

## Abstracts

My primary research lie within the fields of Macroeconomics and Open Economy Macroeconomics, although the questions I am interested in have heavy economic growth and economic development themes. Below are the abstracts of my working papers.

### **Fiscal and monetary policy in the presence of informality and the incentive to join a currency union.**

How does economic activity outside of government control —informality— affect the conduct of fiscal and monetary policy? I first study this question in a New Keynesian, small open economy model and then collect data to conduct an empirical analysis. The model is assumed to feature informality in both goods and labor markets. A non-traded sector produces a non-taxed informal good. The traded sector produces a formal good and is subject to taxation, but it can hire workers using both formal and informal contracts. I show that the presence of informality decreases the optimal tax rate and increases macroeconomic volatility. Estimation of the marginal effect of the informal sector on the tax rate using a panel data supports this finding. Moreover, when the country cannot credibly pre-commit to the optimal policy, informality significantly increases the incentive to peg the currency. This result can help explain why many sub-Saharan African countries have plans to either expand existing currency unions or to form new ones.

### **Unemployment, optimal monetary policy and labor mobility in a currency union.**

How does migration within a currency union affect welfare across the union? I study this question in this paper with a New Keynesian, currency union model. The union consists of two economies whose economies are characterized by labor market frictions. One country member has a higher job-finding rate and a lower unemployment rate, compared to the other country, hence unemployed agents in the former have an incentive to relocate to the latter. I show that when firms have the ability to hire workers from abroad and when unemployed agents can relocate to a different country, the negative impact of asymmetric shocks are significantly reduced, improving welfare across the union on balance.

### **Exit from sudden stops: a hazard model approach.** *(With Yu-chin Chen)*

Using a hazard based duration model we analyze the main determinants of the duration of a sudden stop. The hazard model estimates the conditional probability of an exit from a period of sudden stop: given that the country experiences a sudden stop up until the end of last period, what is the probability that the country exits the sudden stop today? We find strong evidence that a higher ratio of foreign exchange reserves to short term external debt and a higher global economic growth shorten sudden spells. We also find that exchange rate flexibility, as measured by the exchange rate regime, increases the duration sudden stops.