A report by the Spanish Mortgage Association

NOVEMBER 2021

Analysing the Spanish Mortgage Pool

First Half of 2021

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Analysing the Spanish Mortgage Pool

November 2021

1. Preliminary Comments

This report presents an update of the data and analysis published by the Spanish Mortgage Association (AHE) in February 2021 (which contained data up to December 2020). The aim of this report is to provide stakeholders with an outlook of the composition and the main features of the Spanish mortgage pool.

The portfolio data are gathered from 12 credit institutions [1] (after the recent merger of two of the institutions that make up the portfolio) issuers of mortgage bonds with a Covered Bond Label by the ECBC[2].

The data are gathered from the information on the cover pool backing covered bond issuances that is available on the corporate websites of each credit institution. As a member of the ECBC, the Spanish Mortgage Association coordinates part of the publication process of this information as well as the definition of different concepts. Thus, all the variables presented in this analysis are subject to homogeneous definitions.

This study presents interesting information on the Spanish mortgage pool profile, which can be useful for further analysis and decision making. Its content may be quoted and reproduced with specific reference to the Spanish Mortgage Association.

[1] *Banco Sabadell, Caixabank, Banco Santander, Kutxabank, Unicaja Banco, BBVA, Bankinter, Ibercaja Banco, Eurocaja Rural-Caja Rural Castilla-La Mancha, Caja Rural de Navarra, Abanca and Grupo Cooperativo Cajamar.*
[2] *https://coveredbondlabel.com/*

2. Fundamental Data of the Cover Pool

The balance of the mortgage portfolio of the sample [3], which represents approximately 85% of the total outstanding mortgage lending [4], registered in the last 6 months an increase of 1.6%, while it has decreased by 0.7% on a year-on-year (y-o-y) basis. The number of loans in the pool has also followed this evolution, with approximately 5.5 million of outstanding loans as of June 2021, recording a slight increase of 0.6% compared to the previous 6 months, while contracting -0.8% y-o-y.

In general, both magnitudes showed a more favourable evolution than in previous analyses (even y-o-y). This could be explained, on the one hand, by the greater dynamics that gross lending has shown, especially during this first half of this year and, on the other hand, by the lower prepayments resulting from the moratoriums implemented throughout 2020.

As a result of the above, the average capital of the pool has experienced a slight increase in its amount both in annual and semi-annual terms, reaching an average of 82,650 euros. By segments, in the residential portfolio the average loan amount was 72,700 euros, while in the commercial portfolio it increased to 203,500 euros.

Table 1

Mortgage Portfolio Basic Data	
National mortgage outstanding loans (*)(**) (million €)	552,500
Mortgage Pool ECBC Label (mill €)	458,589
Mortgage portfolio/outstanding balance	83,0%
Number of loans in the portfolio	5,549,017
Average loan amount (€)	82,643
Average amount - residential (€)	72,680
Average amount - commercial (€)	203,499
Average loan term (years)	10,50
Average LTV	58.4%
Residential collateral	81,1
Commercial collateral	18,9%

(*) Not including MBSs

Source: own elaboration from ECBC Label data

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[3] *Dated as of June 2021 for the sample as a whole.*

[4] *This data, corresponding to June 2021, does not include neither on-balance nor off-balance mortgage backed securities.*

3. Property Type Information

As for the nature of the collateral securing the loan, it is observed that the residential portfolio[5], which accounted for more than 81% of the outstanding balance of the pool, is gradually gaining weight to the detriment of the commercial portfolio[6]. Within the pool, the residential collateral oscillates in a range of 70%-92% depending on the entity taken as a reference. Overall, the residential portfolio has always had major presence in the mortgage pool, although these differences seem to widen in recent years, as only a year ago the residential portfolio barely accounted for 80% and three years ago it did not reach 77%.

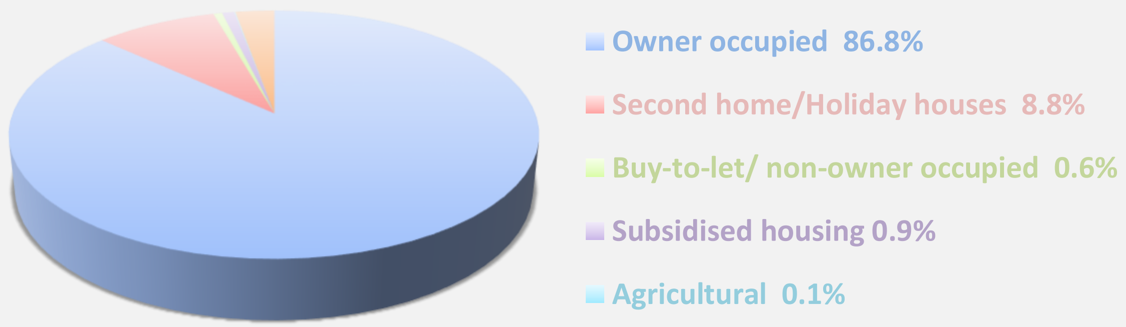
Table 2

Property Type Information	
Residential	**81.1%**
Maximum in portfolio	91.8%
Minimum in Portfolio	70.3%
Commercial	**18.9%**
Maximum in portfolio	29.7%
Minimum in Portfolio	8.2%

Source: own elaboration from ECBC Label data

Within the residential segment, 86.8% of the properties that make up the portfolio constituted the main home of the loan holder. Second homes represented 8.8% of the portfolio. Together, they accounted for almost 96% of the portfolio. The remaining 4% is divided between social housing, 'buy to let' homes or homes built on rustic land, among others.

Chart 1: Residential collateral breakdown



Source: own elaboration from ECBC Label data

[5] *Residential loans meet the following criteria: loans with full recourse to the individual taking out the loan; and either (a) loans secured against a residential property in which the borrower resides or b) where the borrower rents out less than four properties.*
[6] *Commercial loans are loans backed by a mortgage and which have recourse to a borrower, excluding individuals and public-sector entities.*

Another parameter to be valued within the residential portfolio is the rank of the mortgage loan. Depending on the right constituted in favour of the creditor we can distinguish between a first rank mortgage or a second rank mortgage, providing in the first case the creditor with a preferential right against third parties to collect the debt in case the holder of the obligation incurs in a situation of default. In this regard, it is observed that 98% of the outstanding operations would have the latter character, maintaining the level with respect to previous analyses.

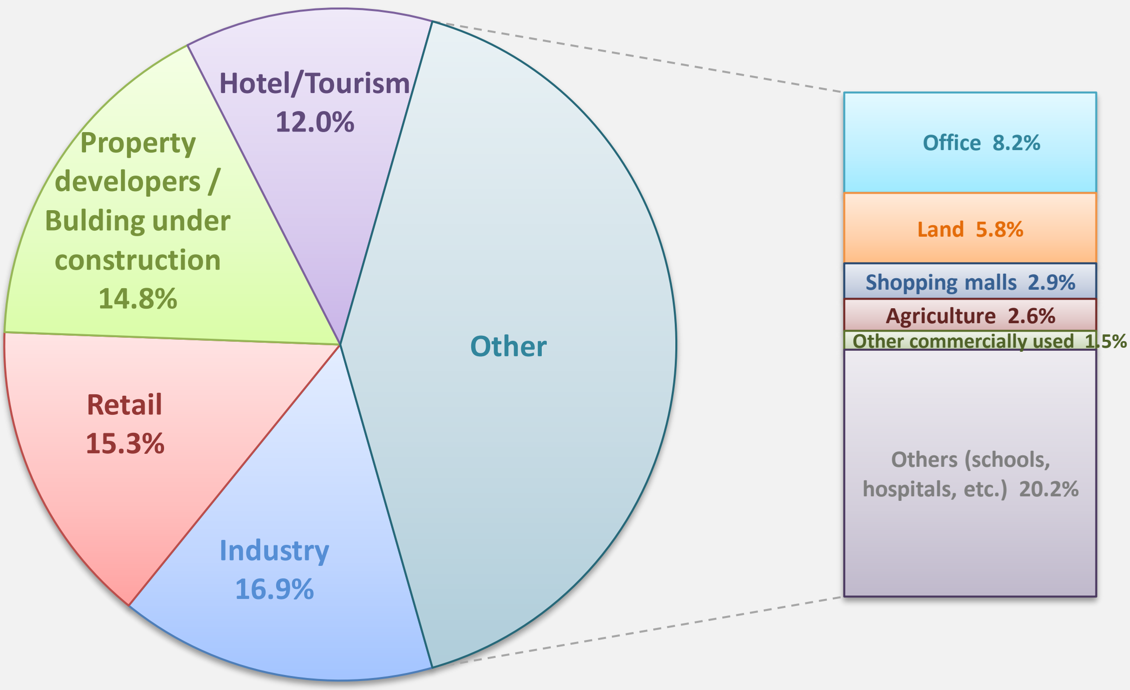
Table 3

Mortgage portfolio rank	
First mortgage	98.0%
Second mortgage	2.0%
Other	0.0%

Source: own elaboration from ECBC Label data

According to the typology of the properties that make up the commercial portfolio, the logistics segment stood out, remaining the first by volume despite losing more than 4 points in the last 12 months. In total, to this heading corresponded a portfolio balance of about 15,000 million euros, and it represented 16.9% of the commercial balance. To a lesser extent, but also with a relevant weight, the retail exposures took the position from real estate activities after representing this year 15.3% of the retail portfolio, while mortgage loans linked to real estate developers accounted for 14.8%.

Chart 2: Commercial collateral breakdown



Source: own elaboration from ECBC Label data

4. Loan-to-Value Ratio (LTV)

According to the LTV ratio, the trend of recent years continued showing a decrease in the proportion of loans with an LTV above the threshold of 80% despite the slowdown compared to previous years. Besides the fact that the more recently granted loans comply with more stringent risk criteria, it should be added that since they are outstanding loans, it is natural that loans tend to reduce this ratio at least in a relatively short period where it is difficult for significant value adjustments to occur while capital continues to be amortized (especially in those loans that have been in the portfolio for a longer time following the French repayment system). However, this slowdown could precisely be understood within the current context where some of the loans in the pool have not continued to meet the regular payment instalments as a result of the moratoriums. Thus, as of June 2021, the volume of loans with an LTV below 80% -although increasing- moderated its trend in the last 12 months, from 87.8% to 88.3%. Within this category, it should be highlighted that 62.8% of the portfolio does not exceed 60% LTV.

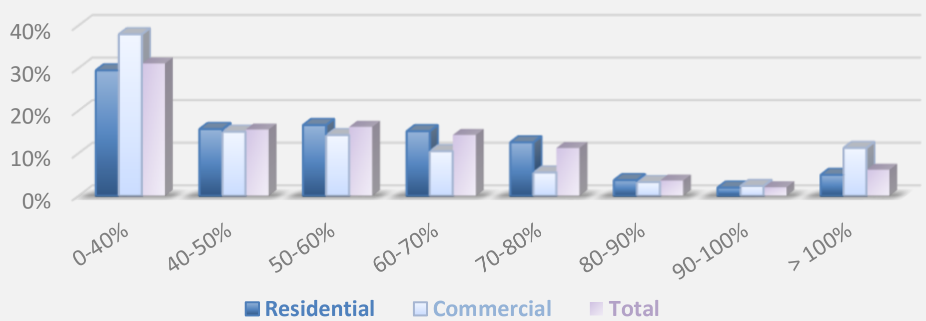
Table 4

LTV ratio distribution			
LTV	**Total**	**Residential**	**Commercial**
0-40%	31.1%	29.5%	37.9%
40-50%	15.6%	15.7%	15.0%
50-60%	16.2%	16.6%	14.3%
60-70%	14.3%	15.2%	10.5%
70-80%	11.2%	12.6%	5.5%
80-90%	3.6%	3.7%	3.2%
90-100%	2.0%	1.9%	2.3%
> 100%	6.1%	4.9%	11.2%

Source: own elaboration from ECBC Label data

This gradual reduction in LTV levels can be seen both in the residential segment -with 10.5% of loans above 80% LTV compared to 10.8% in the previous year-, and in the commercial portfolio -which has gone from loan ratio above this limit of 17.6% to stand at 16.8%, about one point less in just 1 year.

Chart 3: Residential and commercial LTV distribution



Source: own elaboration from ECBC Label data

At the aggregate level, the average LTV stood at 58.4%; in the case of the commercial portfolio it accounted for 65.5% while in the residential portfolio it decreased to 56.7%. Naturally, this last rate is below the ratio registered in the second quarter of 2021 in the new lending for housing purchase, which stood at 64.8% after several years witnessing a process of reduction in debt indexes.

In general, loans with principal above 80% of the collateral value have undergone a down variation, helping to gauge risks and to improve the quality of the mortgage pool at a crucial moment due to the market uncertainty surrounding a potential deterioration in the quality of the assets as part of the economic stimuli are withdrawn. From a regulatory approach, it should be borne in mind that these risk exposures allow banks to free up resources, since they compute with a significantly lower risk weighting for the purposes of calculating risk-weighted assets (RWA), which also allows them to improve their efficiency and profitability ratio.

5. Distribution of loans by Size

Considering the composition of the pool according to the outstanding capital, it was observed a slight increase in the tranche that comprises loans between 200,000 and 1 million euros. Specifically, these loans represented in terms of outstanding balance 18.9% of the pool as of June 2021, compared to 18.6% in the previous half-year or 18.5% in June 2020. For its part, loans with an outstanding capital under 200,000 euros, remained accounting around 69% of the pool, while those exceeding one million euros decreased slightly to 12.2% from 12.7% recorded in the middle of the previous year.

Table 5

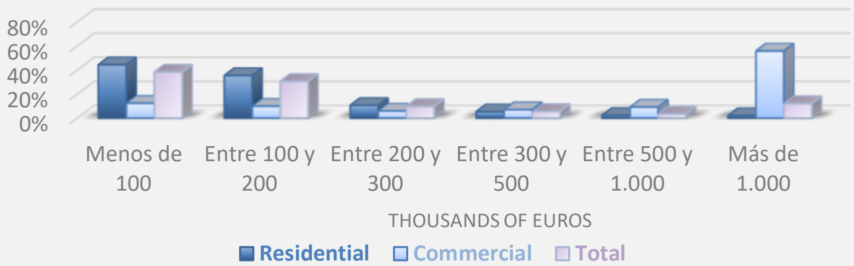
Weighted average distribution by credit institution (loan amount vs. outstanding balance)

Tranche	Total	Residential	Commercial
Up to 100.000 euros	38.3%	44.4%	12.4%
Between 100.000 and 200.000 euros	30.6%	35.4%	9.9%
Between 200.000 and 300.000 euros	9.7%	10.6%	5.9%
Between 300.000 and 500.000 euros	5.6%	5.3%	6.9%
Between 500.000 and 1.000.000 euros	3.5%	2.2%	9.2%
More than 1.000.000 euros	12.2%	2.0%	55.8%

Source: own elaboration from ECBC Label data

When analysing separately the two pool segments, significant divergences arise in terms of the magnitude of the outstanding operations: while in the residential portfolio approximately 80% of the residential outstanding balance corresponded to operations that do not exceed 200,000 euros, in the commercial portfolio this magnitude barely exceeded 22% of the commercial balance, representing the bulk of the operations the ones exceeding one million euros (56%).

Chart 4: Weighted distribution by entities according to loan amount over the total outstanding pool balance



Source: own elaboration from ECBC Label data

This structure varies significantly when analysing the portfolio according to the number of operations assigned to each tranche (without computing the balance of each operation).

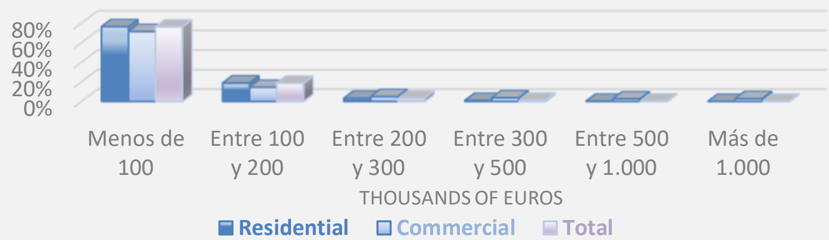
Table 6

Weighted distribution by entities according to loan amount over the total number of loans			
Tranche	**Total**	**Residential**	**Commercial**
Up to 100.000 euros	76.1%	76.4%	71.4%
Between 100.000 and 200.000 euros	18.6%	18.9%	14.4%
Between 200.000 and 300.000 euros	3.4%	3.3%	4.9%
Between 300.000 and 500.000 euros	1.2%	1.0%	3.7%
Between 500.000 and 1.000.000 euros	0.4%	0.3%	2.7%
More than 1.000.000 euros	0.3%	0.1%	2.8%

Source: own elaboration from ECBC Label data

In this case, the proportions remained much more aligned, because as we see in the residential segment 95% of the outstanding loans were located within the tranche under 200,000 euros, a coefficient that lower to 86% in the case of the commercial segment, but clearly higher than that recorded in the previous section. It seems logical, since operations of more than one million euros computed for these purposes for their outstanding capital (eg. EUR 1 million and a half) instead of as a unit, hence they will necessarily weigh above other smaller loans.

Chart 5: Weighted average distribution by credit institution (loan amount vs. total no. loans in the sample)



Source: own elaboration from ECBC Label data

6. Loan seasoning

It is worth highlighting the increase recorded during the first half of the year by the tranche of the pool up to 12 months since the origination of the operation, contrary to what happened a year ago when gross residential lending was seriously altered by the economic implications derived from Covid-19. Specifically, the interval up to 12 months has shown an increase in its share, from 8.4% registered in June 2020 to 10.0% 12 months later.

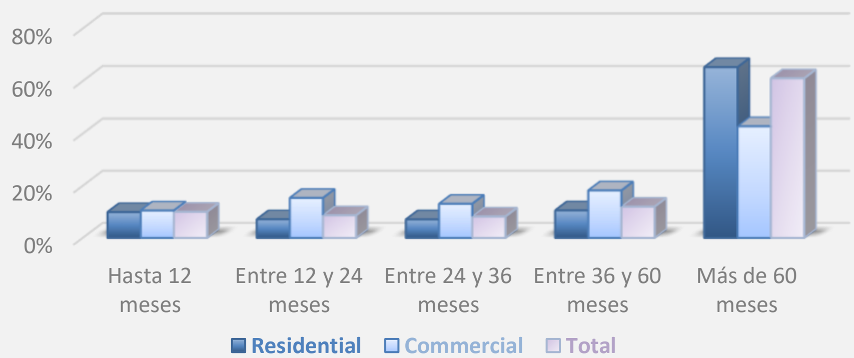
Table 7

Loan seasoning			
Tranche	**Total**	**Residential**	**Commercial**
Up to 12 months	10.0%	9.9%	10.5%
Between 12 and 24 months	8.7%	7.1%	15.4%
Between 24 and 36 months	8.2%	7.1%	13.1%
Between 36 and 60 months	12.0%	10.5%	18.2%
More than 60 months	61.1%	65.3%	42.8%

Source: own elaboration from ECBC Label data

This evolution, however, has not been equal in both segments: in the residential segment**,** credit granted in the last 12 months accounted for 9.9% of the residential balance, compared to 7.2% registered a year ago; while in the commercial segment, the loans originated more recently have been losing steam for years in favour of those with a greater seasoning (despite maintaining a position slightly higher than residential) as 10.5% of the commercial portfolio was in that tranche as of June 2021, compared to 13.3% a year ago. If the last 24 months (2 years) are considered, the differences between both segments are reduced, accounting this type of operations for 17.0% of the balance of the residential portfolio compared to 25.9% of the commercial portfolio. Due to the characteristics of this type of operation, the bulk of the pool in both segments is within the tranche of mortgages granted more than 60 months ago (5 years), which has a share of 65.3% in the case of the residential portfolio and 42.8% in the case of the commercial portfolio.

Chart 6: Loan seasoning



Source: own elaboration from ECBC Label data

Without considering 2 of the 12 entities in the sample (which account for 20% of the total pool balance approx.), the average seasoning of the aggregate pool stood at around 8 years and 6 months.

7. Amortisation profile

According to the amortisation profile of the pool – weighting the term according to the contractually established payment schedule – the percentage structure is maintained at similar levels compared to previous analyses. In this regard, 4.1% of the outstanding balance is expected to be repaid before one year; another 12.1% will do so in the next 5 years; another 18.0% will take place in the following 10 years; while the remaining 65.9% will do so over the next 10 years, without prejudice to the fact that any loan may incur an early repayment and may produce some variation in the table.

Table 8

Amortisation profile	
0-1 years	4.1%
1-2 years	2.7%
2-3 years	2.9%
3-4 years	3.2%
4-5 years	3.3%
5-10 years	18.0%
+10 years	65.9%
average term (years)	10,50

Source: own elaboration from ECBC Label data

To this end, the weighted average life[7] is 10 years and 5 months as of June 2021, although the weighted average maturity[8] is stood at 17 years and 9 months, decreasing with respect to the term registered a year ago.

In total, for an available sample of approximately 80% of the total number of entities participating in the study, the pool has an average term per loan of 26 years and 5 months. This figure was slightly higher than the one registered in the new originations according to the estimates of the Property

[7] *The weighting of the loan life according to the repayment schedule accrued by the loan is considered. This is especially significant for loans under the French repayment system, where the principal is progressively amortised as the instalments are paid. Thus, in the case of a new loan, as the years gradually go by, a higher proportion of the instalment will be devoted to amortise capital.*

[8] *It is exclusively considered the residual term of the loan from the time of reference (the year under analysis) until maturity, without considering the planned repayment schedule.*

This data has been calculated on 10 of the 12 entities that make up the sample, which account for about 80% of the mortgage portfolio under analysis.

Registrars, which place the average term at 24 and a half years in Q2 2021. Nonetheless, it should be borne in mind that this last data corresponded just to housing credit, while the former one included also the mortgages secured by a commercial property (although with a more residual weight).

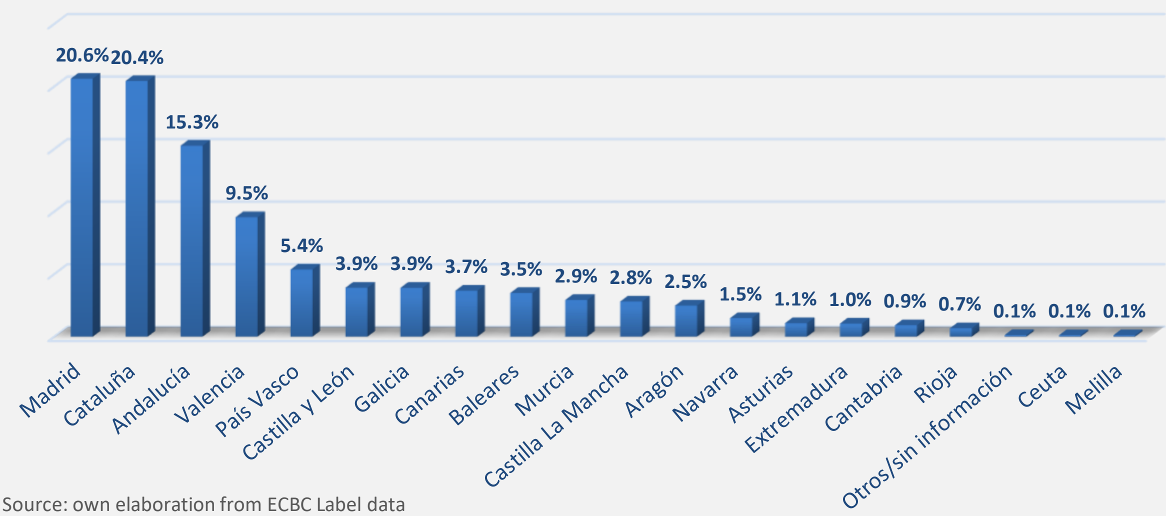
As an additional fact, in the case of *cédulas hipotecarias*, which serve as a funding instrument for a large part of this mortgage pool, the weighted average life did not reach 5 years.

8. Geographical distribution of the pool

The geographical profile of the pool under analysis draws a similar scenario compared to previous reports. Thus, more than 70% of the properties was concentrated in some of the autonomous communities with greater economic and tourist influence. Going into detail, it is observed that both Madrid and Catalonia have been occupying the top positions for years, coinciding also with the most densely populated. Both concentrated more than 40% of the market, which is divided between 20.6% in Madrid and 20.4% in Catalonia as of June 2021. Next in the rank, with a relevant share, was Andalusia representing 15.3% of the market; while Valencia and the Basque Country, also important economic hubs, operated with a share of 9.5% and 5.4%, respectively.

The rest of the regions have a penetration rate of less than 4% at individual level. In aggregate, all of them do not exceed 30% of the pool, maintaining Castilla y León (3.9%), Galicia (3.9%), the Canary Islands (3.7%) and the Balearic Islands (3.5%) the leadership within this group.

Chart 7: Geographical distribution of the mortgage pool assets



Source: own elaboration from ECBC Label data

In general, when the information is offered by market segments, the picture is very close to the scenario of the aggregate pool: communities such as Madrid, Catalonia, Andalusia, Valencia or the Basque Country represented the bulk of the pool, both in the residential portfolio, with a share of 71.1%, and in the commercial portfolio, reaching 72.1% of the commercial balance.

Outside the Spanish borders, we found only 0.5% international exposures, with the vast majority of properties based within the European Union. These transactions occured mainly between credit entities that, although operating in Spain, border other countries, such as Portugal or France.

Table 9

International geographical exposure of the pool	
European Union	99.9%
Spain	99.5%

Source: own elaboration from ECBC Label data

9. Interest rates

As for the modality of the subscribed interest rate, we see that as more recent operations entry the pool, the proportion of loans within the fixed interest rate[9] modality grows as an alternative to variable interest rates[10]. In particular, the former have increased their weight by around 2 percentage points in semi-annual terms and more than 4 points in year-on-year terms, reaching a share of 21.6%.

This context of strong growth in fixed-rate began more than five years ago and it has been favouring those consumers with a more conservative profile not willing to assume in the future the volatility derived from the interest rate risk associated with variable rates while they benefit from very competitive offer prices.

Table 10

Interest rate per segment	Total	Residential	Commercial
Fixed	21.6%	20.9%	24.9%
Variable	78.4%	79.1%	75.1%

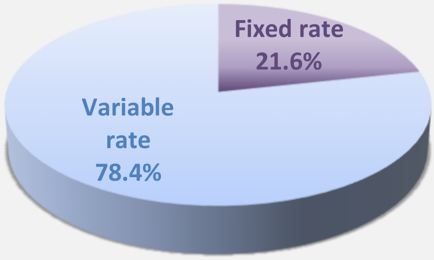
Source: own elaboration from ECBC Label data

This trend can also be seen by segments, highlighting the increase in the case of the residential portfolio, where fixed-rate arrangements have gone from representing 16.2% of the balance in the first

[9] *Loans with an initial rate fixation over 1 year.*
[10] *Loans with an interest rate up to 1 year of initial rate fixation.*

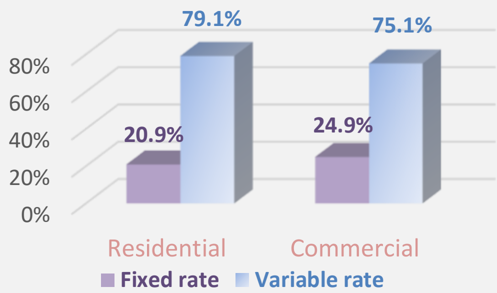
half of 2020 to 20.9% in this first half of 2021, almost 5 points more in just one year. In the commercial portfolio during that same period, loans in the fixed rate modality have reached 24.9% of the portfolio compared to the rate of 21.7% of the previous year.

Chart 8: Interest rate total mortgage pool



Source: own elaboration from ECBC Label data

Chart 9: Interest rate by segment



Source: own elaboration from ECBC Label data

10. NPLs Portfolio

A positive evolution is maintained in the Non-Performing Loans (NPLs) levels of the pool under analysis, despite at a more moderate pace of sanitation compared to the situation before the pandemic outbreak. In total, the weighted ratio of **NPL**[11] of the pool stood at 3.8%, after a practically testimonial improvement of 0.1 percentage points on a half-year basis, although somewhat more significant y-o-y (0.4 points).

If the residential segment is considered, NPLs barely accounted for 3.0% of the residential mortgage balance (in line with the rate published by the Bank of Spain in housing exposures), while in the commercial segment NPL ratio rose to 7.1%, although below its previous levels. In general, so far the data reveal the effectiveness of the different economic and social measures implemented in response to the health crisis, through holiday payments, Temporary Lay-Off Plans or state-guarantee credit lines. However, this situation could be affected in a near future if the losses of the loans recognized in the balance sheet of the entities as 'underperforming' (stage 2 according to IFRS9 standards)[12] materialise, which according to the Bank of Spain have shown an unfavorable behavior since the outbreak of the crisis. In any case, the materialisation of this scenario will depend to a large extent on the evolution of employment and whether or not there is an orderly economic-financial measures withdrawal. In principle, in the residential credit segment a great impact is not expected since housing is usually one

[11] *Loans with more than 90 days past-due considering the total amount of the loan.*
[12] *According to IFRS 9 standards, within the 'stage 2' status are classify all those loans that have had a significant increase in credit risk since their initial recognition, albeit without a credit event occurring.*

of the main payments to be met and historical data reflect this fact. On the contrary, it is more likely that in the commercial segment those credits linked to the sectors most affected by the pandemic may experience an impairment in their NPL rates. In any case, it should be remembered that in anticipation of these latent risks, financial institutions have been providing new provisions during this year and especially during the previous one, so that a large part of these potential risks would have already been covered.

11. Amortisation system followed in the pool

Finally, when analysing the composition of the pool according to the repayment system followed by the mortgage loan, the French repayment system represented the bulk of transactions. Under this system, instalments are comprised by decreasing interest amounts and increasing principal amounts.

In this sense, there are 95.7% of the exposures in the portfolio that apply this method of amortisation, leaving a much more residual proportion under another system. Specifically, 2.2% followed a bullet-interest only system and 2.1% a system different from the previous two (usually of increasing instalment system).

Table 11

Amortisation profile	Total	Residential	Commercial
French	95.7%	98.6%	83.6%
Bullet - interest only	2.1%	0.5%	8.8%
Other	2.2%	1.0%	7.6%

Source: own elaboration from ECBC Label data

In the residential portfolio the volume of loans following a French repayment system (of constant instalments) amounted to 98.6%. In the case of the commercial portfolio, this system constituted a smaller albeit significant proportion, accounting for 83.6% of the portfolio.