

# Thesis Abstract

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## **Negative Nominal Interest Rates and Monetary Policy** (Job Market Paper)

A nonpar exchange rate between currency and reserves has been proposed as a potential policy tool to reduce the effective lower bound (ELB) on nominal interest rates. To study the implications of introducing this novel policy tool, I construct a model with multiple means of payment and frictions associated with the storage and transportation of currency. A nonpar exchange rate can reduce the ELB if there exist sufficient frictions that induce agents to exchange currency and reserves rather than avoiding the central bank. However, introducing a nonpar exchange rate can reduce welfare by increasing these frictions and distorting the allocation of means of payment. A negative nominal interest rate can be optimal for a nonstandard reason. But, if the negative interest rate is constrained by the ELB, the optimal policy is to set the interest rate at the ELB without introducing a nonpar exchange rate.

## **International Effects of Quantitative Easing and Foreign Exchange Intervention**

Revise & Resubmit (3rd round) at *Journal of International Economics*

A two-country general equilibrium model with financial frictions is developed to study the global consequences of quantitative easing and foreign exchange intervention. In the model, the key financial frictions are limited commitment, differential pledgeability of assets as collateral, and a scarcity of collateralizable assets. Due to the differential pledgeability of assets, financial intermediaries acquire different asset portfolios depending on their home country. Quantitative easing can reduce long-term bond yields and term premia internationally and depreciate the creditor country's currency. Foreign exchange intervention always depreciates the local currency, but it can improve welfare globally if implemented by the creditor country.

## **Money, Credit, and Financial Intermediation with Private Information and Costly Monitoring**

Consumers typically use more cash and less credit in small-value transactions. A model of money and credit is constructed to study the implications of heterogeneous payment choices for monetary policy. In the model, each consumer participates in a small-value or a large-value transaction depending on a preference shock. Financial intermediaries write deposit contracts for consumers to intermediate credit transactions. A preference shock is private information to a consumer, which is costly for intermediaries to observe. In equilibrium, financial intermediaries create state-contingent deposit contracts for consumers. However, private information and costly monitoring generate an incentive problem, so that the quantity of credit is constrained for consumers in large-value transactions. The effects of monetary policy on the allocation of means of payment vary depending on the size of transaction.