

# Does the fall in the stock market risk amplifying the crisis?

By [Christophe Blot](#) and [Paul Hubert](#)

The Covid-19 crisis will inevitably plunge the global economy into recession in 2020. The first available indicators – an increase in the unemployment rolls and in partial unemployment – already reveal an unprecedented [collapse](#) in activity. In France, the OFCE's [assessment](#) suggests a 32% cut in GDP during the lockdown. This fall is due mainly to stopping non-essential activities and to lower consumption. The shock could, however, be amplified by other factors (including rises in some sovereign rates, falling oil prices, and capital and foreign exchange movements) and in particular by the financial panic that has spread to the world's stock exchanges since the end of February.

Since 24 February 2020, the first precipitous one-day fall, the main stock indexes have begun a decline that accentuated markedly in the weeks of March 9 and 16, despite announcements from the [Federal Reserve](#) and then the [European Central Bank](#) (Figure 1). As of 25 April,

France's CAC-40 index had fallen by 28% (with a low of -38% in mid-March), -25% for the German index and nearly -27% for the European Eurostoxx index. This stock market crash could revive fears of a new financial crisis, only a few years after the subprime crisis. The fall in the CAC-40 in the first few weeks was in fact steeper than that observed in the months following the collapse of Lehman Brothers in September 2008 (Figure 2).

Figure 1. Changes in the main stock market indexes

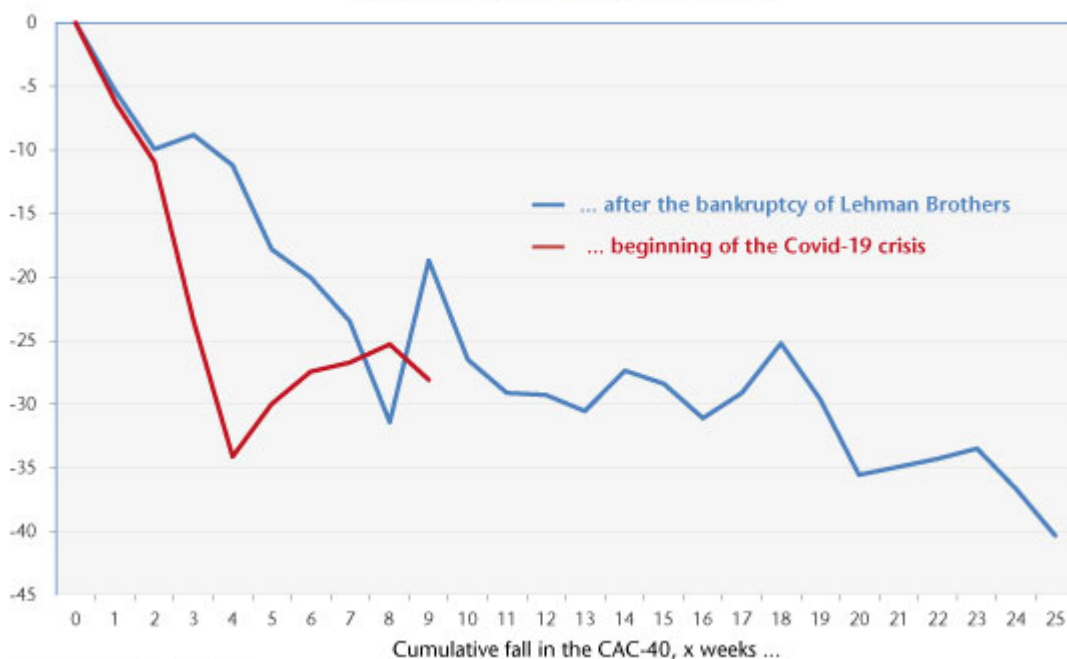


Source: Eikon Datastream. Base 100: average for the year 2019.

While the short-term impact of the Covid-19 crisis could prove to be more severe than that of the 2008 financial crisis, the origin of the crisis is very different – hence the need to reconsider the impact of the stock market panic. In the financial crisis, the origin was in fact a banking crisis, fuelled by a specific segment of the

US real estate market, the subprime market. This financial crisis then caused a drop-off in demand and a recession through a variety of channels: higher risk premiums, credit rationing, financial and real estate wealth effects, uncertainty, and so on. While some of these elements can be found today, they are now being interpreted as the consequence of a health crisis. But if there is no doubt that this is at the outset a health and economic crisis, can it trigger a stock market crash?

Figure 2. Fall in France's CAC-40 index in the Covid-19 crisis compared with the post-Lehman Brothers collapse



Source: Eikon Datastream.

Another way of posing the question is to ask ourselves whether the current stock market fall is due entirely to the economic crisis. Share prices are in fact supposed to reflect future changes in a company's profits. Therefore, expectations of a recession, as demand – consumption and investment – and supply are constrained, must

result in a reduction in turnover and future profits, and therefore a fall in share prices.

However, the financial shock could be magnified if the fall in stock prices is greater than that caused by the decline in corporate profits. This is a thorny issue, but it is possible to make an assessment of a possible over-adjustment of the stock market, and thus of a possible financial amplification of the crisis. The method we have used is to compare changes in profit expectations (by financial analysts) since the beginning of the Covid-19 crisis with the fall in equities.

Focusing on CAC-40 companies, profit expectations for next year have been cut in the last three months by 13.4% [\[1\]](#). This reduction should therefore be fully reflected in the change in the index. In fact, the fall there was much larger: -28%. This would result in an amplification of the financial shock by just under 15 percentage points.

This over-adjustment by the stock market can be explained by, among other things, the current prevailing uncertainty about the way lockdowns around the world will be eased, and thus about an economic recovery, as well as uncertainty about the oil shock that is unfolding concomitantly, with determinants that are both economic and geopolitical. This over-adjustment may therefore not be wholly

irrational (with regard to the supposed efficiency of financial markets), but the fact remains that it has led to major variations in the financial assets of consumers and business.

Variations like these are not neutral for economic growth. On the consumer side, they contribute to what are called the wealth effects on consumption: additions to a household's assets give it a sense of wealth that drives it to increase its consumption [2]. This effect is all the greater in countries where household assets are in the main financialized. If a large portion of household wealth is made up of equities, then changes in share prices strongly influence this wealth effect. The portion of shares (or of investment funds) in financial assets is quite similar in France and the United States, respectively 27% and 29%. However, these assets account for a much larger share of the disposable income of American households: 156%, compared to 99.5% in France. As a result, French households are less exposed to changes in share prices. Empirical studies generally suggest a greater wealth effect in the United States than in France [3].

As for business, these changes in stock market valuations have an effect on investment decisions through collateral constraints. When a company takes on debt to finance an

investment project, the bank demands assets as collateral. These assets can be either physical or financial. In the event of an increase in equity markets, a company's financial assets increase in value and allow it greater access to credit

[4]. This mechanism is potentially important today. At a time when companies have very large cash requirements to cope with the brutal shutdown of the economy, the sharp decline in their financial assets is restricting their access to lines of credit. While the financial amplification factors are not reducible to the financial shock, the recent changes in the prices of these assets are nevertheless giving an initial indication of how the financial system is responding to the ongoing health and economic crises.

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[1] The data comes from Eikon Datastream, which for each company provides analysts' consensus on the earnings per share (EPS) for the coming year and the following year. We then calculated the weighted average using the weight of each CAC-40 company in the index of the change in these expectations over the past three months. The fact that a 13.4% decline in profit expectations for the next year will give rise to a 13.4% decline in the stock price is made on the assumption that profits beyond the next year are not taken into account, or, in other words, that their current net value is zero,

which is to say that investors' preference for the present is very strong today.

[2] More formally, we can speak of a propensity to consume that increases as wealth increases. Wealth effects can be distinguishable according to whether they are purely financial assets or also include property assets.

[3] See [Antonin, Plane and Sampognaro \(2017\)](#) for a summary of these estimates.

[4] See [Ehrmann and Fratzscher \(2004\)](#) and [Chaney, Sraer and Thesmar \(2012\)](#) for empirical assessments of this transmission channel via share prices or property prices, respectively.

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# Does too much finance kill growth?

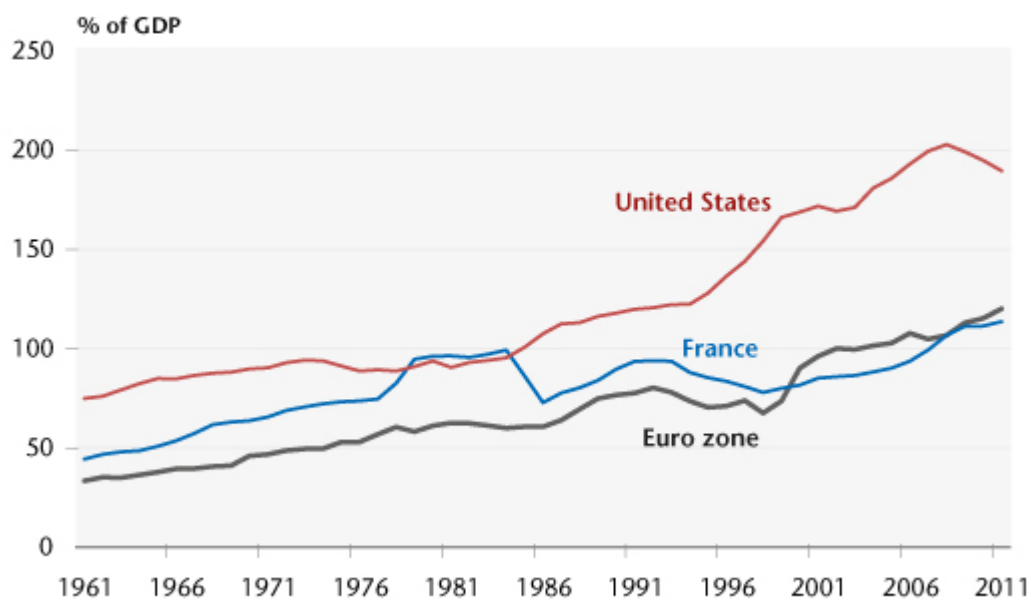
By [Jérôme Creel](#), [Paul Hubert](#) and Fabien Labondance

Is there an optimal level of financialization in an economy? An [IMF](#) working paper written by Arcand, Berkes and Panizza (2012) focuses on this issue and attempts to assess this level empirically. The paper highlights the negative effects caused by excessive financialization.

Financialization refers to the role played by financial services in an economy, and therefore the level of indebtedness of economic agents. The indicator of the level of

financialization is conventionally measured by calculating the ratio of private sector credit to GDP. Until the early 2000s, this indicator took into account only the loans granted by deposit banks, but the development of shadow banking ([Bakk-Simon et al., 2012](#)) has been based on the credit granted by all financial institutions. This indicator helps us to understand financial intermediation ([Beck et al., 1999](#)) [1]. The graph below shows how financialization has evolved in the euro zone, France and the United States since the 1960s. The level has more than doubled in these three economies. Before the outbreak of the subprime crisis in the summer of 2007, loans to the private sector exceeded 100% of GDP in the euro zone and 200% in the United States.

**Figure. Credit granted to the private sector by banks and other financial institutions**



Source : World Bank.

Arcand, Berkes and Panizza (2012) examined the extent to which the increasingly predominant role played by finance has an impact on economic growth. To understand the importance of this paper, it is useful to recall the existing differences in the findings of the empirical literature. On the one hand, until recently the most prolific literature highlighted a positive causal relationship between financial development and economic growth ([Rajan and Zingales, 1998](#), and [Levine, 2005](#)):



the financial sector acts as a lubricant for the economy, ensuring a smoother allocation of resources and the emergence of innovative firms. These lessons were derived from models of growth (especially endogenous) and have been confirmed by international comparisons, in particular with regard to developing countries with small financial sectors.

Some more skeptical authors believe that the link between finance and economic growth is exaggerated ([Rodrik and Subramanian, 2009](#)). [De Gregorio and Guidotti \(1995\)](#) argue that the link is tenuous or even non-existent in the developed countries and suggest that once a certain level of economic wealth has been reached, the financial sector makes only a marginal contribution to the efficiency of investment. It abandons its role as a facilitator of economic growth in order to focus on its own growth ([Beck, 2012](#)). This generates major banking and financial groups that are “too big to fail”, enabling these entities to take excessive risks since they know they are covered by the public authorities. Their fragility is then rapidly transmitted to other corporations and to the economy as a whole. The subprime crisis clearly showed the power and magnitude of the effects of correlation and contagion.

In an attempt to reconcile these two schools of thought, a nonlinear relationship between financialization and economic growth has been posited by a number of studies, including in particular the Arcand, Berkes and Panizza (2012) study. Using a dynamic panel methodology, they explain per capita GDP growth by means of the usual variables of endogenous growth theory (*i.e.* the initial GDP per capita, the accumulation of human capital over the average years of education, government spending, trade openness and inflation) and then add to their model credit to the private sector and the square of this same variable in order to take account of potential non-linearity. They are thus able to show that:

1. The relationship between economic growth and private

- sector credit is positive;
2. The relationship between economic growth and the square of private sector credit (that is to say, the effect of credit to the private sector when it is at a high level) is negative;
  3. Taken together, these two factors indicate a concave relationship – a bell curve – between economic growth and credit to the private sector.

The relationship between finance and growth is thus positive up to a certain level of financialization, and beyond this threshold the effects of financialization gradually start to become negative. According to the different specifications estimated by Arcand, Berkes and Panizza (2012), this threshold (as a percentage of GDP) lies between 80% and 100% of the level of loans to the private sector. [2]

While the level of financialization in the developed economies is above these thresholds, these conclusions point to the marginal gain in efficiency that financialization can have on an economy and the need to control its development. Furthermore, the argument of various banking lobbies, *i.e.* that regulating the size and growth of the financial sector would negatively impact the growth of the economies in question, is not supported by the data in the case of the developed countries.

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[1] While this indicator may seem succinct as it does not take account of disintermediation, its use is justified by its availability at international level, which allows comparisons. Furthermore, more extensive lessons could be drawn with a protean indicator of financialization.

[2] [Cecchetti and Kharroubi \(2012\)](#) clarify that these thresholds should not be viewed as targets, but more like

“extrema” that should be reached only in times of crisis. In “normal” times, it would be better that debt levels are lower so as to give the economies some maneuvering room in times of crisis.

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# Livret A accounts – drowning in criticism

By Pierre Madec

As the Governor of the Bank of France and the Minister of the Economy and Finance announced a further (probable) reduction in the interest rate on Livret A accounts for August 1st, the rating agency [Standard&Poor's](#) (S&P) released a study of the French banking system. The U.S. agency argues that Livret A accounts, and regulated savings more generally, “penalize French banks” and are at the root of “distortions in the banking market”. This debate, which is hardly new, has been the subject of a number of reports: [Duquesne](#), 2012; [Camdessus](#), 2007; [Noyer-Nasse](#), 2003, and more. Some ardently defend the peculiar French approach represented by Livret A, while others advocate, on the contrary, a deep-going reform of a system they describe as “lose-lose”.

So what’s the actual situation? Do Livret A accounts really threaten the French banking system? How are the household savings deposited in them used? What has been the impact of the series of increases in the ceilings on deposits? What will be the impact of the (probable) new rate cut proposed by the Minister of Economy and Finance, Pierre Moscovici, both for savers and for the financing of social housing? We provide a

few answers below.

### **What are Livret A accounts?**

Livret A accounts date from almost 195 years ago. They are a regulated investment that gives the right to a fiscal benefit (exemption from all taxation and social charges), with guaranteed deposits at a rate set by the State [1].

In 2011, the French savings rate was 16% on average, which was 1.1 points higher than in 2006. The increase in the savings rate went largely into regulated savings, and especially into Livret A accounts, which are held by [63.3 million French people](#), with total savings of 230 billion euros in April 2013, twice the level of January 2007. Three successive developments contributed to this massive increase in total holdings: the financial crisis, which redirected a portion of household savings into risk-free investments; the widespread distribution of Livret A passbooks to all banks after 1 January 2009, under the Act to modernize the economy [2]; and finally, the 50% increase in the ceiling on Livret A accounts, which took place in two stages (in October 2012 and January 2013). This growing attraction for Livret A is also due to the full liquidity of the accounts and the deposit guarantee – neither of which is available, for example, for life insurance.

### **What is the role of Livret A accounts?**

One of (many) specific features of the French model for financing housing is (among others) that providers of social housing do not draw on the bond markets ([Levasseur, 2011](#)). Social landlords are therefore financed mainly (73% in 2012) by the Caisse des Depots et Consignations (CDC), where a portion of household's Livret A savings are deposited. The CDC operates a savings fund that centralizes 65% of Livret A holdings, which in April represented more than 150 billion euros (Banque de France). The deposits made available are used

primarily for lending for social housing and urban policy [3]. These borrowings are largely used for the construction, acquisition and rehabilitation of social rental housing by social landlords (*HLM bailleurs*), but they can also be used to finance specific housing operations and urban policy measures such as the National urban renovation plan (“NERP”). In order to secure the deposits and ensure the savings fund has the amounts needed, the amount of deposits centralized under Livret A funds must always be greater than or equal to 125% of the outstanding loans for social housing and urban policy granted by the CDC.

It is obvious that the target of building 150,000 social housing units per year (compared to 105,000 in the year 2012) will give rise to a significant increase in the sector’s financing needs [4]. To meet this goal, 13.7 billion euros in lending for social rental housing will need to be granted for one year in 2013, *i.e.* 4 billion more than in 2012.

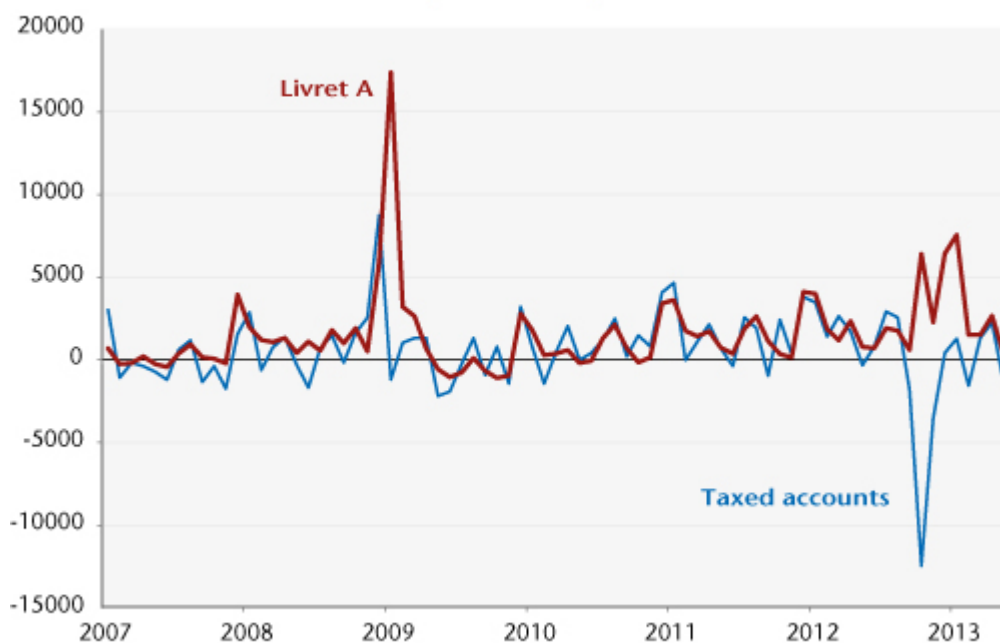
Finally, the Livret A resources that are not centralized by the CDC (80 billion euros) are subject to a “duty of use”. Eighty percent must be used by the banks [for financing SMEs](#) while 10% must be used [to finance energy savings measures in existing buildings](#) [5]. Similarly, a certain number of local government investment programmes (Campus Plan, 2012 Hospital plan, Grenelle Environment programme) have benefited from Livret A funds.

### **Are Livret A accounts endangering the French banking system?**

Given the increasing interest of households in regulated savings (especially Livret A), one might think (like S&P) that this type of investment threatens the banking system by depleting bank liquidity, which has already been undermined by the crisis. The higher ceilings established in recent months have indeed led – in essence – to a transfer of savings to tax-exempt investments, whose share in total household financial savings increased by 0.6 percentage point between

2011 and 2012. In October 2012, there was a significant drop in savings accounts subject to tax (-12 billion euros), a drop that can be explained in part by the higher ceilings on Livret A accounts (+6 billion euros) [6] (see Figure 1).

**Figure 1. Changes in the Livret A balance and in accounts subject to tax (billion euros)**



Source : Banque de France.

It is important to put S&P's alarmist declarations into perspective – on the one hand, because, except for the month of October 2012, the flow from taxed accounts has been relatively stable, and on the other hand, because in 2012 regulated savings, although up significantly, accounted for only 9.5% (6.2% of which for Livret A) of total household financial savings, which amounted to 3,664 billion euros. In addition, if there were a real and lasting lack of liquidity, technical adjustments exist or can be made. According to the latest [annual report of the Cour des comptes](#) (French Court of Auditors), at the beginning of the year the coverage ratio of savings deposits was 156% of outstanding loans to social housing and urban policy, instead of the regulatory 125%. This over-coverage represents about 50 billion euros, which are allocated neither to the financing of social housing nor to

bank liquidity. Now claimed by the banks, these funds are to be quickly allocated. As the savings fund has substantial liquidity, while leaving unchanged the ratios of coverage and of centralization (the fruit of bitter negotiations), it is clear that a number of temporary transfer mechanisms between the savings fund and the banking sector could quickly deal with any risk of a liquidity crisis. Finally, note that the banks have also benefited from the more widespread distribution of Livret A, notably through the payment by the savings fund of a commission on the amounts centralized. This commission, which is directly drawn on the funds for social housing, took 1 billion euros from the savings fund in 2012. Without drawing any conclusions about what should be done with these counterflows, it is questionable whether a better trade-off could be established between the centralisation rate and the coverage rate, the commission rate and the long-term funding of social housing [7].

### **What about the “probable” cut in the rates?**

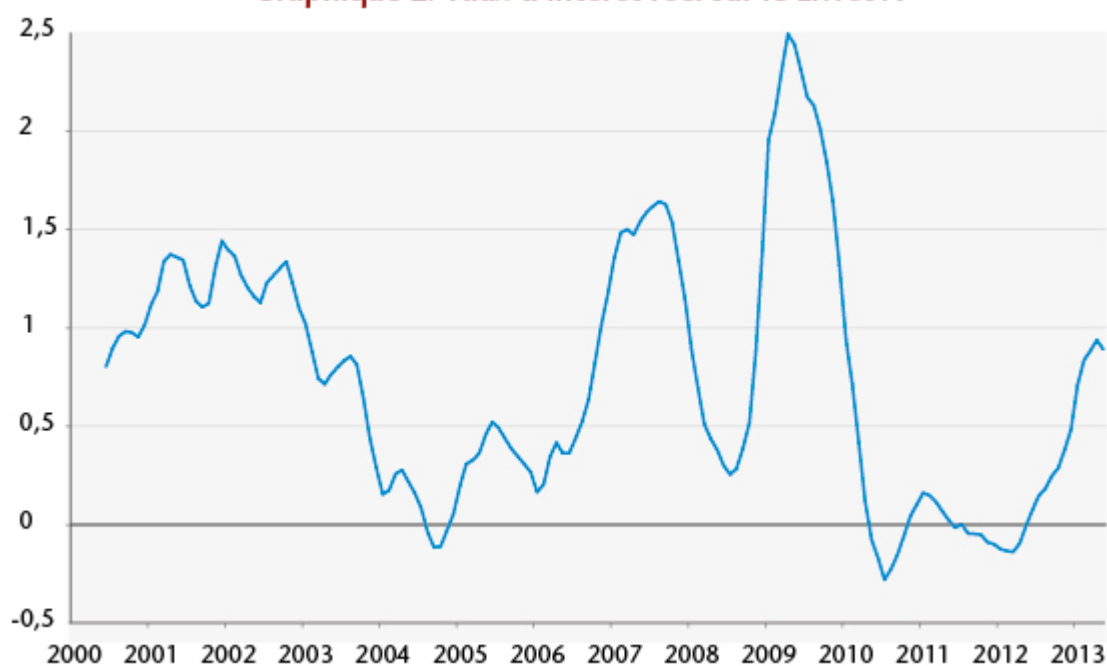
The reduction in Livret A rates, the proposal advanced on June 23 by the Minister of the Economy, Pierre Moscovici, who was echoing the statements made a few days earlier by the Governor of the Bank of France, Christian Noyer, should come into force on August 1, and is the result of a fall in the inflation rate on which it is partly indexed. What effect would this rate cut have on the flow of savings into Livret A accounts, and thus on the financing of social housing?

In May 2013, the interest rate on Livret A was 0.5% in real terms, a relatively low level. Over the period 2011-2012, it even came to an average of zero (see Figure 2). However, the net flow remained stable over the period. This is explained partly by the low rates offered by other investments, in particular taxed savings accounts such as the CEL home savings plan, which have had a negative real net rate since late 2009. Given the trade-offs made by households, in particular the wealthiest ones, in their efforts to obtain the best return on

their savings, it is relatively complex to demonstrate a strict correlation between the rate on Livret A accounts (real or nominal) and changes in the total outstandings. Thus, in the second half of 2009, Livret A suffered outflows even though the real rate on it was high; in 2010 and 2011, however, net deposits were high even though the rate was no longer so high.

Given, on the one hand, the lower real net rates offered by comparable investments and, secondly, current social and economic uncertainties, we can expect some stability in the flows during the second half of 2013, despite the decline in the rate of remuneration. This stability will obviously depend on the size of the rate reduction. As the rate is currently 1.75%, it seems unlikely that the high inflows will continue if the rate is revised below 1.25%. As France's Economic commission expects inflation of 1.2% for 2013, fixing the Livret A rate below this would result in a fall in household purchasing power, which would go against the government's commitments.

**Graphique 2. Taux d'intérêt réel sur le Livret A**



Source : Banque de France, INSEE, calculs OFCE.

Nevertheless, it should not be forgotten that this re-



valuation in the rate is not automatic and in fact depends on a political decision. In the second half of 2009, while the collapse of inflation would have justified a decrease of 1.5 points to reduce the rate to 0.25%, the rate reduction ultimately applied was only 0.5 point, leaving the rate at 1.25%. An additional 2 billion euros was thus distributed to households. Conversely, in February 2012, given the return of higher inflation (even temporarily), the rate should have been lifted to 2.75%. The savings shortfall for households due to not changing the rate is estimated at 1 billion euros.

As with households' choice between safety, liquidity and yields, the public trade-off between household purchasing power and the lending terms for social landlords can prove to be complicated. So while undervaluing the rate significantly benefits beneficiaries of the allocation of funds from Livret A (mainly social landlords) whose loan rates are "indexed" on the Livret A rate, it is disadvantageous for the saver.

While "small" savers are not very sensitive to changes in interest rates, "big" investors, that is to say, those approaching the deposit ceiling, can make rapid trade-offs out of Livret A. However, these 10% of the depositors, with the largest accounts, represent 51% of Livret A deposits. A massive reduction in rates could therefore lead to a significant outflow and subsequently substantially reduce the CDC's capacity to lend to the social housing sector, a sector with ambitious building targets and mounting financing needs. On the contrary, it seems clear that maintaining higher rates during a period of low inflation would push up the cost of lending to social housing, at a time when the State and the housing agencies have committed to the construction of [120 000 social housing units](#) per year between 2013 and 2015.

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[1] For greater detail on the method of determining the interest rates, see [Péléraux \(2012\)](#).

[2] In January 2009, the total balance experienced a historic increase of 12.5%. For comparison, the successive increases in the ceiling in last October and January resulted in increases of 3.1% and 3.5%.

[3] In 2012, [total lending of 9.7 billion euros was granted by the savings fund](#) simply for financing the 105,000 social housing units.

[4] This objective corresponds to a campaign promise of the candidate Francois Hollande. It was recently downgraded: 120 000 housing financed per year until 2015 and 150,000 from 2016.

[5] For example, in 2012 Oséo and the FSI Strategic investment fund (*Fonds stratégique d'investissement, FSI*) received, respectively, 5.2 billion and 0.5 billion euros of resources from Livret A.

[6] The transfer was made primarily to the LDD Sustainable development account (*Livret de développement durable*), whose outstandings grew by nearly 14 billion euros in October 2012 following the doubling of the ceiling.

[7] While the commission rate should converge by 2022 to 0.50% for all the distributing institutions, in 2011 it was 0.37% for new distributors and 0.53% for traditional distributors ([CDC, 2012](#)).