The financial crisis and household savings behaviour in France

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The financial crisis sharply eroded the confidence of French households, who traditionally mistrust risky assets more than their Anglo-Saxon counterparts. First appearing in 2007, the financial turmoil spread into the real sphere and deteriorated the macroeconomic environment. In 2008, growing uncertainty and rising unemployment strained household consumption, which slowed to the lowest annual growth rate in over ten years (+1% in 2008 vs +2.4% in 2007) according to the INSEE.

The gradual upturn in the savings rate that followed mainly benefited the financial component of savings. The increase in the financial savings rate was mainly due to the contraction in financing flows, while investment flows increased only slightly in the post-crisis period (2007-2009). In contrast, the non-financial savings rate has trended downwards since Q3 2008.

The household savings rate rose from 15% of gross disposable income in Q4 2006 to 16.2% in Q4 2009. France has one of the highest savings rates in Europe and in the OECD countries in general, behind Germany (17.2%) and Belgium (16.6%) but ahead of Italy (15.1%) and Spain (12.9%). Its savings rate is significantly higher than the eurozone average (15.4%) and the average for the 27 EU member countries (13.5%) and is far above those observed in the United States (5.9%) and the UK (1.7%)1.

With the severe deterioration in the macroeconomic environment, households had to adapt their consumption and savings behaviour, notably at the height of the crisis in 2008. Looking beyond the instantaneous shock and its immediate impact on the real economy, however, did the financial crisis have a more lasting impact on the structure of household assets and their choice of savings?

Empirically, although the financial crisis effectively raised the savings rate, the structure of investment flows does not seem to have changed significantly. Life insurance and real estate continue to attract the lion's share of savings flows. As to the residual share of financial investments, households responded to fluctuations in the economy and interest rates by hedging between financial assets (excluding life insurance).

A precautionary rise in the savings rate

The increase in the savings rate observed slightly before the outbreak of the crisis can be attributed to the upturn in the financial savings rate to an annual average of 7% in Q4 2009 (from 5.1% in the year-earlier period), the highest since Q4 2004.

Increase in the financial savings rate

The increase in the financial savings rate can be attributed to a slight upturn in financial allocations, but also to a smaller rise in debt (net annual financing flows dropped to 2.9% of gross disposable income in Q4 2009 from 7% in Q4 2007). Based on Bank of France statistics, it appears that the cumulative annual flow of household financial investments increased significantly at the end of 2009 (to 9.9% of annual gross disposable revenue in Q4 2009 vs 8.9% in Q3), mainly due to greater investments in life insurance (£88.4bn; 6.8% of gross disposable income).
Faced with the consolidation of investment flows, net flows of bank borrowings picked up slightly in late 2009 after declining for seven consecutive quarters (£37.1bn). Yet as a percentage of gross disposable income, financing flows remained well below the levels reached in Q4 2007, and this debt moderation strongly contributed to the upturn in the savings rate observed since the outbreak of the financial crisis.

**Investment and financing flows (*) (as % of GDI, yearly averages)**

Chart 1         Sources: INSEE, BNP Paribas calculations

Factors behind the increase in the savings rate

The upturn in the savings rate is more an illustration of household uncertainty in response to the macroeconomic downturn than to debt reduction associated with a decline in available credit and real wealth. With the erosion of wealth, households are encouraged to reduce consumption in order to rebuild savings (Pigou effect). The decline in real estate asset value is accompanied by a decrease in wealth which can also encourage households to boost savings (notably financial savings). Yet, the value of real estate assets appreciated strongly in the decade to 2007 (+146.1% on average in the existing home segment for all of France), while the slowdown and then decline in prices only very partially erased these gains, which remain substantial over the past 12 years (+131.4% on average for the period 1997-2009).

Moreover, given the slight recovery in real estate prices in early 2010, persistently high risk aversion (real estate is still seen as a safe haven) and sustainably low long-term rates, this negative wealth effect is unlikely to persist and probably will not have a lasting impact on household consumption. In 2007, the INSEE pointed out that there is a strong link between consumption and wealth in the United States and the UK, but that in France the correlation is weak. A recent study by the Bank of France [2010] confirms that this link is stronger in the United States than in France, where household consumption depends more closely on expectations of household purchasing power. Consequently, it is fairly unlikely that the increase in the household savings rate was simply mirroring the decline in the value of real estate assets observed in 2009.

In contrast, despite a slight improvement in the economic environment in early 2010, the outlook for the future remains uncertain. From a Keynesian perspective, the economic crisis and high unemployment will encourage households to build up precautionary savings that can be used in case of temporary financial troubles. Deterioration in the economic environment combined with greater uncertainty should thus result in a decline in current spending and greater savings efforts. If the job market does not improve significantly and/or the advanced economies continue to deteriorate, it would be
reasonable to expect the savings rate to level off at a high level. The savings rate is unlikely to rise much further, however, because gross disposable income is only expected to increase moderately by the end of the year.

Simple performance indicators like the implicit volatility of option prices can be used to assess investors’ perception of risk. For the United States, the VIX indicator calculated by CBOE (Chicago Board Options Exchange) measures the implicit volatility of the S&P 500. Euronext has a similar measure for CAC40 stocks. An increase in implicit volatility – which empirically peaked at the height of the financial crisis and has returned to the levels prior to the bursting of the dot.com bubble - implies a higher perception of risk. In other words, an increase in this indicator signals greater risk aversion among economic agents, including households, with as a corollary the formation of precautionary savings in low risk assets (and less appetite for risky securities subject to market fluctuations).

Lastly, whereas budget stimulus measures were launched to deal with the consequences of the financial and economic crisis, the deteriorated state of public finances has now led the public authorities to adopt a draconian austerity plan. This plan aims to sharply reduce the public deficit from about 7.8% of GDP in 2010 to 3% by 2013 or 2014 at the latest. Although the government has so far expressed its determination to limit tax increases, its goal will not be easy to achieve solely by cutting public spending. Consequently, direct or indirect taxes will probably be raised, especially since the government seems to be facing ever tighter budgetary restrictions. Growing awareness of the weight of the deficit (as well as the associated debt servicing charge, which accounted for 2.4% of GDP in 2009 and contributed 31% of the total deficit) could encourage households to build up abundant savings in response to growing expectations of future tax increases and cutbacks in certain types of allocations - according to the Ricardian equivalence theorem and public debt neutrality popularised by Barro [1974] - which highlights the ineffectiveness of the announced budget stimulation measures. Yet, any tax increases are unlikely to trigger a real increase in the savings rate, because households would not be able to hoard any further. Faced with a macroeconomic environment offering no real visibility, households are more likely to curb consumption rather than to temporarily ease their budgetary restraint and dip into savings.

Investment flows have been affected more in volume terms than structurally

Despite a relative easing of savings investments in 2007 (€86.1bn in 2007 vs €110.1bn in 2006), life insurance investment flows held at high levels and only declined slightly, in keeping with the decline in gross disposable income (which averaged 6.2% in 2007-2009 vs 6.7% in 1998-2006). Life insurance remains the leading asset category for long-term savings and absorbs the lion’s share of financial savings flows (about 70% of the total in 2009).

Life insurance is still the preferred savings product

Household savings in life insurance are mainly invested in euro-denominated contracts with capital guarantees (about 80% of total). Since 2007, the amount invested in euro-denominated, multi-support contracts have increased to the detriment of unit-linked contracts. This tendency reflects the search for both greater security, by reducing risk exposure and hedging between several investment vehicles based on market trends, and performance, by boosting euro-denominated funds with unit-linked contracts.

Investment flows before and after the financial crisis (as % of GDI, yearly averages)

The popularity of life insurance contracts is due in part to several factors, including lower interest rates on Livret A passbook savings (which dropped to 1.75% in May 2009 and then to 1.25% in August 2009), relatively attractive long-term rates, tax incentives and in general household confidence in this type of investment product. In this respect, households often see life insurance as a
means of optimising taxation while benefiting from preferential fiscal terms on inheritances and/or gifts. The fiscal terms are still attractive for contracts exceeding the amount of the standard deduction per beneficiary, in compliance with current tax laws. Life insurance products are extremely flexible (withdrawals can be made as annuities or capital, etc.) and can be bought back, notwithstanding the payment of management fees, giving policyholders access to relatively liquid savings. Consequently, the preference for life insurance products can be explained by the desire to build up precautionary savings in preparation for a possible decline in revenues while also building up assets to complement retirement pensions.

**Interest rates and CAC 40 yield (in %)**

Yet following the criticism of tax niches expressed by the Inspection Générale des Finances (IGF, the investigative authority of the Finance ministry), the government announced changes in the taxation of savings products, including life insurance, at the end of August 2010. Henceforth, this type of savings product will be subject to tighter fiscal regulations (multi-support funds will be subject to annual payment of CSG and CRDS taxes in the same manner as exclusively euro-denominated contracts, instead of at the end of the contract; earnings of insurance companies allocated to reserve funds would also be taxed), reducing somewhat the attractiveness of these products.

**Reallocation of investment portfolios into less risky securities**

Except in 2009, when the decline in short-term rates was accompanied by a reallocation in favour of longer term securities, money market instruments have continued to attract an abundant amount of investment flows, both before and after the financial crisis. There were remarkably strong investment flow into this asset category following the bursting of the dot.com bubble in 2001 (€70.8bn) and in the aftermath of the financial crises in 2007 and 2008 (when annual investment flows reached €70.4bn and €71.7bn, respectively). In periods of financial turmoil and financial market uncertainty, households traditionally shift towards risk-free, liquid assets. This process was disrupted, however, by the unprecedented decline in short-term money market rates: lower short-term rates encouraged households to reduce their portfolios of money market assets in 2009 (-€16.5bn, -1.3% of gross disposable income) and to hedge in favour of medium to long-term products with higher returns (€9.6bn in 2009, 0.7% of gross disposable income). The real return on short-term instruments has been very low or negative since 2009, which explains why investment portfolios have been scaled back for this asset category.

In crisis periods, households also lose their appetite for direct or indirect investments in listed equities (via equity mutual funds, guaranteed and formula mutual funds, diversified investment funds and hedge funds, and investment fund securities), as illustrated by the decline in investment flows in this category in 2001 (-€0.4bn vs €13.9bn in 2000) as well as in 2007 and 2008 (to -€4.8bn and -€8bn, respectively). The increase in investment flows in 2009 (€2.1bn, 0.2% of gross disposable income) illustrates renewed household interest in directly or indirectly held listed equities. For the post-crisis period, however, investment flows in this asset category are still negative (averaging -0.3% of gross disposable income).

**Investment flows in listed and equity mutual funds*, (in % of GDI, yearly averages)**

Over the period 2007-2009, life insurance was the savings product that made up the biggest share of
household financial assets (37.2%), ahead of equities & equity equivalence (25.7%) and money-market instruments (25.5%). In contrast, the share of non-monetary deposits (8.2%) and fixed-income products (2.3%) remains much smaller. The abundant flow of investments into life insurance thus bolstered this savings product as a share of household financial wealth. The share of money-market instruments also increased slightly between the pre- and post-crisis periods. In contrast, the share of assets invested in non-monetary deposits (mainly PEL and PEP special savings accounts) contracted, despite an upturn in investment flows in 2009 (€16.8bn, 1.3% of gross disposable income), in keeping with the decline in short-term rates that year while the rate of return on PEL home savings accounts held at 2.5%.

Structure of household financial asset before and after the financial crisis

![Chart 7](chart7.png)

Real estate assets are still highly attractive

The non-financial savings rate has declined since Q3 2008, but French households are still highly attracted to real estate assets: investment in housing continued to absorb over half of investment flows in 2009.

Decline in the non-financial savings rate

Unlike the financial savings rate, the non-financial savings rate began to decline - to 9.2% in Q4 2009 from 10.3% in the year-earlier period - mainly due to the decline in housing investment, which was hit by the deterioration of the economic and financial environment.

In the midst of an economic downturn, solvency restrictions have become increasingly strict, notably for first-time homebuyers. In Paris, borrowing capacity improved and then levelled off in H1 2009, before deteriorating again in Q4 2009 due to the rebound in house prices (which was not offset by lower lending conditions).

Borrowing capacity index, in average number of square meters

![Chart 8](chart8.png)

The seasonally-adjusted household debt rate shows that household debt was historically high, accounting for 75.9% of gross disposable income in Q4 2009 (and 76.5% in Q1 2010). Yet the extension of loan periods (211 months in Q2 2010 for all types of assets combined, vs about 166 months in Q1 2001) and a notable decline in the average cost of residential credit (3.45% on loans from the banking sector alone, all markets combined, in Q2 2010, vs 5.62% in Q1 2001) ended up reducing the financial charge born by households.

Residential and consumer loans grew at a particularly dynamic pace through mid 2006, adding to household debt. From the outbreak of the financial crisis
to the end of 2009, the annual growth rate of residential and consumer loans trended downwards, despite a slight upturn in the growth of loans outstanding at the end of the year.

Mainly due to valuation effects, household real estate wealth (residences and developed lands) rose strongly in the 2000s, peaking at 5.1 times annual gross disposable income in 2007 from 2.8x in 2000. In comparison, household financial wealth followed more jagged trends, declining with the bursting of the dot.com bubble early in the decade and with the financial crisis in 2008. The growth in real estate wealth levelled off in 2008 and 2009 (to 4.9 and 4.7 times gross disposable household income, respectively) following a slowdown in existing home prices on a year-on-year basis, before declining as of Q4. Even so, real estate assets continue to make up the preponderant share of total household wealth (58% in 2009 vs 35.9% for financial assets).

### Household financial and real estate wealth, market value of the assets divided by the GDI

![Chart 10](image)

Sources: INSEE - patrimoine accounts, BNP Paribas calculations

### Existing house prices

![Chart 11](image)

Sources: INSEE - "Chambre des Notaires", BNP Paribas calculations

According to the Observatoire du Crédit Logement, the relative cost of loan-financed real-estate transactions accounted for 3.9 times gross disposable household income in August 2010\(^9\), returning to the summer 2007 level despite very favourable credit conditions, reflecting the upturn in house prices since early 2010 and the rebound in demand (notably in the new housing sector\(^{10}\)).

**Real estate is seen as a safe haven**

The relatively strong attachment to real estate in France can be attributed to cultural and historical reasons. For much of French history, home ownership was reserved for a very small proportion of the population, and households now see it as the materialisation of a deep-felt aspiration. At a time when investors are mistrustful of the sovereign debt instruments of certain European countries following the Greek crisis last May and equity market trends are swinging widely\(^{11}\), the real estate market can be seen as a safe haven offering less price volatility in the short term.

The decline in home loan rates starting in late 2008 was followed by an upturn in new loan production in H1 2010. The flow of new loans (all initial loan periods combined) rose to €123.6bn in July 2010 from €83.8bn in the year-earlier period. Although a large share of new loan production is supported by loan refinancing, it illustrates that household are taking a strong interest in real estate again. A series of fiscal measures (Robien, Borlo and Scellier laws, doubling of zero-interest loans, Pass foncier delayed payments for first-time homebuyers, tax deductibility of interest payments on mortgage loans to purchase a primary residence, etc.) may also have increased the attractiveness of real estate. The Scellier law introduces a tax reduction equivalent to 25% to 37% of the property purchase price spread over 9 years and which can be carried forward to the next year, for all French taxpayers investing in new homes to be rented. Previous tax incentives, also subject to conditions, generally provided a deduction in taxable income for all investments made in new homes, and thus targeted a narrower public (higher tax brackets). The real estate market should thus benefit over the long term from low interest rates on new loans (3.6% in July 2010 vs 4.17% in July 2009 for home loans with an initial loan period of over a year, accounting for nearly 90% of new production). For the new home segment, the other government incentives are also valid through the end of 2010. The end of the doubling of zero interest loans at the end of H1 2010\(^{12}\) and a smaller tax deduction on the Scellier scheme next year could strain the new home market somewhat in
2011 after the dynamic momentum of 2010, especially at a time of sluggish economic growth and a mild increase in gross disposable household income.

What prospects for long-term savings?

Risk aversion is the main explanation for the lower level of share ownership by French households, which accounts for 7.6% of total assets, well below the levels in the United States (14.2%) and Canada (13.7%)\(^\text{13}\). The financial crisis does not seem to have changed much the savings behaviour of French households, who continue primarily to adopt positions of accumulating wealth (notably compared to their Anglo-Saxon counterparts, for whom real estate assets are significantly smaller\(^\text{14}\)) and to prefer life insurance for their financial investments.

**Simplified structure of household wealth in some OECD countries in 2008**

![Chart 12](sources: OECD, BNP Paribas calculations)

Proposals currently being debated could slightly change the tax regime for life insurance, which totalled nearly €1,400bn in contracts outstanding in Q1 2010. Of the options being explored, three broad proposals can already be discerned: 1) the possibility of tightening taxation of life insurance products (with a 1 point increase in the prélèvement libératoire forfaitaire in 2011), 2) subjecting tax advantages to a minimum percentage invested in equities (at least 20%) and 3) switching from life insurance to retirement savings products. Given the need to strengthen the capitalisation of small and very small businesses in France, the public authorities are likely to see the savings absorbed by life insurance as a means to boost the equity capital of these companies while bolstering the pay-as-you-go pension system.

Pensions and pension financing lie at the heart of public debate. Despite the extension of the pension contribution period, there is still great uncertainty about the future level of pensions in the eyes of the youngest workers. Moreover, the current pension financing reforms being debated in parliament since fall 2010 will only cover about two thirds of the financing needs projected by the Conseil d’Orientation des Retraites by 2020 (€45bn, 1.9% of GDP). According to a TNS-Sofres study conducted in June 2010\(^\text{15}\), 83% of young workers are worried about the size of their pensions. Despite financial efforts that are sometimes hard to make, young workers are aware of the need to prepare for their retirement. It would be helpful if budget cutbacks were to spare the fiscal regime for long-term savings products (and notably life insurance, PERP and PERCO) which could be used to top up basic pensions.

A recent Senate report \(^\text{16}\) recommended consolidating the pay-as-you-go system while also promoting the attractiveness of retirement savings plans by overhauling taxation and easing their functions and management terms (at least partial withdrawal in capital and modular annuity payments), by specifically targeting young workers, employees of small and very small businesses and low-income households. In this respect, the government would like to strengthen the attractiveness of group retirement savings plans via PERCO (Plan d’Epargne Retraite Collectif) and to encourage individual initiatives via PERP (Plan d’Epargne Retraite Populaire). In general, at a time when deteriorating public finances and higher mandatory contributions risk handicapping growth, legislators could encourage the development of a two-pronged regime in which voluntary long-term savings plans compliment the basic pay-as-you-go pension system.

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Box: The savings rate and its components

Key components of the savings rate

Overall savings, measured as a flow, are equal to the sum of: i) investments and non-financial operations (gross fixed capital formation in housing, net transfers and other applications), ii) investments in financial and monetary assets minus the change in credit outstanding to finance current consumption or the financing of real estate and financial assets.

The savings rate can thus be broken down into a non-financial and a financial savings rate (calculated respectively as net non-financial and financial investments over gross disposal income). An increase in the savings rate occurs either through an increase in financial or real savings financed by an increase in household revenues, or through a decline in borrowing to finance these assets.

Calculation method

The INSEE calculates the financial savings rate as the financing capacity over gross disposable income. The financing capacity (CF) is equal to savings (S) after deduction of residential investments (FBCF) and other applications (AE) (changes in stocks and acquisitions net of disposals of objects of value and non-productive assets) but after taking into account net capital transfers (Tn) (investment subsidies, savings bonuses, inheritance and other transfer taxes). In addition to housing investment, non-financial savings includes other applications after deducting net capital transfers.

Mathematically, financing capacity is written as follows: \( CF = S + Tn - FBCF - AE \). This relation is equivalent to: \( S = SnF + SF \) with \( SnF = FBCF + AE - Tn \) and \( SF = PF - Var.C \) where Snf corresponds to non-financial savings flows, SF to financial savings flows, PF to financial investments and Var.C to the variation in credit outstanding. By dividing this relation by gross disposable income, the overall savings rate is comprised of a non-financial savings rate and a financial savings rate.

In theory, the financing capacity corresponds to net investment flows (i.e. reduced by financing flows). Due to accounting and statistical lags, however, this equivalence is rarely verified (see chart 13).
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NOTES

1 Sources: INSEE for France, Eurostat for the other European countries and Bureau of Economic Analysis for the United States. Data is for 2009 or else 2008.

2 In the United States, households can use increases in real estate wealth to take out Home Equity Loans using the equity in their home as collateral. In France, households cannot finance additional consumption without first selling one or more real estate assets. As a result, the wealth effect is stronger in the United States, where consumption is more closely linked to changes in wealth than in France.

3 Certain analysts use other simple indicators such as the price of gold or the Swiss franc. The inconvenience of these two indicators is that they can be influenced by other factors independent of risk aversion.

4 Multi-support life insurance contracts combine vehicles invested for the most part in euros to guarantee savings and unit-linked instruments to increase returns.

5 The law in favour of Labour, Jobs and Purchasing Power adopted in August 2007, calls for reducing death and/or gift taxes. As a result, it slightly reduces the attractiveness of life insurance products designed to facilitate gifts and/or inheritances for contracts established below the value of the standard deduction per beneficiary.

6 See the IGF report on "the assessment of fiscal and social niches relative to savings investment income".

7 Unlisted shares and other equity stakes can be seen for the most part as the capital of closely held companies and family entities (very small businesses; small and medium-sized enterprises, etc.). These stakes are holdings in a productive tool and are less affected by market trends. We thought it would be more pertinent to concentrate on listed shares directly or indirectly owned by households in order to assess the impact of the economic cycle on investment flows.

8 Although retraced in financial statements, unlisted shares do not make up financial savings per se because they correspond to the share capital held professionally. Nonetheless, they are taken into account as part of the presentation of the structure of household financial assets.

9 The monthly performance chart for August 2010 can be downloaded at:


10 See the INSEE’s quarterly opinion survey at:


11 The CAC40 surged from 3700 to nearly 4000 points between 26 February and 31 March before dropping 12.2% between 31 March and 31 August.

12 Zero interest loans were doubled until 30 June 2010 and then increased by 50% through 31 December 2010.

13 Source: OCDE Economic Outlook n°86 – December 2009 / Table 58. The OECD scope includes equities and equity equivalence, i.e. listed and unlisted equities and equity mutual funds.

14 In addition to the fact that Anglo-Saxon households generally have much bigger equity and bond portfolios than French households, this differential can also be attributed to different retirement systems, notably the widespread use of pension funds in Canada, the United States and the UK. See box 2 on page 106 of the INSEE publication "L’économie française en 2006" for further information on the methodology of international comparisons.


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