Abstract

First essay suggests that the non-fundamental component of asset prices is one of the drivers of the credit cycle. The proposed model builds on the financial accelerator literature by including a stock market where leveraged investors trade stocks of productive firms with stochastic returns. Investors borrow funds from the banking sector and can default. Their limited liability induces a moral hazard problem which shifts demand for risk and drives prices of risky assets above their fundamental value. Embedding the contracting problem in a New Keynesian general equilibrium framework, the model shows that expansionary monetary policy leads to a rise in both the fundamental and non-fundamental components of stock prices. A positive shock to the non-fundamental component triggers a credit cycle: collateral value rises, and lending and default rates decrease. The credit boom lasts only while stock market growth maintains sufficient momentum. However, monetary policy does not reduce the volatility of inflation and the output gap by reacting to asset prices.

Second essay introduces an "updating channel" of monetary policy, which can play a significant role if a central bank is deemed to possess superior information compared to general public. Assuming an information advantage of a central bank, an unexpected change in monetary policy interest rates signals the state and the outlook of the economy to outside agents. The subsequent update of their expectations goes in an adverse direction, counteracting the conventional transmission from interest rates to inflation and output. We develop a simple model laying down a theoretical basis for the updating channel. We further detect the presence of the updating channel in private forecasts of inflation in a cross-country sample of selected OECD countries.

Third essay illustrates the non-linear reaction of small (satellite) currencies to increased financial stress in the large (core) economy. We suggest that the safe haven status of a satellite currency may hold in calm periods, but breaks down when risk aversion is elevated. A stylized model of portfolio allocation between assets denominated in euro and the satellite currency suggests the presence of two regimes characterized by different reactions of the exchange rate to an increased stress in the euro area. In the "diversification" regime, the satellite currency appreciates in reaction to an increase in the expected return variance in the core economy, while in the "flight to safety" regime, the satellite currency depreciates in response to increased expected volatility. Using the Bayesian Markov-switching VAR model, the presence of these regimes is identified in the case of the Czech koruna, the Hungarian forint and the Polish zloty.