EUROPEAN DATAWAREHOUSE



IRPH INDEX: INSIGHT FROM EUROPEAN DATAWAREHOUSE

On the 10th of September the Advocate General of the Court of Justice of the European Union published a ruling against Spanish banks¹ which used the Indice de Referencia de Préstamos Hipotecarios (IRPH) as a reference index for the mortgages they offered in the last decades². The ruling stated that this index, which was found to lack overall transparency, could be considered abusive if borrowers were not made aware of its composition and historically higher rates compared to other indices, as shown in Exhibit 1a.



Exhibit 1a: IRPH vs 12-Month Euribor Indices

Source: European DataWarehouse and Bank of Spain.

¹ Source: InfoCuria

² The IRPH was introduced and first used for mortgages in September 1990

In the ECB RMBS reporting template, the interest rate index is reported in field AR108. Unlike the Euribor indices, the IRPH does not have a dedicated number for field AR108. We have found that IRPH is likely to be the only index referred for Spanish deals when AR108 (Current Interest Rate Index), is populated with "13" (Other). To confirm if the IRPH is used in a given deal, one must also refer to deal documentation, commentaries or investor reports. Furthermore, some data providers have informed us that indeed, "13" in field AR108 refers to the IRPH. As of second half of 2019, we found that:

- 68% of our active Spanish RMBS deals had at least 1 loan indexed to the IRPH, and
- 7.5% of total active Spanish RMBS loans on our platform are indexed to IRPH

Based on our data, we see that, historically, IRPH-linked interest rates have been higher than those linked to Euribor. Even considering the spread, there is still a substantial difference, as shown in Exhibit 1b. For example, a 20-year EUR 150,000 mortgage issued in Q1 2014 linked to the IRPH would have exceeded EUR 5,000 in additional costs compared with a loan linked to 12-month Euribor by Q1 2019.³



Exhibit 1b: Actual Interest Rates Paid Based on Euribor and IRPH

Source: European DataWarehouse

The Court ruled that borrowers with mortgages linked to the IRPH could be compensated. Spanish banks have nevertheless defended the validity of the IRPH, arguing that it was an official index approved and published by the Bank of Spain.

While the current opinion is not binding, the Spanish Justice Tribunal (Tribunal

de Justicia), which has ultimate say over the case, often follows the opinion given by the Court of Justice of the European Union. Therefore, it is possible that the Tribunal may also find the use of the IRPH to be predatory. This would signal the beginning of a lengthy legal process to compensate borrowers with mortgages linked to the IRPH.

After that, we have estimated the principal and interest payment which would correspond to pay during the first 5 years, starting on 2014 until 2019, for a loan with a maturity of 20 years, an amount of 150,000 and a monthly payment under both indexes. The interest rate has been updated on an annual basis and takes those rates which would correspond for the loans to reset accordingly.

³ To estimate this difference, we used all the deals which have at least one loan indexed to IRPH. Afterwards, the loans have been grouped by index: i) Euribor or ii) IRPH. We then calculated the average interest rates from 2014 to 2019 as shown in the Exhibit 1b.

IRPH ESTIMATION

While the IRPH is published by the Bank of Spain, it has been developed and maintained using aggregated data from a group of Spanish banks. This rate is the "simple average of the weighted average interest rates of mortgage loans with terms of three years or more, for the purchase of unsubsidized housing, granted or renewed by banks and savings banks in the month to which the reference rate refers. Equivalent annual rates are used to calculate the average."⁴ Due to this unique calculation, and the fact that it includes additional mortgage-related fees, the IRPH has been historically greater than the 12-month Euribor.

PREVALENCE OF LOANS LINKED TO IRPH IN SPANISH SECURITISATIONS

Using our data, we can see that not all Spanish originators are equally exposed, as shown in Exhibit 2. Caixabank, BBVA and UCI carry the highest current balances for affected mortgages.



Exhibit 2: Amount of Loans Linked to IRPH vs Deals including Loans Linked to IRPH (by Servicer)

Source: European DataWarehouse

Exhibit 3 lists the deals with the largest exposures to the IRPH. In particular, there are seven transactions with an amount of loans exposed to IRPH in excess of 30% of their current balances; the largest being the Hipocat

(originated by Caixa Catalunya, currently BBVA) and RMBS Prado UCI) series. To complete this picture, exhibit 5 in our Appendix shows all the deals in which we could identify loans linked to the IRPH.



Exhibit 3: Top 20 Largest Exposure to IRPH (as Percentage of Current Balance)

For those deals originated by saving banks there are other different indexes populated in the field AR108 (Current Interest Rate Index) apart from the IRPH and hence it is necessary to reconcile data from savings banks with the relevant investor report.

DEAL NAME	CURRENT BALANCE ACTIVE LOANS INDE- XED TO IRPH	ACTIVE LOANS INDE- XED TO IRPH
RURAL HIPOTECARIO VII FTA	21.93%	15.08%
RURAL HIPOTECARIO GLOBAL I FTA	11.42%	8.28%
RURAL HIPOTECARIO VI FTA	14.08%	11.94%
RURAL HIPOTECARIO VIII FTA	8.30%	6.96%
RURAL HIPOTECARIO X FTA	4.06%	4.10%
RURAL HIPOTECARIO IX FTA	4.18%	3.65%
RURAL HIPOTECARIO XI FTA	3.76%	3.44%
RURAL HIPOTECARIO XV FTA	0.82%	0.61%
RURAL HIPOTECARIO XVIII FT	0.03%	0.01%
RURAL HIPOTECARIO XIV FTA	0.96%	0.31%
RURAL HIPOTECARIO XII FTA	0.72%	0.43%

Exhibit 4: Deals on our Platform Originated by Saving Banks and Linked to IRPH

Source: Europea de Titulizacion

Source: European DataWarehouse

CONCLUSION

As seen in other lawsuits, such as mortgage floor clauses, the process is legally complex, and it can take years until it is fully resolved. While we cannot yet determine the outcome of the forthcoming rulings, we can at least use our data to determine the scope of the issue. Clarity will only come on this issue once the Spanish Justice Tribunal has formalized and finalized their legal decision.

European DataWarehouse is pleased to provide timely market insight such as this to its customers. We will keep our customers informed regarding the outcome of this legal process and any potential impact it may have on our data. For any questions, please contact our team at <u>enquiries@eurodw.eu</u>

APPENDIX

Exhibit 5: Originators and Deals with Loans Linked to IRPH

ORIGINATOR AND DEAL NAME	CURRENT BALANCE ACTIVE LOANS INDEXED TO IRPH	ACTIVE LOANS INDEXED TO IRPH
UCI	31.83%	29.33%
RMBS PRADO I	44.72%	45.62%
RMBS PRADO IV	37.35%	34.21%
RMBS PRADO II	32.29%	27.54%
RMBS PRADO III	29.71%	27.62%
RMBS PRADO V	25.95%	20.33%
RMBS PRADO VI	23.06%	21.78%
CAIXABANK	9.40%	18.04%
CAIXABANK RMBS 3, F.T.	12.56%	23.05%
CAIXABANK RMBS 1, F.T.	9.68%	17.12%
CAIXABANK RMBS 2, F.T	5.57%	12.32%
VALENCIA HIPOTECARIO 2 FTH	0.06%	0.05%
BANKIA	6.10%	8.17%
MADRID RMBS III	11.30%	16.29%
MADRID RMBS IV	3.47%	4.93%
MADRID RESIDENCIAL II	2.67%	3.19%
BANCAJA 7 FTA	2.41%	5.24%
MADRID RESIDENCIAL I	2.14%	3.15%
KUTXABANK	5.54%	9.29%
AyT Hipot. BBK I	19.10%	23.79%
AyT Hipot BBK II	13.98%	24.97%
AyT ICO-FTVPO Vital Kutxa	7.29%	7.46%
AyT Colat. G. Hipot. BBK II	6.60%	9.79%
AyT Colat. G. Hipot. BBK l	5.16%	11.25%
IM CAJA LABORAL 1	2.01%	2.19%
AyT Kutxa Hipot. II	0.65%	0.70%
IM CAJA LABORAL 2	0.37%	0.46%
AyT Kutxa Hipot. I	0.15%	0.13%
AyT Colat. G. Hipot. Vital Kutxa l	0.14%	0.22%
BANCO SABADELL	5.42%	9.53%
TDA CAM 4, FTA	17.09%	20.31%
TDA CAM 6, FTA	13.12%	16.28%

DRIGINATOR AND DEAL NAME	CURRENT BALANCE ACTIVE LOANS INDEXED TO IRPH	ACTIVE LOANS INDEXED TO IRPH
TDA CAM 5, FTA	12.06%	13.32%
TDA CAM 7, FTA	10.80%	13.50%
TDA CAM 8, FTA	9.90%	11.98%
TDA CAM 9	8.75%	12.07%
CAIXA PENEDES 1 TDA, Fondo de Titulización de Activos	7.21%	8.18%
CAIXA PENEDES 2 TDA, Fondo de Titu- lización de Activos	4.69%	6.14%
TDA SABADELL RMBS 4, FONDO DE TITULIZACIÓN	2.86%	5.07%
SANTANDER	4.67%	6.19%
IM PASTOR 3	10.75%	9.84%
FONDO DE TITULIZACIÓN DE ACTIVOS SANTANDER HIPOTECARIO 1	9.19%	12.19%
FONDO DE TITULIZACIÓN DE ACTIVOS SANTANDER HIPOTECARIO 3	6.14%	7.43%
F.T.A. RMBS SANTANDER 3	6.03%	8.07%
FT RMBS SANTANDER 4	5.42%	7.02%
IM PASTOR 4	4.54%	4.21%
FONDO DE TITULIZACIÓN DE ACTIVOS SANTANDER HIPOTECARIO 2	4.02%	3.90%
F.T.RMBS SANTANDER 5	3.63%	5.34%
FONDO DE TITULIZACIÓN DE ACTIVOS SANTANDER HIPOTECARIO 8	2.65%	3.02%
FTA RMBS SANTANDER 2	2.64%	3.20%
F.T.A. SANTANDER HIPOTECARIO 9	1.43%	1.82%
FONDO DE TITULIZACIÓN DE ACTIVOS SANTANDER HIPOTECARIO 7	0.77%	1.06%
BBVA	3.31%	6.36%
HIPOCAT 6 FTA	81.80%	84.10%
HIPOCAT 7 FTA	51.20%	56.00%
HIPOCAT 8 FTA	43.22%	55.29%
HIPOCAT 11 FTA	32.27%	37.79%
HIPOCAT 10 FTA	28.75%	33.18%
HIPOCAT 9 FTA	21.52%	26.19%

ORIGINATOR AND DEAL NAME	CURRENT BALANCE ACTIVE LOANS INDEXED TO IRPH	ACTIVE LOANS INDEXED TO IRPH
BBVA RMBS 1 FTA	3.54%	3.11%
BBVA RMBS 2 FTA	2.99%	2.92%
BBVA RMBS 18 FT	2.80%	2.74%
BBVA RMBS 3 FTA	1.80%	2.03%
BBVA RMBS 12 FTA	1.01%	1.88%
BBVA RMBS 16 FT	0.74%	1.12%
BBVA RMBS 13 FTA	0.56%	1.21%
BBVA RMBS 15 FTA	0.43%	0.53%
BBVA RMBS 11 FTA	0.42%	0.42%
BBVA RMBS 5 FTA	0.15%	0.28%
BBVA RMBS 17 FT	0.02%	0.03%
CAJAMAR	2.15%	3.66%
IM CAJAMAR 3	4.91%	7.13%
IM CAJAMAR 5	2.20%	3.57%
IM CAJAMAR 4	2.17%	3.26%
IM BCC CAJAMAR 1	1.94%	3.21%
IM CAJAMAR 6	1.17%	2.14%
BANCA MARCH	1.84%	2.60%
TDA 30, Fondo de Titulización de Activos	1.84%	2.60%
LIBERBANK	1.55%	2.33%
TDA 26-Mixto, Fondo de Titulización de Activos	3.30%	3.47%
SABADELL AND BANCA MARCH	2.61%	3.46%
TDA 29 Fondo de Titulización de Acti- vos	2.16%	3.46%
IM CAJASTUR MBS 1	1.55%	2.33%
ABANCA	0.49%	0.75%
HT ABANCA RMBS II, FT	0.49%	0.75%
IBERCAJA	0.13%	0.57%
TDA IBERCAJA 2, Fondo de Titulización de Activos	0.50%	1.49%
TDA IBERCAJA 5, Fondo de Titulización de Activos	0.25%	0.86%

DRIGINATOR AND DEAL NAME	CURRENT BALANCE ACTIVE LOANS INDEXED TO IRPH	ACTIVE LOANS INDEXED To IRPH
TDA IBERCAJA 6, Fondo de Titulización de Activos	0.24%	0.93%
TDA IBERCAJA 3, Fondo de Titulización de Activos	0.09%	0.40%
TDA IBERCAJA 7, Fondo de Titulización de Activos	0.02%	0.14%
TDA IBERCAJA 4, Fondo de Titulización de Activos	0.00%	0.03%

Source: European DataWarehouse

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European Transparency Register ID Number: 781559916266-15