

Two Essays in International Economics

My research focuses on modeling cross-border financial activities in the presence of contractual imperfections. I emphasize on the use of simple example to illustrate formal model and finding empirical evidence to support theoretical predictions. In my job market paper, I model how the strength of domestic debt enforcement affects foreign debt owed by private sectors. A second paper addresses the importance of intensive margin in intrafirm trade caused by contract incompleteness and productivity heterogeneity. My future research plans include continuing with frontier topics of international economics, and evaluating issues in finance (alternative investment and risk management) using economic theory and applied econometrics.

“Private Debt with Pervasive Risk of Default” [Job Market Paper]

This paper studies the effects of private debt on risk sharing and welfare, where individual residents are assumed to have access to both international and domestic asset markets. Like Jeske (2006), the assumption is that domestic residents cannot commit to repay their debts across borders. Unlike the previous literature, the novel feature in this paper is the introduction of limited commitment to debt contracts within borders. The marginal rate of substitution (henceforth, MRS) is no longer necessarily equalized among all residents in any one country. The pervasive risk of default creates heterogeneity in MRS for countries that are, as a whole, constrained in the international asset market. A constrained country's domestic interest rate is equal to the reciprocal of the lowest MRS within that country. However, non-constrained countries still have equalized MRS, which determines the international interest rate. A wider gap between international and domestic financing cost emerges. This leads to harsher punishment for international debt defaulters; hence, allows more international risk sharing. Although limited commitment within borders hinders domestic risk sharing and prevents aggregate welfare from reaching an even higher standard, it improves the original level of aggregate welfare in Jeske's setup. This paper shows how this improvement depends upon the interaction between the endogenous borrowing constraints in international and domestic asset markets. Empirical evidence from 26 emerging market economies reveals that the part of external debt owed by private sectors is significantly higher in countries with weak domestic debt enforcement.

“The Extensive Margin of Intrafirm Trade” [Under review by the International Journal of Economics and Business Research: Special Issue on: “Intra-industry Trade, Theory and Empirics”]

The firm-level approach to intra-industry trade reveals that the variation in the number of exporters or exported varieties (extensive margin) accounts for a greater share of the changes in aggregate trade than the variation in the average exports per firm-variety (intensive margin). Using Bureau of Economic Analysis' U.S. Multinational Company data of 2007, this paper shows vertical intrafirm trade follows a similar pattern. Like Antràs (2003), the share of intrafirm imports in total U.S. imports is found to be higher, the higher the headquarters intensity of the exporting affiliates in foreign countries. This paper further demonstrates this increase in imports is mainly due to the establishment of a large number of foreign affiliates. In addition, lower trade barriers and a better investment environment in a country attract greater amounts of U.S. direct investment, and this attraction materializes mostly in terms of new affiliates than in terms of more sales per existing affiliate. The endogenous choice of optimal number of affiliates can be rationalized in a theoretical framework that combines three ingredients—a multiproduct setup, Antràs' property-rights model, and Melitz's heterogeneity view on productivity applied to affiliates. Therefore, the paper's key contribution lies in identifying the extensive margin of intrafirm trade—headquarters-intensive firms tend to integrate larger numbers of productive suppliers as affiliates, and will redraw their boundaries under trade liberalization.