

CGFS Papers

No 69

Macroprudential policies to mitigate housing market risks

Country case study: France

December 2023

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Authors: Ludivine Berret (Banque de France), Marine Dujardin (Banque de France), Etienne de l’Estoile (Banque de France), Matthieu Segol (Banque de France)

1. Housing as a source of risk

Three structural pillars of the French housing financing model have historically contributed to mitigating housing credit risks (Graph 1).

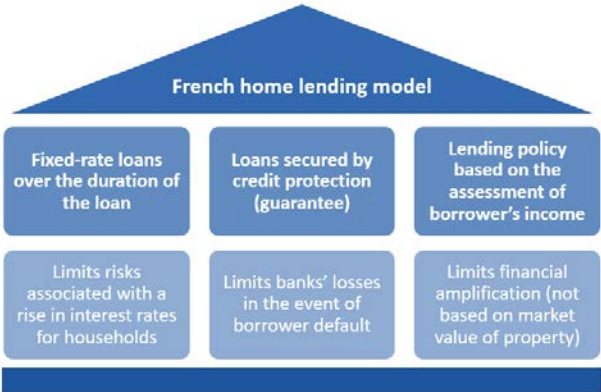
Pillar 1: Almost all housing loans in France (97.7% of outstanding loans in 2022¹) have fixed interest rates over their entire duration (Graph 2.A). This limits default risks for households associated with a rise in interest rates.

Pillar 2: Nearly all loans are secured by credit protection (96.8% of outstanding loans in 2022, Graph 2.B). This mainly takes the form of a third-party guarantee that covers the losses banks face when borrowers default (63.8% of total outstanding loans). The use of mortgages, whereby the home is used as collateral, is limited, which helps to mitigate the credit risk for banks in case of house price corrections.

Pillar 3: Banks’ lending policies are based on their assessment of borrower solvency, usually measured by the debt service-to-income (DSTI) ratio, rather than on the market value of the financed property. This provides protection against the risk of a feedback loop between house prices and home lending. Due to these three structural features, housing loans have been characterised by a low level of delinquency. The ratio of non-performing housing loans has never exceeded 1.5% over the last two decades, and it has been lower than that observed in several other major European countries in recent years (Graph 3).

The French home lending model

Graph 1



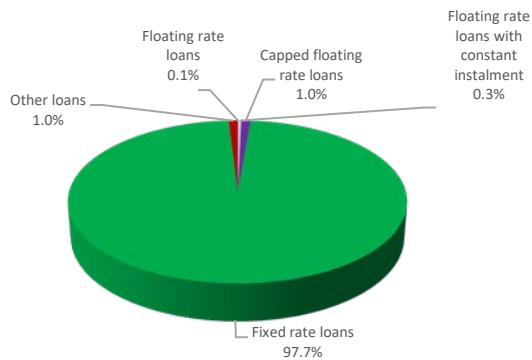
¹ Autorité de contrôle prudentiel et de resolution (ACPR), “Annual housing financing survey”.

Structure of housing loans in France

Graph 2

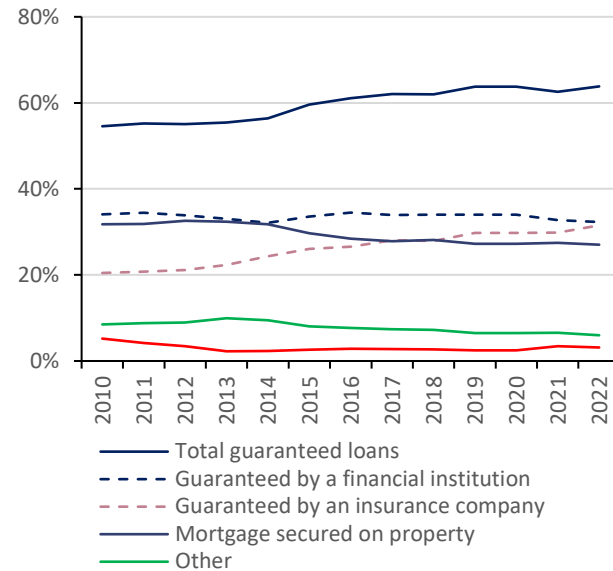
A. Structure of outstanding loans by type

%



B. Structure of outstanding loans by type of guarantee

%



Source: ACPR, "Housing financing, Analysis and synthesis"

However, in 2019,² the High Council for Financial Stability (HCSF) – the French macroprudential authority – issued an alert on two trends at play since 2015 on the residential real estate market that were threatening this housing financing: a deterioration in lending standards and a rise in household indebtedness (Table 1). The deterioration in lending standards was significant, in particular regarding the debt service-to-income (DSTI) ratio at origination, with an increase in the share of loans with DSTI ratios above 35% (26% of new housing loans in 2019, compared with 22% in 2015), combined with an all-time high average maturity (20.3 years in 2019) and mean loan-to-value (LTV) ratio (89% in 2019). Although default rates have been relatively low in France, they exhibit cyclical, which can be associated with the dynamics of lending standards. A study of different cohorts of borrowers showed that the loosening of lending standards in France contributed significantly to the rise in default rates from 2005 to 2014, even after controlling for other important factors (ie households' characteristics, business cycle), confirming that borrowers' vulnerability was closely linked to lending standards.³ These loans were covered by a third-party guarantee, mitigating the risk of spillovers, but these dynamics illustrated that sound lending standards are essential to the robustness of the French housing financing model. Additionally, household indebtedness, mainly driven by housing loans, had been on the rise since 2002 and represented one of the highest levels in Europe (with a debt-to-income ratio reaching nearly 100% in the fourth quarter of 2019), increasing household exposure to negative shocks.

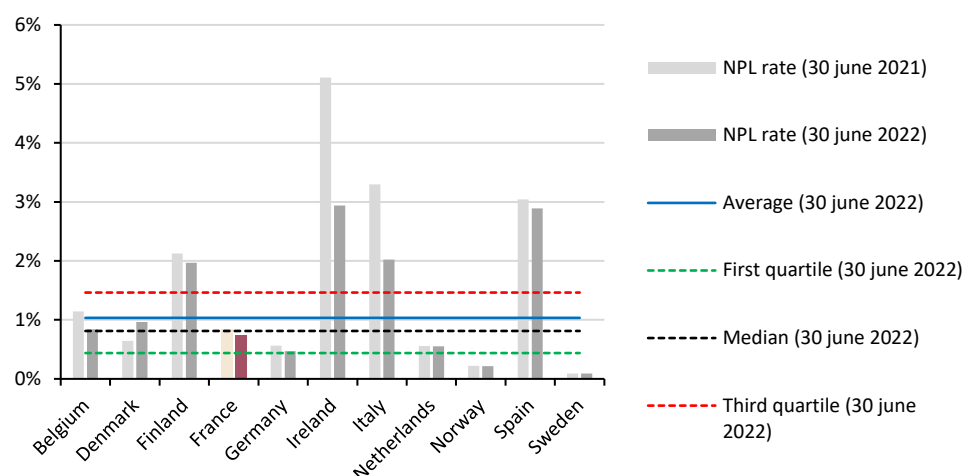
² High Council for Financial Stability, "Diagnostic des risques dans le secteur de l'immobilier résidentiel", October 2019, https://www.economie.gouv.fr/files/files/directions_services/hcsf/2019-10-Diagnostic-risques-immobilier.pdf.

³ [Assessment of the French financial system](#) (December 2021)

Non-performing loan ratios across European countries

In per cent

Graph 3



Source: European Banking Authority (EBA), Transparency exercises (exposures to retail clients, excluding SMEs, secured by an immovable property; outstanding amounts processed using an advanced internal-ratings-based approach). First quarter, third quarter: first and third quartiles. Computations by Autorité de contrôle prudentiel et de résolution (ACPR).

Monitoring of households' vulnerabilities

Table 1

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Household indebtedness | | | | | | | | |
| Debt-to-GDI ratio (%) | 85.4 | 87.6 | 87.9 | 89.5 | 90.9 | 93.3 | 96.4 | 99.0 |
| Debt-to-income at origination (years) | 4.4 | 4.2 | 4.4 | 4.3 | 4.8 | 4.9 | 5.2 | 5.4 |
| Lending standards (at origination) | | | | | | | | |
| Mean DSTI ratio (%) | 30.8% | 30.1% | 29.8% | 29.4% | 29.5% | 29.7% | 30.1% | 30.3% |
| Share of housing loans with DSTI > 35% (%) | 25.5% | 23.3% | 22.8% | 21.9% | 22.2% | 23.6% | 24.8% | 26.1% |
| Average maturity (years) | 19.5 | 18.6 | 18.6 | 18.0 | 18.7 | 19.0 | 19.9 | 20.3 |
| Average LTV (%) | 79.7% | 83.9% | 82.7% | 85.7% | 85.9% | 87.0% | 87.3% | 88.8% |
| Share of housing loans with LTV > 100% (%) | 8.9% | 10.5% | 9.0% | 10.8% | 11.9% | 12.7% | 12.0% | 15.0% |

Source: ACPR

To mitigate housing risks, the HCSF opted in 2019 for a borrower-based measure (BBM) comprising both a DSTI and a maturity limit. The measure currently in place combines a DSTI limit of 35%, a maturity limit of 25 years and a flexibility margin of 20%. The flexibility margin makes it possible to exempt up to 20% of the quarterly production of new loans from the DSTI and maturity limits, provided that at least 70% of this flexibility is earmarked for buyers purchasing a primary residence. At least 30% of the total margin must be allocated to first-time buyers (FTB).

2. Governance and objectives

The macroprudential powers of the HCSF were granted by law in 2013.⁴ They include the power to set credit standards for lending as well as the power to adjust risk weights on the residential property sector. The HCSF can issue recommendations and legally binding decisions that apply to financial institutions supervised in France. In terms of governance, it brings together five institutions (the central bank, the Ministry of Finance, the financial markets authority (AMF), the banking and insurance supervisory authority (ACPR), and the accounting standards authority (ANC)) and three qualified members. It is chaired by the Minister of Finance, but the Governor of the Banque de France has the power of initiative, meaning that it is the only institution within the HCSF which can propose the adoption of macroprudential measures (Graph 4).

Internal organisation of the HCSF

Graph 4



3. Objectives

The HCSF is tasked with “supervising the financial system as a whole, with the aim of safeguarding its stability and ensuring that the financial sector makes a sustainable contribution to economic growth”.⁵ Its mission is to help to mitigate and prevent systemic risks, including those stemming from the real estate market. In order to achieve its goal, the HCSF has adopted a series of five intermediate objectives, one of which is more directly related to housing market developments: to mitigate and prevent excessive credit growth and leverage.

⁴ Law of 26 July 2013 on the separation and regulation of banking activities.

⁵ Article L.631-2-1 of the French Monetary and Financial Code

Within this mandate⁶ the BBM that was implemented from 2019 onwards had twin goals: it was primarily aimed at maintaining the resilience of households by preventing excessive leverage and, as a consequence, maintaining lenders' resilience by decreasing the credit risk stemming from the household sector thanks to a reduction in the probability of default on home loans.

Implemented in a context of low interest rates, a dynamic housing market and low default rates, this measure aimed to lock in good practices for home financing and was viewed by the HCSF as structural. The DSTI and maturity limits were considered as sound from a risk point of view at any point in the cycle. Although the measure applied to new loans only, meaning that its effects would be gradual, it also provided insurance against a potential build-up of risk in future.

As far as quantitative objectives are concerned, the BBM adopted by the HCSF set a ceiling on the share of loans with loose lending standards. The remaining indicators that justified the macroprudential measure (eg household indebtedness) have been closely monitored.

4. Macprudential instruments in practice

Institutional considerations and ex-ante simulations informed the design of the HCSF's BBM. The HCSF chose to implement a BBM since the main source of risk which had to be mitigated was the increasing leverage of households. Capital-based measures were not considered as a suitable tool at the time, since risks were associated with new loans rather than with the stock of existing loans. Moreover, they would have had a limited impact on banks' behaviour because French banks already had ample capital in excess of existing regulatory requirements. A DSTI limit was preferred over an LTV limit given that the DSTI ratio was already commonly used by French banks to assess the solvency of borrowers. A DSTI ratio is all the more appropriate because French banks usually grant credit based on income while only a limited share of RRE lending is based on mortgages and thus on the house values (27%, Graph 2.B). The LTV ratio also has the drawback of being procyclical as a rise in house prices increases borrowing capacity. As a result, an LTV limit may not be as efficient as a DSTI limit to mitigate the feedback loop between house credit and prices. Besides, French case law⁷ had previously recommended that the DSTI should not exceed 33%, thus setting a best practice among banks based on this limit. An ex ante assessment model, based on data from the Household Finance and Consumption Survey, helped to fine-tune the design of the BBM and especially to calibrate the limit. Even if the data had some limitations, the model assessed the impact of the measure on prices and housing loans, as well as the share of excluded borrowers in the long run, in comparison to a situation without a BBM.

⁶ Article L.631-2-1 of the French Monetary and Financial Code: "[The HCSF] may, on a proposal from the Governor of the Banque de France and with a view to preventing the appearance of excessive upward movements in the price of assets of any kind or excessive indebtedness of economic agents, set conditions for granting credit by entities that are subject to the supervision of the French Prudential Control and Resolution Authority or the Financial Markets Authority and that have received authorisation to carry out this activity, when these entities grant loans to economic agents located on French territory or loans intended for the financing of assets located on French territory".

⁷ See Court of Cassation rulings: Cour de cassation – Première chambre civile – 16 avril 2015 – n° 13-15.858; Cour de cassation, chambre civile 1, Audience publique du mardi 11 mars 2014 - N° de pourvoi: 12-29,910; Cour d'appel de Rouen – 28 avril 2016 – n° 15/00727; Cour d'appel de Versailles – 1 juin 2017 – n° 15/06839; Cour de cassation – Chambre commerciale – 10 janvier 2018 – n° 16-23.845.

An ex ante assessment model to guide the calibration of the measure

The model used micro-level data on transactions between 2015 and 2017 from the Household Finance and Consumption Survey (HFCS). The ex ante assessment followed three main steps:

- (i) Calculating the impact of the measure on the purchasing capacity of buyers, taking into account possible adjustments in the DSTI ratio, maturity and LTV ratio;
- (ii) Modification of matches between sellers and buyers (new allocation of transactions); and
- (iii) Market clearing according to different scenarios (prices do not adjust; prices fully adjust to buyers' purchasing capacity; prices partially adjust (median).

The model then provided the impact on prices and housing loans as well as the share of excluded borrowers in the long run in comparison to a situation without a BBM.

The results were used as input for the calibration, taking into account the limitations of the assessment, which was based on a restricted number of transactions, with some inconsistency in the data used.

The scope of the measure was intended to meet two main objectives: to limit the possibility of regulatory arbitrage and to ensure consistency with other national and European definitions. The measure targets credit institutions and financing companies, given that housing financing is fully intermediated by banks in France. As the share of foreign entities in home financing is very low, asking for reciprocity in other EU countries was deemed unnecessary. For the sake of consistency, the definition of loans was based on the definition provided for in the French consumer code. The definition of income (before taxes) was chosen to match the most common definition used by banks, with the possibility for banks to apply a more stringent definition. The definition of debt servicing is based on the consumer code, but a clause was added in 2021 confirming that banks need to include the mortgage insurance costs. Finally, for the assessment of the DSTI ratio's compliance, rules were set up to minimise potential leakages and regulatory arbitrage (eg longer grace periods, bullet loans): the DSTI ratio is calculated using (i) the maximum annual debt servicing over the duration of the loan and (ii) constant annual income at the time the loan is taken out.⁸ Thus, banks cannot assume income increases.

An important characteristic of the BBM was its gradual process of implementation based on interaction with various stakeholders. The HCSF decided to follow a step-by-step approach, since it was the first time it had implemented such a macroprudential measure with a direct impact on households. Therefore, the calibration was fine-tuned over time so that the measure served the purpose of strengthening financial stability without impairing access to credit, which was also a key consideration given the composition of the HCSF. As illustrated in Graph 5, the HCSF measure was first implemented as a non-binding recommendation in December 2019 in order to test the adequacy of a 33% DSTI limit, a 25-year maturity limit and a 15% flexibility margin. After a first impact assessment, the HCSF recommendation was modified in January 2021, leading to a slight increase in the DSTI limit (35%) and the flexibility margin (20%). The HCSF recommendation did not become legally binding until 1 January 2022. Two technical adjustments were decided in June 2023 to account for certain operational challenges encountered by banks in implementing this measure. These did not alter the overall structure or scope of the measure. First, the HCSF indicated that the banking supervisor (ACPR) may consider that compliance with these limits for overall new lending for that quarter and the two subsequent quarters constitutes appropriate and sufficient corrective

⁸ The income that has to be considered is income (i) after payment of social security contributions and (ii) before payment of income taxes. Banks are free to apply a more stringent definition in line with their risk management strategy.

action, following a limited breach of the flexibility margin in one quarter. This was decided in view of the seasonal nature of some transactions and in order to facilitate the operational management of the measure by the banking networks. Second, in view of the effective take-up of flexibility for purchases of main residences, the HCSF decided to raise the proportion of the 20% flexibility margin that can be used freely from 20% to 30%. The minimum share allocated to primary residences within the flexibility margin was decreased from 80% to 70%. The 30% share of the flexibility margin allocated to first-time buyers remained unchanged.

Implementation of the French BBM – timeline

Graph 5

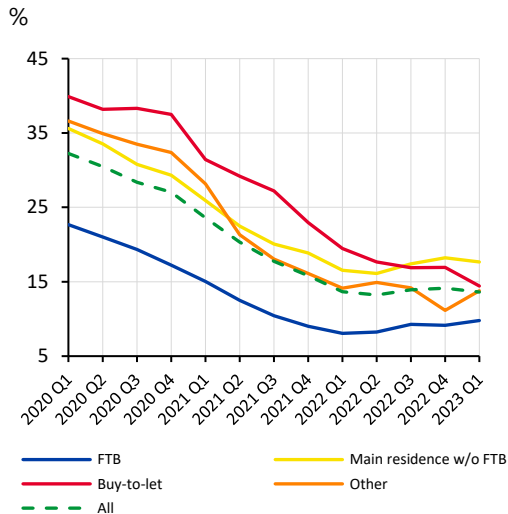


5. Effectiveness

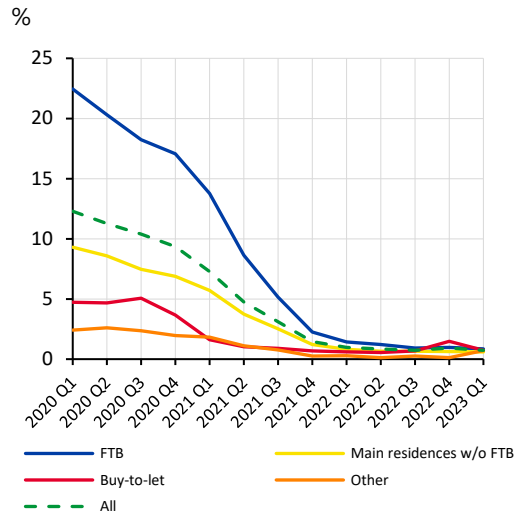
5.1 Measuring success.

The introduction of the measure in 2019 led to a homogenous improvement of lending standards across all market segments without impairing access to credit. The objective of the HCSF measure was to halt the deterioration in lending standards of housing loans. Its effectiveness has been primarily assessed based on its ability to meet this objective. At the time of implementation, non-compliance with the current DSTI limit of 35% was significantly higher (32% of total new loans in January 2020) than non-compliance with the maturity threshold (12.8% of total new loans), except in the case of first time-buyers for which both limits were equally binding (Graphs 6.A and 6.B). Within two years of the introduction of the measure, the share of loans with a DSTI ratio greater than 35% was halved for each market segment, while the share of loans that were non-compliant with the maturity threshold was reduced to less than 2% for each segment. Data show that banks were able to accommodate these constraints primarily by increasing the average maturity of loans, albeit moderately (from 21.6 years in January 2020 to 22.3 years in March 2023) (Graph 6.C). The increase in the size of down payments wherever possible also played a role: the average loan-to-value (LTV) ratio fell by 1.6 percentage points over the period 2020–2022, reaching 83.9% at the end of 2022, and the share of loans with an LTV ratio greater than 100% was reduced to 17% in the first quarter of 2023 from 31% in the first quarter of 2020 (Graph 6.D).

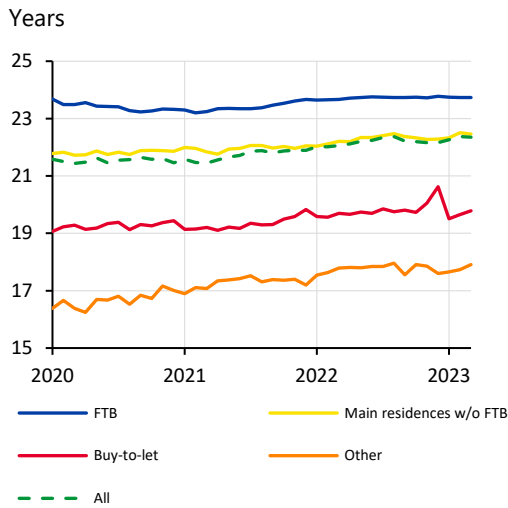
A. Share of new loans with DSTI ratio > 35%



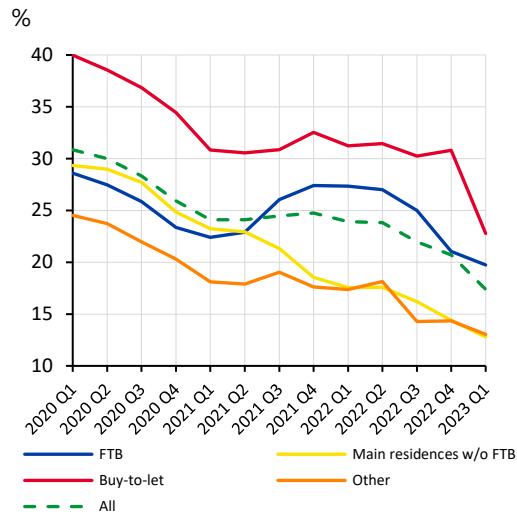
B. Share of new loans not compliant with the maturity limit



C. Average maturity of new housing loans



D. Share of new loans with an LTV ratio > 100%



Source: ACPR

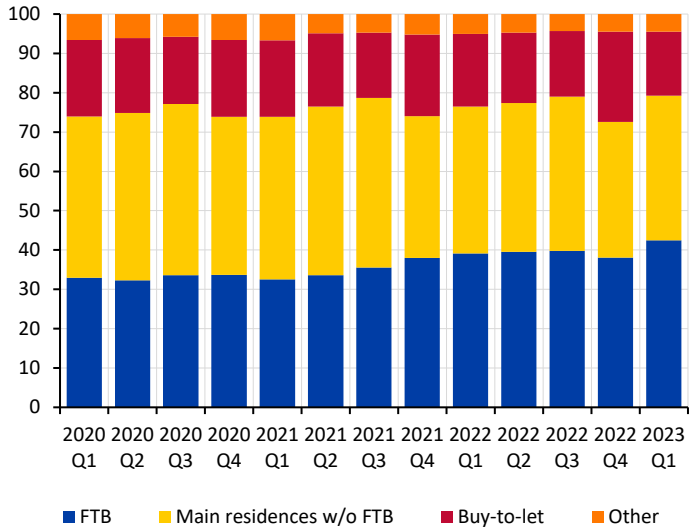
The measure did not impede access to credit, as annual housing loans reached record high levels in 2021 and 2022. Nor did the measure unduly impact the distribution of credit, as the ratio of first-time buyer loans to total new housing loans has not been negatively impacted over the last three years (Graph 8). Since 2020, an average of 77% of new loans in France have been granted to borrowers buying their main residence (of which 49% are first-time buyers), while the rest has been distributed between buy-to-let loans (18%) and second and subsequent buyers (5%). There is no evidence that the introduction of the measure has led to a reallocation of credit to other sectors in the economy. In particular, loans to non-financial companies (NFCs) accounted for 45% of total outstanding loans to the non-financial sector in December 2022, a level close to the one observed before the introduction of the measure (44% in December 2019).

Moreover, the implementation of the BBM has not constrained the overall credit supply, including credit to NFCs which, much like credit to households, has remained dynamic.

Distribution of market segments

In per cent

Graph 8



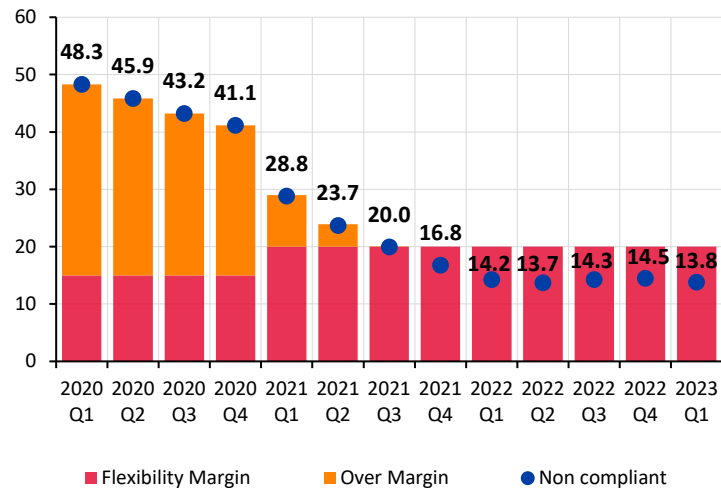
Source: ACPR

On the back of these trends, the share of non-compliant loans had already fallen below the limit set by the flexibility margin by the third quarter of 2021, less than two years after the introduction of the measure. The share of non-compliant loans held by practically every major French banking network has been below the 20% flexibility margin since the third quarter of 2021 (Graph 9). The flexibility margin was designed to protect buyers of main residences (for which at least 70% of the flexibility margin is available), with a specific focus on first-time buyers (for which at least 30% of the flexibility is reserved). Banks have been converging towards this targeted composition of the margin (Graphs 10.A and 10.B). The fine-tuning of the breakdown of the flexibility margin adopted in June 2023 to address some operational difficulties will also help foster compliance.

Non-compliant loans have fallen below the flexibility margin

In per cent

Graph 9



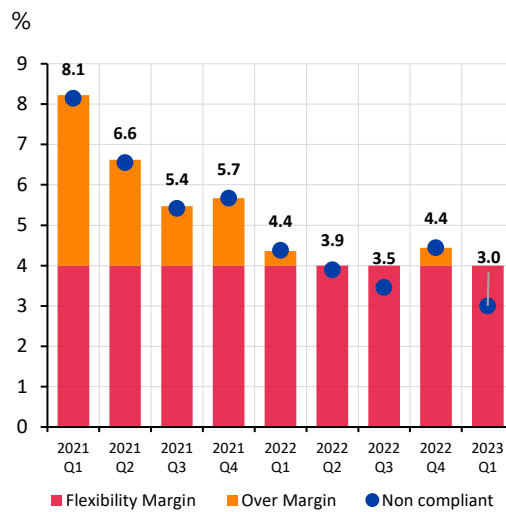
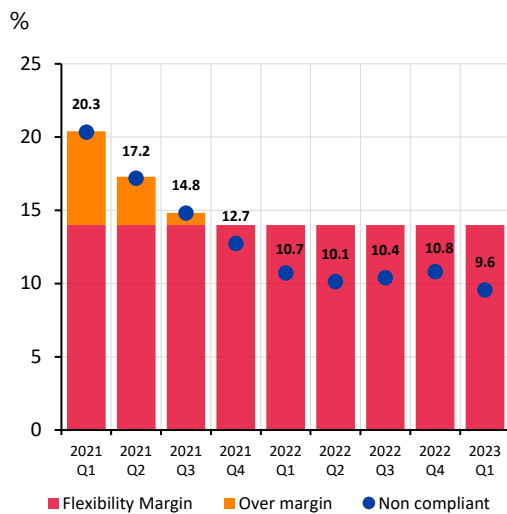
Source: ACPR

Non-compliant new loans by buyer type

Graph 10

A. Non-compliant new loans for non-first-time buyers

B. Non-compliant new loans for borrowers not buying a main residence



Source: ACPR

5.2. Factors influencing success.

The measure was designed as a structural one to anchor banks' expectations. It was transformed into a legally binding decision to ensure its full effectiveness over time. The policy was introduced to reinstate maximum limits on lending standards which had been historically acknowledged and from which banks had started to deviate. This positioning facilitated acceptance of the measure among banking institutions, and the transformation of the initial recommendation into a legally binding policy enshrined the idea that these limits should be considered as structural ones. In addition, throughout the process, the HCSF strived to promote the acceptability of the measure and explain its rationale through a series of meetings with all stakeholders, including banks, financial intermediaries, brokers and consumer protection associations. One of the challenges was the lack of European harmonisation for borrower-based measures which prevented from anchoring the measure in a common framework, which could have facilitated acceptance.

HCSF's wide-ranging powers and governance choices fostered the effectiveness of the policy. The HCSF opted for gradual implementation of the measure. The design and calibration of the measure evolved from 2019 to 2022 and were nurtured by consultations and early impact assessments. Indeed, after the HCSF's risk assessment in 2019, which was submitted for public consultation, the HCSF issued a first recommendation in December 2019, which was not legally binding. In this recommendation, the DSTI limit was 33%, the maturity 25 years and the flexibility margin was 15% of quarterly production. At least 75% of the flexibility margin was intended for primary residences and FTB. The impact assessment and consultation with stakeholders, which took place during the Covid-19 pandemic, showed that the measure was too stringent and that clarifications had to be made regarding its scope. As the objective of the measure was to increase households' resilience without impairing access to credit, important adjustments were made in 2021. Following the new recommendation of the HCSF in January 2021, the DSTI limit was increased to 35% (insurance costs included), the maturity limit remained unchanged, but with a maximum two-year grace period in case of construction or renovation work, and the flexibility margin was increased to 20% of quarterly production. These changes did not become legally binding until January 2022, after the publication of an HCSF decision in September 2021, to make sure banks would have sufficient time to adjust their lending practices and to ensure full acceptability of the measure. The gradual implementation of the BBM proved successful, as the share of non-compliant loans was below 20% for all banks by the first quarter of 2022.

Several features of the HCSF's organisational arrangements have helped to shield its decisions from unwarranted developments. This includes a governance lock associated with the power of initiative granted exclusively to the Governor of the Banque de France, which makes his approval necessary before any change to the measure, and also the participation of five different institutions and three academics as members, ensuring a balanced view on the decisions. The features also include a unified communication policy on the part of the HCSF, which may depart from the individual views of its members.

5.3 Leakages

The design of the BBM aimed to minimise potential sources of leakages and regulatory arbitrage. Whenever possible, the definitions used (eg debt service, loans) were based on the already existing legal framework to avoid heterogeneous interpretations across banks. Additionally, the DSTI limit is assessed based on the maximum annual debt servicing over the entire duration of the loan, rather than the average annual debt servicing, and on constant annual income. This excludes potential upwards revaluations of income by banks. Finally, the DSTI limit was implemented in parallel with a maturity limit to avoid creating rebalancing opportunities between the DSTI ratio and maturity.

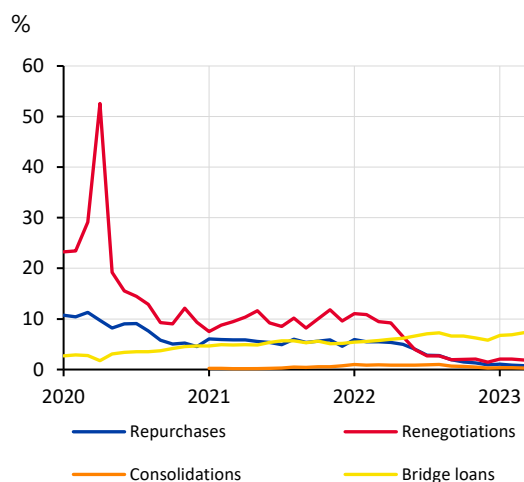
Regular monitoring has not revealed any evidence of leakages to date. The Banque de France is monitoring three main types of leakages or arbitrage possibilities: loans outside the policy scope (repurchases, renegotiations, credit consolidation and bridge loans), borrowers outside the policy scope (such as loans to legal entities) and lenders outside the policy scope (foreign lenders, non-banks). As shown in Graph 11.A, as of mid-2023 there is no evidence of an increase in the share of loans exempted from the measure or of leakages towards borrowers who would fall outside the policy scope. Moreover, the share of cross-border credit has remained very low (<1% of total credit) and has decreased over time (0.9% in December 2018; 0.3% in December 2020 and in June 2022, Graph 11.B).

These dynamics could however change in a context of higher interest rates and accelerating inflation, pushing borrowers closer to their maximum borrowing capacity. Should the situation deteriorate, the HCSF could ask European countries to reciprocate the measure.

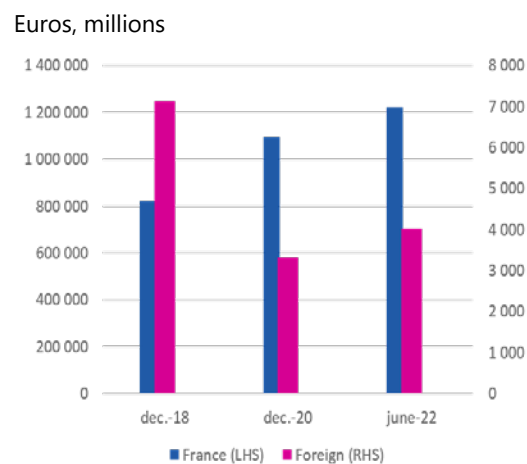
Regular monitoring has not revealed any evidence of leakages to date

Graph 11

A. Share of loans outside policy scope



B. RRE credit to French counterparties, per lender country¹



¹ Data from the UK have been excluded since 2020.

Source: ACPR; EBA, "Transparency exercise", December 2018, December 2020 and June 2022.

6. Costs, benefits and unintended consequences

To maximise efficiency and acceptability, the measure was calibrated to avoid distributional costs in terms of housing affordability and ensure an improvement in lending standards without unduly impacting access to credit. While not directly linked to financial stability, access to credit for house purchases is a very sensitive issue from both an economic and political perspective, and steps were taken to ensure that the design of the measure would limit the risk of crowding out first-time buyers and low-income households. However, the flexibility margin does not specifically exempt low-income households, as that would run counter to the objective of the measure, which is to limit household overindebtedness and related risks. Moreover, the HCSF decided to rule out using a definition of income based on disposable income net of loan repayments (which was advocated by some banks), since it wanted to limit the leveraging capacity of higher-income

borrowers and curb speculative behaviour. To minimise any side effects of the process, various steps were taken. For instance, cliff effects were avoided by using a gradual implementation process, leaving time for borrowers and lenders to adjust to the new rules. Additionally, discussions were held with stakeholders with a view to avoiding or resolving side effects, and important changes to the flexibility margin were made in 2021 in this regard.

In the context of rising inflation and increasing interest rates, the possible costs and side effects of the measure are continuously monitored, especially regarding credit access for lower-income households and the optimisation of the limits by banks. During the first two years following the introduction of the policy (up to the fourth quarter of 2021), the decrease in borrowing rates due to the accommodative monetary policy increased households' borrowing capacity and facilitated access to housing for all households, including lower-income ones, thereby fuelling a particularly dynamic market. Another driver was the major change in households' preferences following the first Covid-19 lockdown: their appetite for houses rather than apartments grew, and they increasingly opted for properties outside city centres. More recently, the acceleration in inflation and hike in borrowing rates has negatively impacted household demand for credit, and lower-income households are those facing the most stringent financing constraints. By targeting first-time buyers, whose income is lower on average, the flexibility margin has given banks the latitude to accommodate this new cycle and avoid disproportionately excluding such borrowers.