





# **Editorial**

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The Spring 2025 issue of the International Journal of Microsimulation is composed of five articles.

The first article, by Ihsaan Bassier, Joshua Budlender and Maya Goldman, simulates the poverty impact of the coronavirus pandemic and related policies for South Africa. Different approaches to nowcasting household survey data are developed and compared, giving different weights to available datasets. The paper adds to a once-limited literature on nowcasting that has blossomed during and after the Covid-19 pandemic, particularly (but not only) on low and middle-income countries where survey data are sometimes updated in a less timely fashion.

The second paper, by Adnan Shahir, Francesco Figari and Solomon Feleke, presents an analysis of fiscal drag in Ethiopia, linking the EUROMOD-based static tax-benefit model ETMOD to a computable general equilibrium (CGE) model. The documented failure of the tax-benefit system in Ethiopia to account for the significant price increases motivates the consideration of general equilibrium effects. The linkage methodology follows a bottom-up approach, where results from the tax-benefit model feed into the CGE through changes in the average income tax rate. The study shows that – in addition to boosting government revenues, fiscal drag slightly favoured economic growth in Ethiopia in the mid-2010s, although at the cost of increasing inequality.

The third paper shifts focus to dynamic modelling. Here, Cathal O'Donoghue provides a timely update of previous reviews (including two of his own), complementing a methodological discussion with a bibliometric analysis of the literature. His conclusion that "[the] field is moving rapidly away from [...] almost an exclusively household income distribution perspective" points to a diffusion of "easier and quicker to develop [...] outcome-focused models".

Given this analysis, the paper by Patryk Bronka, Justin van de Ven, Daniel Kopasker, Srinivasa Vittal Katikireddi, and Matteo Richiardi might seem to go against the tide, describing a rich dynamic framework for life course analysis over multiple life domains, including education, family, work and health. Not only the model is characterised by a broad scope and a large number of state variables that are jointly evolved, but variants are estimated on multiple European countries. The paper focuses on model validation for the UK, by comparing simulated outcomes obtained starting the model in 2011 with observed outcomes over the period 2011-2019.

The last paper in the issue, by Chris Schilling, Yushy Zhou, Siddharth Rele, Cade Shadolt, Sharmala Thuraisingam, Penny O'Brien, Josh Knight, Nabeeh Zakariyya, Michelle Dowsey and Peter Choong, describes a health microsimulation of osteoarthritis in Australia. The model allows an analysis of the impact of the diseases that takes into account population heterogeneity.

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## Suggestions for further reading

"What criteria affects model acceptance in policymaking?" is a key question for microsimulation modellers, who are often motivated by policy relevance in their work. A relatively older paper (Kolkman et al., 2016) offers some insights. They point to 11 criteria, referring to model characteristics (quality, tractability, efficiency and flexibility), supporting infrastructure (compatibility, transparency, consistency), organisational factors (organisational conditions and model advocates), and two others (reputation and stakeholder and user engagement). The authors summarise their study as follows:

"Model developers cannot influence all of the criteria that matter to model acceptance in government. They have little ability to influence organizational conditions and the presence of advocates



within the organization. Model developers have some, but limited influence over their reputation and the consistency of their model outcomes with established models. This leaves those developing models with six criteria that they can affect and that they should consider carefully if they are seeking model acceptance in government. The six are quality, tractability, efficiency, flexibility, compatibility and participation in development. These six criteria are not typically addressed in publications that present a model and claim usefulness of that model to policymaking. This suggests that the usefulness of models to policymaking cannot be understood in isolation from the social context in which they are used.

Four of these six criteria (quality, tractability, efficiency and flexibility) are based on the perceptions of the intended users. It is important to note that perception seems to be central to model acceptance. While the quality of a model may be established beyond doubt in an academic community, those involved in policy making may not necessarily perceive it equally favourably. These four criteria could be satisfied by involving the client organization in the model development process and investing in model transparency, for instance, by ensuring the availability of model documentation that is written to the appropriate level of expertise and organizing regular opportunities for model developer and user to meet."

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### **Conflict of Interest**

No competing interests reported.

## Reference

Kolkman DA, Campo P, Balke-Visser T, Gilbert N. 2016. How to build models for government: criteria driving model acceptance in policymaking. *Policy Sciences* 49: 489–504. DOI: https://doi.org/10.1007/s11077-016-9250-4