

Essays on forecasting performance of DSGE and empirical models

The topic proposes to study several possible research questions in the field of forecasting performance of DSGE and/or empirical models, incl. a possible focus on (Bayesian) prediction averaging. The topic aligns well with the ongoing research projects conducted by a small team of macroeconomists within the department. The student working on this topic will have access to supercomputing facilities, enabling to perform calculations with high computational requirements.

Local and hard currency official debt in low- and low-middle income countries

The thesis will investigate the main drivers behind the official debt evolution in LLMICs, distinguishing between the macroeconomic effects and the official debt relief programs. The research will apply variants of the Durbin-Wu and Hausman methods and General Method of Moments to detect and deal with the endogeneity bias and reverse causality issues in explaining the observed phenomena and their relation to the hard currency/local currency debt choices. Standard debt-sustainability accounting metrics (Debrun et al, 2019) in decomposing the behavior of the LLMICs debt will be applied.

Risk premiums associated with the onshore local currency lending in low- and low-middle income countries in the absence of deep markets

The thesis will develop a model-based methodology for identifying and pricing the convertibility and transfer risk premiums associated with the onshore local currency (LCY) lending in LLMICs in the absence of deep markets. Following the approach of Du and Schreger (2017), time series database of prices of LCY and hard currency (HCY) instruments issued by emerging markets and LLMICs sovereigns will be constructed. After extracting measures of the relevant premiums for the exchange rate, convertibility and transfer risks, a model of Kamenik et al. (2013) will be adapted, to model the transfer and convertibility risk premiums.