

RESEARCH

I am an international economics and industrial organization economist with a special interest in applied econometrics. My research is policy driven and practically oriented, ranging from the effects of policy and firm conduct on the patterns and composition of international trade. As the share of trade in global output continues to rise, the analysis of how specific firm behavior and policy shapes the underlying international transactions continues to gain in importance. Rooted in the synthesis of international economics and industrial organization, my current research is focused on the study of the international transportation industry and its interdependence with the internationally traded goods' markets.

WORKING PAPERS

“Commercial Policy Outcomes in the Presence of Integrated Bilateral Transport Costs: The Importance of Trade Imbalances” 10/04/2016.

Abstract: As import tariffs continue to fall globally, the significance of alternative trade costs rises. This study investigates the effect of maritime trade policy on bilateral trade flows in the presence of bilateral trade imbalances. Using a partial equilibrium model of international trade and transportation, I show theoretically that the joint structure of bilateral (i.e. back and forth) transport markets causes asymmetric transport costs that lead to heterogeneous trade elasticities with respect to carrier costs. These elasticities vary systematically across fully and underutilized transport markets, across different bilateral trade imbalances and across differentiated products. To evaluate the model predictions empirically, I exploit information on an EU environmental policy which induces exogenous variation in carriers' operating costs. Investigating the policy's implications on US-EU trade, I find small variation in policy-induced treatment effects when bilateral trade is balanced. However, in the presence of trade imbalances, I find significant variation in trade effects with large reductions of trade in underutilized transport markets and for transactions involving bulky and/or heavy products. The empirical results provide robust evidence in support of the theoretical predictions. The documented heterogeneity of trade effects in response to policy shocks brings significantly different implications for developing and developed countries in the context of current commercial and environmental policies, such as the International Convention for the Prevention of Pollution from Ships (MARPOL) by the International Maritime Organization.

“Trade, Transportation and Trade Imbalances: An Empirical Examination of International Markets and Backhauls” (with Wesley W. Wilson) 10/06/17. Under review at the *Canadian Journal of Economics*

Abstract: The U.S. trade deficit has been growing for over 25 years and has been accompanied by enlarging freight rate differentials. While traditional models of trade have been ignoring these gaps assuming symmetry across all bilateral trade costs, the questions of how exactly these growing trade imbalances influence bilateral transport costs and what the consequences of this integration may be have remained largely unanswered. To address these questions, we develop and estimate a model of international trade and transportation that accounts for the effects of persistent trade imbalances. The theoretical results are supported by our empirical analysis and indicate that bilateral transport costs adjust to a country's trade deficit and that this dependence on traffic imbalances causes spillover effects between exports and imports. These novel results become of particular importance, as China has announced to ban waste imports, the sixth largest

U.S. export. With the trade imbalance set to further worsen by the end of the year, we use our empirical results to simulate the projected 1.5% rise in the U.S.-China trade imbalance. We find that China's ban will not only lead to a 0.77% reduction of transport costs charged on U.S. exports, but also a 0.34% increase in transport costs on Chinese exports. A back-of-the-envelope calculation suggests that this increase in transport costs causes a significant negative spillover effect on Chinese exports with an upper bound estimate of \$1.7 billion.

“The Resilience of International Trade: Evidence from Hurricane Katrina”.09/29/2016.

Abstract: Natural disasters are omnipresent, increasing in their destructive force and potentially devastating for local or even regional economic activity. In this study, I analyze the dynamics and spatial distribution of the trade effects resulting from natural disasters. I develop a spatial gravity model of international trade and apply the model to monthly U.S. port level trade data. Contributing to the existing literature, I estimate the dynamic evolution of trade effects caused by Hurricane Katrina differentiating these disruptions at the local port level. The estimates point to the static and dynamic resilience of international trade. While ports closest to Katrina's epicenter experience significant short-run reductions, international trade handled by nearby ports rises in response to this disaster. Interestingly, the counteracting short-run trade effects are insignificant beyond the third order neighboring ports and are more pronounced for those ports to the east of Katrina's epicenter. Furthermore, the estimates point to very idiosyncratic evolutions of these positive and negative short-run trade effects implying that the recovery and resulting dynamic resilience of trade is very port specific. Overall, the analysis illustrates the potential disparity between aggregate and local trade effects and underlines the significance of infrastructure networks to reduce the devastation inflicted by natural disasters.

WORK IN PROGRESS

“The Effects of Trade Imbalances and Transport Costs on FDI”

“Does Clean Shipping Reduce Trade? Evidence from US Emission Control Areas”

“The Role of Transport Costs in Economic Development”