Thesis proposal:

Financial vulnerability to climate change in an era of restructuring emerging financial markets

Abstract:

Emerging financial markets have represented an increasing share of international capital flows, and have experienced a considerable development in the financial system as well as a remarkable economic growth. Nevertheless, they are known for their instability due to high exposure to the world economic fluctuations, to geopolitical tensions, and particularly to climate change. In this context, by employing a set of modern econometric techniques, this thesis, first, aims to examine how temperatures and precipitation in emerging countries align with global warming, and then to quantify their effects on their financial markets. This allows us to provide a better understanding of the vulnerability of emerging countries, and to build a robust indicator of financial vulnerability to climate change. The second objective of the thesis is to determine the financial structure, market-based or bank-based, which is more resilient to climate change, and thus the most suitable one for the financial systems of emerging countries. It is especially important as emerging economies are undergoing significant financial structural change.

Keywords:

Global warming; Financial vulnerability; Financial emerging markets; Macroeconometrics; Structural change; Multivariate time series

Expected profile:

The candidate must have theoretical knowledge and skills in finance, financial macroeconomics. Econometrics skills are also required as the thesis will be based mainly on empirical work, especially prior knowledge of multivariate time series methodologies (BVAR, Factorial model with stochastic volatility, FAVAR, TVP-FAVAR, GVAR) is highly appreciated. Models can be estimated using open-source software such as R and Julia, or other software such as Matlab and Stata.