Irving Fisher Committee on
Central Bank Statistics

IFC Satellite Seminar on "Granular data: new horizons and challenges for central banks"

The secret ingredient of being relevant? Microdata. Making the move from ready-made to fresh statistics[1]

Luís Teles Dias and Lígia Maria Nunes,
Banco de Portugal

1 This contribution was prepared for the IFC Satellite Seminar held at the ISI 64th World Statistics Congress, co-organised with the Bank of Canada in Ottawa, Canada, on 15 July 2023. The views expressed are those of the authors and do not necessarily reflect the views of the Bank of Canada, the BIS, the IFC or the other central banks and institutions represented at the event.

The secret ingredient of being relevant? Microdata.

Making the move from ready-made to fresh statistics.

Luís Teles Dias[1], Lígia Maria Nunes[2]

[1]*Banco de Portugal*, Statistics Department, Lisboa, Portugal – ldias@bportugal.pt
[2]*Banco de Portugal*, Statistics Department, Lisboa, Portugal – lmnunes@bportugal.pt

Abstract

In the realm of statistics, much like in culinary arts, the quality of the ingredients used can significantly influence the final outcome. The Banco de Portugal has embraced this philosophy by transitioning from traditional, "ready-made" statistical reports to dynamic, microdata-driven insights. This shift is essential for producing relevant and timely information that meets the evolving needs of society, particularly in response to rapid economic changes.

Historically, the Banco de Portugal has been producing and publishing bank interest rate statistics for over three decades, harmonized across the euro area since 2003 under the Monetary and Financial Institutions Interest Rates (MIR) framework. These statistics provided a standardized view but often lacked the granularity required to address specific, emergent issues. The period of low or negative interest rates rendered these statistics less newsworthy, but the landscape changed dramatically with the onset of rising interest rates in mid-2022. The predominantly variable-rate nature of Portuguese housing loans – over 90% indexed to Euribor – exposed many households to significant financial risk, demanding a more detailed statistical approach.

The introduction of new statistical indicators in September 2022 marked a pivotal shift towards leveraging the comprehensive data available in the Portuguese central credit register (CCR). The CCR's vast database, encompassing over 200 attributes per loan contract, provided the granular data needed to develop these fresh statistics. These new indicators offered detailed insights into loans granted by banks to households, which were previously obscured in aggregated data. The new set of indicators addressed e.g., the various subtypes of housing loans, a common typology of interest rates based on different indexants, the distribution by percentiles of the amounts of regular instalments, the differentiation between new and renegotiated loans and the early amortization of loans.

This enhanced statistical output has been well-received, evidenced by a surge in engagement with Banco de Portugal's statistical portal, BP*stat*. The average monthly page views of our press releases on interest rate statistics shot up from around 650 in the 1st half of 2022 (before the publication of the new indicators) to around 1800 in the 2nd half (after the new indicators) and remained at this level in the 1st half of 2023. This fact clearly underscored the public's demand for these new statistics.

The transition to microdata-driven statistics required more than just access to data; it required a user-centric approach and active listening to the public's needs. By prioritizing clarity and relevance in its reporting, the Banco de Portugal ensured that the new indicators were understandable and useful to the general public. For instance, instead of using technical terms like "initial period of rate fixation," the new reports focused on whether interest rates were fixed or variable and how frequently they were reviewed.

Significant findings from these new indicators included a notable shift in the housing loan market: the proportion of the stock of loans with variable rate fell from over 90% to near 70% within a year. The differential between fixed and variable interest rates also decreased, with both

averages converging around 4.20% by May 2023. Additionally, there was a noticeable increase in loan early amortization (either full of partial), reflecting borrowers' responses to rising interest rates.

The impact of these new statistics extends beyond immediate public engagement. They have demonstrated the potential of microdata to enhance the relevance and responsiveness of official statistics. Looking forward, the Banco de Portugal aims to apply this approach to other domains, such as non-financial corporate data, to address issues like potential increases in sales margins amidst inflation.

In conclusion, the Banco de Portugal's move towards utilizing microdata for fresh, detailed statistics exemplifies its commitment to staying relevant and responsive in an era of rapid economic change. This approach not only meets regulatory requirements but also provides the public with vital information, enhancing trust and utility in official statistics. The key takeaway is that relevance in statistics, much like in cuisine, depends on the quality and freshness of the ingredients – data that is timely, detailed, and directly responsive to the needs of users.

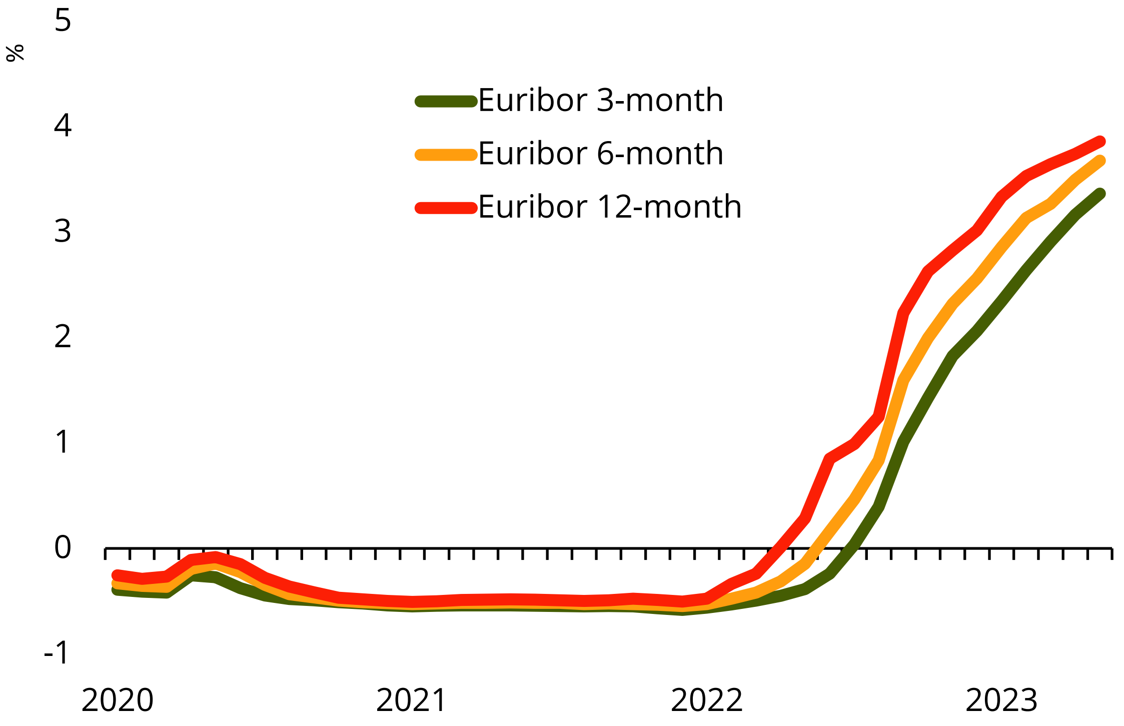
The secret ingredient of being relevant? Microdata

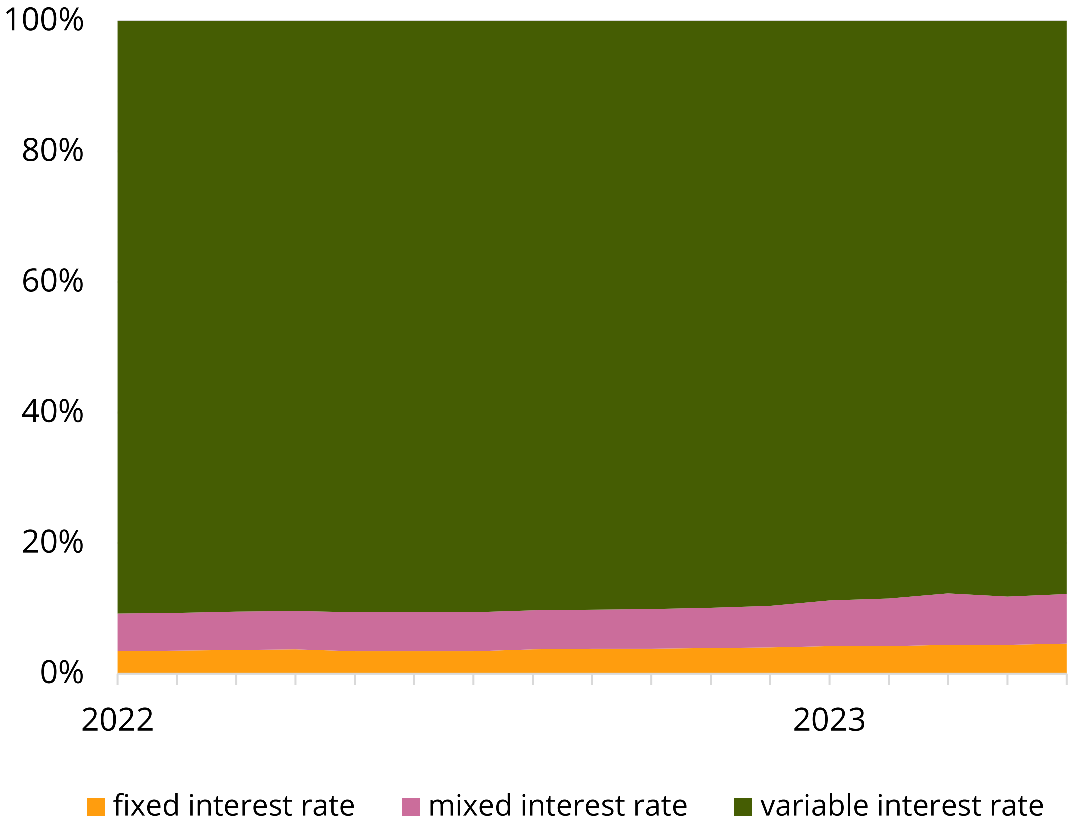
Making the move from ready-made to fresh statistics

Luís Teles Dias
Lígia Maria Nunes
•
Banco de Portugal

BANCO DE PORTUGAL
EUROSYSTEM

90% of the stock of loans for permanent own housing had a variable interest rate





The Portuguese Central Credit Register has more than 200 variables on every loan above EUR 50.

Better data

Skills on data management and analytics

Identify the hot topics

MENU

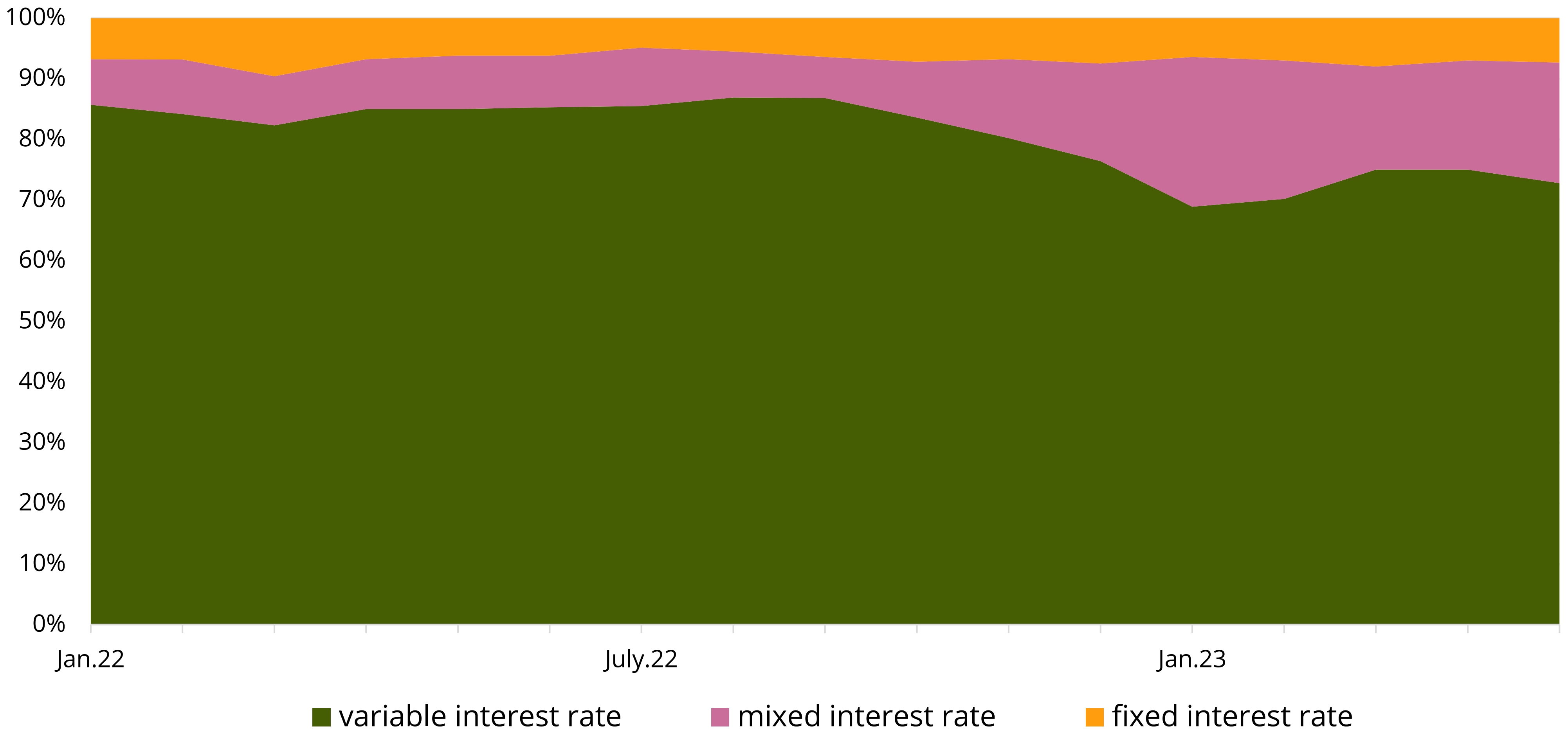
Appetizer: Distribution of new loans by type of interest rate

Soup: Average interest rates on new loans for permanent own housing, by type of interest rate

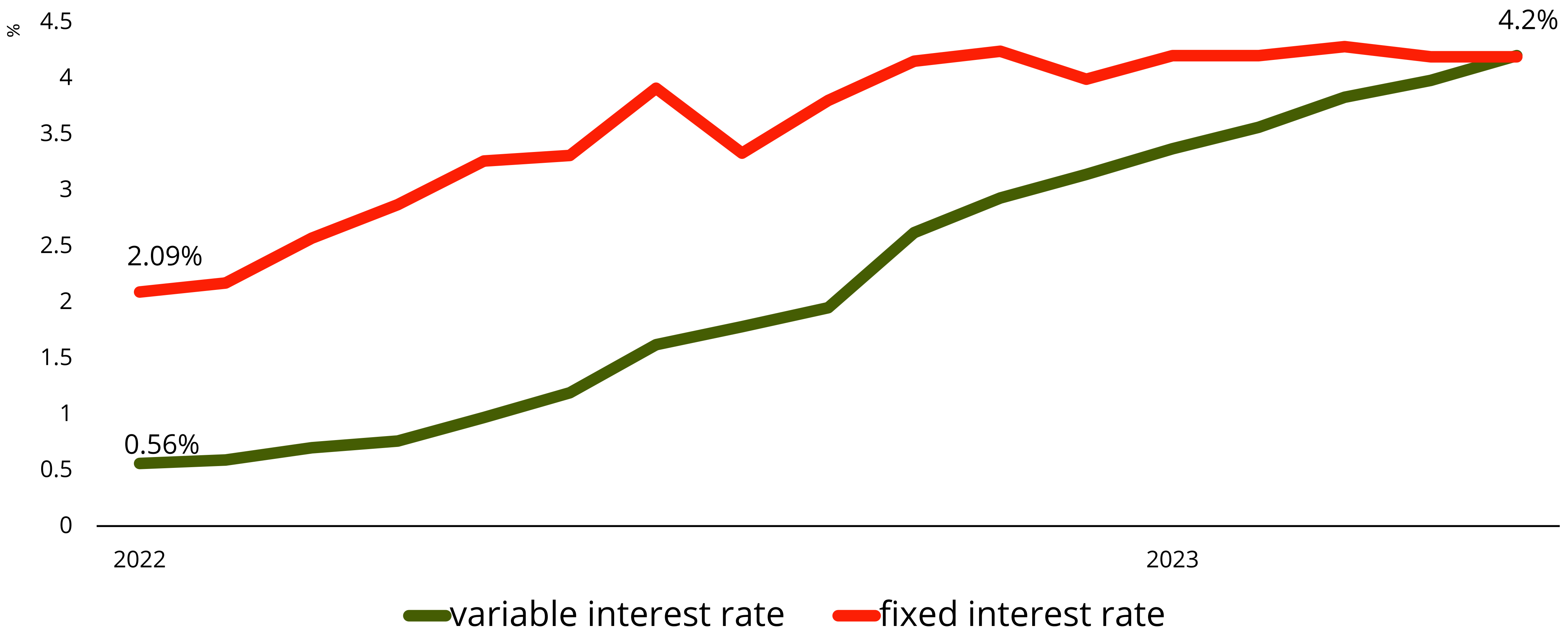
Main course: Distribution overtime of monthly instalments for permanent own housing

Dessert: Proportion of early amortization of the stock of loans for permanent own housing

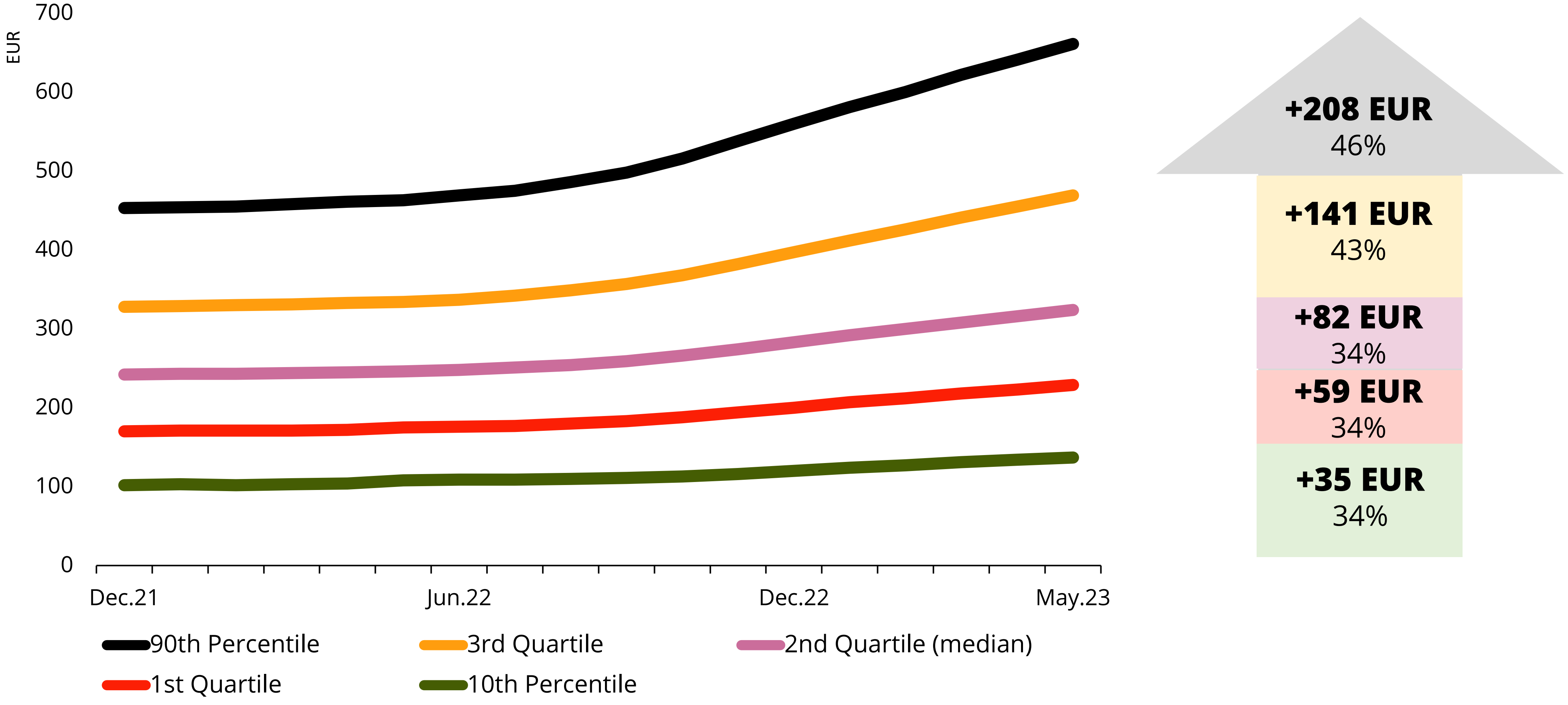
New loans for permanent own housing with variable interest rate decreased from October 2022 onwards



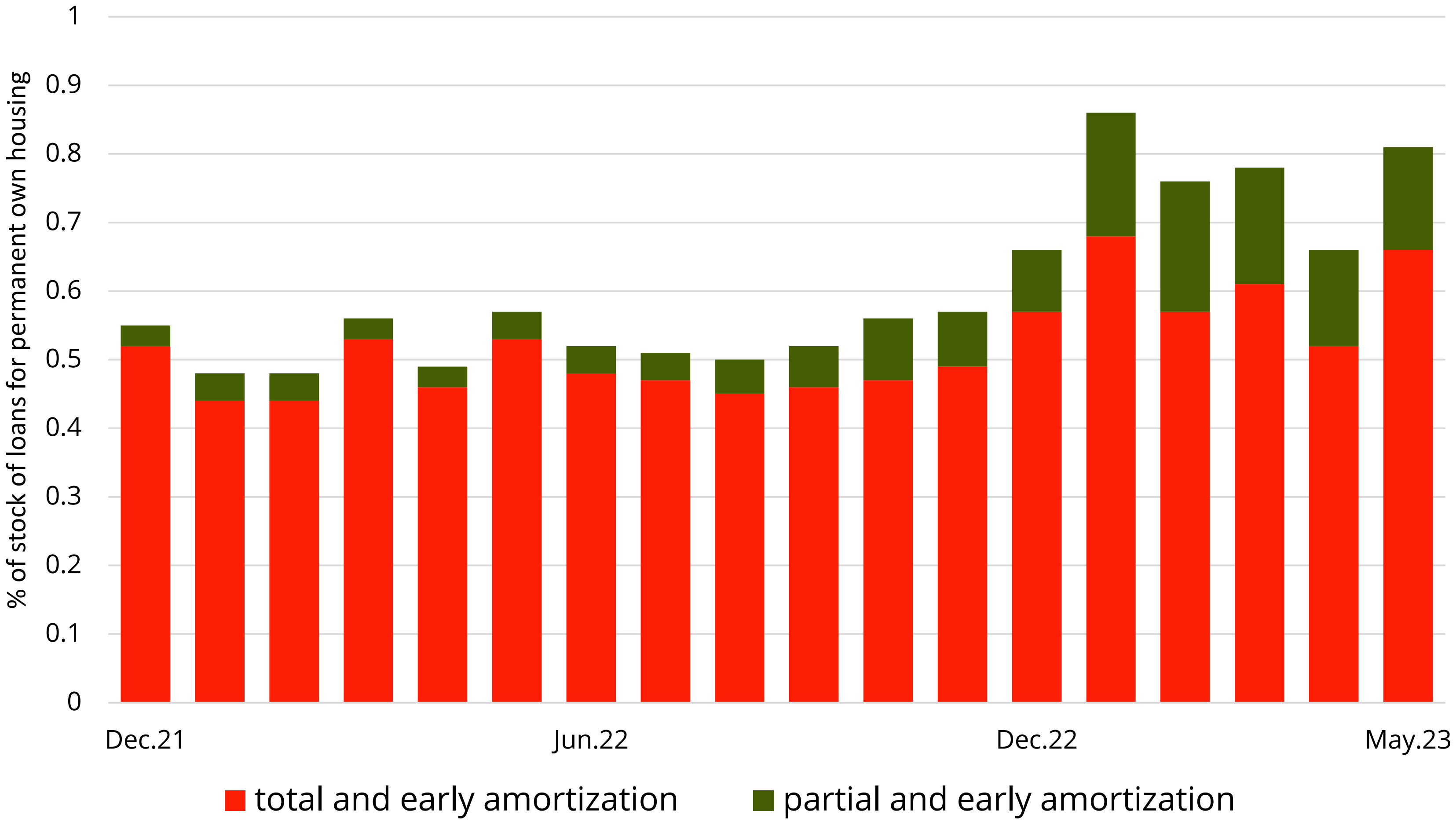
Gap between average interest rates on new loans for permanent own housing with variable and fixed interest rates closed



Monthly repayment of loans for permanent own housing increased, on average, between EUR 35 and EUR 208 between December 2021 and May 2023



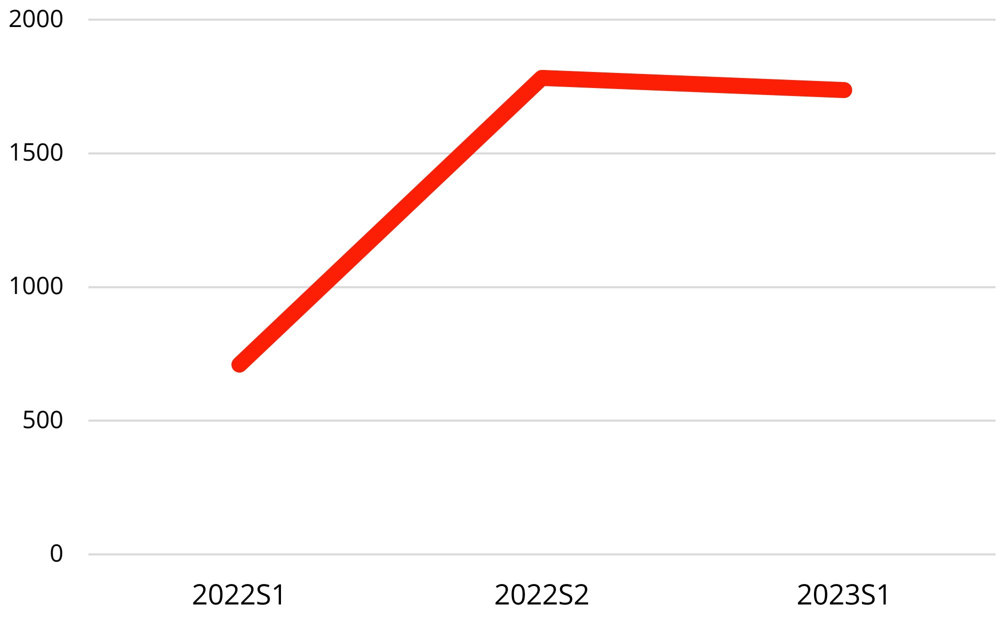
Early amortizations of loans for permanent own housing reached 0.67% of the stock in May, continuing the upward trend observed since September 2022



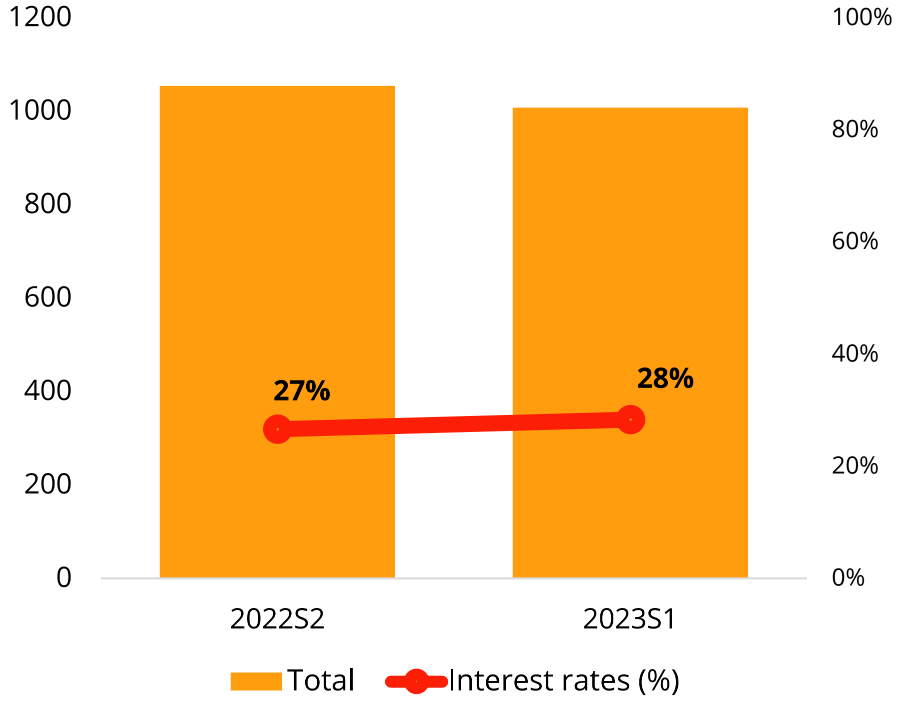
28% of the news published by the media on statistics released by the Banco de Portugal were on interest rates

Statistical press releases – interest rates

Average monthly page views



News published by the media on statistics released by Banco de Portugal



Remaining relevant is about continuing to be users' choice year after year.

SO, SPEND TIME WHERE YOUR USERS SPEND TIME

The secret ingredient of being relevant? Microdata

BoC-IFC satellite seminar on "Granular data: new horizons and challenges for central banks"

Ottawa, July 15, 2023

Luís Teles Dias | ldias@bportugal.pt
Lígia Maria Nunes | lmnunes@bportugal.pt

BANCO DE PORTUGAL
EUROSYSTEM