Research Statement

Sung-Ju Wu Duke University

October 19, 2023

My research areas are international trade and development economics, with a focus on how global trade and investments affect economic development. Specifically, my work studies how firms make production and investment decisions across locations in response to trade shocks and policy changes, and how these responses, in turn, affect local welfare at both the home and host country. I answer these questions by combining rigorous empirical analysis utilizing firm-level and worker-level datasets as well as structural analysis with tools from trade and industrial organizations.

Foreign Direct Investments and Host Country Outcomes

An extensive literature in trade and development explores the welfare implication of trade liberalization in developing countries. Foreign-owned firms play an important role in transmitting the impact of trade shocks to the host country owing to their significant engagement in trade activities. However, when calculating the welfare contribution of foreign-owned firms, one crucial element is frequently overlooked. Foreign-owned enterprises, by definition, do not contribute most of their profits to local consumption except taxes. Foreign multinational enterprises (MNEs) could even shift their profits to affiliates in tax havens and further reduce their tax burden in the host countries with actual production activities. Given the predominant role of MNEs in global trade, conventional trade models risk drawing wrong welfare conclusions from trade episodes by misattributing all the profits made by foreign-owned firms to the host country.

My job market paper "Foreign Ownership and Firm Response to Foreign Demand Shocks" investigates the firm response and welfare implication of foreign demand shocks in a developing country when foreign-owned manufacturers repatriate their profits. Using enterprise surveys in Vietnam, I initially establish that foreign-owned firms, even when controlling for firm size, are the primary entities engaged in trade activities in Vietnam. Exploiting the positive foreign demand shock from the US-China trade war in 2018-2019 that affected all manufacturers based in Vietnam, I find that the positive responses in input sourcing, product export, and employment are primarily driven by foreign-owned manufacturers, with Chinese manufacturers exhibiting the strongest response.

Motivated by the findings, I develop and estimate a quantitative model of trade participation that takes into account firm ownership. In this model, domestic and foreign-owned firms differ in productivity, fixed costs of sourcing and exporting, as well as their retention of net profits in Vietnam. A counterfactual exercise shows that differences in fixed costs can explain about half of the gap in trade response between domestic and foreign-owned firms to a simulated demand shock of similar magnitude to the trade war. The welfare contribution of the shock to Vietnam would be 15 percent higher if foreign-owned manufacturers were to retain all their profits locally.

Another current project "Regional Effect of FDI Composition Change in Vietnam" is closely related to my job market paper. Focusing on Phase 3 of the OECD Anti-Bribery Convention implemented in 2010, I study how tighter international regulations applied to a subset of foreign-owned firms could alter the composition of foreign investments in Vietnam. Preliminary results indicate that countries that are strong enforcers of the convention reduce their investments in Vietnam following its implementation. I look forward to continuing this strain of research to understand how foreign investments shape the development of an emerging economy like Vietnam.

Foreign Direct Investments and Home Country Outcomes

Another strain of my research relates to the impact of outward investments on firm and labor market outcomes in the home country. The main challenge is dealing with identification due to the fact that investment decisions are endogenous. As theoretical studies on multinational production have pointed out, firms self-select into outward investment activities based on unobserved productivity factors.

My working paper "Firm and Labor Adjustments to FDI Liberalization" (with Ming-Jen Lin and Yi-Ting Wang, Revision and Resubmit at the *Journal of International Economics*) addresses the identification challenge by focusing on a policy of investment liberalization in 2001 by the Taiwanese government, which allowed the production of 122 electronic products in China. Using a matched difference-in-differences approach, we find that the manufacturers targeted by the policy were 16% more likely to invest in China compared to the non-targeted ones on average. Analogously, domestic incumbent workers of the targeted manufacturers were more likely to change their jobs, have shorter job tenures, and receive lower wages in subsequent years compared to those employed by non-targeted manufacturers. The effects of the policy at the worker level displayed significant heterogeneity across the initial wage distribution, with the top-decile workers benefiting and other workers experiencing losses.

Building upon the current work, my future research seeks to utilize administrative data from Taiwan and quantitative trade models to understand whether rising outward foreign investments from 1990 to 2010 could explain the wage stagnation pattern during the same period in Taiwan.