household consumption expenditure means that the level of household savings was only revised slightly over the 2013 and 2014 base years. However, over the less recent years, consumption expenditure was only revised slightly whereas GDI was revised substantially downward: the savings ratio was therefore revised substantially downward over those years.

The very large downward revision of the dividends received by households had a knock-on effect on the net income distributed by NFCs. Furthermore, the resorption of the differences with the balance of payments is reflected in a substantial drop in the net interest received by the rest of the world, which also results in a marked downward revision of the net interest paid by NFCs. These movements combined with the drop in net property income paid by NFCs led to a very large increase in NFCs' savings, and as the evaluations of GFCF remain unchanged, a very large reduction in the net borrowing position of NFCs compared to the 2010 base.



### What "income" indicator to use for the different agents?

For those who wish to analyse the resources available to the various categories of agents for consumption or investment, the most natural approach consists in analysing their gross disposable income (GDI): this aggregate, the balance of the secondary distribution of income account, tracks the disposable income of agents after transfers, in particular after redistribution *via* the social and tax system. It is on the basis of their GDI that households will make a trade-off

between final consumption expenditure and gross savings (which will finance their investment expenditure in particular). For companies, GDI amounts to the same thing as their gross savings, as they do not have any final consumption expenditure.

The case of general government is somewhat particular, as GDI does not really lend itself, for these entities, to analyses in terms of trade-offs between final consumption and savings. General government do, of course, have a high level of final consumption expenditure, almost €520bn in 2014, but a large part of this expenditure (approximately €380bn) corresponds to the counterpart in uses of non-market service production imputed to government entities, conventionally valued as the production cost of these services: this imputed expenditure cannot therefore be analysed as an actual purchase of services. The rest (approximately €140bn) corresponds to public financing of market goods and services consumed by households (reimbursement of outpatient healthcare consultations or medicines, housing benefits, etc.) and pertains more to the redistributive function of the general government. For these reasons, we will concentrate on the latter's gross savings,<sup>1</sup> as for companies.

#### NFCs: relatively buoyant savings and investment, indebtedness under control

Whereas they increased by almost  $\notin$ 7bn a year between 2004 and 2007, the gross savings of non-financial corporations (NFCs) were virtually stable between 2007 and 2010, and then gradually picked up: they increased by about  $\notin$ 5bn a year between 2010 and 2013, then by a little more than  $\notin$ 10bn a year between 2013 and 2017 (*figure 2*).

Between 2004 and 2007, gross savings were driven by very dynamic real value added (contribution of  $+\in$ 31bn a year on average) and value added prices on an upward trend (almost  $\in$ 12bn a year) (*figure 3*). Nevertheless, the very sustained growth in compensation paid, which contrasts in particular with the very strong wage moderation observed in Germany over the same period, contributed negatively to the annual change (almost - $\in$ 27bn a year at constant employer contribution rates) and held back the increase in NFCs' gross savings.



#### 2. GDI and gross saving - differences at 2007 levels (in values and %)

Source: Insee, national accounts, 2014 base.

<sup>1.</sup> The notion of gross government savings must be distinguished from that of the public deficit: government savings correspond to the balance calculated before capital transactions, so exclusive of investment expenditure in particular.



#### 3. Contributions to the average annual change in gross savings of NFCs

From 2007 to 2010, however, the contribution of real value added was very negative (-€8bn a year on average), reflecting the scale of the 2008-2009 recession. The contribution of the dynamics of compensation (at given employer contribution rates) also remained negative (-€12bn) as the wage bill continued to rise, even at a very slow pace: the increase in the average wage counterbalanced the impact of job losses. In this particularly unfavourable context for NFC savings, it was the increase in value-added prices (contribution of +€12bn a year) and the reduction in taxes on income and wealth paid by NFCs (corporation tax in particular), due to business support measures under the economic stimulus plan, which enabled NFCs' gross savings not to fall. Lower interest rates also played an important role: their contribution (+€5bn a year on average) wiped out the impact of other property income (most notably dividends paid).

From 2010 to 2013, NFCs' gross savings gathered pace, thanks first of all to a recovery in activity: the contribution of gross real value added was of the order of +€15bn a year, in spite of a marked slowdown in spring 2011. The contribution of value-added prices was a little lower than in the previous period. Conversely, the contribution of the evolution in the nominal wage bill was more markedly negative due to employment holding up better. In addition, there were the negative effects of a rise in employer contribution rates, but also of taxes net of subsidies on production, in particular as a result of the raising of the forfait social.<sup>2</sup> In a context of fiscal consolidation, this time the contribution of taxes on income and wealth was negative. On the other hand, the property income dynamic was highly favourable to NFCs' savings: lower interest rates combined with a sharp decline in net dividends paid by NFCs, mainly between 2012 and 2013 (the year when dividends received by households began to be systematically taxed at the personal income tax rates, *box 2*).

<sup>2.</sup> The social levy (forfait social), whose taxable base consists of forms of compensation that are not subject to social security contributions, but are subject to the CSG tax, was created in 2009. Initially 2%, its rate has been regularly increased to reach 20%, the rate which has applied since summer 2012.

#### Box 2

#### How to explain the sharp drop in dividend flows between 2012 and 2013

Between 2012 and 2013, the net profits distributed by NFCs declined dramatically, by  $\in$ 18.7bn, and dividends received by households fell by  $\in$ 13.6bn (-34%), which brought the corresponding flows to levels close to those measured some ten years before.

The first possible explanation concerns the cyclical economic environment, growth in the economy having slowed very substantially between 2011 and 2012 (+0.2% after +2.1%): it should be recalled that the dividends paid in year N mainly concern the previous financial year, N-1.1 However, this cyclical economic situation explanation is not sufficient to explain the unprecedented fall, as no fall on this scale was observed in earlier periods, even in phases when economic activity was contracting.

The second possible explanation relates to changes in taxation. It should be noted first of all that the fall in dividends received by households between 2012 and 2013 is not on the same scale within the scope of corporations subject to corporation income tax (-41%) and that of corporations subject to the IRPP (personal income tax) (-18%). Although there was no substantial change to the taxation applicable to the latter between 2012 and 2013, this was not the case for the taxation of dividends received from the former. Until 2012 dividends received from corporations subject to a

flat-rate withholding tax (PLF) of 21%. From 2013 onwards, dividends have been taxed at the income tax rates. For the wealthiest households, which are also those receiving the most dividends, the abolition of the PLF meant the rate of tax on dividends leapt up from 21% to 41%.

It is possible that some shareholders, if they did not have cash flow needs, will have decided to defer the payment of dividends. Of course, it would be difficult to imagine all corporations suddenly reducing their distribution of dividends for this reason, if only because many of them have a large portion of non-resident shareholders (who are therefore not affected by the tightening of the taxation of dividends received by households residing in France). But in some cases, households are not directly shareholders in the companies in guestion, for example when they have shares in a family holding company which is itself a shareholder in listed companies. It is possible to imagine that some people will have thought it advantageous to keep their dividends in such a holding company in order to avoid, at least in the short term, their dividends being taxed at the income tax rates. It is also possible that households wishing to invest in shares chose to reduce their direct shareholding in favour of unit-linked life-insurance plans, which are invested in shares but are more tax-efficient.

1. The practice adopted by certain companies of paying dividends quarterly or the use of financial years that do not coincide with the calendar year oblige us to nuance this assertion slightly.

From 2013 to 2017, NFCs' gross savings accelerated further to reach €61.2bn in 2017, a level higher than in 2007. The contribution of real value added and of value-added prices remained very positive, whilst that of property income was very weak: the new drop in interest rates was offset by a recovery in dividends, particularly substantial in 2016. On the other hand, the wage bill paid by NFCs barely picked up, whereas the apparent employer contribution rates fell slightly and the contribution of taxes net of subsidies on production was positive, thanks to the ramp-up of the CICE (competitiveness and employment tax credit).

Overall, over the entire period studied, NFCs' savings remained relatively buoyant, which enabled them to avert too steep a drop-off in their investments: NFCs' investment rate (measured as the ratio of their gross fixed capital formation (GFCF) to their value added) even increased a little over the period, from 22.7% in 2007 to 23.5% in 2016 (*figure 4*). While it is true that NFCs' investment saw a one-off drop between 2008 and 2009 in the midst of the recession, from 2011 onwards it more or less returned to its nominal level of 2008. However, this diagnosis of preserved investment needs to be qualified: the net investment rate, calculated by subtracting from the GFCF the consumption of fixed capital (CFC), which measures the wear and tear and obsolescence of fixed assets, did in fact fall slightly over the period, from 4.5% in 2007 to 3.6% in 2017.



#### 4. Gross and Net investment rate of non fonancial corporations (NFC)

Source: Insee, national accounts, 2014 base.

These divergent changes in the gross and net investment rates may legitimately come as a surprise. This situation can be explained by the progressive deformation of the composition of NFCs' investments: NFCs' GCFC includes a growing share of investments in intangible assets (mainly software and research and development (R&D)). Accordingly, the all economy's GFCF in IT, information services and scientific R&D activities represented 21.0% of total GFCF in 2017 compared to only 16.6% in 2007. However, these assets have shorter economic lives than tangible assets: the pace of innovation in software and R&D means that this type of asset rapidly becomes obsolete. As a result, when the share of intangible assets increases, NFCs have to spend more and more in terms of gross investment just to maintain the level of their fixed capital.

Ultimately, the fact that NFCs' savings held up enabled them, overall, to maintain their investment effort, in particular in intangible assets, without placing too great a strain on their net borrowing position: the latter hovered around €20bn a year throughout the period, admittedly with some quite marked fluctuations from year to year. NFCs thus exceptionally generated a net lending in 2009 and 2010 when companies drastically reduced their investments whilst fiscal policy was sustaining their savings.

This diagnosis of relative stability in the net borrowing position of NFCs at a level that was, all told, moderate, may at first sight seem contradictory with the evolution of their indebtedness (figure 5). If we consider the liabilities in the form of loans and bond issues together, we can in fact observe a quite considerable rise in NFCs' indebtedness, since it exceeded €1,000bn (+51%) between 2007 and 2017. While it had represented 9.8 years of NGCs' gross savings in 2007, indebtedness measured in this way reached 11.5 years of savings in 2017, after peaking in 2012 at 12.5 years.

This vision is, however, a little misleading as indebtedness evaluated in this way is not consolidated by intra-group commitments, nor does it take account of the parallel growth in the assets held by NFCs in the form of currency and deposits: against a backdrop of sharp falls in interest rates mechanically reducing the opportunity cost of holding cash, NFCs' liquid assets (in the form of currency and deposits) grew by almost €400bn over the same period. Accordingly, measured net of assets held in the form of loans, bonds, currency and deposits, NFCs indebtedness in 2017 amounted to only 3.6 years of gross savings, namely the same level as in 2007, after peaking at 4.3 years in 2012 (*figure 5*).

#### 5. Indebtedness of NFCs



# Faced with a marked slowdown in their income growth, households sharply scaled back their consumption and investment spending

The average annual growth rate of household gross disposable income collapsed suddenly and durably at the time of the financial crisis: whereas its annual growth rate stood at +4.1% between 1997 and 2007, it never exceeded +1.5% between 2007 and 2017. The same applies from a qualitative point of view if we consider not the change in nominal GDI, but that in its purchasing power (+2.6% a year on average during the decade before the crisis, +0.7% during the next decade).

Between the pre-crisis years and the period 2007-2010, the average annual growth of nominal GDI was therefore halved (figure 6). The upturn in employment in 2010 and the buoyancy in social benefits nevertheless mitigated the impact on GDI (which increased by +€25bn a year on average over this period) of this recession of an unprecedented magnitude. Indeed, after stagnating in 2009 due to job losses in the midst of the recession, the payroll received by households started to rise again in 2010 (although at a more moderate pace than before the crisis). At the same time, the stimulus package adopted at the beginning of 2009 supported the increase in spending on benefits, with measures in favour of the unemployed in particular.

Growth in households' GDI slowed substantially over the subperiod 2010-2013 (+€10bn a year on average): while the buoyancy of wages held up and income from land picked up (actual income of owner-landlords and income imputed to households that own the dwelling they occupy), the other components of income were much less favourable during the subperiod: financial income declined substantially with the fall in dividends paid by NFCs in 2013, whilst social benefits in cash slowed, due in particular to the ramp-up phase of the retirement pension reform of 2010, which pushed back the minimum age for drawing pensions. Above all, measures raising the rate of employees contribution rates and tightening household taxation (including, in particular the income scale taxation of securities and and moveable assets and the lowering of the ceiling on the family tax allowance (quotient familial)) weighed heavily on GDI:<sup>3</sup> the

<sup>3.</sup> However, the impact of these measures on GDI can vary widely depending on the income brackets concerned [Cazenave et al., 2014; Accardo et al., 2017]



#### 6. Contributions to the average annual change in household gross disposable income

contribution of these two items to the change in GDI was - $\in$ 14bn a year on average, compared to only - $\in$ 3bn over the previous subperiod. This led to significant losses of purchasing power over two consecutive years (2012 and 2013), a phenomenon that was not observed in previous recessions (*box 3*).

The subperiod 2013-2017 saw a marked acceleration in nominal GDI (+€23bn a year on average). Wages and social benefits in cash slowed, it is true, but this was in a context of very low inflation between 2014 and 2016 (so that the acceleration in households' purchasing power was more marked than that of GDI). On the other hand, the changes in the household taxation were much less unfavourable to GDI growth. The contribution of financial income became neutral again: the rebound seen in dividends received by households (particularly substantial in 2016) was to a large extent offset by the fall in interest rates, which affected both the remuneration of households' deposits and the yields of life insurance policies.

It should be noted that the contribution of the mixed income of self-employed workers to the evolution in households' GDI (negative over the period 2007-2013, very slightly positive thereafter) was in stark contrast to the strong rebound in self-employment over the course of the last decade: +19% between 2007 and 2017. This vigour of self-employment was due mainly to the surge in the numbers of "auto-entrepreneurs", a new self-employed status that appeared in 2009 and which has been an undeniable success. However, auto-entrepreneurs generally have a limited activity [Omalek et Rioux, 2015], if only because the advantages of this regime (non-liability for VAT, social security and tax contributions calculated as a percentage of turnover) are only available if the turnover does not exceed a certain threshold: for example, the threshold for service activities was €33,200 in 2017 (it is higher when the activity involves the purchase/sale of goods).<sup>4</sup> The surge in auto-entrepreneurship has therefore led to a drop in the average mixed income of self-employed workers (-21% in nominal terms between 2007 and 2017).

<sup>4.</sup> Since 1 January 2018, differentiated levels have been introduced for the exemption from VAT (threshold maintained at  $\leq$ 33,200 for service activities) and for the turnover threshold above which the self-employed worker loses the status of auto-entrepreneur ( $\leq$ 70,000 for services).

#### 1975, 1993, 2009: 3 recession profiles

The temporal depth of the French national accounts – backcast since 1949 – lends itself to a comparative analysis of the episodes of recession experienced by the French economy since the "Glorious Thirty" years, which serves to highlight the unique features of each episode.

Of the three episodes, 1975, 1993, 2009, the latter is indisputably the one that saw the most marked reduction in the level of real GDP: -3.4% compared to -1.4% in 1975 and -1.1% in 1993. If we consider instead the fall in the rate of growth of real GDP per capita, the shock to the economy was still worse in 2009 than in 1993, but the conclusion is less clear if we compare 2009 to 1975: the rate of real per capita GDP growth fell by 5.2 percentage points between 2007 and 2009, compared to only 1.6 points between 1973 and 1993, but 6.9 points between 1973 and 1975.

Beyond the path taken by GDP, the different episodes had very different consequences on agents' accounts. The 1975 recession led to a fall in the margin rate of the order of 3 points, which became even more marked in the following years against a backdrop of automatic price indexing of wages at a time when the oil crisis was causing a sharp upturn in inflation: 8 years after the recession (i.e. in 1983), NFCs' margin rate remained 5 points below its level prior to the recession – it was only in the mid-1980s, thanks to the deindexation of wages and the oil counter-shock, that it returned to levels comparable with those of the early 1970s. The 1993 recession did not lead to a marked degradation of the margin rate of NFCs. The 2009 recession, on the other hand, caused a 2- to 3-point drop in the margin rate, which only returned to a healthy level in 2015, thanks to a gradual recovery in activity and the implementation of the CICE. These different stories also play out in the changes in NFCs' saving ratios.

The 1975 recession led to a substantial drop in hourly productivity gains: of the order of 6% a vear in the last years of the glorious Thirties, they were closer to 3% on average in the following vears. The downturn quickly impacted the gains in household purchasing power. Conversely, the 1993 episode was not accompanied by a marked slowdown in the trend in productivity gains and purchasing power progressively gathered pace over the years following the recession to grow at a rate of over 3% a year between 1998 and 2001. The 2009 recession was, for its part, marked by unprecedented productivity losses (-2.9% in 2009), which were not made up for in the following years when hourly productivity only increased at a rate of about +1% a year. Inevitably this collapse of productivity gains had a knock-on effect on purchasing power, although with a time lag due to the expansionist fiscal policy implemented at the height of the crisis: the purchasing power of gross disposable income thus fell in two consecutive years, 2012 and 2013.



Box 3



This break in the growth rate of households' GDI obviously had an effect on their consumption and investment choices (*figure 7*). The average annual growth rate in household consumption expenditure in real terms did in fact lose around 2 points, falling from +2.6% in the decade before the crisis to +0.8% between 2007 and 2017, with a one-off decline (-0.5%) in 2012, in the middle of the fiscal consolidation phase. The break in the growth of household consumption was particularly marked in consumer durables and semi-durables (+0.8% between 2007 and 2017 after +4.9% between 1997 and 2007): motor vehicles, clothing, furniture, household electrical appliances and electronic goods. The consumption of certain



## 7. Annual growth rate of household consumption expenditure and household investment (excluding sole proprietors)

services, especially accomodation and food service activities, slowed down (+0.6% between 2007 and 2017 after +2.6% over the previous decade), but no notable slowdown occurred in the consumption of food and beverages.

Household investment (excluding sole proprietors), which corresponds essentially to their purchases of new real estate property, including the expenses relating to these acquisitions (agency fees, property transfer duty, etc.) saw a very spectacular drop after an average annual growth rate of 4% during the decade before the crisis. The real contraction observed in 2008 and 2009 (-16% in two years) was only followed by a modest and fleeting recovery in 2010 and 2011. For the next four years households' GFCF fell again in real terms. It was only from 2016 that a hint of a recovery began to emerge; and yet real household investment remained 13% lower in 2017 than its pre-crisis level.

The household investment rate (measured by calculating the ratio of households' GFCF to their GDI), which had increased substantially in the early 2000s, from about 9% to almost 11% between the late 1990s and 2007, also saw quite a sudden fall before returning to a level close to that of the end of the 1990s as early as 2009. It then hovered around 9% to 9.5%.

In aggregate terms, the financial crisis only briefly induced substantial wealth losses for households: while household wealth did indeed fall by more than 6% between the end of 2007 and the end of 2008 due to the combined effect of a fall in share prices and property prices, from the end of 2010 household wealth exceeded its pre-crisis level in nominal terms. It thus reached 8.1 years of GDI at the end of 2016 compared to 7.9 years at the end of 2007 and only 4.8 years at the end of 1997.

If we confine ourselves to the purely financial part of households' results, and in particular to the changes in their net financial assets, which at the end of 2016 represented 2.7 years of GDI, what we find is very similar: while the impact of the implementation of the Solvency II regulations on the value of life insurance policies was neutralised in 2016,<sup>5</sup> households' net financial assets represented 0.3 years more GDI than at the end of 2007 and 0.6 years more GDI than at the end of 1997. This vigour nevertheless owes much to investments in life insurance: the net amount collected always remained positive in spite of the unfavourable trend in yields since 2010 with the capital losses recorded on Greek bonds in 2011-2012, then the drop in the interest rates of government bonds (the very large majority of policies being denominated in euros). If we exclude this type of investment and restrict ourselves to the most liquid assets, we find that households' assets such as cash and deposits net of liabilities (essentially bank loans), only represented 0.08 years of GDI at the end of 2016 compared to 0.11 years at the end of 2007 and 0.40 years at the end of 1997. The level of the most liquid assets held by households at the end of the 2000s to finance their real estate purchases.

# The balance sheet of general government has deteriorated sharply since the 2008-2009 crisis

Whereas the period 2004-2007, marked by sustained growth in activity (+2.1% a year on average), saw gross public savings grow somewhat (approximately  $+ \in 9$ bn a year), the latter nosedived in the period 2007-2010 (- $\in 25$ bn a year, figure 8). This sharp deterioration was the result of the usual effect of the automatic stabilisers in a phase when activity is contracting (the

<sup>5.</sup> The "Solvency II" Directive, which came into force on 1 January 2016, has changed the method of calculating technical provisions which until then had corresponded to the discounted value of insurers' obligations to their policyholders. These provisions must now reflect the transfer value of the insurer's obligations (that is to say the amount of assets that a third party would demand to take over the insurer's obligations). This methodological change has had the effect of increasing insurers' obligations towards households by around €200bn.



### 8. Contribution of the various accounting items to the average annual change in gross savings of the general government

erosion of tax bases puts a strain on tax and contributions revenue, whilst the main operating expenditure items increase at the same pace as before the crisis, even accelerating spontaneously, such as expenditure on unemployment benefits) and and the implementation of a resolutely countercyclical policy. The level of gross public savings was negative in three consecutive years (2009-2011).

The fiscal consolidation period that followed (2010-2013), on the other hand, saw gross public savings pick up significantly (approximately +17bn a year). Taxes and contributions revenues picked up due to a return to slightly positive growth and especially to the different measures to increase taxation. They were generally more buoyant than in the period 2004-2007, even though growth had not returned to its pre-crisis trend. The increase in gross public savings was also due, although to a lesser degree, to the slowdown in operating expenditure: the rate of increase in intermediate consumption, remuneration and social benefit charges dipped.

Finally, gross public savings stagnated overall over the period 2013-2016, due mainly to a return to a more neutral tax policy overall, aimed among other things at speeding up the recovery of corporations' accounts, whilst the main operating expenditure items were decelerating, in a context, it is true, of falling inflation. Gross public savings accelerated in 2017, however, due to the marked improvement in the economic conditions.

Although the collapse of growth mechanically had a very unfavourable impact on gross public savings by depressing revenues whilst increasing expenditure on certain benefits, it should be emphasised that this unfavourable impact was mitigated slightly by the change in interest rates which, from 2012 onwards, led to a reduction each year in interest charges (figure 9), even though the outstanding debt was growing fast.

The path followed by gross public savings naturally had a negative effect on general government's investment choices. During the years preceding the crisis (2004-2007), the growth in gross public savings allowed the financing of vigorous investment expenditure, so that over 60% of the increase in savings was absorbed by the rise in investments. During the crisis years (2007-2010), public investment continued to grow in spite of the sharp contraction in gross public savings. Indeed, public investment was mostly financed (53% in 2016) by local government, but the gross savings of these local entities did not diminish over these years (it increased by 2.8bn between 2007 and 2010): the fall in gross public savings during the crisis is essentially attributable to the State government.



## 9. General government deficit, primary balance, apparent interest rate on the debt and 10-year government bond yield

The fiscal consolidation phase coincided, on the other hand, with a slowdown in public investment, which stagnated between 2010 and 2013. It then fell significantly between 2013 and 2016 whereas gross public savings stagnated and local authority revenues were much less dynamic, in particular due to the gradual reduction in the general operating grants allocated to them.

As general government did not slash its investment expenditure with the crisis, the trend of its deficit more or less follows the same pattern as that of gross savings, with a very sharp decline between 2007 and 2010 and then a slow recovery. The primary balance also picked up over the last few years, although slightly more slowly due to the fall in interest charges. In 2017 general government's primary balance remained markedly negative (-0.8% of GDP).

The accumulation of high deficits from 2008 onwards mechanically swelled government debt according to the Maastricht definition (notified debt), with an increase from 64.5% of GDP at the end of 2007 to 98.5% at the end of 2017 (figure 10). The growth in debt in percentage points of GDP over this period (+34.0 points) is naturally on an altogether different scale to that seen over the previous ten years, when GDP was more buoyant and deficits lower. The increase in the net debt in percentage points of GDP (+31.5 points) is barely less marked.

However, in addition to this mechanical effect of the accumulation of deficits there was the one-off impact of the measures taken in 2008 and 2009 to curb the consequences of the financial crisis on the real economy. The most emblematic example of such interventions, in France, is provided by the SFEF (French Financing corporation) which was set up in autumn 2008. The collapse of Lehman Brothers in September 2008 having led to a generalised distrust of banking institutions and the collapse of interbank lending, the French State intervened by creating, with the French banks, a company tasked with lending to the latter and financing these loans by issuing State-guaranteed bond securities. The SFEF's conditions of operation led to it being classified under general government<sup>6</sup> so that all the company's bond issues were

<sup>6.</sup> In July 2009, the SFEF was classified as a financial corporation following a Eurostat decision relating to the recording in the national accounts of public interventions made during the financial crisis. However, Eurostat subsequently revised its analysis and agreed with INSEE to reclassify the SFEF under general government in the 2014 base as of its creation in 2008.

recorded in the government debt. The other significant example is that of the SPPE (Société de prise de participation de l'État), also classed as a general government entity, whose purpose was to shore up banking institutions' equity by temporarily acquiring stakes in their capital: these acquisitions were financed by borrowing.



#### 10. Gross reported public debt, gross debt excluding SFEF and SPPE, net debt

#### For more information

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