Memorandum of Understanding between the Office for Budget Responsibility and HM Treasury for macroeconomic models

April 2025

1 Introduction

- 1.1 The Budget Responsibility and National Audit Act 2011 establishes the OBR as a central part of the UK's fiscal framework, with responsibility for examining and reporting on the sustainability of the public finances. The OBR must be independent and expert – and perceived as such – to provide credible fiscal and economic forecasts and analysis. There is a Memorandum of Understanding that sets out the <u>agreed working relationship</u> between the OBR, HM Revenue and Customs, the Department for Work and Pensions, and HM Treasury.
- 1.2 This macroeconomic models Memorandum of Understanding establishes a framework for the joint governance, management and development of the OBR and HMT's shared macroeconomic models. It does not constitute a legally binding agreement.
- 1.3 The models listed here have been developed individually or jointly by the OBR and HMT. Both institutions commit to joint access, maintenance and development of the core of each model as set out in this memorandum of understanding, as far as possible and subject to the additional considerations listed in Annex A. Each institution is free to use the models independently and develop extensions for independent analysis.
- 1.4 The macroeconomic models are tools to which considerable judgement is applied. In producing the economic forecast and other analysis, the OBR also uses a variety of auxiliary analytical tools, examines recent data and assesses alternative economic forecasts. The most important parts of the OBR's economic forecast and analysis are the judgements that underpin them. All judgements made are the responsibility of the members of the OBR's Budget Responsibility Committee.

2 Scope

2.1 The macro models covered by this agreement are:

- The main macroeconomic forecast model. (Large-scale macroeconomic model using a mixture of behavioural equations and identities to ensure consistency across the OBR economic forecast.)
- The Overlapping Generations model (UK OLG). (Micro-founded, numerically-solved, general equilibrium model with heterogeneous generations and individuals, used to analyse long-run macro-fiscal trends.)
- The Tax Computable General Equilibrium model (GETAX) and its variants. (Microfounded, numerically-solved, general equilibrium model with sectoral heterogeneity, used to analyse tax, trade and macro-business trends.)
- The New Keynesian "small model". (Small system of estimated shock relationships used to analyse short-to-medium term macro-policy scenarios.)
- The labour supply model. (Labour market module run on HMT micro-simulation model (IGOTM), analyses labour supply response to tax policy.)
- The cost of capital framework. (A set of equations that translate changes in business tax policy and interest rates into an impact on investment.)
- 2.2 A set of additional considerations against terms of this MoU are set out in Annex A for some of the models listed above.

3 Governance

- 3.1 Joint governance of the macro models will be supported by the Macro Models Steering Group (MMSG), which includes representatives from the OBR and HMT. The MMSG meets twice a year to discuss existing model development work, priorities for future work six months ahead and any other issues relating to maintenance or development, management and governance of the macro models.
- 3.2 The MMSG will review this MoU at least every two years, reserving the right to make changes or add new models to the scope between reviews as needed.

4 Model development

- 4.1 The core of the listed models will be available for joint access by the OBR and HMT, subject to the additional considerations in Annex A. This generates the opportunity for joint maintenance and development. Primary responsibility for development, and resource allocation, will be agreed by the MMSG. Both institutions will maintain and regularly exchange a record of any changes to the core of any listed model, including access to supporting analytical material.
- 4.2 The OBR and HMT can independently use the core of the listed models for analysis and retain discretion over the version employed, subject to additional considerations in Annex A.
- 4.3 The OBR and HMT can independently develop extensions to the core of the listed models to be used for specific applications. They can each reserve the right to maintain exclusive model extensions.
- 4.4 The OBR and HMT commit to allocating analytical resources to the maintenance and development of the macro models to ensure they remain fit for purpose and can be run independently of any extensions. In line with <u>Government Functional Standard 10: Analysis</u>, those responsible for each model should: have appropriate skills, information, and tools; quality assure throughout the analytical life cycle, communicating QA clearly; engage in peer review by independent individuals or groups; and proactively find and implement innovations to continuously improve the analysis process, sharing lessons learned. There should also be good maintenance of supporting resources like spreadsheets, model code and user documentation. Steps should also be taken to support knowledge management and business continuity, including development logs, regular teach-ins and handover materials. Any risks or issues against any of these considerations or wider standards of analytical assurance can be raised at the MMSG.

5 Management

- 5.1 Within HMT, responsibility for macro models lies within Economics and Fiscal Groups, overseen by the Director of Analysis. Economics and Fiscal Groups are responsible for fulfilling HMT's obligations under this memorandum of understanding.
- 5.2 At the OBR, the BRC economy expert has oversight of macro models, with analytical staff responsible for OBR's management, maintenance and development of models.
- 5.3 The MMSG will review plans for developments, policy applications and resourcing.

6 Transparency

- 6.1 The OBR and HMT will treat shared information in accordance with the requirements of the Freedom of Information Act 2000. Subject to this, and unless otherwise specified, signatories will not without prior consultation disclose shared information that is restricted, commercially sensitive or may otherwise harm the formulation and development of Government policies. Signatories reserve the right to place further conditions on the handling, disposal and retention of shared information.
- 6.2 The OBR, in coordination with the HMT, will publish updated documentation of the macro models as appropriate and as time and resources allow. This may include code and supporting files where appropriate. The OBR and HMT will respond to further requests for information related to the macro models on a case-by-case basis, subject to the requirements of the Freedom of Information Act 2000.

A Annex

- A.1 Sharing of GETAX, in any of its variants, will be subject to agreement by HMRC, in compliance with all relevant data and software licenses.
- A.2 This MoU does not represent an agreement to immediate OBR access to the IGOTM microsimulation platform. The OBR may request use or operation of the labour supply model in the course of its own analysis, with timing and resourcing of requests subject to agreement by the signatories of this MoU. For the wider IGOTM platform, this MoU intends for the MMSG to assemble a plan moving towards shared access, within reason, over a period of time. IGOTM access, when possible, will be agreed separately with HMT or incorporated into this MoU at future reviews, in compliance with all relevant data and software licenses and considering resource constraints.