



ANALYSES ET SYNTHÈSES

 Housing finance in France in 2015

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Overview

- ❑ Activity on the residential property market recovered sharply in 2015, supported by long-term interest rates, which remained at historically low levels. On the existing homes market, the number of deals increased by 16% over the year, climbing above its long-term average, while sales gained 17.9% on the new homes market, building on the recovery that began in late 2014. The pick-up took place as prices for existing dwellings held steady in 2015; after previously falling for three years running, prices were 0.1% down nationwide, but 0.3% higher in Paris and 0.2% in the rest of France.
- ❑ Against this backdrop, new housing loans extended by French banks surged by 77.2% in 2015 according to *Banque de France* statistics. While the low interest rate environment continued to support loan transfers, there was also a fairly sustained upturn in new lending in other market segments, with an average increase of 20.3% according to monthly monitoring data gathered by the *Autorité de Contrôle Prudentiel et de Résolution* (ACPR – Prudential Supervision and Resolution Authority). This translated into a mild acceleration in the growth rate of outstanding loans, which rose from 2.3% at end-2014 to 4% at end-2015. As a result, housing loans to individuals were steady at just above 10% of the total assets of French banks.
- ❑ As in past years, the overall assessment of the risk exposure borne by banks on housing loans in France was broadly positive. Lending policies continue to be based primarily on borrower solvency rather than on the value of the financed property:
 - In a setting of persistently low interest rates, fixed rate loans rose to account for a record 96.7% of new lending as well as 88.2% of outstanding loans;
 - Loan transfers, which contributed to an accelerated decline in the average interest rate on outstanding housing loans by encouraging loans to be renewed at lower interest rates than those applied at origination, seemingly topped out at EUR 8.7 billion in September 2015, with monthly flows shrinking to a quarter of that level by March 2016 at EUR 2.3 billion;
 - The debt service ratio, which is measured by dividing the borrower's repayments by his/her income, continued to decline from the high of 31.6% reached in 2009, falling to 29.4% in 2015 – its lowest level since 2004;
 - Since virtually all loans are amortising loans and since the rate of amortisation for outstanding loans is accelerating with the decline in the average maturity of new loans, which is linked in turn to the fall in interest rates, banks look relatively well shielded against a price shock, with the loan to value (LTV) ratio for outstanding loans reaching 68.3% at end-2015;
 - Almost all loans are secured, most often by a credit institution or insurance company; moreover, guarantees provided by insurers continued their steady growth;
 - The cost of risk for housing loans fell by more than 15%, breaking with the uptrend in place since 2011.
- ❑ Notwithstanding the broadly favourable assessment, several issues deserve to be highlighted:
 - Average loan size continued to increase, pushing up the loan-to-income (LTI) ratio despite the decline in the debt service ratio: the average LTI ratio, which shows how many years of income the borrower would need to repay the loan, climbed from 4.25 to 4.33 between 2014 and 2015, returning to the peak of 4.34 years recorded in 2010;
 - With no marked improvement in the jobs situation, gross outstanding non-performing loans (NPLs) continued their post-crisis pattern of growth, although the pace eased compared with 2014. However, while they made

up an increased proportion of total outstanding housing loans, the share was slightly smaller than that observed in 2001 and considerably smaller than the share of NPLs in all non-bank lending.

- ❑ The ACPR is keeping a close watch on the regulatory changes currently being discussed within international supervisory bodies, which could challenge France's robust financing model for housing finance.

Keywords: housing loans to individuals, average loan amount, average maturity, loan-to-value ratio, debt service ratio, non-performing loans and provisions, cost of risk.

JEL codes: G21, R21, R31

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Preliminary comments

- ❑ This study is based on the information gathered through the 2015 annual survey by the General Secretariat of the ACPR (SGACPR) as well as on the ACPR's monthly monitoring of housing loan flows to individuals, which was set up in September 2011 and covers a sample of banks representing 96.3% of outstanding housing loans to individuals at 31 December 2015¹. The study also draws on additional external sources of information including the *Banque de France*, INSEE and the CGEDD (French sustainable development council).
- ❑ In 2015, the SGACPR deepened its analysis by adding a new questionnaire for the main housing loan guarantors (*Crédit Logement*, *Caisse d'Assurances Mutuelles du Crédit Agricole* (CAMCA; Crédit Agricole group), *Compagnie Européenne de Garanties et Cautions* (CEGC; BPCE group), *Parnasse Garanties* (BPCE group) and *Cautonnement Mutuel de l'Habitat* (CMH; Crédit Mutuel group)). It also contacted *Société de Gestion des Financements et de la Garantie de l'Accession Sociale à la Propriété* (SGFGAS) to obtain detailed information about the amount of State-guaranteed loans.
- ❑ As in 2014, several banks sent in additional or corrected information for previous years along with their responses to the 2015 questionnaire, which has helped to make a number of indicators more representative and to correct misreported information. Also, one institution is in the process of winding up its business and filed no information. As a result, some figures in the present study may differ from those published last year.

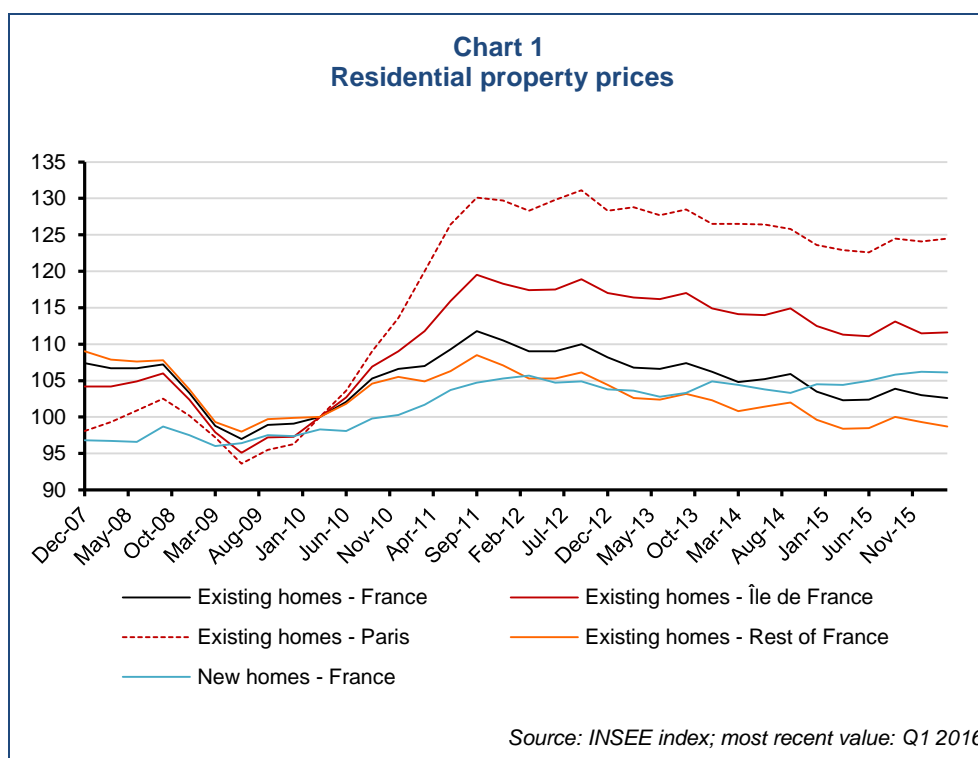
¹ BNP PARIBAS, BNP PARIBAS PERSONAL FINANCE, SOCIETE GENERALE, CREDIT DU NORD, CAISSES REGIONALES DE CREDIT AGRICOLE, LCL, CAISSES D'ÉPARGNE, BANQUES POPULAIRES, CREDIT FONCIER DE FRANCE, CREDIT MUTUEL, CIC, CREDIT IMMOBILIER DE FRANCE, HSBC FRANCE and LA BANQUE POSTALE.

1. Main features of the housing loan market

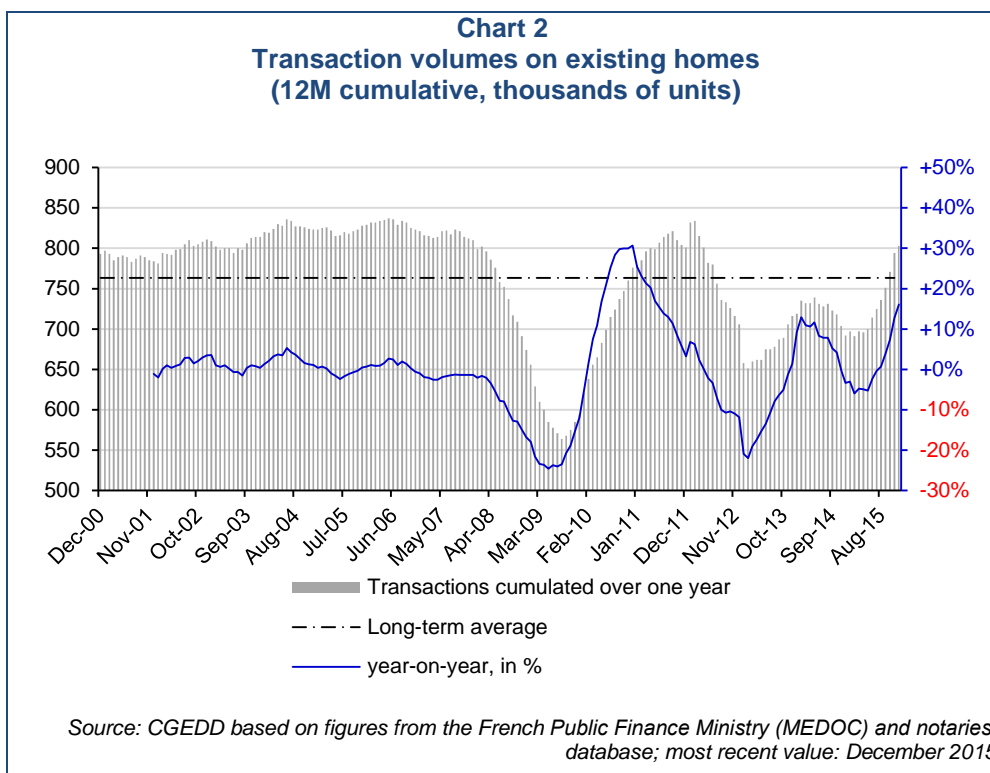
1.1. Prices stabilised and deals recovered

Prices softened marginally on the existing homes market in 2015, falling by 0.1% (Chart 1). However, the overall result masked contrasting trends: while prices fell 0.8% year-on-year in the Île de France region, they rose once again in Paris, by 0.3%, and also in the rest of France, where they were up by 0.2%. Furthermore, by end-2015, prices were still sitting well above pre-crisis levels, with a gap of almost 21% in Paris and 5.3% in the Île de France region. Price firmed everywhere in Q1 2016, with 0.5% growth nationwide and a larger 1.1% increase for Paris.

Prices on the new homes market ended the year 1.6% higher, after marking time in 2014.



Stable prices were accompanied by renewed business on the existing homes market: deal numbers recovered strongly, leaping by 16% to 803,000 sales in 2015 from 692,000 in 2014 and overtaking the long-run average of 763,337 transactions. The increase was still ongoing during the early months of 2016 (Chart 2).



1.2. Housing loan flows increased and pace of growth in outstanding loans accelerated

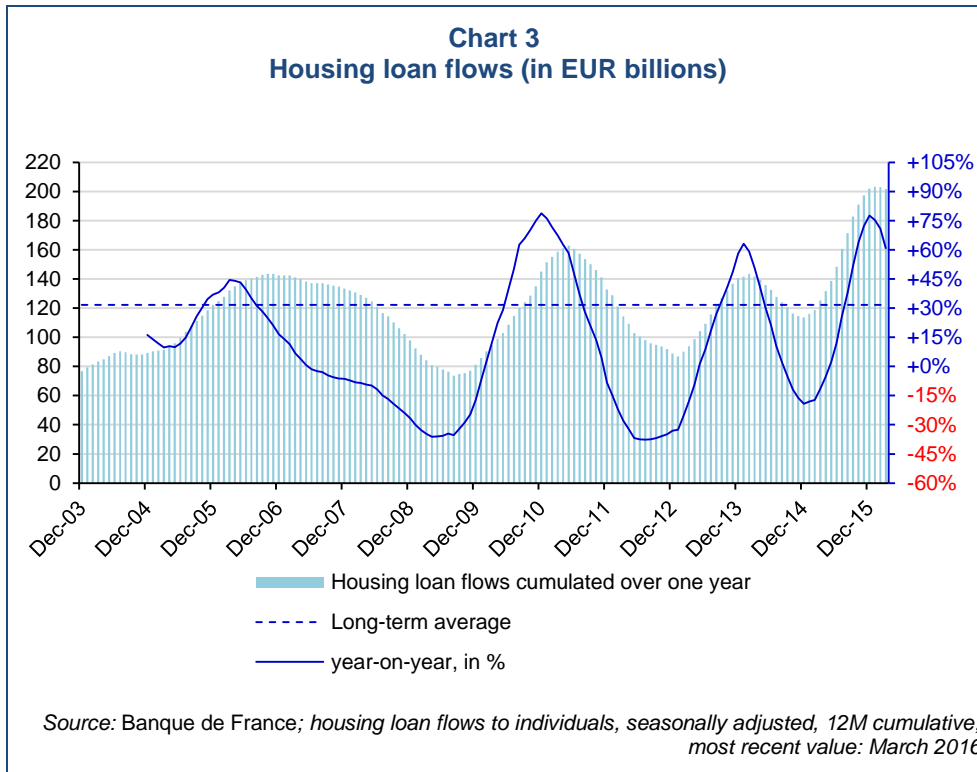
Note

Loan transfers: transaction whereby a bank buys a borrower's loan from another bank. As loan transfers are followed by the provision of a new loan to the borrower (by the bank purchasing the original loan), they are included under gross housing loan flows measured by the ACPR. They do not, however, affect the net balance of housing loan flows² as the new loan is immediately offset by the repayment of the borrower's original loan to the other bank.

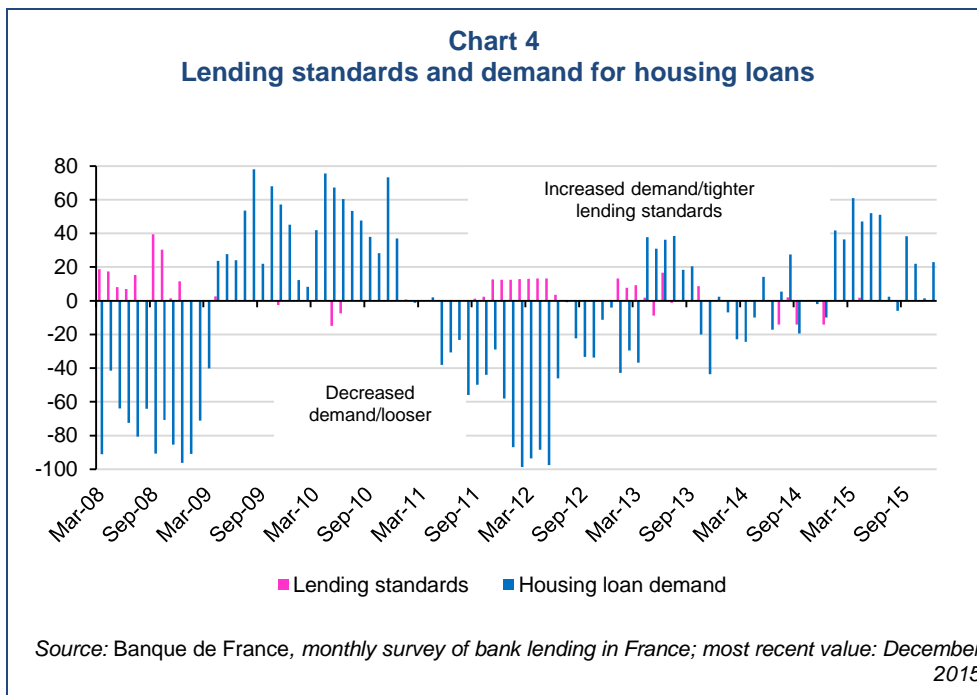
Renegotiation: transaction whereby the borrower obtains new terms on an original loan, notably a new interest rate. Renegotiations do not result in the provision of a new loan and therefore do not have to be reported by banks as part of the ACPR's monthly monitoring of housing loan flows. They are however included in housing loan flows measured by the *Banque de France* as they lead to the creation of a new contract.

The upturn in the number of deals was accompanied by a rebound in housing loan flows ([Chart 3](#)). In December 2015, according to *Banque de France* statistics, new lending rose 77.2% year-on-year to reach its highest level since 2003, standing at EUR 202.2 billion, compared with EUR 112.6 billion the previous year. However, the pace appeared to slacken in early 2016, with the annual growth rate easing back to 60.8% at end-March.

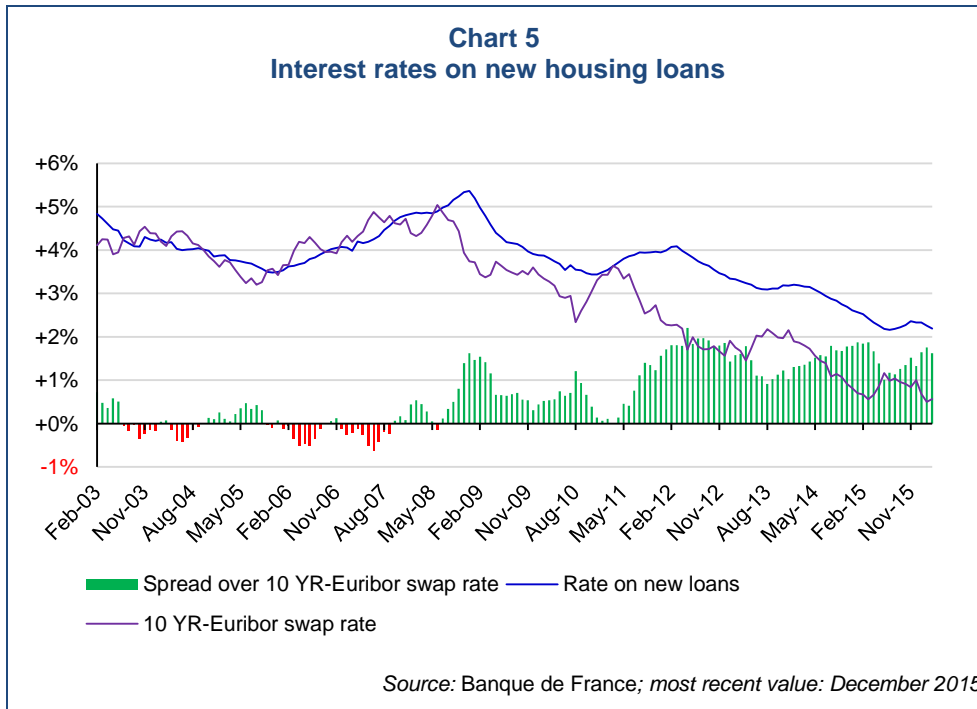
² Net lending for a given period is defined as new loan contracts less contractual or early repayments on existing loans.



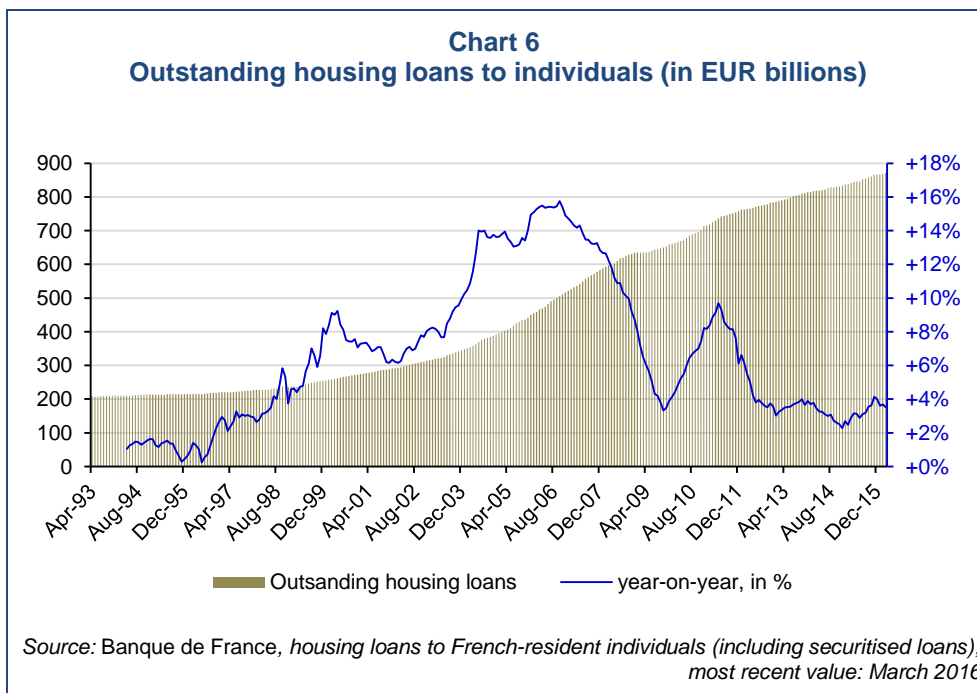
The increase in new lending was chiefly driven by strong demand for credit, which was back up at the immediate post-crisis levels seen in 2009 - 2010, and by a slight easing of lending standards (Chart 4).



Although the trend reversed somewhat at end-2015, the continued decline in interest rates on housing loans in connection with the fall in long-term interest rates is supporting the pick-up in new lending (Chart 5).



As a result, the outstanding stock of housing loans rose by 4% year-on-year, i.e. an acceleration of 1.7 percentage point (pp) relative to December 2014 (Chart 6). When securitised loans are included, total outstanding housing loans exceeded EUR 866 billion in 2015.

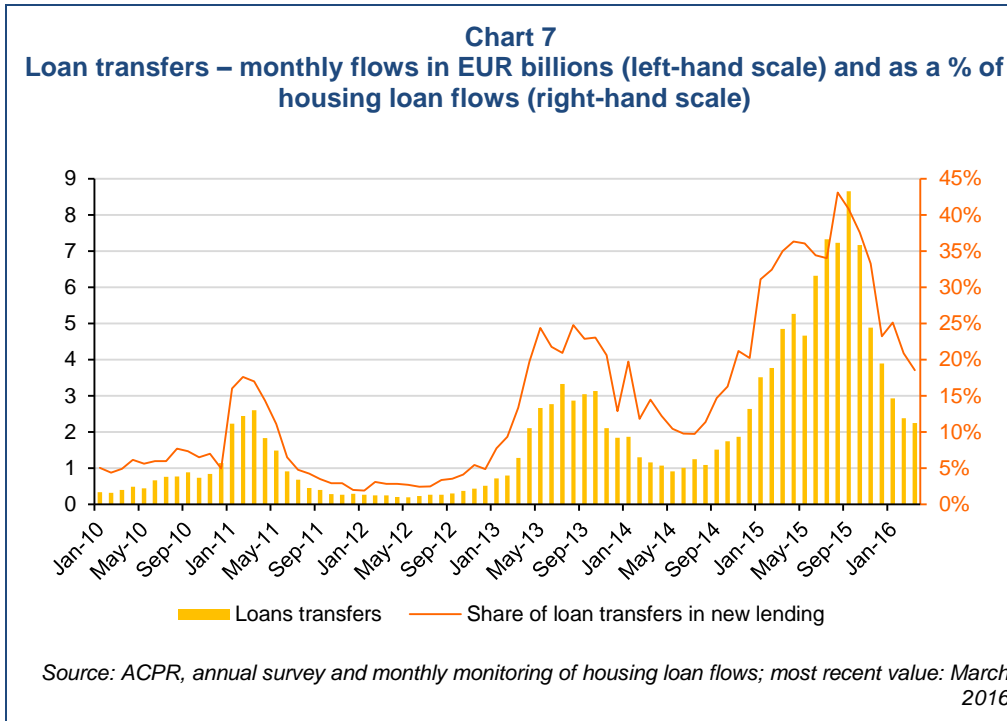


An analysis of data published by the European Banking Authority (EBA) last November as part of its 2015 EU-wide Transparency Exercise³ revealed that foreign banks have a tiny share of the housing finance market in France, with French banks accounting for 99.1% of outstanding loans reported at 30 June 2015.

³ <http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-transparency-exercise/2015/results>

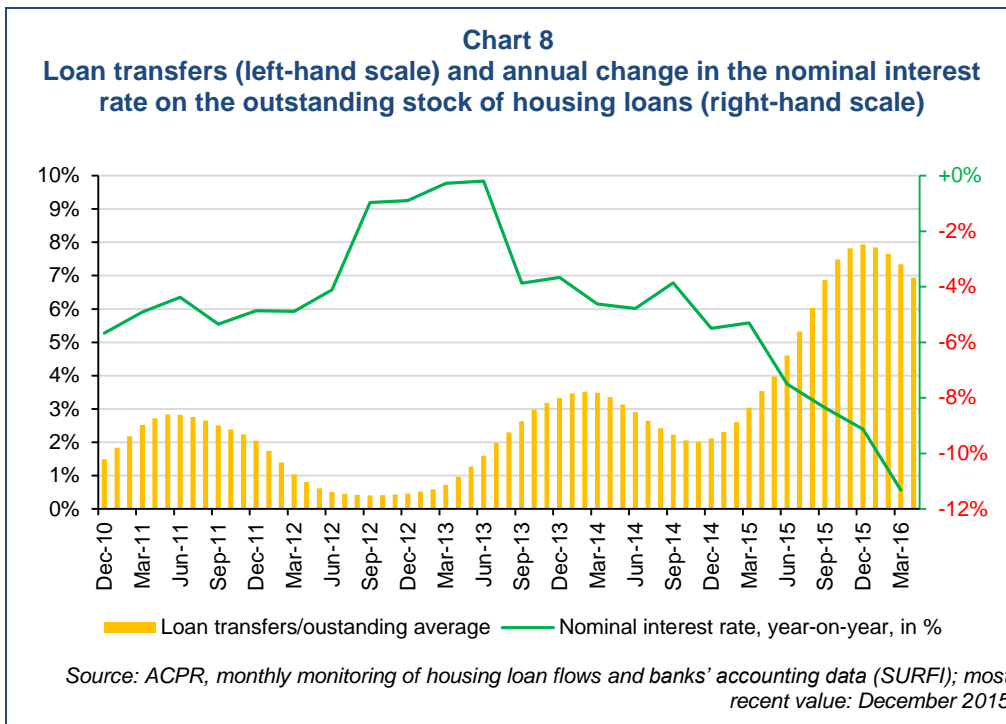
1.3. Loan transfers look to have peaked

In terms of monthly flows, loan transfers topped out at EUR 8.7 billion in September 2015. Their share has since diminished, in a trend that was still ongoing in early 2016 (Chart 7). The marked slowdown could point to the gradual depletion of outstanding loans available for renegotiation or tighter lending standards, which have however yet to feed through to the available statistics (cf. above).



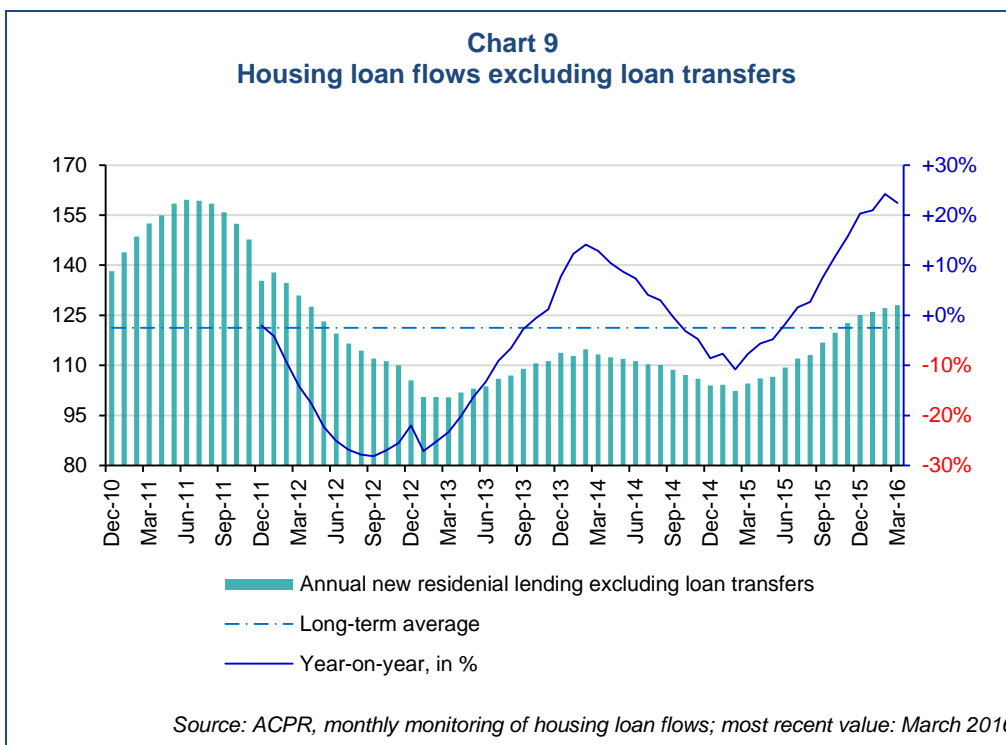
Sustained levels of loan transfers have been accompanied by an accelerated decline in the nominal interest rate on housing loans⁴ over the recent period (Chart 8). Since 2011, movements in the nominal interest rate have been closely and negatively correlated with the change in the share of loan transfers in the outstanding stock of loans. Although loan transfers initially impact banks' profitability positively because of early repayment penalties or negotiation fees, they exert a persistently negative effect on net interest margin over the long run.

⁴ Relationship between the amount of interest earned over the year and average outstanding housing loans.



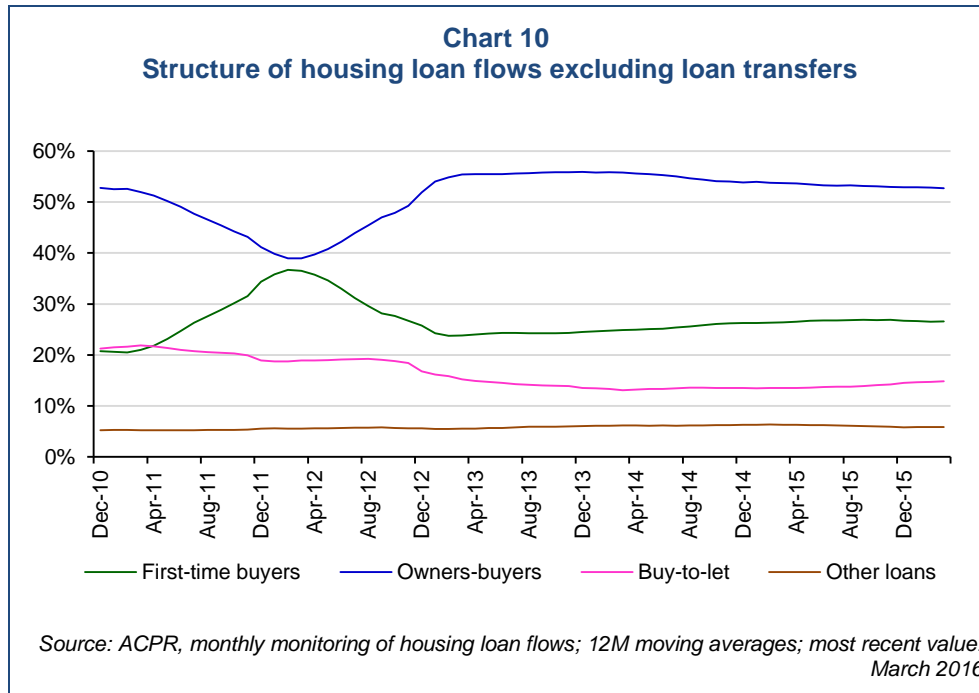
1.4. New lending excluding loan transfers increased strongly

Stripping out loan transfers, housing loan flows surged in 2015, exceeding its long-term average, although the trend appeared to lose some momentum at the beginning of 2016 (Chart 9). That said, 12M cumulative flows, at EUR 128 billion, were markedly below the values observed in mid-2011 (almost EUR 160 billion).

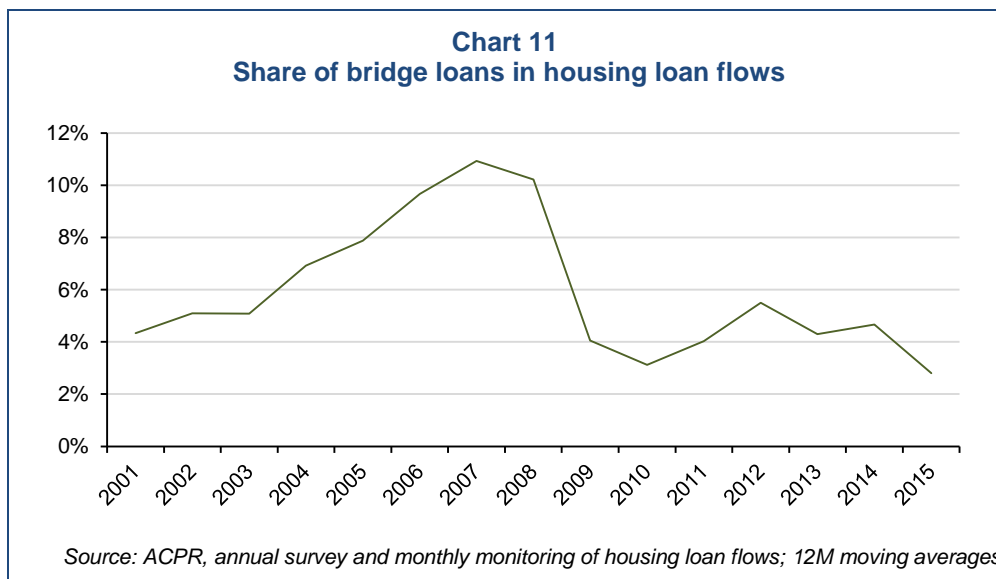


The structure of new lending has shifted gradually since 2012 (Chart 10). The share of owners-buyers, i.e. existing homeowners, shrank from 55.9% at end-2013 to 52.7% at end-March 2016. Between Q1 2013 and end-2015, the decline initially supported first-time buyers, whose share grew from 23.8% to 26.8%, before edging down to 26.6% in March 2016. Since mid-2015, buy-to-let investors have also benefitted, with their share growing to 14.8% of new lending in Q1 2016 compared with 13.5% the previous year. And after increasing weakly until

early 2015 to peak at 6.4%, other loans have since declined steadily, with their share reaching 5.9% at 31 March 2016.

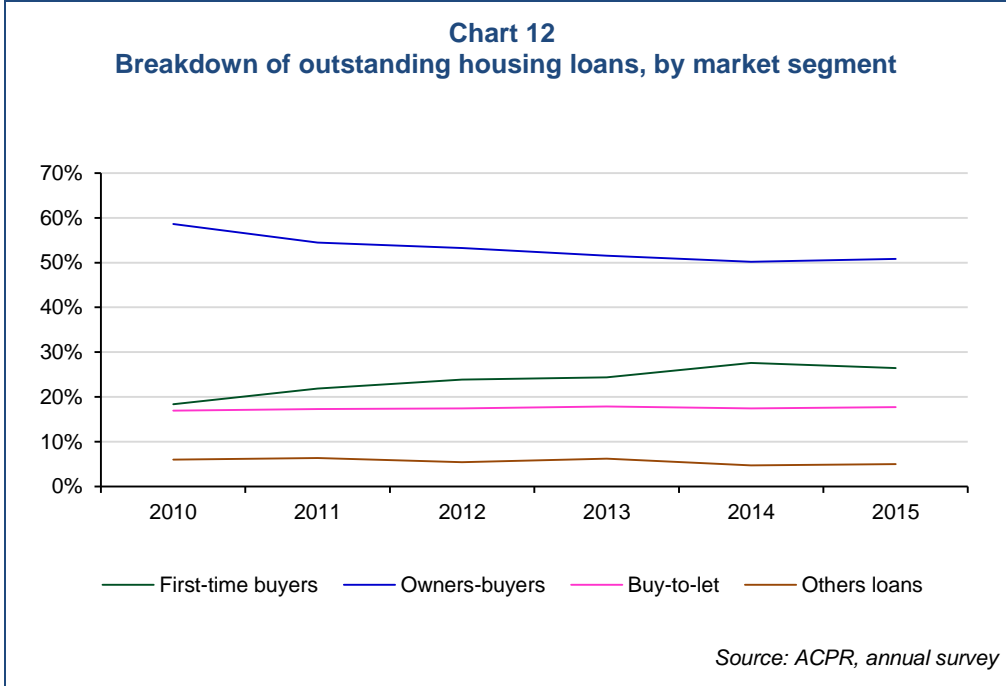


Finally, despite renewed activity on the existing and new homes markets, bridge loans hit a low in 2015 of just 2.8% of new lending compared with 3.1% in 2010 (Chart 11).



The structure of outstanding loans excluding loan transfers exhibited changes that mirrored those of new lending (Chart 12). Specifically, although it stabilised in 2015, the share of existing home owners has diminished since 2010, mainly to the benefit of first-time buyers. Also, the recent pick-up in activity on the buy-to-let segment has not yet fed through to outstanding loans in this segment.

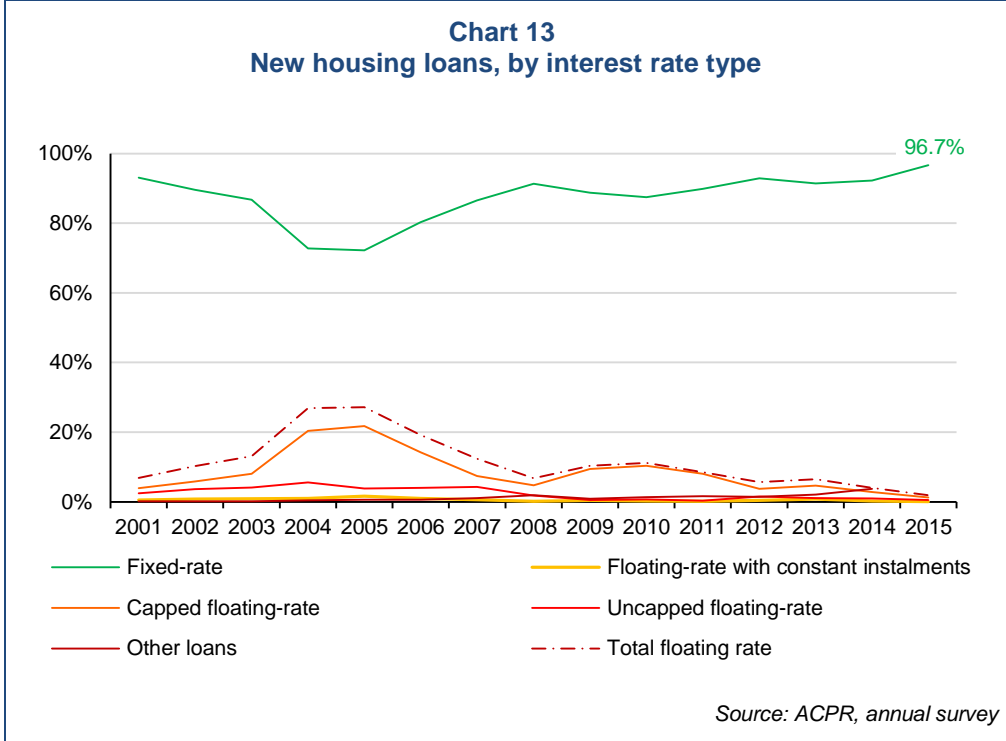
Chart 12
Breakdown of outstanding housing loans, by market segment



1.5. The decline in interest rates favours fixed rate loans

With interest rates on housing loans reaching record low levels, the share of fixed rate loans increased sharply once again, rising to 96.7% in 2015 from 92.3% in 2014 (Chart 13). Furthermore, slightly more than two-thirds of floating rate facilities taken out in 2015 were capped to protect borrowers against large rate increases. Other loans, which include loans with adjustable repayments and hybrid loans and which jumped sharply in 2014, made up just 1.4% of new lending in 2015.

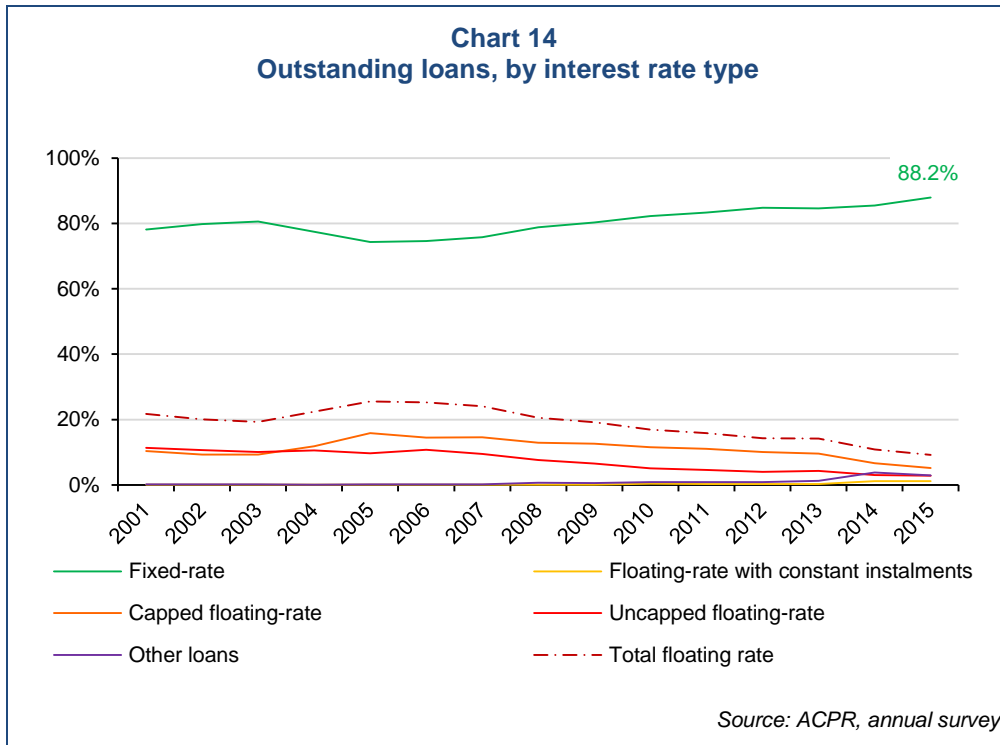
Chart 13
New housing loans, by interest rate type



Changes in the structure of outstanding loans by interest rate type echoed those in new lending. Although floating rate loans do have a bigger presence in the outstanding stock of loans, the share of fixed rate facilities nevertheless reached an all-time high in 2015 of 88.2% (Chart 14).

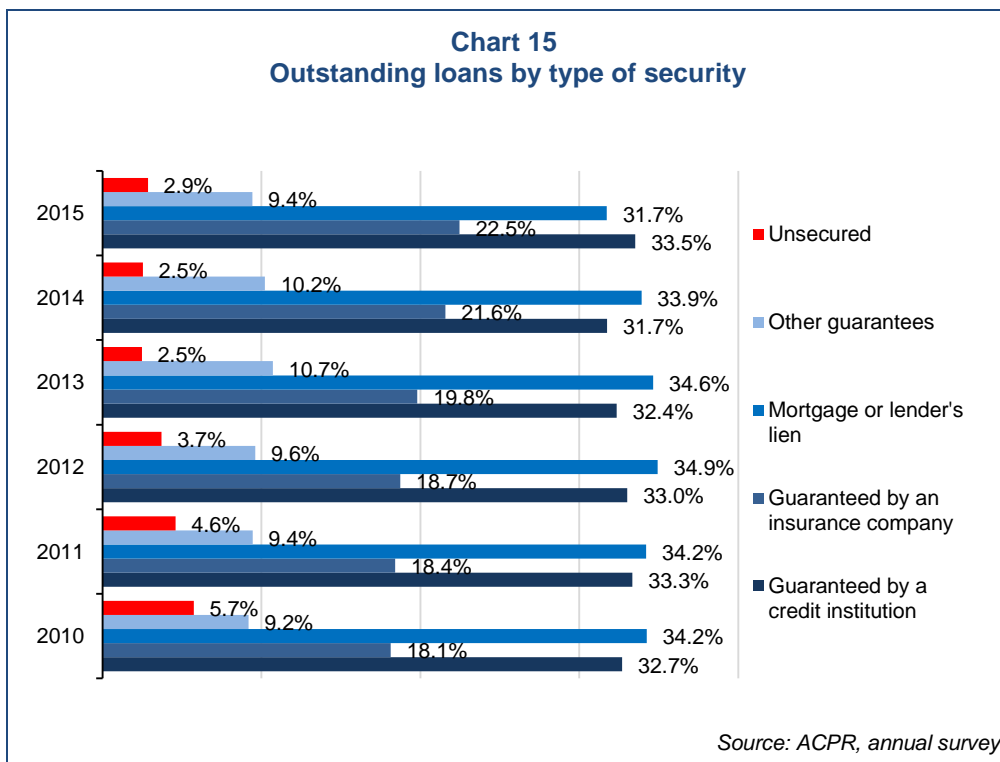
As in the past, most floating rate loans are capped, although capped loans have a smaller share of outstanding floating rate products (56.4%) than they do in new

lending. This may reflect the fact that borrowers are currently benefitting from ultra-low reference rates.



1.6. Nearly all outstanding loans are secured

Despite a small increase in unsecured loans (2.9% compared with 2.5% the previous year), nearly all housing loans are secured (Chart 15). Guarantees continue to be the most widely used option, and their share of lending increased from 53.3% to 56% as the proportion of guarantees provided by insurance companies continued to grow, following a trend in effect since 2010. Meanwhile, the share of loans guaranteed by a mortgage or lender’s lien fell for the second year running, shrinking to 31.7%.

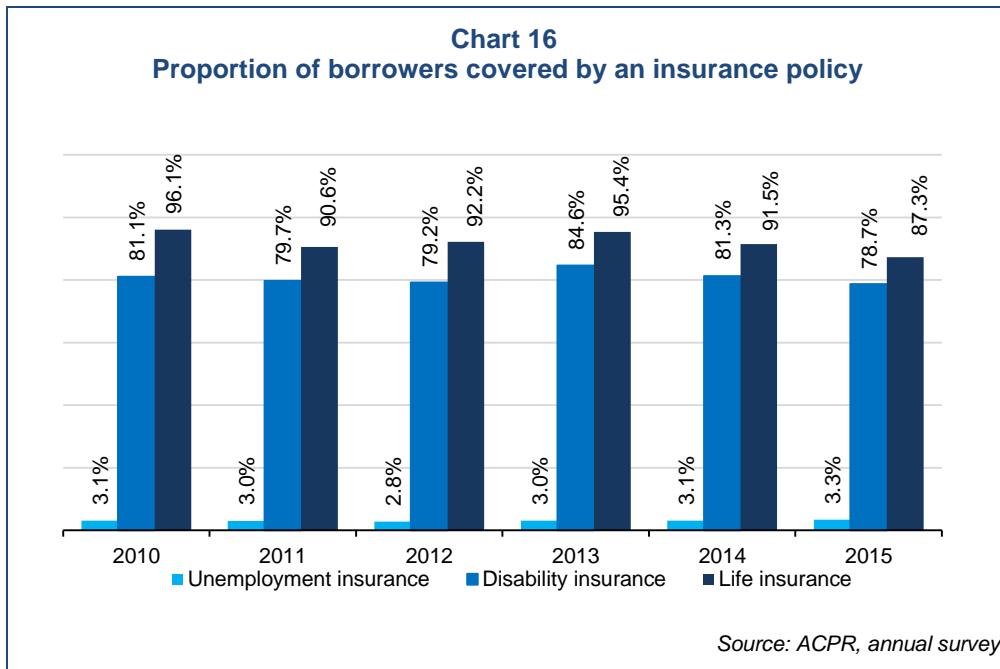


Guarantees provided by credit institutions include those provided by *Crédit Logement*, which provides guarantees for most of the market's banks, and CMH, which guarantees facilities issued by the *Crédit Mutuel* group exclusively.

Guarantors operating with insurance company status essentially comprise CEGC and CAMCA, which are specific subsidiaries of mutual groups.

Other guarantees accounted for less than 10% of the outstanding loan stock and include, for example, personal guarantees, FGAS guarantees, and mutual guarantees for civil servants.

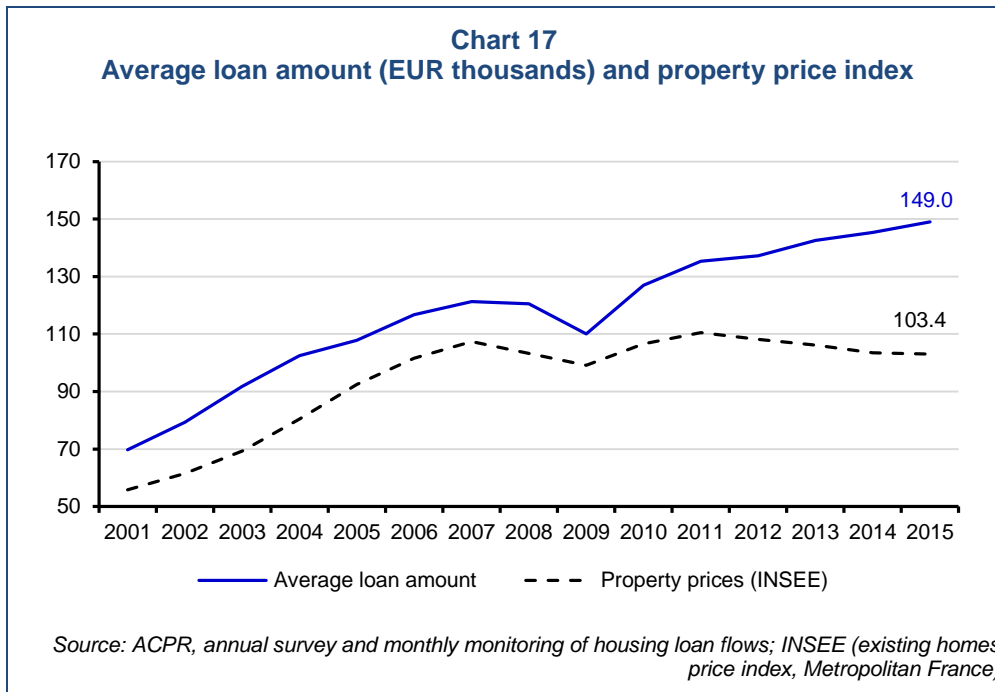
Furthermore, when they take out a loan, borrowers also purchase personal insurance, chiefly against death or disability (*Chart 16*). Coverage rates declined somewhat in 2015. Job loss insurance continues to account for a tiny share.



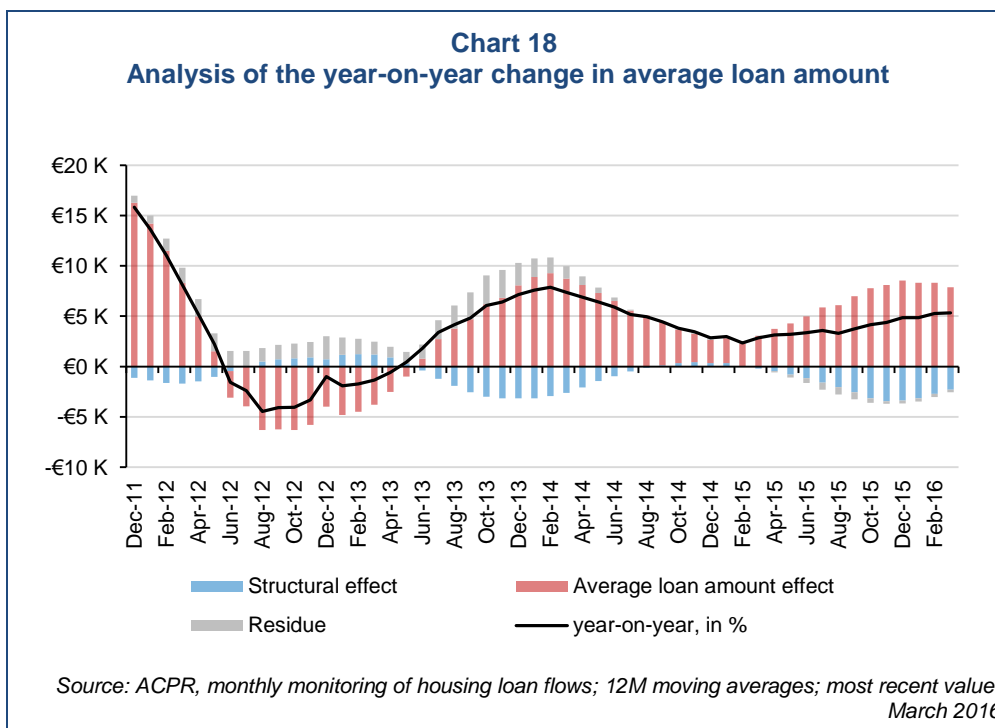
2. Borrower risk profile

2.1. Average loan size continued to grow

The average loan amount rose in 2015, reaching EUR 149,018, or EUR 3,705 (2.6%) more than in 2014, and continued to move in the opposite direction to property prices (Chart 17).

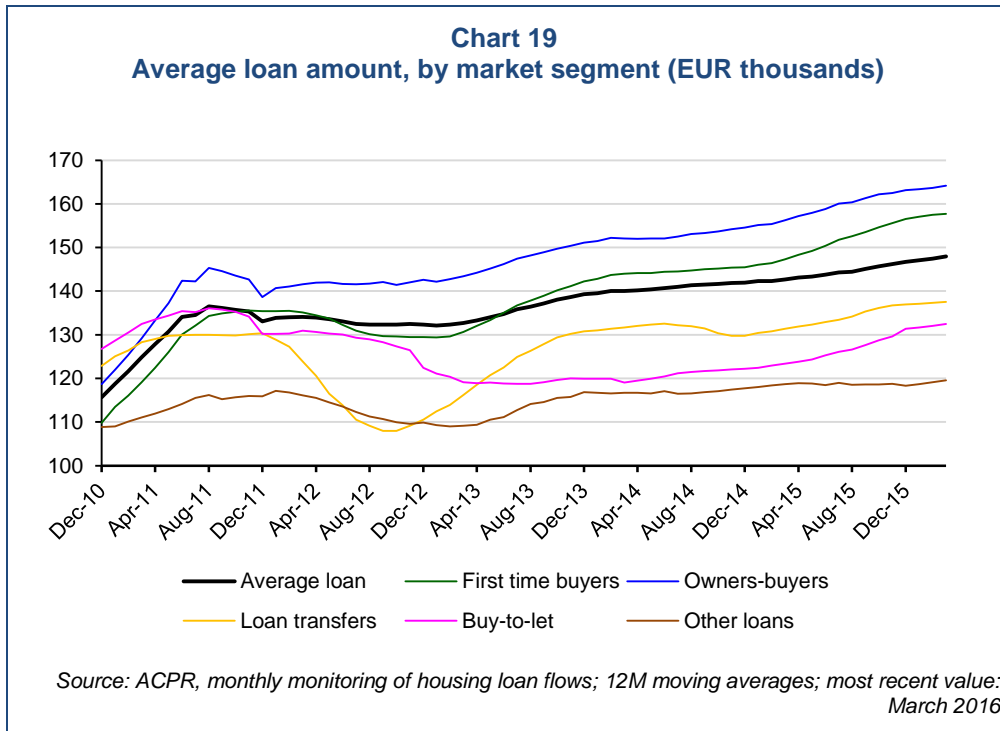


The increase in the average loan was essentially attributable to across-the-board growth on virtually all market segments (“average loan effect” in the chart below). The rise was tempered by the increase in the share of loan transfers, whose average loan amount is lower than the overall average (negative “structural effect”; see Chart 18).

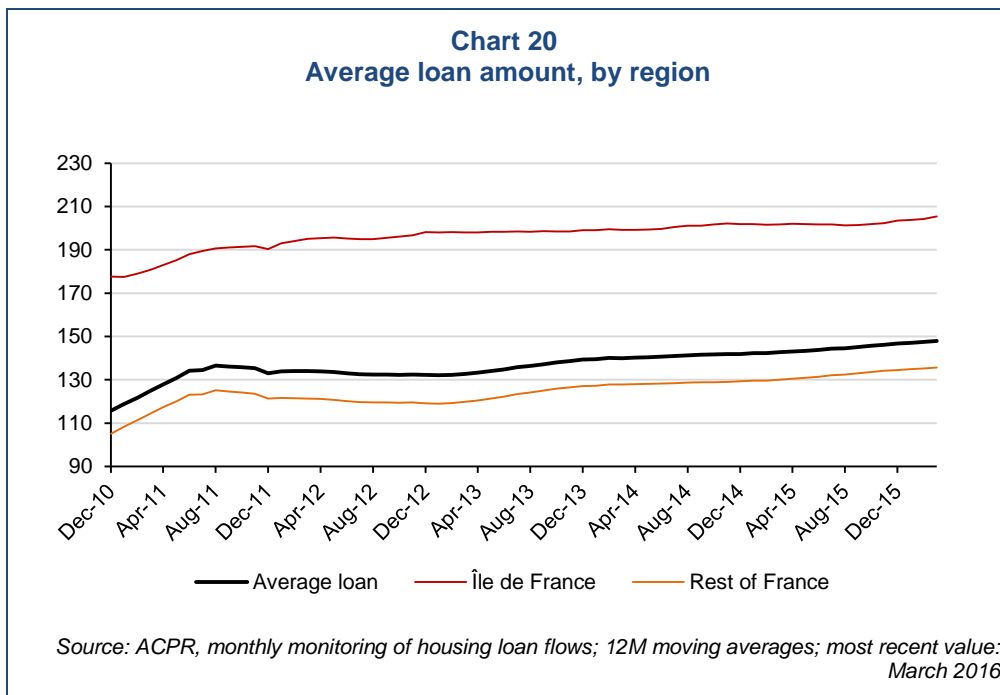


Not including other loans, whose average amount was roughly unchanged, average loan size increased sharply across all other segments (Chart 19).

Year-on-year, it increased by 7.6% for first-time buyers, 7.2% for buy-to-let investors, and 5.5% for owners-buyers and loan transfers.



Average size grew more strongly in the rest of France (4.1%) than in Paris (0.8%; [Chart 20](#)). However, in Paris, the average loan stood at approximately EUR 204,000 compared with EUR 135,000 elsewhere in the country.



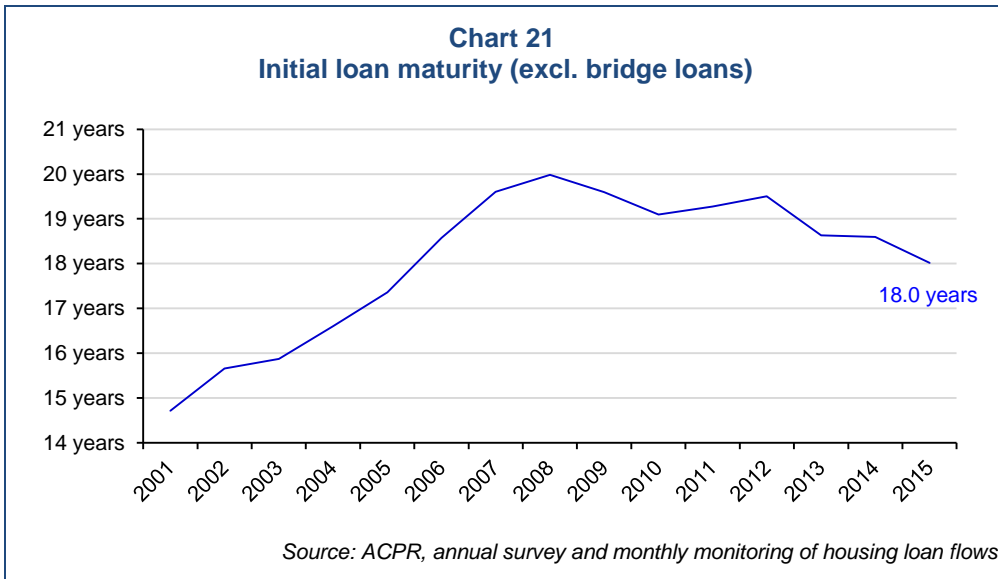
2.2. Average maturity continued to decline

Note

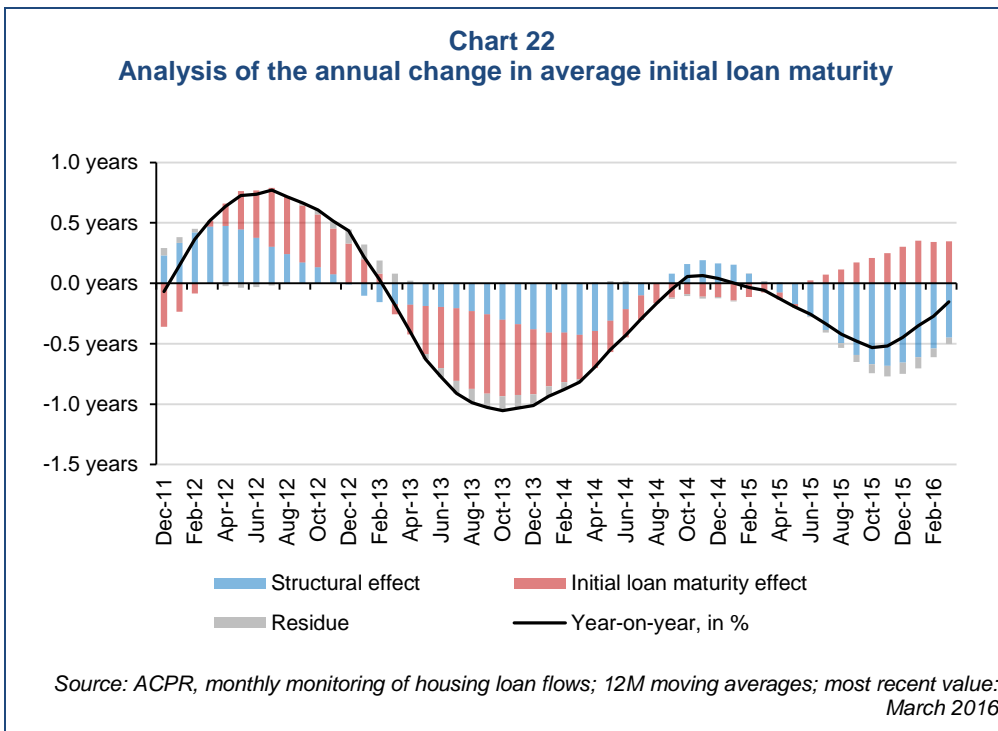
Initial maturity: for a given loan vintage, this is the average of all initial maturities as set up in the lending contract, weighted by the outstanding loan balance.

Residual maturity: remaining expected life of the loan until its expiry date, as set up in the lending contract.

Initial maturity has declined almost continually since peaking at 20 years in 2008 (Chart 21). It reached 18 years in 2015, or six months less than in the previous year.

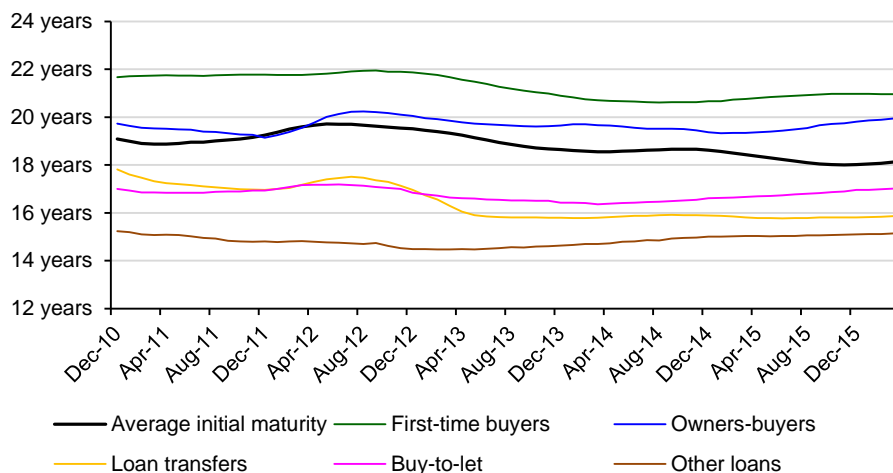


However, the decline in average initial maturity chiefly reflects a structural effect (Chart 22) and especially the impact of the sharp increase in loan transfers, whose initial maturity is relatively shorter than that of most other segments.



Changes in initial maturity on the individual segments pushed overall average maturity up (positive “maturity effect”): although it shortened by one month for loan transfers, initial maturity increased by five months for owners-buyers, four months for first-time buyers and buy-to-let investors and one month for other loans (Chart 23).

Chart 23
Initial loan maturities (excl. bridge loans), by market segment



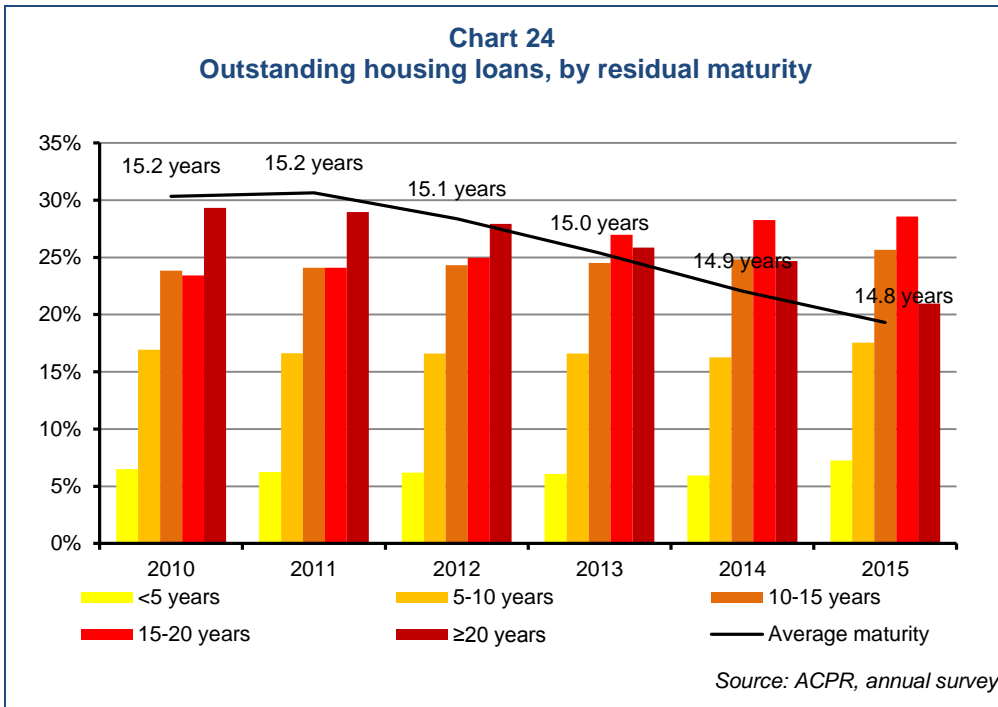
Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

A detailed analysis of the information provided by banks reveals that:

- seven did not offer loans with maturities of over 25 years, or where they did, such loans accounted for no more than 1% of their new lending;
- one bank stood out from the rest because 18% of its new loans carried maturities of more than 25 years; these loans were chiefly advanced to first-time buyers aged 25-45 and earning income of close to double minimum wage.

Since 2012, initial maturities have been very similar in the Île de France region and elsewhere in France; while there was a decline between 2014 and 2015, maturities began rising again towards the end of the year in a trend that gathered pace in early 2016 in both geographical areas.

Residual maturity continued the downward trend observed since 2011 to reach 14.8 years in 2015, driven down particularly by the 3.7 point decline in the share of outstanding facilities with a residual maturity of over 20 years and by the rise in outstanding loans with a residual maturity of less than ten years (Chart 24). Another contributing factor was unquestionably the accelerated pace of loan transfers and renegotiations, as borrowers took advantage of low interest rates to shorten the remaining term of their loans. Note that the curve's downward shift relative to the 2014 analysis is due to the fact that one bank that had previously reported residual maturity of over 18 years did not provide any data.

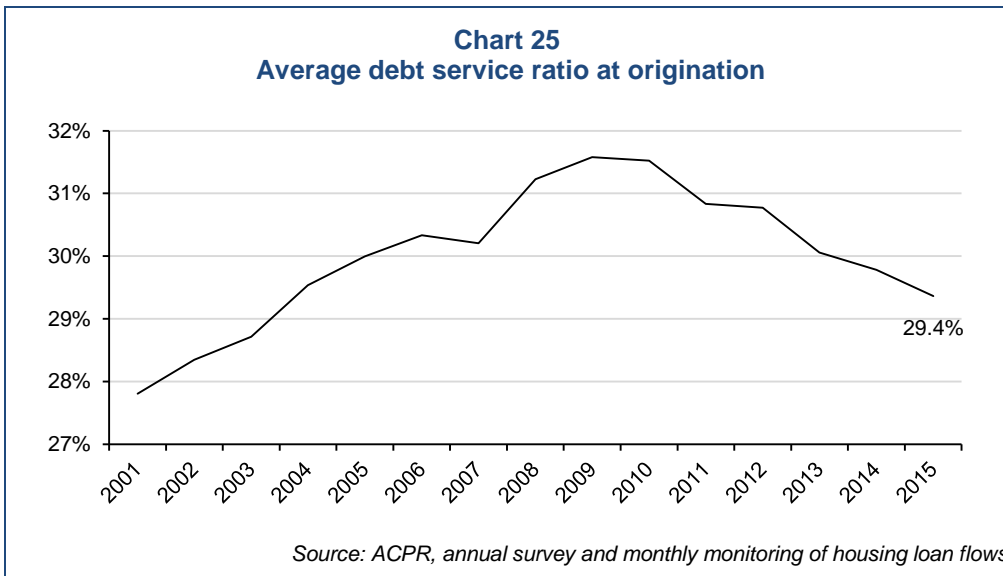


2.3. Debt service ratios continued to decline

Note

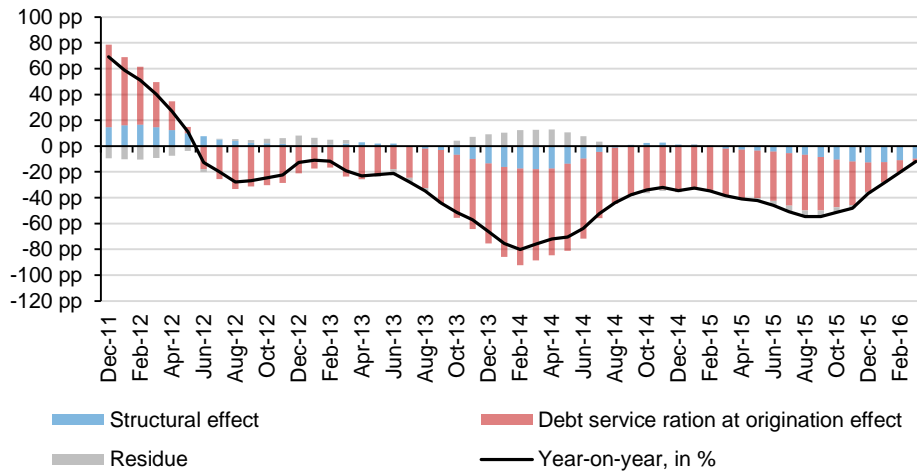
The debt service ratio at origination is calculated by dividing all of the borrower's regular outgoings (including all loan repayments) by his/her gross income.

The average debt service ratio was 29.4% at end-2015, below its 2004 level of 29.5% (Chart 25).



The decline in the average debt service ratio at origination chiefly reflects an across-the-board decrease (negative “debt service ratio effect”), with changes to the structure of new lending amplifying the trend slightly (Chart 26).

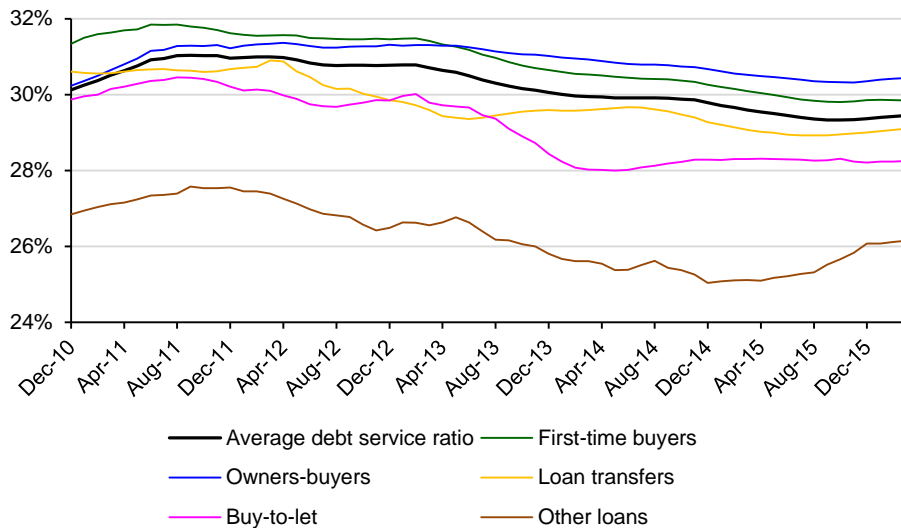
Chart 26
Analysis of the year-on-year change in average debt service ratio at origination



Source: ACPR, monthly monitoring of housing loan flows; most recent value: March 2016

The debt service ratio at origination fell in 2015 for the three main segments (first-time buyers, owners-buyers and loan transfers) and settled at around 28.2% in the buy-to-let segment (Chart 27). Other loans, which mainly involve purchases of secondary residences, rose by 0.6 pp at the end of the year.

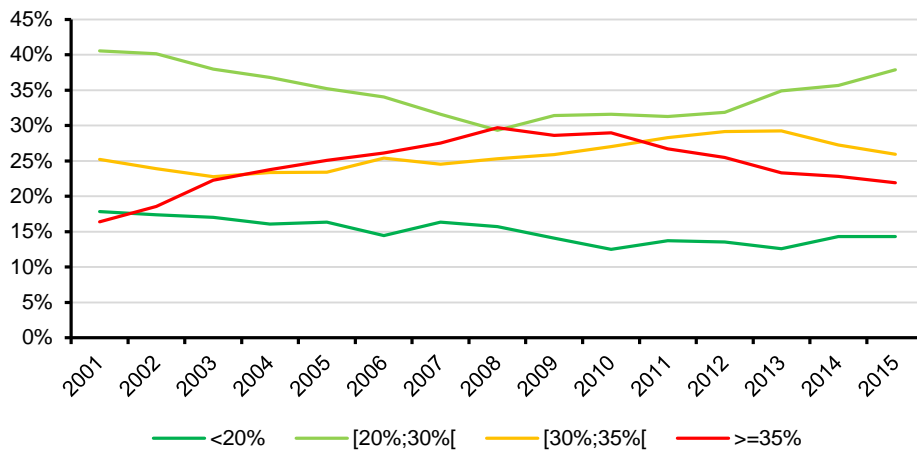
Chart 27
Debt service ratio, by market segment



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

The share of borrowers whose debt service ratio exceeds 35% has decreased steadily since 2008 and fell by one point year-on-year to 21.7% at end-2015 (Chart 28). Borrowers with a ratio of between 20% and 30% were up 2.3 pp relative to December 2014 to make up 38.1% of the total, while the share of borrowers with a debt service ratio of below 20% was more or less unchanged at 14%.

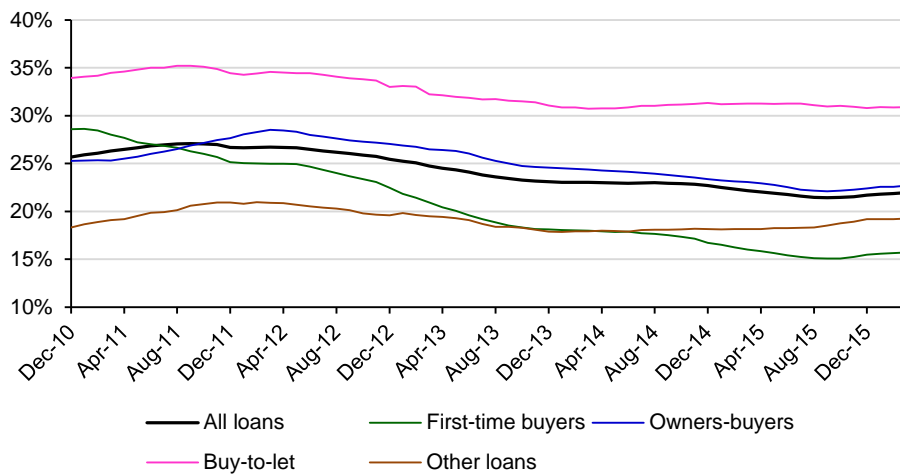
Chart 28
Share of new lending, by debt service ratio



Source: ACPR, annual survey and monthly monitoring of housing loan flows

The buy-to-let segment again had the highest proportion of borrowers with a debt service ratio of over 35% and showed no appreciable change in 2015. Conversely, the proportion of such borrowers declined among first-time buyers and owners-buyers, while increasing in the other loans category (Chart 29).

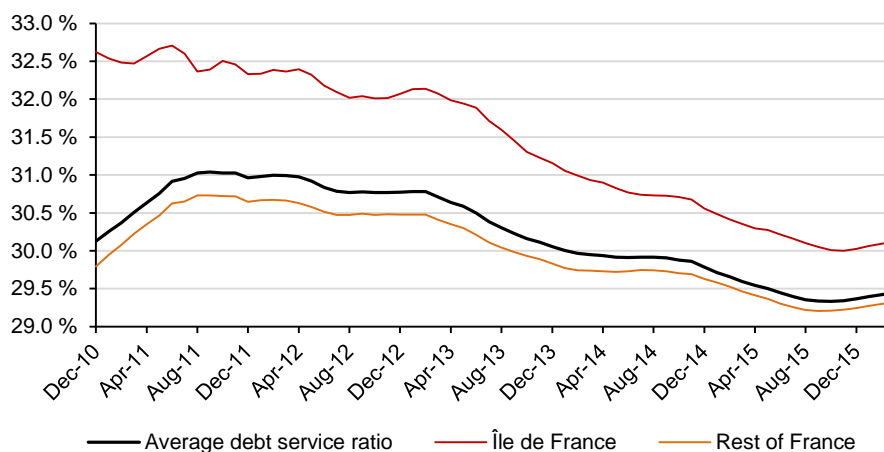
Chart 29
Share of new loans with debt service ratio of over 35%, by market segment



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

The debt service ratio trended downwards in all regions in 2015, although a reversal was noted at the end of the year (Chart 30). The ratio was about 0.8 pp higher in the Île de France region throughout the year.

Chart 30
Average debt service ratio, by region



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

2.4. Average income increased slightly

Note

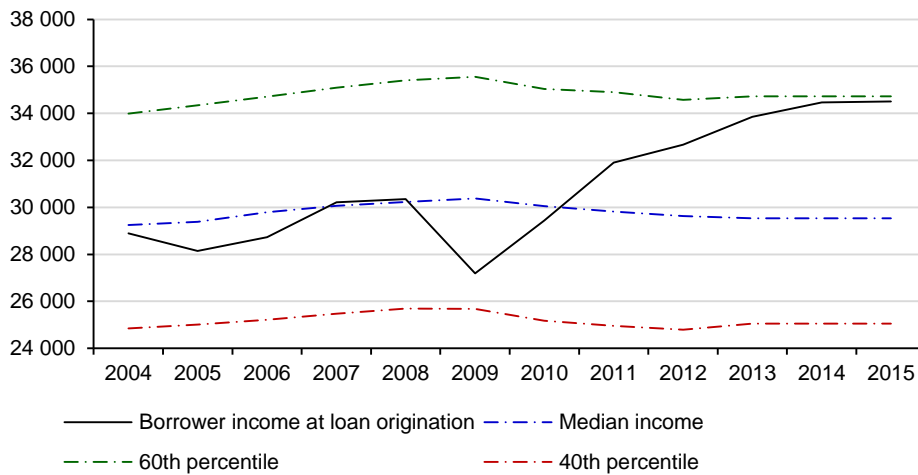
Average borrower income at origination is estimated using the following proxy method:

- First, an estimate is made of the total repayment due in a given year on an average-sized loan with an average initial maturity and an average interest rate; in 2015, based on a loan of EUR 149,018 with an initial maturity of 18 years and a fixed interest rate of 2.3%, the total repayment due over the year is EUR 10,110;
- Second, using this repayment amount and the average debt service ratio, it is then possible to calculate the average borrower income at loan origination; in 2015, based on an average debt service ratio of 29.4%, average initial borrower income was EUR 34,428.

Although average income has increased since 2010, the growth rate slowed between 2014 and 2015 from 1.4% to 0.6%, taking income to EUR 34,428 (Chart 31). Average income is thus very close to the 60th percentile⁵.

⁵ Most recent year for which data are available: 2013

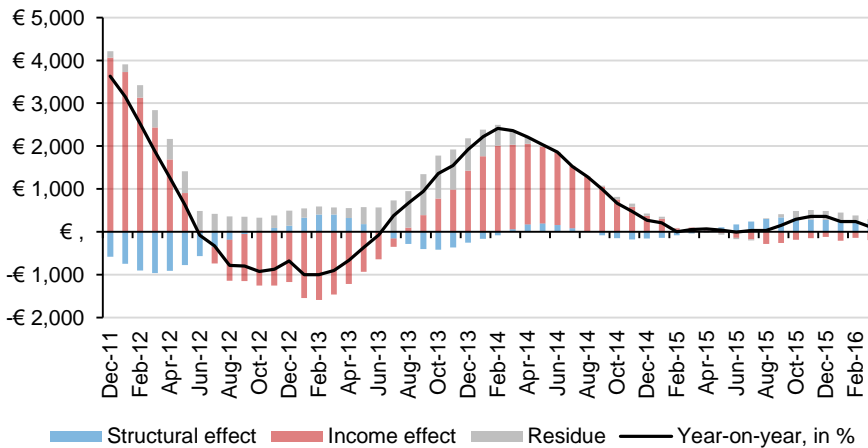
Chart 31
Average borrower income at origination, in euros



Source: Banque de France; INSEE; ACPR, annual survey and monthly monitoring of housing loan flows

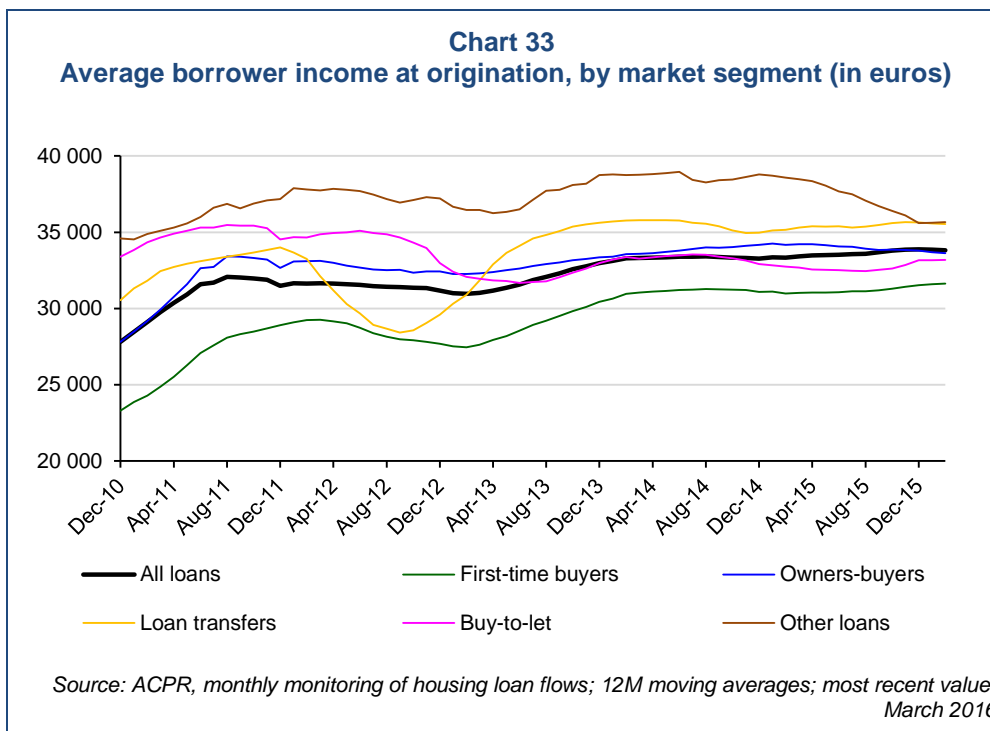
A detailed analysis of the change in average borrower income shows that it primarily reflects a shift in the structure of new lending, with client segments featuring higher-than-average incomes, particularly the loan transfer segment, being more represented in 2015 (Chart 32).

Chart 32
Analysis of the year-on-year change in average borrower income at origination

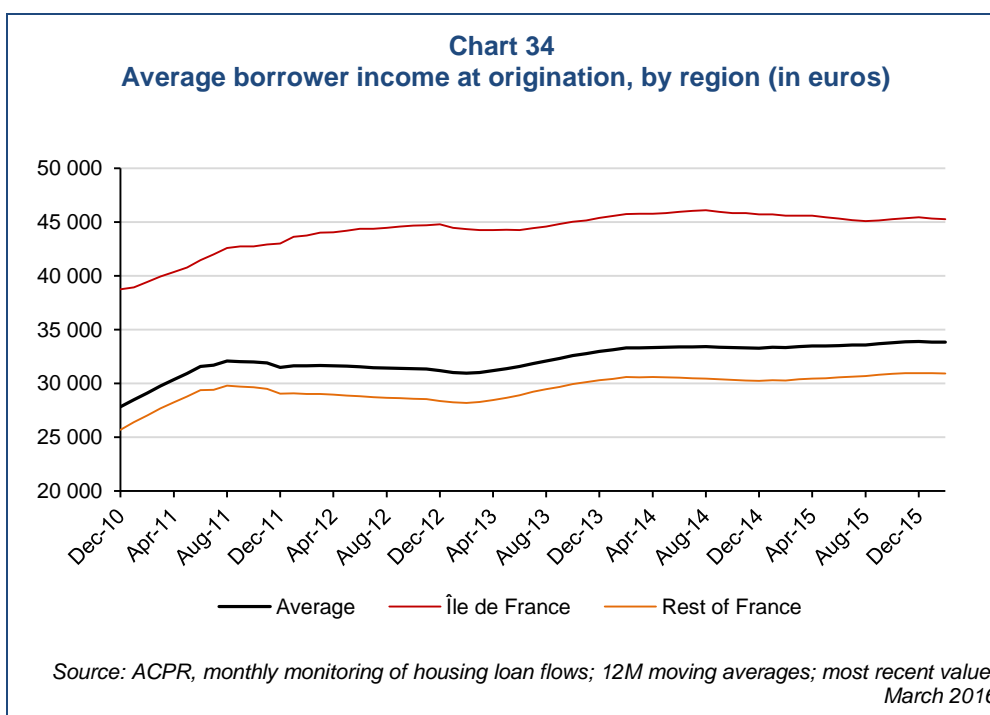


Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

With the exception of other loans, which decreased by 8.2% between 2014 and 2015, income did not change greatly over the period, declining by 1.1% among owners-buyers and rising by 1.9% in the loan transfers segment (Chart 33).



While average income in the Île de France region fell by 0.6% in 2015, it rose by 2.4% elsewhere in France; in both cases, however, income levelled off in Q1 2016 (Chart 34).



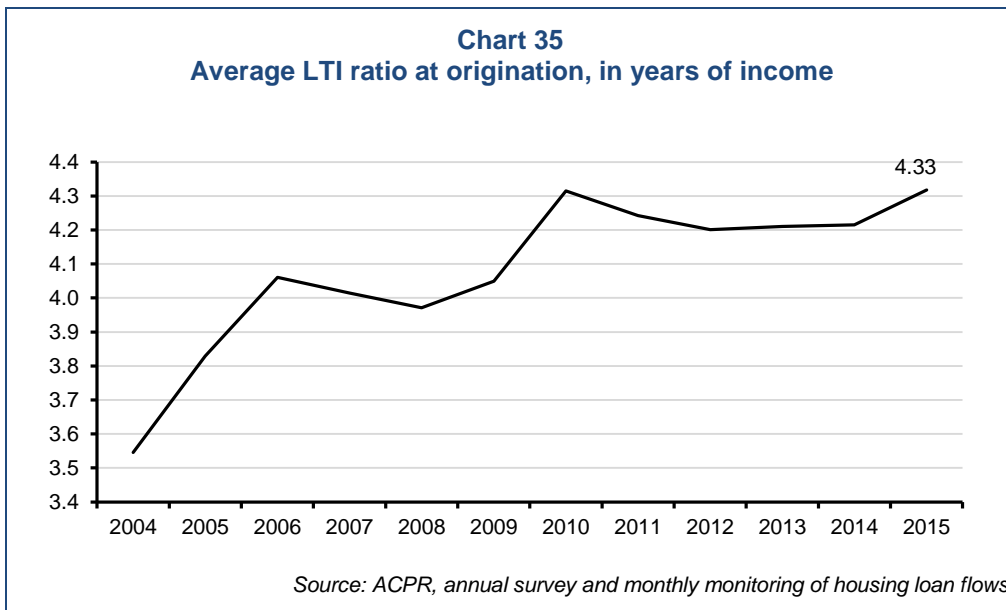
2.5. LTI at origination showed an increase

Note

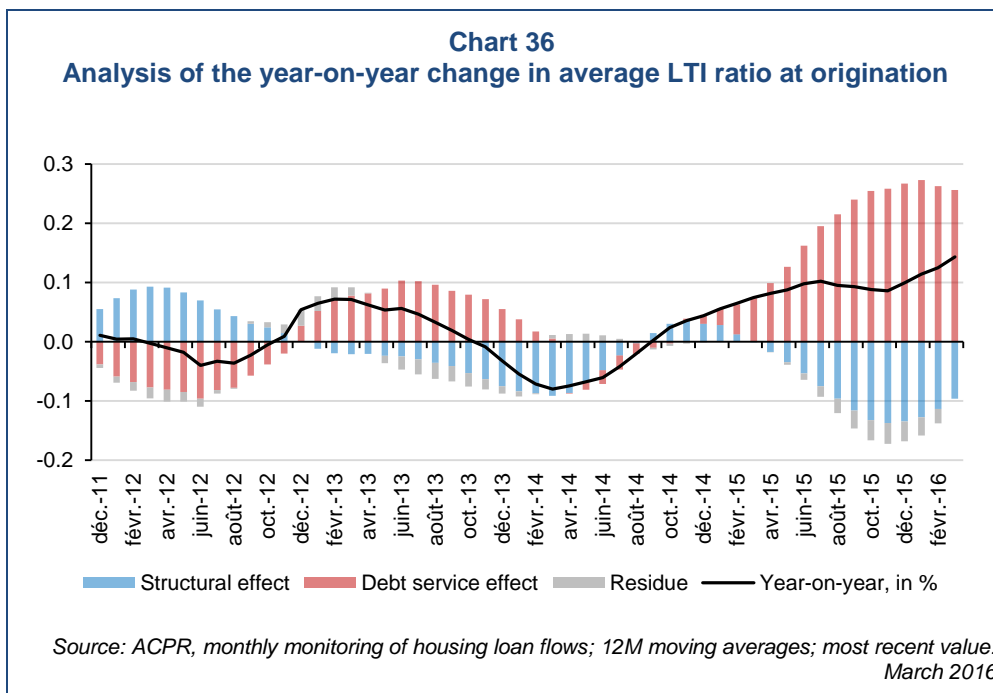
The loan-to-income (LTI) ratio at origination is the ratio of the average initial loan amount to the borrower's estimated annual income at that date.

The LTI ratio thus shows how many years of income a borrower would need to repay a housing loan.

The average LTI ratio increased more sharply in 2015 than in 2014, reaching 4.33 years compared with 4.25 one year earlier. This took it back to its 2010 level of 4.34 years (Chart 35).

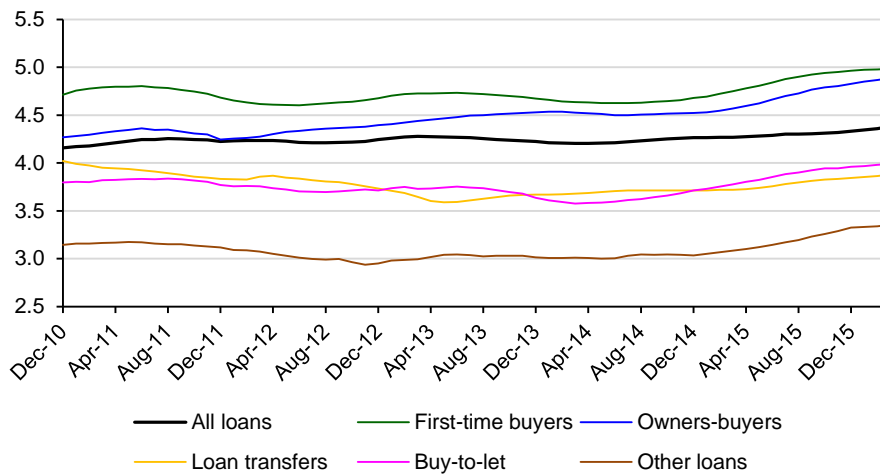


Despite bigger representation for segments with relatively lower LTI ratios (negative “structural effect”), the average LTI ratio at origination rose because LTI ratios went up across the market segments (Chart 36).



All segments reported increased LTI ratios in 2015. The rise was relatively contained in the case of loan transfers (0.13 year) but was around 0.3 year for all other loan types (Chart 37). This trend appeared to persist into early 2016, except among first-time buyers, whose LTI ratio stabilised.

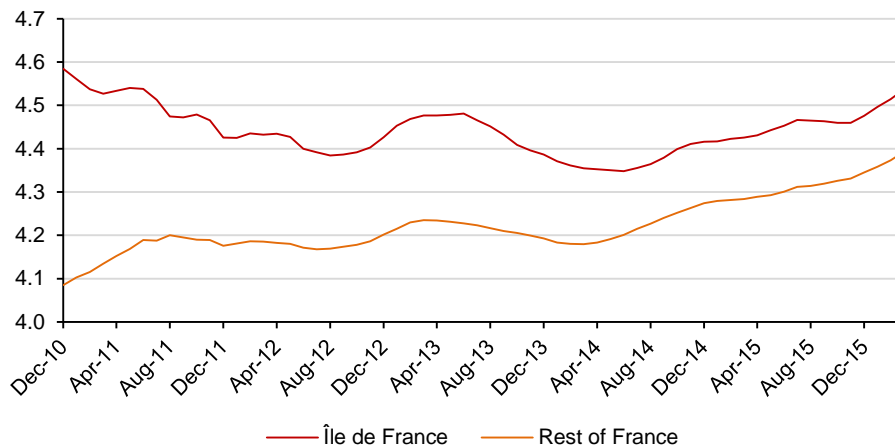
Chart 37
Average LTI ratio at origination, by market segment



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

LTIs were higher both in the Île de France region and elsewhere in France. The gap between the two regions has been fairly constant since mid-2014 (Chart 38).

Chart 38
Average LTI ratio at origination, by region



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

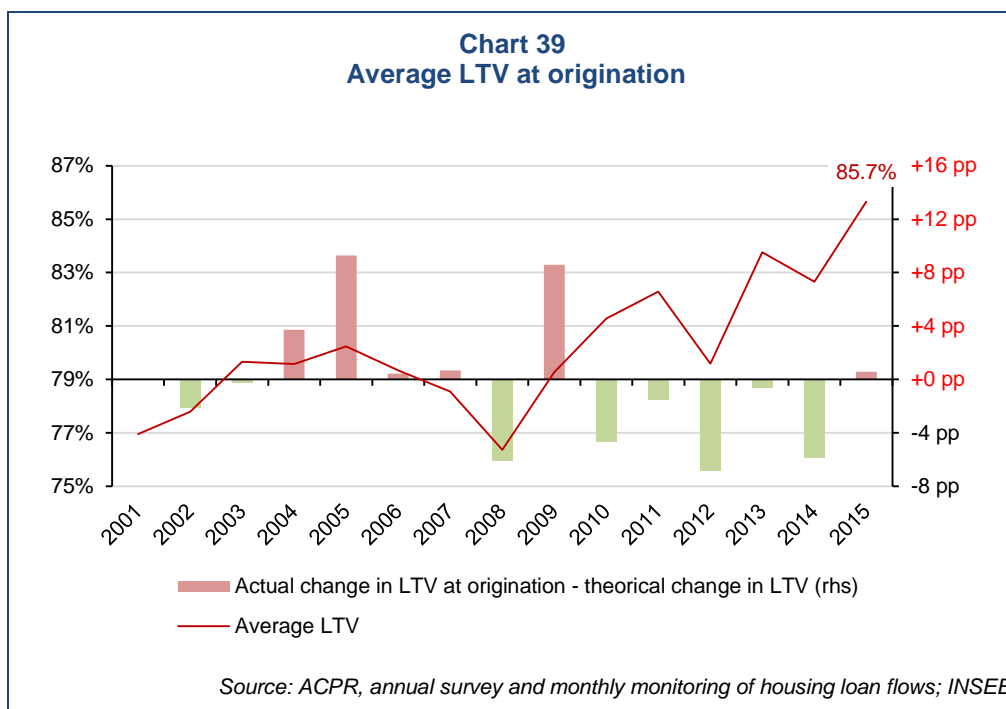
2.6. LTV on outstanding loan stock grew slightly

Note

The loan-to-value (LTV) ratio at origination is the ratio between the amount of the main housing loan and the price of the purchased property (excluding stamp duty and legal fees). It can also be defined as the difference between 1 and the borrower's down payment rate. Banks in the survey report the average LTV per transaction weighted by the amount of new housing loan approvals over the period.

During the life of the loan, the LTV is the ratio between the outstanding principal of the loan and the market value of the financed property. This information has been included in the ACPR annual survey since its revision in 2012.

After declining in 2014, LTV at origination resumed its growth and climbed to 85.7%, or 3 pp higher than the previous year (Chart 39). For the first time since 2010, the increase slightly outpaced the theoretical change measured on the basis of the changes in average loan amounts and property prices⁶.

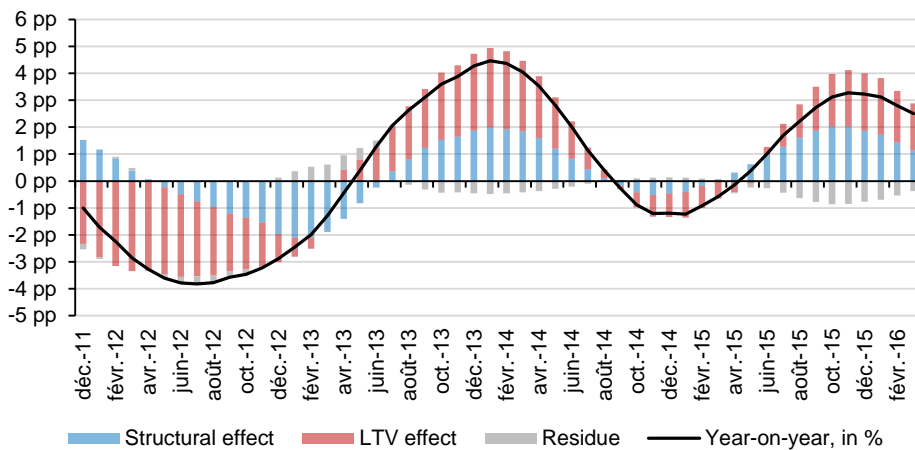


The increase in average LTV at origination can be ascribed both to the increase observed on most segments and to a shift in the structure of new lending to feature greater representation for segments exhibiting higher-than-average LTVs, particularly loan transfers (Chart 40), which continue to report an artificially high average ratio⁷.

⁶ The theoretical change in LTV (δ^*) is measured by the relationship between the change in average loan amount (L) and the change in the property price index (I): $\delta_n^* = (L_n/L_{n-1})/(I_n/I_{n-1})$. The difference between the actual change in LTV ($\delta_n = LTV_n/LTV_{n-1}$) and this theoretical change is interpreted as the result of a structural effect (change in the proportion of loans with a higher-than average LTV, when $\delta_n > \delta_n^*$, or a lower-than-average LTV, when $\delta_n < \delta_n^*$) and changes in lending standards (looser when $\delta_n > \delta_n^*$ / tighter when $\delta_n < \delta_n^*$), although the respective contributions of the two variables cannot be identified at this stage.

⁷ Since loan transfers concern loans that have already been partly paid off, their average LTV should, *ceteris paribus*, be lower than that of other loan types. Even so, in early 2016, several banks were still reporting very high LTVs in this segment (>98%), because their management systems assume that the amount of the transferred loan is equivalent to the value of the property being financed.

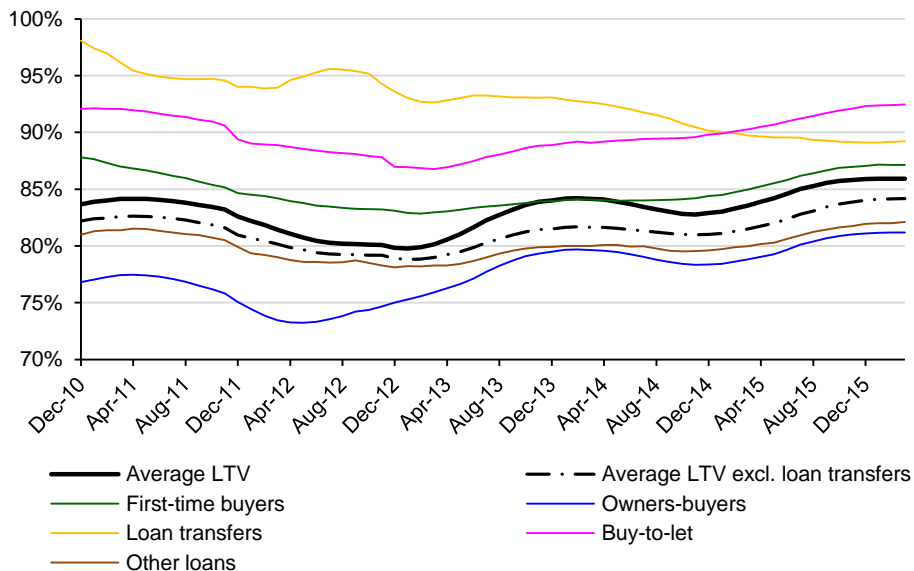
Chart 40
Analysis of the year-on-year change in average LTV at origination



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

With the exception of loan transfers, whose ratio fell by 1 pp between 2014 and 2015, LTV at origination rose relatively uniformly across all segments (from 2.3 pp for other loans to 2.8 pp for owners-buyers). Even when restated to exclude loan transfers, average LTV at origination jumped by 3 pp in 2015 (Chart 41).

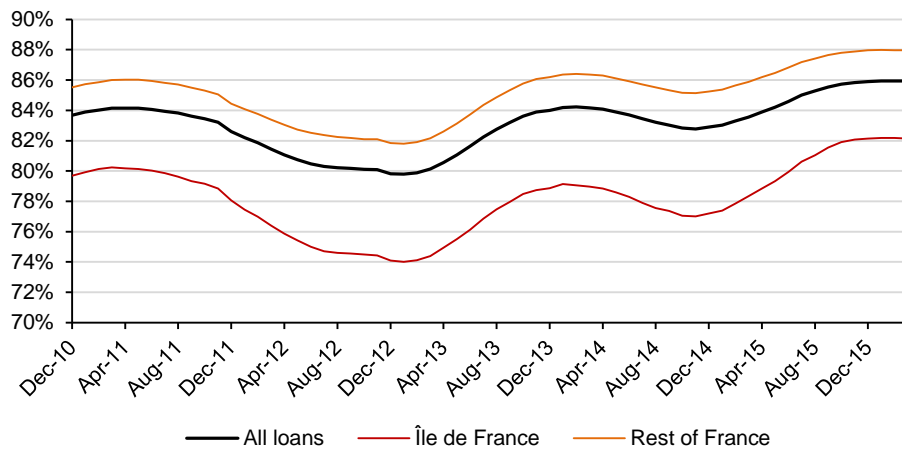
Chart 41
Average LTV at origination, by market segment



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

Average LTV at origination increased especially swiftly in the Île de France region, where it jumped by around 5 pp between 2014 and 2015, while the increase elsewhere in the country was more a measured 2.7 pp. As a result, the gap between the two regions narrowed, although the Île de France continues to report a markedly lower ratio than the rest of the country, notably because it features a larger proportion of bridge loans, which are excluded from LTV (cf. above) (Chart 42).

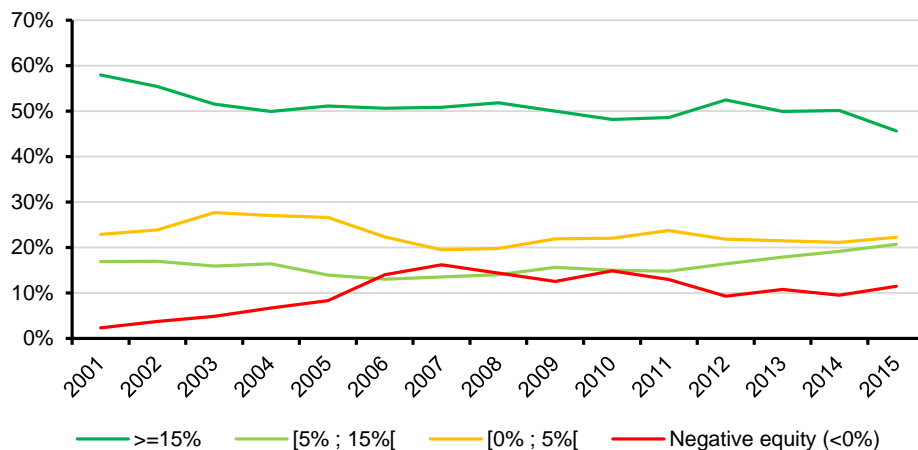
Chart 42
Average LTV at origination, by region



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; most recent value: March 2016

A breakdown of new lending by down payment ratio reveals no major changes, with large down payments ($\geq 15\%$) continuing to have the biggest share despite falling to 45.6% at end-2015, which is its lowest level since 2001 (Chart 43). Transactions with a down payment of between 5% and 15% have increased since 2011 and have now caught up with the next lower bucket. Negative equity situations, i.e. where the loan at origination exceeds the value of the property, accounted for approximately 11.5% of new lending in 2015, which was slightly higher year-on-year but still lower than the peak of 16.2% seen in 2007.

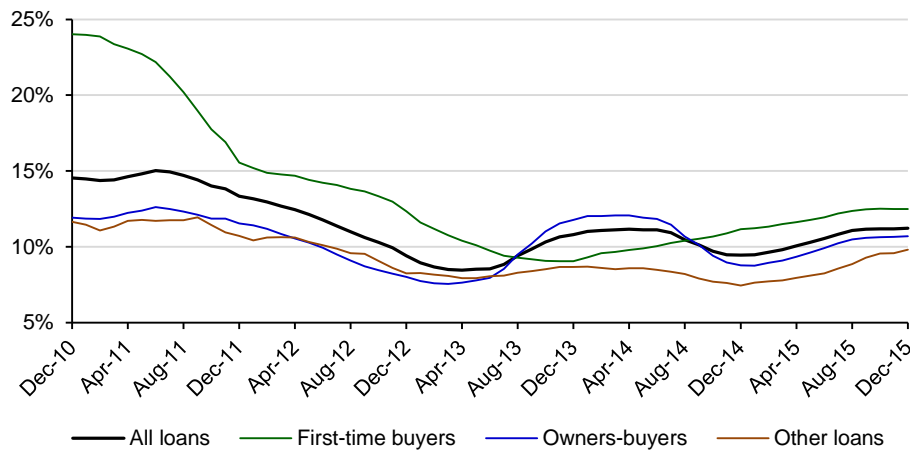
Chart 43
Breakdown of new lending, by size of down payment



Source: ACPR, annual survey and monthly monitoring of housing loan flows

The share of negative equity loans increased across all market segments between 2014 and 2015; however, it remained below the levels reached in 2010, particularly among first-time buyers (Chart 44).

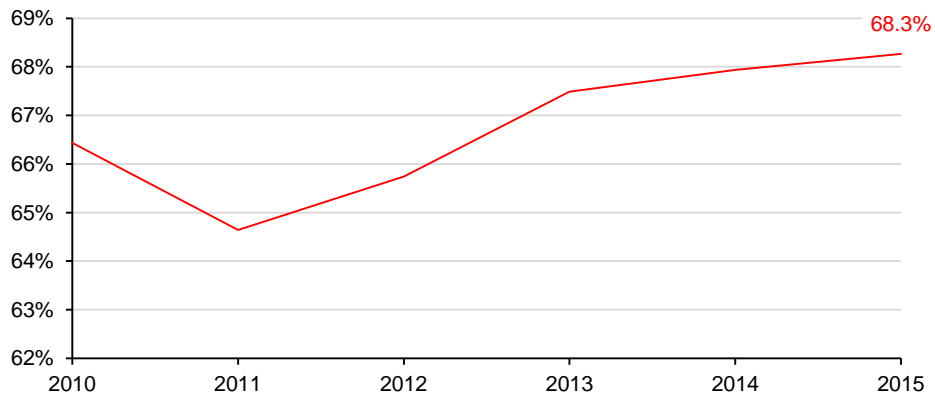
Chart 44
Share of negative equity loans*, by market segment



Source: ACPR, monthly monitoring of housing loan flows; 12M moving averages; *loans whose amount at origination exceeds the value of the property

Despite the relatively high starting level and the uptrend since 2008, LTV on the outstanding stock of housing loans, as measured based on ACPR survey responses, rose only slightly in 2015, climbing 0.3 pp to 68.3% (Chart 45). On average, prices would have to fall by more than 31.7% for the value of financed properties to be less than the remaining principal of outstanding loans.

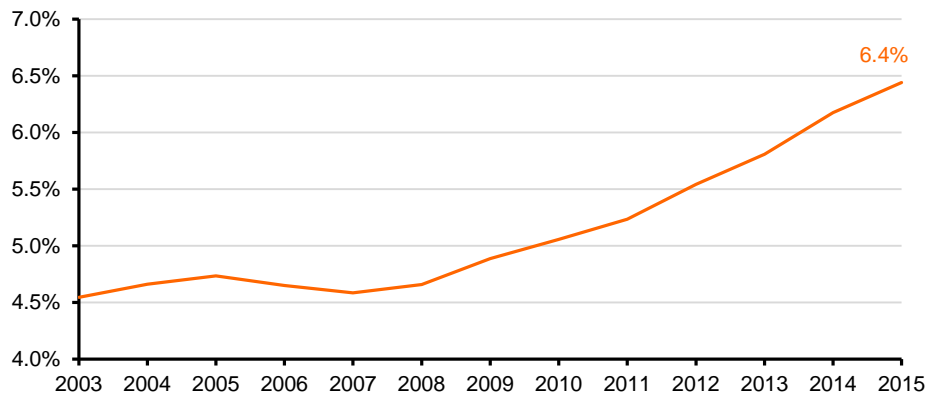
Chart 45
LTV on outstanding housing loans



Source: ACPR, annual survey and monthly monitoring of housing loan flows

The decline in loan maturity and in average interest rates has led to a fresh increase in the rate of amortisation, with the share of interest in annual repayments gradually declining, *ceteris paribus* (Chart 46).

Chart 46
Ratio of amortisation to outstanding housing loan stock

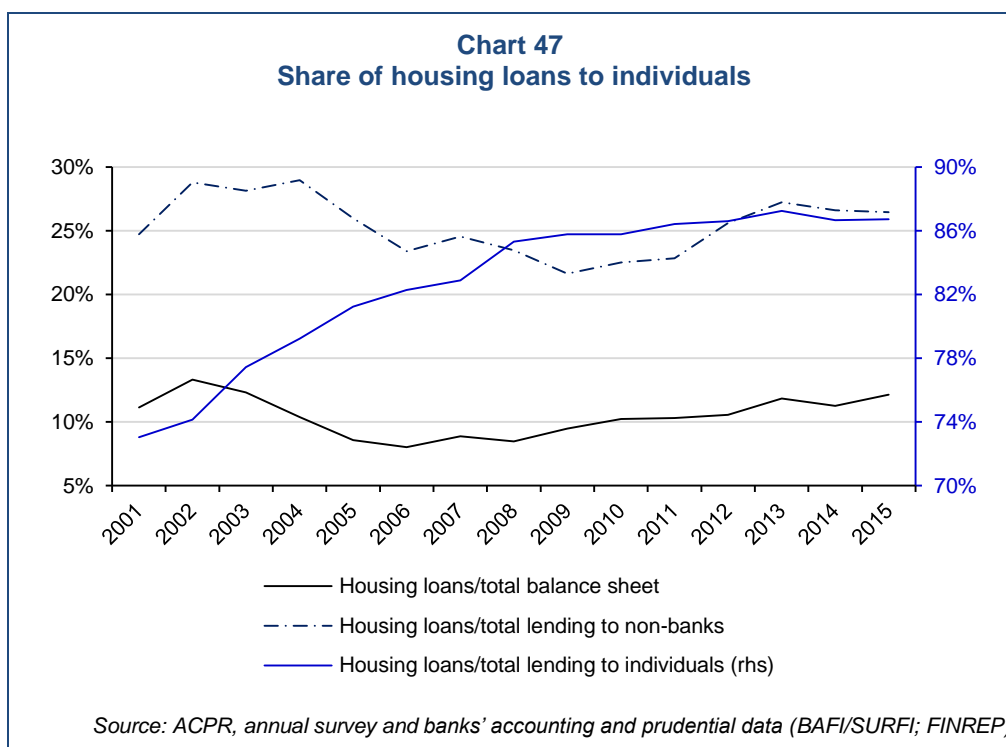


Source: ACPR, annual survey and monthly monitoring of housing loan flows; Banque de France; INSEE; ACPR calculations

3. Risks linked to housing finance

3.1. The share of housing loans stayed relatively stable

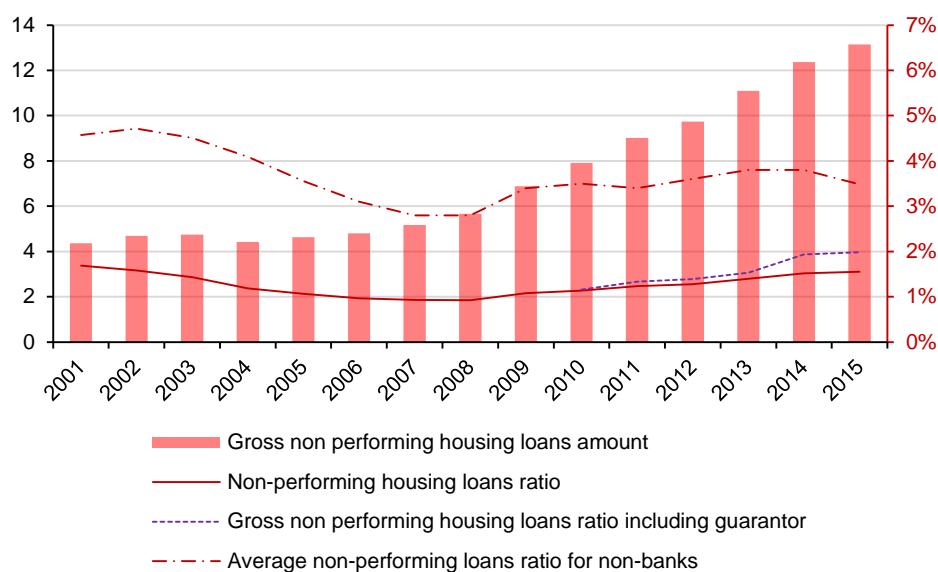
As a share of the total assets of the banks in the sample, housing loans to individuals rose slightly in 2015, reverting to their 2013 level but still well short of the 2002 peak. Their share of total loans to non-banks and overall lending to individuals was similarly stable (Chart 47).



3.2. Further growth in gross non-performing loans (NPLs)

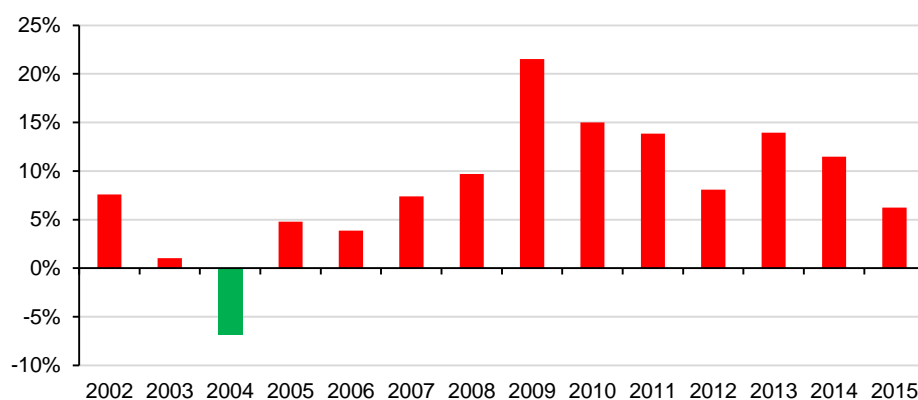
Gross non-performing housing loans continued to grow in 2015 but at a slower pace than in 2014, increasing by EUR 0.8 billion to EUR 13.1 billion, i.e. an increase of 6.3% compared with 11.4% the previous year (Chart 48 and Chart 49).

Chart 48
Gross outstanding stock of non-performing housing loans, EUR billions (left-hand scale) and as a % of total outstanding housing loans (right-hand scale)



Source: ACPR, annual survey and BAFI/SURFI data

Chart 49
Gross outstanding stock of non-performing housing loans, year-on-year change



Source: ACPR, annual survey

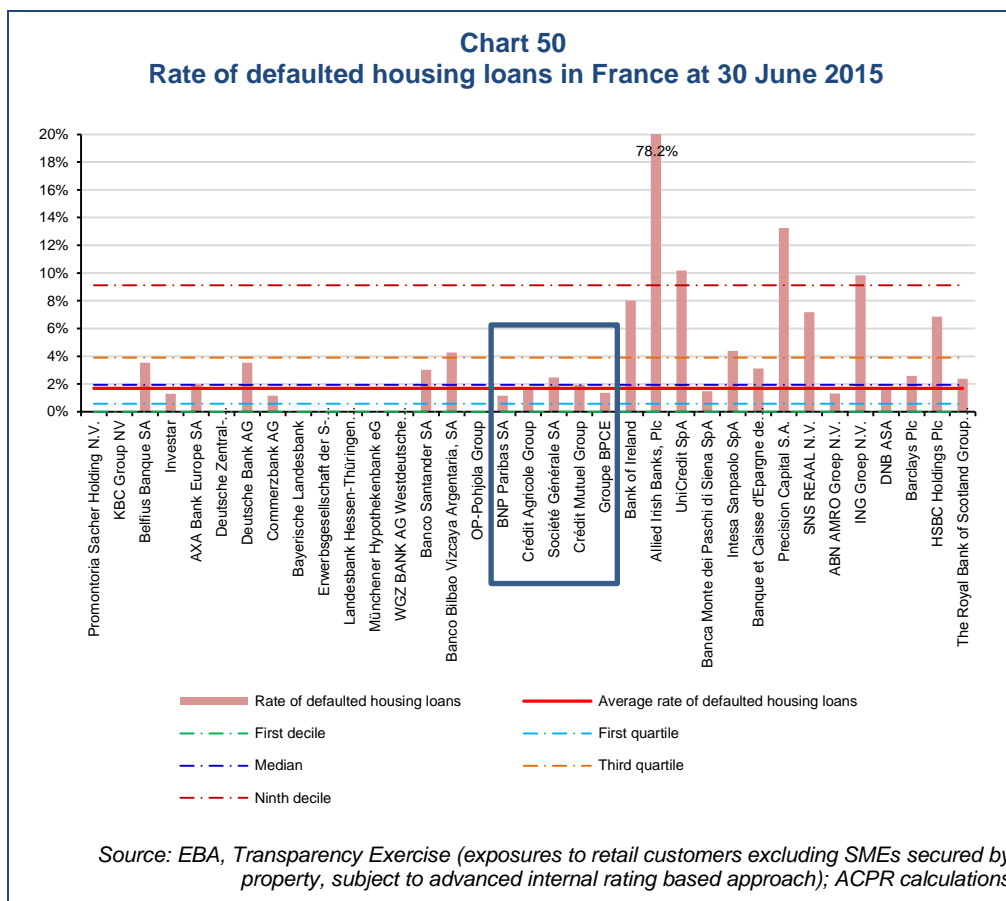
Since the outstanding stock of performing loans increased less swiftly, the ratio of gross non-performing housing loans rose to 1.55% at end-2015, while the ratio of gross NPLs to all non-bank lending shrank by 32 basis points (bps) to 3.48%. This situation may reflect the persistently high unemployment rate, which has an adverse effect on lending to individuals⁸.

While the ratio of gross non-performing housing loans increased only marginally compared with 2014 (3 bps), it nevertheless continued to rise towards the peak of 1.69% reached in 2001. Furthermore, based on information provided for the first time by the main loan guarantors, gross NPLs amounted to 1.99% of total outstanding loans, a year-on-year increase of 6 bps. In this regard, the increase observed between 2013 and 2014 reflects changes in scope, since one institution was able to provide data only for the last two years.

⁸ Cf. *Analyses et Synthèses* No. 61

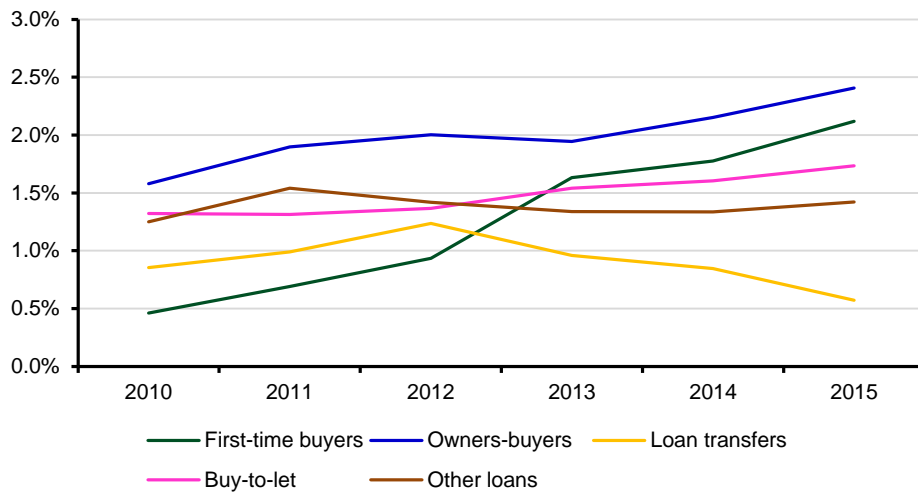
The ratio of gross outstanding NPLs to all housing loans might however be overestimated insofar as some banks also include a portion of their exposures to individual entrepreneurs along with housing loans to individuals, while the outstanding NPLs that they report are divided by the only performing loans to individuals.

Finally the rates of defaulted housing loans for French banks on their national portfolios are below the median rate for banks that are active on the French market, except in the case of SG, which is slightly above (Chart 50).



While the NPL ratio declined by 0.3 pp in the loan transfer segment, falling for the third year running, it increased across all other segments (Chart 51). The increase was quickest among first-time buyers and owners-buyers (26 bps in both instances), and the ranking of ratios across different loan types was unchanged from 2014.

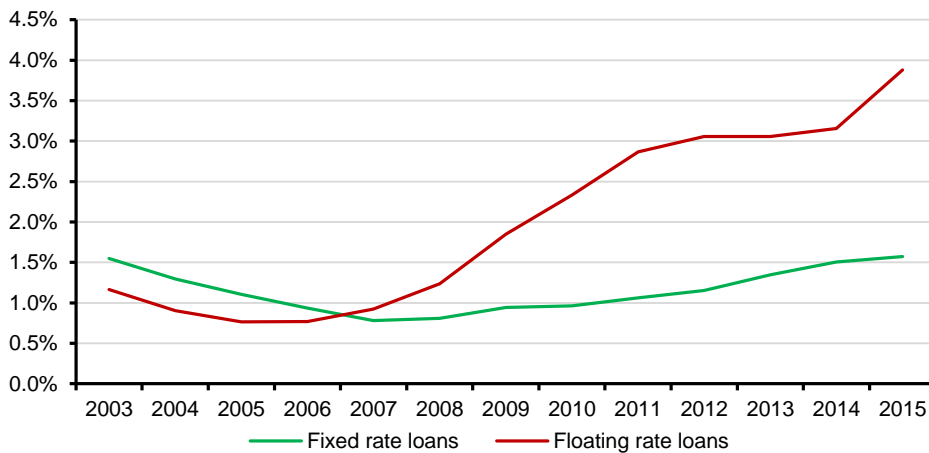
Chart 51
Gross non-performing housing loans ratio, by market segment



Source: ACPR, annual survey

The NPL ratio increased sharply for floating rate loans, rising from 3.16% to 3.88% (Chart 52). This was mainly attributable to a decline in outstanding floating rate loans reported by two banks, since the actual outstanding amount of NPLs increased by a relatively contained 3.3%. The ratio also continued to increase among fixed rate loans, but to a much smaller extent (6 bps).

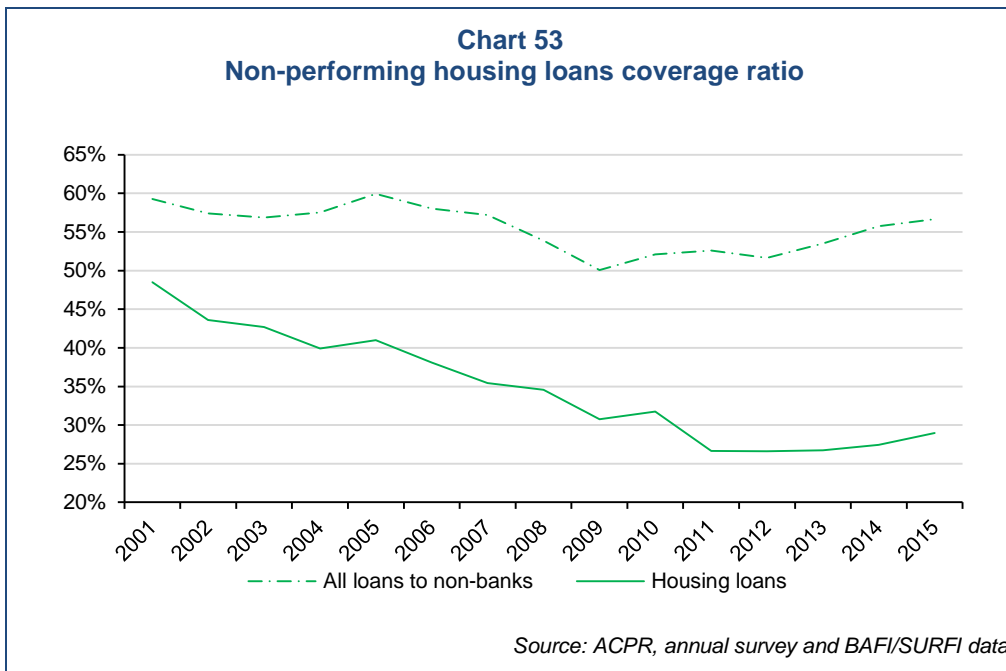
Chart 52
Gross non-performing housing loans ratio, by interest rate type



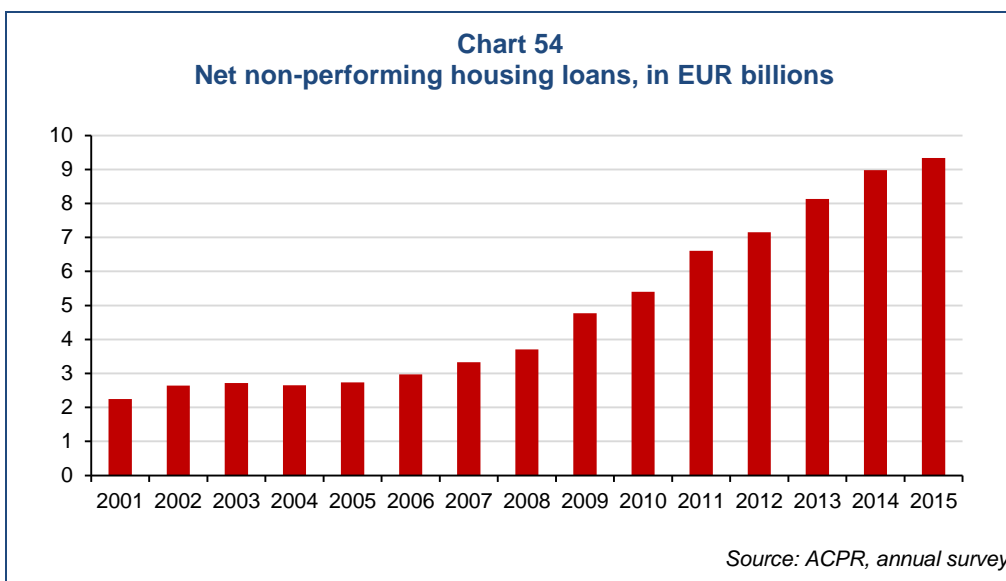
Source: ACPR, annual survey

3.3. NPL coverage ratio improved

The NPL coverage ratio for housing loans continued its slow climb, rising to 29% (Chart 53). Even so, it remains well off its 2001 level (48.5%) and is still considerably lower than the average NPL coverage ratio for overall lending to non-banks, with the gap standing at over 27 points. The spread has been relatively stable since 2011 and reflects the substantial guarantees provided to banks on housing loans.

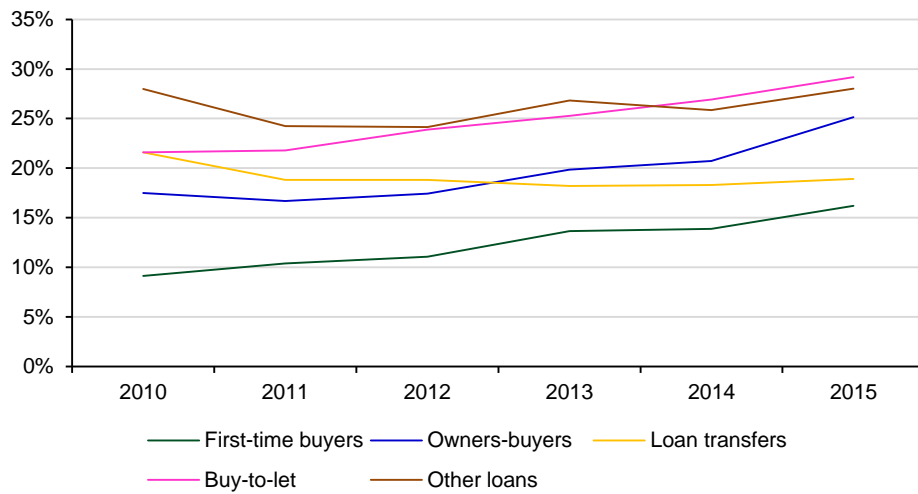


The improvement in the coverage ratio helped to contain the year-on-year increase in the net amount of non-performing housing loans, which rose by just 3.9% to EUR 9.3 billion (Chart 54) – the smallest increase since 2006.



The coverage ratio went up across all market segments, although loan transfers showed the most muted increase (Chart 55). The owners-buyers segment reported the sharpest growth (4.4 pp) but was still behind the buy-to-let segment, which again had the highest coverage ratio. Conversely, first-time buyers had the lowest coverage ratio, at 16.2%, although it did go up by 2.3 pp. This may reflect the various assistance schemes and guarantees available to these types of borrowers (FGAS, etc.).

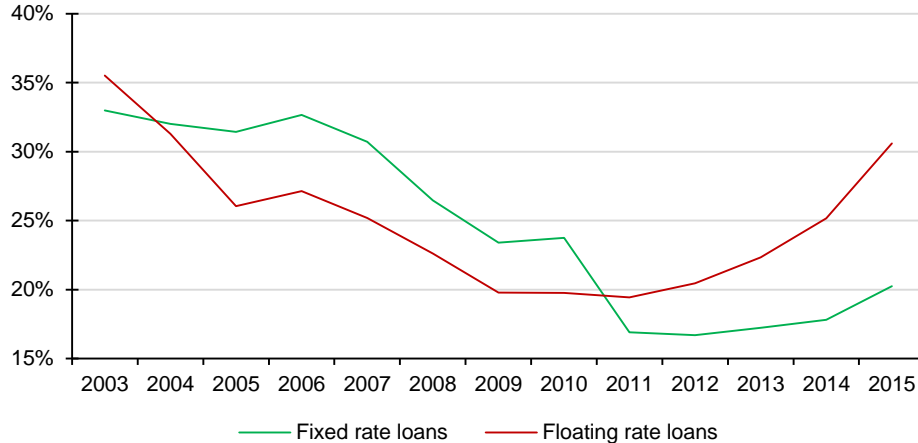
Chart 55
Coverage ratio for non-performing housing loans, by market segment



Source: ACPR, annual survey

Coverage ratios continued to increase for fixed and floating rate loans alike, albeit more briskly for floating rate facilities (Chart 56). An 11 pp gap has now opened up between the two categories.

Chart 56
Coverage ratio for non-performing housing loans, by rate type



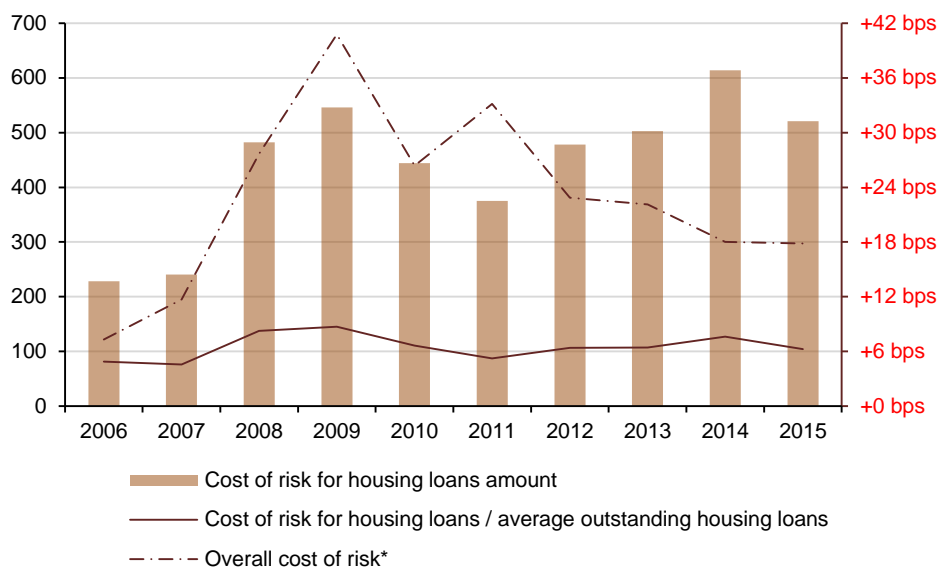
Source: ACPR, annual survey

3.4. The cost of risk went down

After increasing between 2011 and 2014, the cost of risk⁹ for housing loans fell by 15.2% in 2015 to EUR 521 million, or slightly above the level seen in 2013 (Chart 57). As a ratio of average loans outstanding, it came to 6.3 bps, down 1.3 bp year-on-year, and remained well below the overall cost of risk for France's six main banking groups.

⁹ The cost of risk is equal to net provisions for non-performing housing loans and net losses on housing loans.

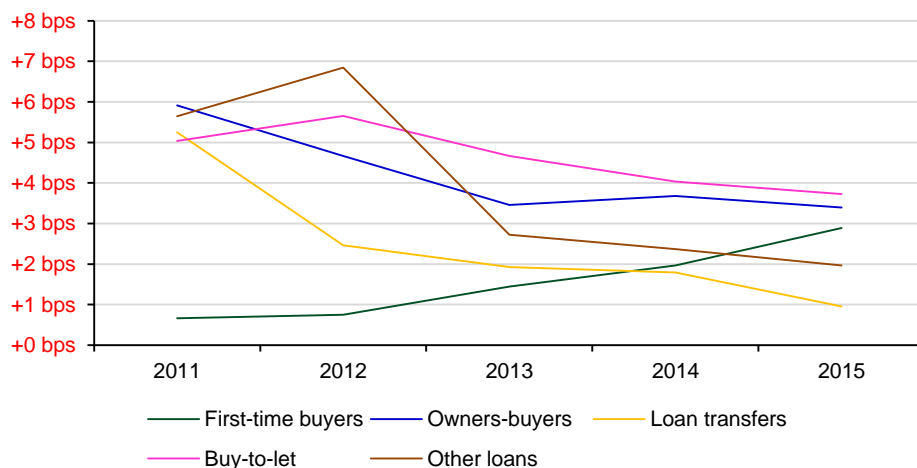
Chart 57
Cost of risk for housing loans, in EUR millions (right-hand scale) and as a % of average outstanding housing loans (left-hand scale)



Source: ACPR, annual survey; banks' financial disclosures; *cost of risk of the six main French banking groups as a ratio of their total assets

The cost of risk went down across all market segments with the exception of first-time buyers (Chart 58).

Chart 58
Cost of risk/average outstanding housing loans, by market segment

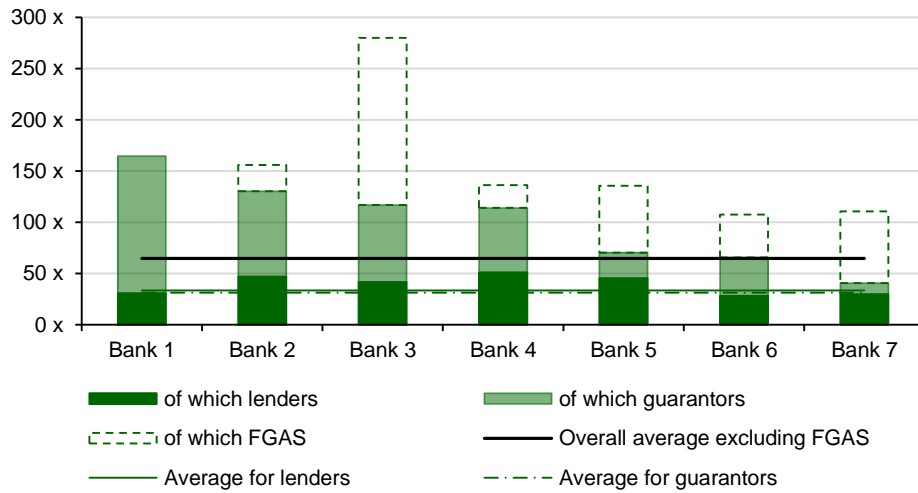


Source: ACPR, annual survey

French banks have more than enough available reserves to cover the cost of risk for housing loans (see Box 1): at end-2015, these reserves were equivalent to 65 times the average annual cost of risk for housing loans¹⁰ (cf. black horizontal line on Chart 59). Banks with the lowest ratios are generally those that enjoy the most extensive coverage through the FGAS scheme.

¹⁰ Average annual cost of risk since 2006.

Chart 59
Coverage of average annual cost of risk at end-2015

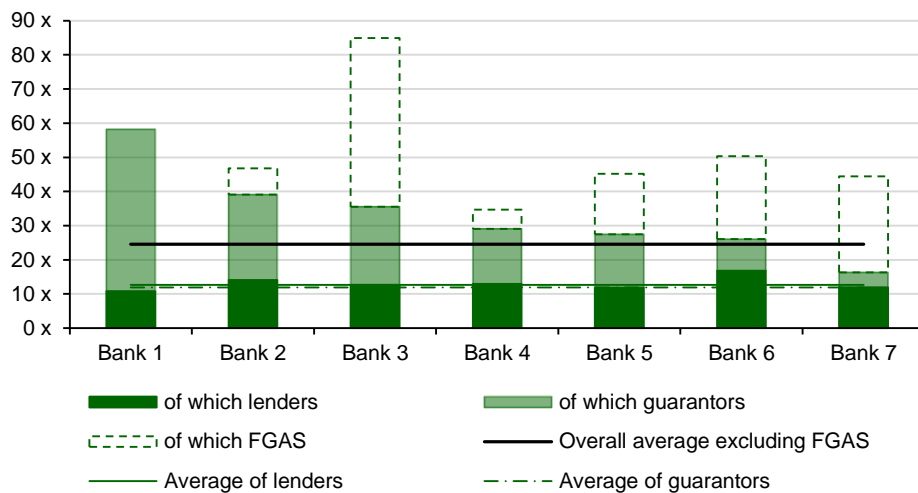


Source: ACPR, annual survey, SURFI and COREP; SGFGAS

Explanation: Bank 2 has own reserves (shareholders' equity, provisions and other reserves set aside to cover risks on housing loans) equivalent to 47 times its average annual cost of risk for housing loans (dark green portion); other guarantees provided to it, excluding the FGAS scheme, are equal to 83x Bank 2's average annual cost of risk for housing loans (light green portion), while the guarantee through the FGAS scheme is equivalent to 25x average annual cost of risk (dotted portion).

Even in a stressed scenario where net provisions and losses on housing loans increase substantially¹¹, banks have access to reserves and guarantees that cover their cost of risk 25 times on average (Chart 60).

Chart 60
Coverage of stressed annual cost of risk at end-2015



Source: ACPR, annual survey, SURFI and COREP; SGFGAS

¹¹ Based on the cost of risk observed each year since 2006, the stressed cost of risk is measured for each bank as the 99.9% quantile of a normal distribution. Depending on the bank, this cost is between 1.7 to 4.6 times the average cost of risk.

Box 1:

Estimate of French banks' available reserves to cover risks on housing loans

French banks can use the following resources to offset their risk exposure on housing loans:

- Impairments or provisions set aside for housing loans, as well as own funds allocated specifically to the coverage of housing loan risk; these funds are assumed to be equivalent to the capital requirements in respect of exposures on retail loans secured by property excluding SMEs, as indicated in COREP reports, for France;
- For guarantors qualifying as credit institutions, guarantee funds based on borrowers' contributions and other capital items specifically allocated to the coverage of housing loans;
- For guarantors qualifying as insurance undertakings, technical reserves set aside to secure housing loans and the corresponding solvency margin requirements;
- State guarantee for a portion of the outstanding housing loan balances secured by FGAS; for the sake of simplicity, this guarantee is assumed to cover 50% of loans covered by the scheme¹².

As bank lending is generally secured by several different types of guarantee, individual banks usually have access to more than one of the above resources. Similarly, a single guarantor may have secured the loan books of several different banks; in this case, the guarantor's own funds and other resources are distributed on a *pro rata* basis, according to the amount of guaranteed lending held by each bank.

Data gathered from the main housing loan guarantors (*Crédit Logement*, CAMCA, CEGC, *Parnasse Garanties*, CMH) and from SGFGAS have been harnessed to refine the estimated cost-of-risk coverage ratios for each bank. Accordingly, the statistics provided in this document cannot be compared with those published last year.

Lastly, given the huge difficulties associated with estimating the profitability of housing loans, account is not taken of future returns that banks may derive from their loan books or that guarantors may earn from their portfolios of loan guarantees.

3.5. Risk exposure remains primarily concentrated on first-time buyers

Table 1 lists the values calculated for each of the previously discussed risk indicators, for each segment¹³. The risk indicators may be grouped into two subsets: *ex ante* (first six criteria in the table) and *ex post* (last three criteria).

¹² See the SGFGAS website for a detailed description of the guarantee scheme: <https://www2.sfgas.fr/web/site-public-anglais/mortgage-guarantee-scheme>

¹³ Methodology: n is the number of segments for which data are available for a given risk indicator (for example, "NPL ratio" data are available for five segments); for this indicator, the score 1/n is attributed to the segment which shows the lowest risk level and 1 (or n/n) to the segment which shows the highest risk level; the overall score of a segment is set as the arithmetical sum of its scores for each risk criterion.

Table 1
Risk estimates for each market segment in 2015

2015/12/31	First-time buyers	Owners-buyers	Credit transfers	Buy to let	Other loans	Île de France	Provinces
Average borrower income at origination	0.86	0.57	0.29	0.71	0.43	0.14	1.00
Average loan amount at origination	0.71	0.86	0.57	0.29	0.14	1.00	0.43
Average maturity at origination	1.00	0.86	0.29	0.43	0.14	0.71	0.57
Average debt-service ratio at origination	0.71	1.00	0.43	0.29	0.14	0.86	0.57
Average LTV at origination	0.57	0.14	0.86	1.00	0.43	0.29	0.71
Average LTI at origination	1.00	0.86	0.43	0.29	0.14	0.71	0.57
Average 1	0.81	0.71	0.48	0.50	0.24	0.62	0.64
Chg. vs. 2014	+0.02	-0.02	-0.14	+0.05	+0.00	+0.05	+0.02
NPL	0.80	1.00	0.20	0.60	0.40		
NPL coverage ratio	1.00	0.60	0.80	0.20	0.40		
Cost of risk	0.60	0.80	0.20	1.00	0.40		
Average 2	0.80	0.80	0.40	0.60	0.40		
Chg. vs. 2014	+0.00	+0.00	+0.00	+0.00	-0.07		
All criteria	0.80	0.76	0.44	0.55	0.32	0.62	0.64
Chg. vs. 2014	+0.01	-0.01	-0.07	+0.02	-0.01	+0.05	+0.02

Source: ACPR, annual survey and monthly monitoring of housing loan flows

One bank left the sample, resulting in some noteworthy changes to the segment ranking. In particular, while first-time buyers are still by far the riskiest segment, owners-buyers are not far behind, primarily because they now have the highest NPL ratio.

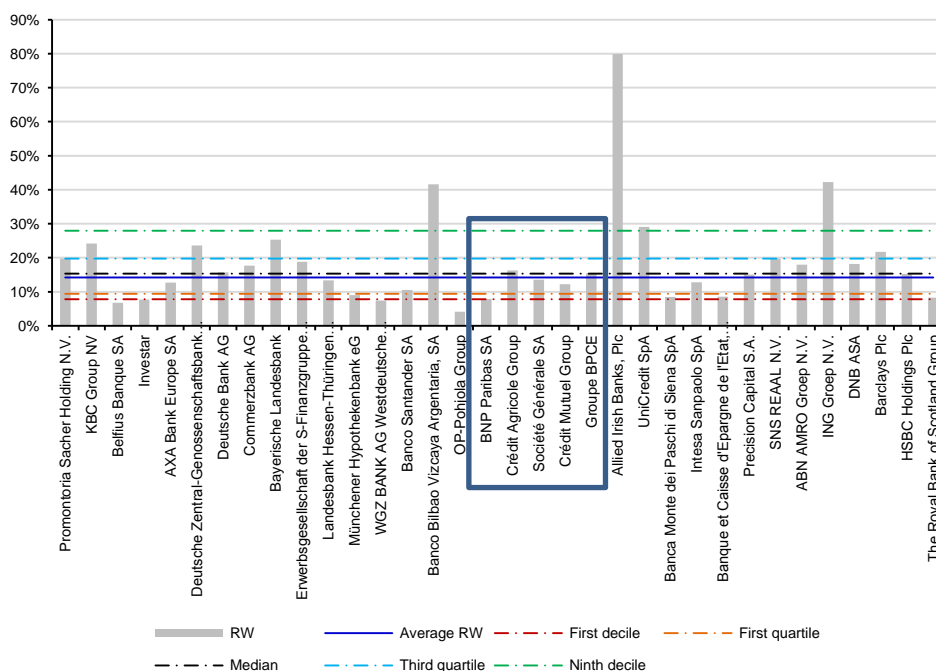
On a like-for-like basis, however, the main risk areas did not change much compared with last year.

3.6. Risk weights remain consistent with the average for European banks

The data from EBA's Transparency Exercise (cf. above) can be used to analyse the risk weights (RWs) of housing loans distributed by French banks in France compared with those of their European competitors. The calculations were carried out for the period ending 30 June 2015 and exclusively considered outstanding loans subject to advanced internal ratings based (A-IRB) approach for credit risk.

With an average RW of 14.2%, French banks are in the average/median of the EBA sample. Only BNPP, whose RW is between the first decile and the first quartile, is in a relatively unfavourable position (Chart 61).

Chart 61
RWs of housing loans in France (A-IRB approach) at 30 June 2015



Source: EBA, Transparency Exercise; ACPR calculations

As pointed out in *Analyses et Synthèses* No. 32 on housing finance in 2013, this approach gives only a partial view of the RWs of housing loans extended by French banks. This is because, as mentioned above, these banks are covered by substantial guarantees. In many cases, the banks are shareholders of the entities providing these guarantees and must deduct their stakes in them when determining their capital requirements.

Factoring in this additional cost materially changes the RWs of housing loans extended by French banks. When their stake in *Crédit Logement*, weighted at 1,250%¹⁴, was added to their risk weight on housing loans, the average RW went up by 5 pp as at 30 June 2015 to 19.2%.

¹⁴ A capital deduction being equivalent to a 1,250% weighting.

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