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Essays in Financial Economics

The thesis focuses on the lending of central banks to banks during the 2007-2013 financial crisis. It uses both theoretical and empirical tools to understand how central banks should lend to banks, focusing more specifically on the role of collateral requirements.

The first chapter starts from the observation that the literature, starting with Bagehot (1873), has generally assumed that the central bank should lend against high quality collateral. However in the 2007-2013 crisis central banks lent mostly against low quality collateral. We use the framework of Holmtrom and Tirole (2011) to build a model that replicates key stylized facts and determine the optimal central bank collateral policy. The second chapter expands the model to two countries, two collateral types and introduces an explicit interest rate instrument for the central bank. I show that collateral policy can play an important role in case of asymmetric shocks inside a currency union. The third chapter propose a framework to estimate how change in haircut affect the type of collateral pledged to the central bank and the distribution of bank funding costs. We estimate the model using data on collateral pledged to the ECB from 2009 to 2011. The fourth chapter focuses on the use of non-marketable assets such as loans as collateral by banks in the private market and at the central bank and discusses implications for the conduct of collateral and central bank lending policies in the euro area.