

# Agnostic Output Gap Estimation in Large Cross-Sections

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Abstract

This paper proposes a Bayesian non-stationary dynamic factor model to extract common trends and cycles from large data sets. It extends the literature on ex-post identification to the non-stationary case and provides an efficient Bayesian sampling algorithm. Our method allows for the estimation of output gaps with a minimum of model assumptions and restrictions on the parameter space. We provide a comprehensive real-time study using a large panel of quarterly macroeconomic and financial time series for the United States. The results indicate that our derived output gap measure tracks the U.S. business cycle well, is stable at the current edge and less prone to revisions than existing methods.