Essays in Macro-Financial Linkages

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Abstract:

This thesis consists in three essays that study the linkages between real and financial factors from different perspectives. Chapter 1, co-authored with Ester Faia and Valeria Patella, introduces a full set of *ambiguity attitudes*, which endogenously induces agents' optimism in booms and pessimism in recessions, in a model where borrowers face occasionally binding collateral constraints. We use GMM techniques with latent value functions to estimate the ambiguity attitudes process, showing that agents update their belief over the credit cycle in a way coherent with our preferences specification. By simulating a crisis scenario, we show that optimism in booms is responsible for strong leverage build-up before the crises while pessimism in recessions implies sharper de-leveraging and asset price bursts. Analytically and numerically, using global non-linear methods, we show that our ambiguity attitudes coupled with the collateral constraints help to explain relevant asset price and leverage cycle facts around the unfolding of financial crises. Chapter 2, co-authored with Carmelo Salleo, studies the strategic interactions between monetary and macroprudential authorities through the lens of an open-economy monetary model featuring trade and financial flows between two symmetric countries. Characterizing a set of *Within-Country Cooperative and Nash Equilibria* for different degrees of trade and financial integration, the analysis identifies large costs associated to the strategic interaction between the domestic authorities. Moreover, the gains from cooperation are strongly affected by the degree of cross-country integration and by the channel through which the integration is realized: larger trade flows reduce the gains, while higher financial globalization makes cooperation more valuable. Then, moving to a *Between-Countries Cooperative and Nash Equilibria* analysis, we confirm that cooperation is beneficial from both the country-specific and the global perspective. Chapter 3, co-authored with Javier Ojea Ferreiro and Elena Rancoita proposes an innovative methodology for the design of adverse scenarios for macroprudential policies calibration and impact assessment. Our methodology allows building tailored scenarios characterized by two main features. First, there is a stable and transparent mapping of the cyclical systemic risk level into the path of the scenario's target variables, which are those variables that determine the overall scenario's severity. Second, the path of the other complementary variables is calibrates with a multivariate copula model estimated with macro and financial data (*MacroFin Copula*). Simulating the model for Euro Area countries, we show that our methodology is able to calibrate adverse scenarios that properly replicate the global financial crises dynamics in terms of severity and co-movement between the key macroeconomic and financial variables.