

David Hendry short course "New Approaches in Economic Forecasting"
Thursday Sept 8, 10am-11:30am
[Research Program on Forecasting](#), George Washington University

Abstract

Economics confronts a non-stationary, evolving world, where models differ from the data generating process. The resulting historical track record of econometric forecasting is poor, littered with forecast failures and out-performed by 'naive devices': such problems date from the early history of econometrics. That adverse outcome is surprising as econometrics uses inter-temporal causal information, but the explanation lies in the many steps between the predictability of a random variable at time $T+h$, and a forecast of it from an estimated model at T . Indeed, if distributions of events shift, most of the famous theorems of statistics are inapplicable, so that it cannot be proved that conditional expectations based on the current distribution are minimum mean-square error 1-step ahead predictors, and consequentially, the law of iterated expectations then fails inter-temporally, so 'causal' models can be poor. The talk proposes an empirically-relevant forecasting theory that explains forecast failure by unanticipated location shifts, shows that other breaks have little impact, which then leads to robust forecasting methods. It then considers forecasting shifts and during shifts. New ways of estimating the forecast origin are also described.