## AGENDA Banco de Portugal Research 2022-25



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### Foreword

Research is essential for the Banco de Portugal to perform its mission. Studies are an essential part of the analytical framework that informs the decisions made by the Bank to achieve its mission of maintaining price stability and promoting the stability of the financial system. They are also crucial for the Bank to fulfil its statutory obligation to provide advice to the Government in economics and finance. Sharing this knowledge with society and promoting a more informed public debate through a closer relationship with the community are part of the Banco de Portugal's strategic guidelines until 2025.

The research agenda seeks to identify priority topics for research that are particularly relevant to achieve the Banco de Portugal's strategic objectives. The agenda seeks not only to question and engage the Bank's economists, but also to signal the human capital and data the Bank needs to invest in to be ready to address the challenges of the coming years. The public dissemination of the agenda facilitates the desirable collaboration with academia and the external research community.

This agenda is meant to reflect evolution, rather than revolution, from the 2018-20 research agenda. The Banco de Portugal wants to strengthen research on some key topics already on the previous agenda. This is the case for topics directly related to its mission or issues related to Portugal's economic growth and public policies. At the same time, the Bank intends to tackle new research challenges arising from global changes in recent years. Some of these are the challenges arising from the COVID-19 pandemic for instance, others arise from digital transformation and environmental sustainability. As with the previous agenda, some studies will be essentially applied research, others will aim at developing models and tools to study the topics proposed.

The agenda is organised into five research topics. The choice of a given thematic structure does not mean there is no interaction between the various topics. Some studies will naturally fit into more than one topic on the agenda. Whilst the research agenda identifies the questions the Banco de Portugal finds critical, the answers will always be those of the individual authors. Independence and openness to a variety of views remain key features at the Banco de Portugal. The creative and technical capacity of the Bank's economists, applied to priority research topics, will decidedly improve the quality of the decisions the Banco de Portugal has to make and its participation in the leading debates at national and international level.

### **RESEARCH AGENDA 2022-25 · Topics**



#### Central bank policies in a changing environment

- 1.1 Monetary policy
- 1.2 Microprudential and macroprudential policies
- 1.3 Interaction between central bank policies and relations with other economic policies
- 1.4 Central bank digital currency, other digital assets and payment innovations
- 1.5 Use of new technologies to inform central bank policies



#### Functioning of the markets and of the Portuguese economy

- 2.1 Product markets and firms
- 2.2 Labour market
- 2.3 Financial intermediation
- 2.4 External relations: trade, investment and factor mobility



### Growth, resilience and equity in the Portuguese economy

- 3.1 Production factors and productivity
- 3.2 Public policies and institutions
- 3.3 Inequality and inclusion



### Climate change, demography and other ongoing transformations

- 4.1 Climate change and energy transition
- 4.2 Demography
- 4.3 Additional structural change factors



## New analytical models and tools



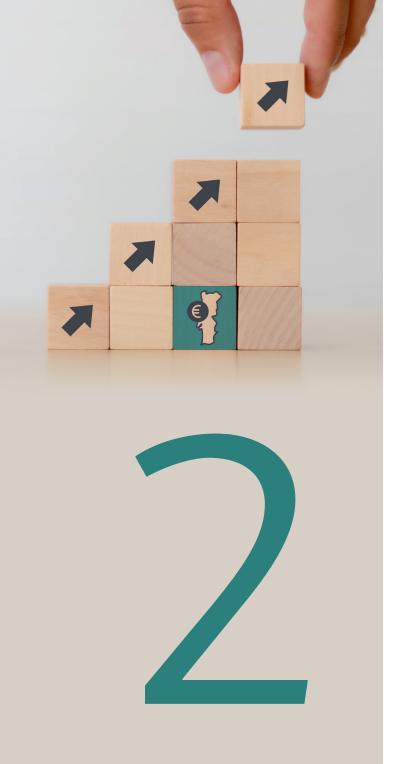
#### Central bank policies in a changing environment

The Banco de Portugal participates in the decisions and implementation of the euro area's monetary policy as part of the Eurosystem. It regulates and supervises the Portuguese banking system together with the European Central Bank within the framework of the Single Supervisory Mechanism. It defines and implements the macroprudential policy. It is the national resolution authority and is part of the Single Resolution Mechanism.

To perform the Banco de Portugal's mission of maintaining price stability and promoting the stability of the financial system, it is essential to further develop research on the appropriate design, implementation and impact of these policies. The exceptional measures adopted in response to the pandemic crisis have enhanced the need to deepen our understanding of the interactions between the different central bank policies and between them and other economic policies, most notably fiscal policy. The digital transformation of the economy and the possibilities for access to, and processing of, granular information pose new challenges to both the financial sector and the central bank. New lines of research are needed to understand the risks and opportunities created by technological innovations, including how the central bank can use these new technologies in the exercise of its various functions.

#### Priority topics

- Monetary policy normalisation or tightening and implications for financial and macroeconomic stability. The effects of the different monetary policy instruments.
- Microprudential and macroprudential policy actions: design, transmission mechanisms and evaluation of impacts.
- Interactions between monetary policy and macroprudential policy in the context of rising interest rates.
- Interactions between monetary policy and fiscal policy in the context of high levels of public debt.
- Risks for the central bank arising from balance sheet size, sovereign exposures and interest rate risk.
- Implications for central bank policies of non-bank financial intermediation or financial intermediation by institutions not based in Portugal.
- Implications of digital currencies issued by the central bank and digital assets issued by private entities for the conduct and transmission of monetary policy and the stability of the financial system.
- Using advanced big data analysis and processing techniques to inform the central bank's policies (such as economic monitoring and forecasting, risk analysis or central bank communication).

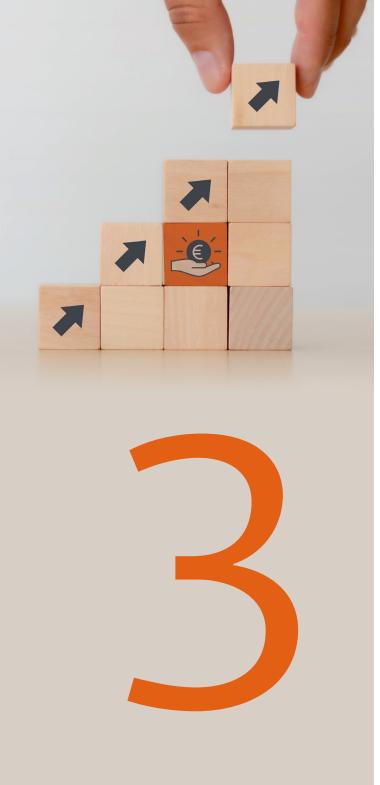


# Functioning of the markets and of the Portuguese economy

Understanding the many aspects of the functioning of the markets, especially in the case of the Portuguese economy, is an essential prerequisite for the Banco de Portugal to make an informed contribution to the public debate on the Portuguese economy and to advise policymakers. The research agenda reinforces the effort made over the years to understand the past and present of the Portuguese economy: functioning and constraints of the various product markets; characteristics and dynamics of firms; functioning of the labour market; the financing of the various sectors of the economy amid significant changes to the financial sector; the positioning of the economy in its relations with other countries. Over the next few years, the Bank's analytical work should focus particularly on understanding the impact of the pandemic crisis and of the armed conflict in Europe.

#### Priority topics

- Inflation: dynamics, determinants and risks.
- Real estate prices: dynamics, determinants and risks.
- Impacts of the pandemic and of the armed conflict in Europe on firms, the labour market and the banking system and the role of the policy response.
- Consequences of heterogeneity among economic agents for the functioning of the markets (product, labour, credit).
- Methodologies and tools for detecting and analysing risks, in particular credit risk.



# Growth, resilience and equity in the Portuguese economy

The Banco de Portugal made a strategic commitment, within its mission, to contribute to the collective effort of promoting the recovery, resilience and convergence of the Portuguese economy within the European context in the medium to long term. Therefore, it is essential to build on the research carried out over the years into the Portuguese economic growth process, identifying constraints and opportunities for the future. In this sense, one of the Bank's strategic priorities is to contribute to a better knowledge of public policy issues by fostering discussion and advising the Government on policy design. Economic growth and its sustainability is a topic that cannot be separated from patterns of income and wealth distribution. Inequality issues, albeit analytically demanding and complex, have taken on greater importance in society and therefore deserve a place on this agenda.

#### Priority topics

- Impacts of NextGenerationEU on the Portuguese economy.
- Effects of public policies on the Portuguese economy. Tax system design and consequences for the economy.
- The quality of institutions as a driver of economic growth.
- Changes in income and wealth distribution due to the pandemic, public policies and structural changes in the economy.

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# Climate change, demography and other ongoing transformations

Various transformation processes are under way globally, which also affect the Portuguese economy. The most notable examples are climate change, energy transition, population ageing and the digitalisation of economies. These processes have significant economic and financial implications which require in-depth analysis. The COVID-19 pandemic and the armed conflict in Europe also open up future lines of research, which include the possible medium and long-term consequences for the economy or how to deal with extreme event risks. Understanding the economic consequences of these fundamental changes and the new challenges they pose for the various economic policymakers cannot be left out of this research agenda.

#### Priority topics

- Environmental risks and energy transition policies: macroeconomic implications; implications for central bank tasks, notably monetary, microprudential and macroprudential policies.
- Demographic changes and the challenges they pose for economic growth, social security systems, health and education systems and inter-generational equity.
- Impact of technological transformation on the allocation of economic resources.
- Medium and long-term economic effects of the pandemic crisis and of the armed conflict in Europe.



# New analytical models and tools

Economic research relies on the use of a theoretical framework and analytical methodology that are appropriate for the subject being researched. Methodologies may consist of models designed as simplifications of economic reality or statistical methods applied to aggregate economic data or microdata on individuals or firms. It is indispensable that the Banco de Portugal's economists specialising in quantitative, statistical and analytical methods continue to design and use methodologies tailored to the questions asked. Some examples are the economic models with heterogeneous agents or forecasting models based on panel data, among many others. The creation of new models and analytical tools is a requirement shared by all the research topics proposed in this agenda.