



3. ECONOMIC ANALYSIS AND RESEARCH

The Central Bank of Malta monitors and assesses economic developments and prospects in support of its key policy-making function. The Bank also carries out economic research and develops and maintains a suite of econometric models.

Four projection exercises were conducted, two of which were undertaken as part of the Eurosystem's Broad Macroeconomic Projection Exercise. Staff carried out further work to enhance the various tools used in the forecasting processes. Modifications were made to better account for the impact of the war in Ukraine and price mitigation measures taken by the Maltese Government on inflation and fiscal projections. Steps were also taken to improve the collection of information on fiscal measures with relevance to climate change. The commentary on the Bank's projections continued to feature boxes on specific aspects related to forecasting. In 2022, these boxes explored various topics, including the energy block within the inflation projections framework, pandemic-related excess savings, projections for food inflation and their relationship with certain components of services inflation, and an assessment of the macroeconomic effects of EU-funded investment, including projects financed through the Recovery and Resilience Facility. As in previous years, meetings were held with officials from the European Commission, the IMF and major credit rating agencies to discuss the local economic situation and outlook.

The Bank maintained its regular dialogue with business firms' representatives and public sector institutions to obtain a timelier gauge of economic conditions and prospects. The Bank published the main results of this exercise on a quarterly basis in the Bank's Business Dialogue publication.

The Bank also communicated its analysis of domestic and foreign economic and financial developments in its *Quarterly Review* and *Annual Report*. Moreover, the Bank continued to publish a monthly *Economic Update*. Apart from commenting on official statistics, these publications include commentaries on several internally developed indicators, including the Bank's estimate of potential output and structural unemployment, a Business Condition Index, the FCI, and cyclically adjusted fiscal and current account balances. As the economy re-opened and the last remaining pandemic-related restrictions were lifted, an indicator of COVID-19 stringency measures was discontinued, while information on pandemic-related loan moratoria and guarantee schemes was streamlined. In view of the high inflation environment, the regular economic publications began to report more detailed assessments of price developments. For example, the *Economic Update* started to include a short commentary on sectoral selling price expectations and the *Quarterly Review* featured additional details on the main contributors of HICP inflation. The *Quarterly Review's* analysis was also extended in other ways. For instance, the section on the housing market was augmented with details on mortgage contracts, and advertised rental prices collected from the internet.

The Economic Analysis Department continued to collaborate with statistical compilers in other institutions and participated in the work of the ECB's Statistics Committee in relation to government finance statistics and general macroeconomic statistics. Further interactions took place with the NSO and the ECB in relation to the validation of the fourth wave of the HFCS.¹ The first results for Malta were presented in the Bank's Annual Research Workshop. In the meantime, the Bank's Economic Analysis and Statistics Department began to collaborate with the ECB on an experimental set of distributional wealth statistics. This dataset, still under development, links micro data collected from the HFCS at three-year intervals with quarterly financial

¹ HFCS results were transmitted to the ECB in 2021.

accounts data. It reflects the distributional information from the survey in the latter dataset with the advantage of being available at a more frequent (quarterly) interval. Once available, this dataset could be used to better assess the heterogeneous effects of economic and policy shocks on different households.

Bank staff undertook specialised research which resulted in six working papers, seven policy notes and 29 boxes, featuring in the Bank's regular publications. Three working papers covered the spillovers of euro area shocks on the Maltese economy, a stress testing framework for Maltese households and a microsimulation study to assess the impact of the COVID-19 wage supplement scheme. The other working papers focused on monetary policy, the estimation of the Bank's DSGE model,² and the development of a nowcasting model for the Maltese economy.

The policy notes dealt with a variety of topics, including the excess demand for banknotes, saving patterns, house prices, Brexit, climate change, oil prices and shipping disruptions, and the impact of COVID-19 on long careers. Research was also presented externally, both locally and abroad. Three studies were published in foreign peer-reviewed journals. Staff continued to participate in the Rental Observatory, set up by the Housing Authority to scrutinize the developments in the private rental market and contributed to two articles of the second edition of the Annual Residential Rental Study. In addition, the Economic Research Department also provided input to several ECB working groups and task forces and presented research results in local and external virtual conferences or webinars on a diverse range of topics.

In 2022, the Bank organised its fifth Annual Research Workshop. The keynote speech by Dr Elisa Lanzi from the OECD focused on the cost of environmental inaction and economic resilience. It was followed by a discussion from two economists from the Research Department on the Bank's latest modelling efforts regarding climate and energy. The final presentation focused on the main findings from the fourth wave of the HFCS for Malta. During the virtual workshop, the Bank launched the fifth edition of its Research Bulletin. The four articles in the Research Bulletin dealt with the main findings from the HFCS on household finances and consumption patterns, the differences between advertised and registered rents, the direct macroeconomic effects of the RRF fund on the Maltese economy and the estimation of the Bank's structural model with state-of-the-art Bayesian methods.

The Modelling Office continued working on the upkeep of existing models as well as on the development of new modelling tools to be used in future policy and research work. In the last two years, staff from Modelling Office have been working in close collaboration with researchers from the University of Macerata to develop a new Computable General Equilibrium model for the Maltese economy. During the last part of 2022, Dr Francesca Severini, and Dr Stefano Deriu from the University of Macerata, visited the Bank for a week-long visit. During this visit, staff from the Modelling Office worked closely with the Macerata team to fine-tune the simulation capabilities of the newly developed model. This two-year project is expected to be finalized by the first quarter of 2023.

The Bank continued to organise regular internal seminars to stimulate economic discussion and debate on its studies prior to their publication. Staff members kept regular contact with academia, both locally and abroad. In addition, assistance from external institutions was sought for the peer-review of the Bank's technical studies. The Bank remained active in domestic fora, such as the National Productivity Board, the Building Industry Consultative Council, and the Rental Observatory. An economist from the Economics Division also presented his research on the effects of oil price swings on the Maltese economy during a workshop with Mediterranean countries organised jointly by the World Bank and the *Banque de France*.

Research plans for 2023 relate to studies on long-term structural trends in the Maltese economy, including demographic changes and climate change. Fiscal policies, inflationary pressures and monetary policy transmission topics are also expected to feature in future work, together with analysis on sectoral linkages, labour skills shortages and other issues affecting the labour market. In addition, the Economics Division will

² The Central Bank of Malta has developed a Dynamic Stochastic General Equilibrium Model (DSGE) for Malta following a three-year technical cooperation with the *Banca d'Italia*.

continue to assess the impact of the recent commodity price shock on the economy. Efforts to augment the research capacity of the Bank's econometric and structural models will also be pursued. The Division will also examine ways in which information collected from its household and industry surveys can be presented in a more accessible format by means of dashboards.