



Bank of England



EUROPEAN CENTRAL BANK



Call for papers – themed issue for the Journal of Econometrics

Machine learning for economic policy

Machine learning techniques are increasingly being evaluated in the academic community and at the same time leveraged by practitioners at policy institutions, like central banks or governments. A themed issue in the Journal of Econometrics aims to present frontier research that sits at the intersection of machine learning and economic policy.

There are good reasons for policy makers to embrace these new techniques. Tree-based models or artificial neural networks, often in conjunction with novel and rich data sources, like text or high-frequency indicators, can provide prediction accuracy and information that standard models cannot. For example, machine learning can uncover potentially unknown but important nonlinearities within the data generating process. Moreover, natural language processing – made possible by advances in machine learning - is increasingly being applied to better understand the economic landscape that policymakers must survey.

This themed issue in the Journal of Econometrics (JoE) is jointly organised by major policy institutions and universities. It aims to cover a diverse set of problems where machine learning approaches and novel data sources are applied to situations, which are relevant to economic policy making. It will cover a range of applications and methodological contributions such as deep learning, text analytics, reinforcement learning, shock or treatment identification, forecasting and nowcasting, as well as different approaches to model interpretability and inference, among others.

It is crucial that the **policy dimension** of accepted papers is significant and integral to the contribution of each paper. Therefore, it is not sufficient that the policy relevance of these papers is restricted to an empirical illustration. Applications, case studies, or experiments should show in a clear way how the insights derived from them can help economic decision makers. It is also important to note that the usual **rigorous editorial standards** of the Journal will apply. So, for example, methods must be clearly and rigorously presented and any underlying assumptions and conditions must be explicitly and carefully stated.

If your paper covers both the methodological and policy angle outlined above, we invite you to submit your paper to the JoE themed issue “Machine Learning for Economic Policy” on Editorial Express (<https://editorialexpress.com/cgi-bin/e-editor/e-submit.cgi?dbase=je>). **The deadline for submission is 31, May 2023.** Submissions will be processed as they arrive.

Handling editor (JoE): Serena Ng (Columbia University)

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