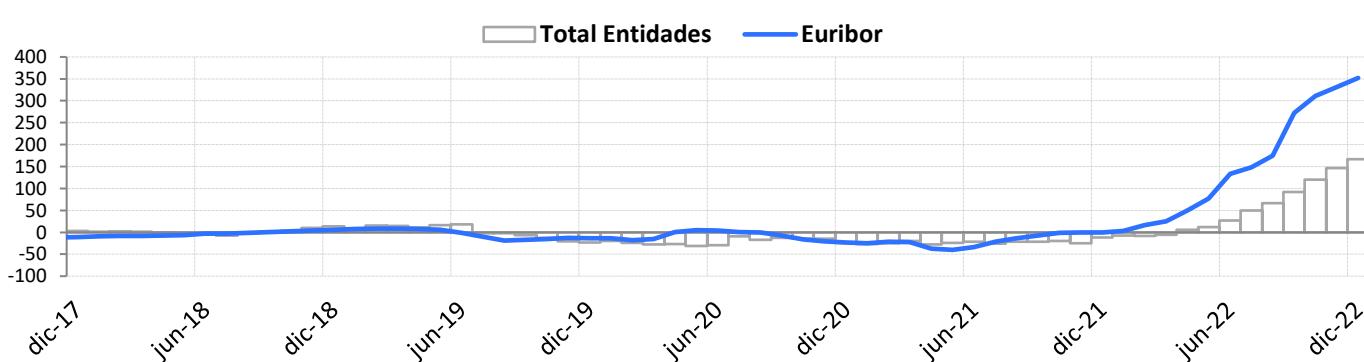


## Reference Indexes of the Mortgage Market

December 2022

	Official reference indexes (%)							Other references	
	Total Institutions	Euro Zone (1)	Euribor 12m	Mibor (2)	€ STR 12m	IRS 5 years (3)	Public Debt from 2 to 6 years	A.H.E.	Covered Bonds
dic-21	1,448	1,480	-0,502	-0,502	-0,566	-0,092	-0,343	0,250	0,074
ene-22	1,485	1,460	-0,477	-0,477	-0,567	0,098	-0,298	-	0,020
feb-22	1,481	1,460	-0,335	-0,335	-0,568	0,537	-0,161	-	0,044
mar-22	1,513	1,490	-0,237	-0,237	-0,570	0,710	-0,024	0,250	0,055
abr-22	1,540	1,530	0,013	0,013	-0,571	1,239	0,129	-	0,055
may-22	1,624	1,720	0,287	0,287	-0,573	1,429	0,395	-	0,181
jun-22	1,799	1,860	0,852	0,852	-0,574	1,976	0,676	0,500	0,284
jul-22	1,986	2,030	0,992	0,992	-0,573	1,633	0,916	-	0,305
ago-22	2,198	2,260	1,249	1,249	-0,529	1,721	1,091	-	0,338
sep-22	2,410	2,440	2,233	2,233	-0,457	2,598	1,459	1,250	1,449
oct-22	2,666	2,590	2,629	2,629	-0,355	3,020	1,742	-	1,474
nov-22	2,877	2,810	2,828	2,828	-0,195	2,809	1,988	-	1,501
dic-22	3,116	3,040	3,018	3,018	-0,021	2,836	2,084	2,250	2,266
<b>Inter-monthly variation</b>									
	Total Institutions	Euro Zone (1)	Euribor 12m	Mibor (2)	€ STR 12m	IRS 5 years (3)	Public Debt from 2 to 6 years	A.H.E.	Covered Bonds
Jul-22	0,187	0,170	0,140	0,140	0,001	-0,343	0,240	-	0,021
ago-22	0,212	0,230	0,257	0,257	0,044	0,088	0,175	-	0,033
sep-22	0,212	0,180	0,984	0,984	0,072	0,877	0,368	-	1,111
oct-22	0,256	0,150	0,396	0,396	0,102	0,422	0,283	-	0,025
nov-22	0,211	0,220	0,199	0,199	0,160	-0,211	0,246	-	0,027
dic-22	0,239	0,230	0,190	0,190	0,174	0,027	0,096	-	0,765
<b>Year-on-year variation</b>									
	Total Institutions	Euro Zone (1)	Euribor 12m	Mibor (2)	€ STR 12m	IRS 5 years (3)	Public Debt from 2 to 6 years	A.H.E.	Covered Bonds
Jul-22	0,501	0,600	1,483	1,483	-	1,950	1,242	-	0,201
ago-22	0,669	0,810	1,747	1,747	-	2,091	1,429	-	0,228
sep-22	0,921	0,970	2,725	2,725	-	2,864	1,810	1,000	1,333
oct-22	1,199	1,130	3,106	3,106	-	3,120	2,083	-	1,358
nov-22	1,465	1,340	3,315	3,315	-	2,898	2,332	-	1,401
dic-22	1,668	1,560	3,520	3,520	-	2,928	2,427	2,000	2,192

Chart: year-on-year variation rates



NOTE:

(1) Euro area lenders' average 1-to-5-year mortgage rate for the purchase of unsubsidised housing (linked to the previous month).

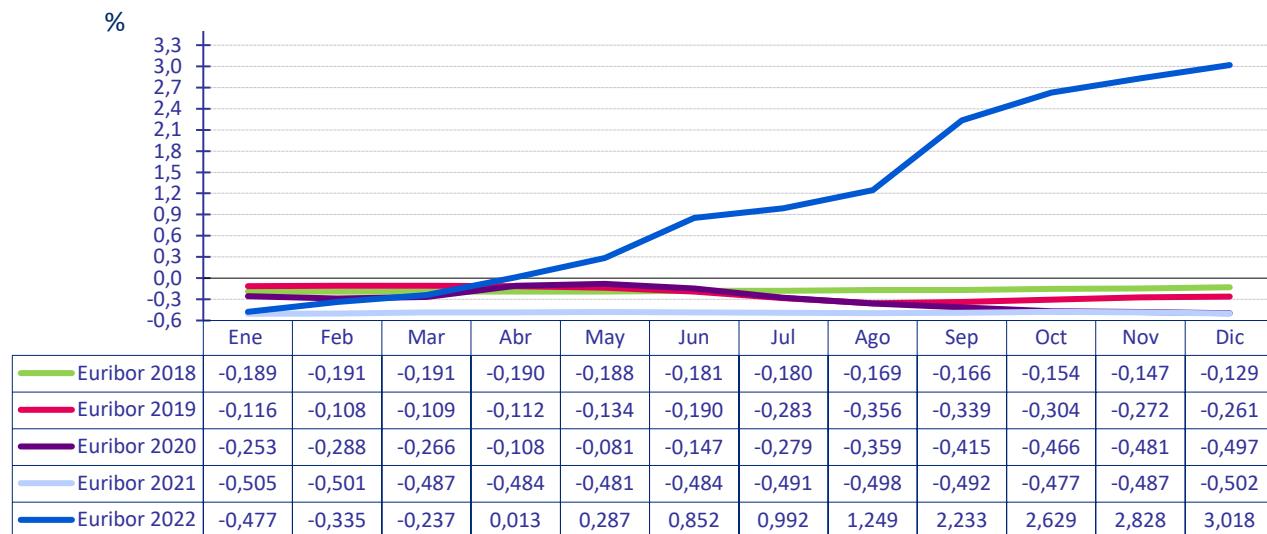
(2) This interest rate ceased to be considered as the official mortgage market reference rate for mortgage loans arranged as from 1 January 2000.

(3) 5 years Interest Rate Swap (IRS). The monthly average is calculated according to the definition established in Circular 5/2012 of 27th of June of the Bank of Spain.

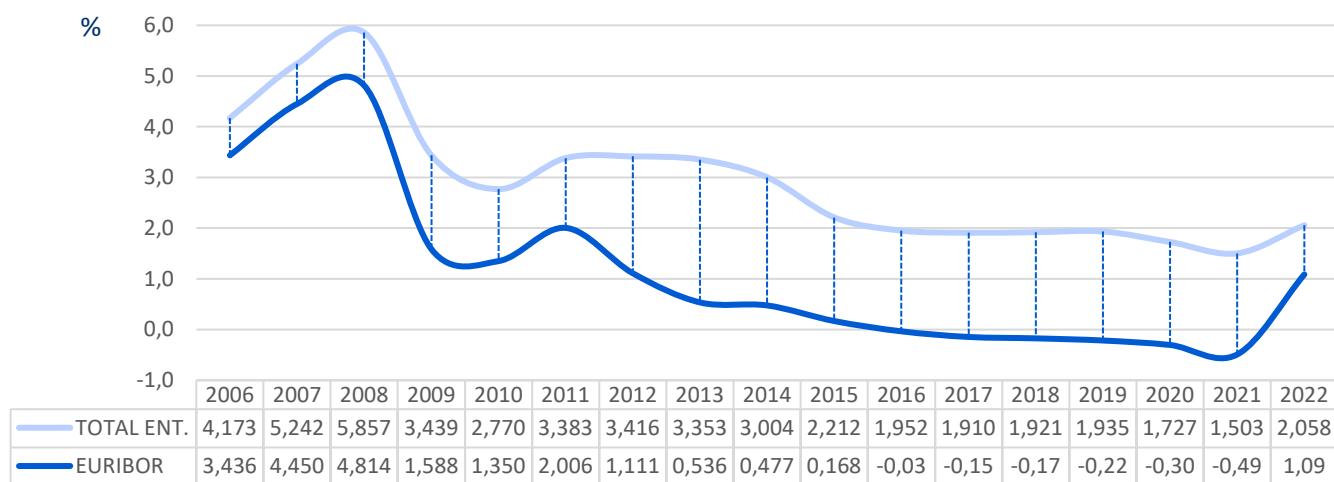
## Reference Indexes of the Mortgage Market

**December 2022**

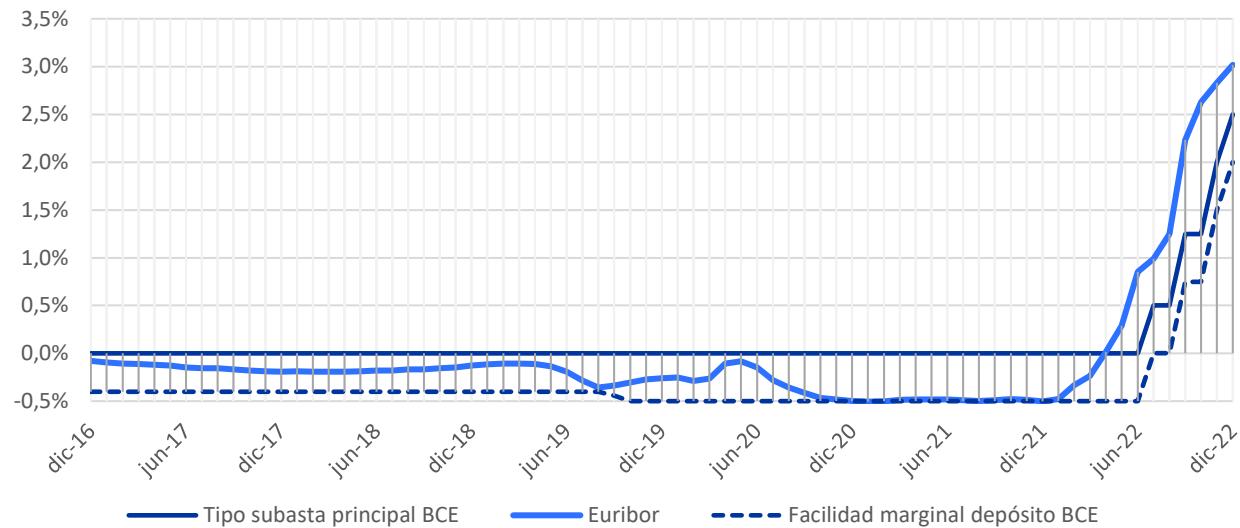
### Euribor 12 monthly average



### Total institutions and Euribor 12 yearly average



### ECB official rate (main refinancing operations) versus Euribor 12



## Reference Indexes of the Mortgage Market

**December 2022**

### 1. OFFICIAL mortgage market reference rates:

	%
Average rate on mortgage loans for house purchase over 3 years granted by Spanish Monetary and Financial Institutions (MFIs)	3,116

Average rate on mortgage loans for house purchase with a maturity between 1-5 years granted by Euro zone MFIs (1)	3,040
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Internal Rate of Return (IRR) on government bonds with a residual maturity of 2-6 years	2,084
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#### Euribor. Plazos

Interbank 1-week Euríbor	1,595
Interbank 1-month Euríbor	1,724
Interbank 3-month Euríbor	2,063
Interbank 6-month Euríbor	2,560
Interbank 12-month Euríbor	3,018

5 year Interest Rate Swap (IRS)	2,836
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#### Interest Rate based on the Euro short-term rate (€STR) (2)

1-week €STR	1,907
1-month €STR	1,553
3-month €STR	1,182
6-month €STR	0,537
12-month €STR	-0,021

Interbank 12-month MÍBOR (3)	3,018
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### 2. Other reference rates

- Resolution 20/6/1986 of the DGT and PF

Most frequent rate of the MFIs members of the board of the Spanish Mortgage Association	2,250
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Rate at issue of Spanish Covered Bonds (Cédulas Hipotecarias)	2,266
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Rate at issue of domestic Government Bonds between 3 and 6 years	2,034
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- Resolution 5/12/1989 of the DGT and PF

Government Bonds Nominal Index for half-yearly payments	2,073
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(1) This rate matches that prepared and published by the ECB with a lag of one month for the purposes of its use as a mortgage market reference rate. As set out in Annex 8 of the Bank of Spain Circular 5/2012, this index will not be corrected should the ECB subsequently change the rate published.

(2) This benchmark, calculated and published by the ECB, is defined as the value of the average compound interest rate at different maturities (one week, one month, three months, six months and 12 months) on the last TARGET2 business day of the month.

(3) This interest rate ceased to be considered as the official mortgage market reference rate for mortgage loans arranged as from 1 January 2000.