

Research Statement: Stephen Pitts

Around the world, many countries find themselves at some stage of the process of structural transformation from economies based on informal agriculture to economies based on formal manufacturing, and from largely rural to largely urban economies as a result. Market failures afflict both sides of this transition. At the origin, smallholder agricultural producers struggle to compete in local markets that are poorly integrated with national and international markets. At the destination, newly arrived migrants struggle to find and keep jobs in the manufacturing sector.

My dissertation offers new insights into both types of market failures in the context of Mexico. The first essay uses an incentivized lab-in-the-field experiment with coffee producers to examine the response of smallholder coffee producers to a marketing cooperative that aims to alleviate some of these market failures. The second essay uses a household survey with these same producers to demonstrate the positive effect of honey production on food insecurity in the “lean months” after they have exhausted their income from the coffee harvest. The third essay uses matched employer–employee data to examine the impact of social networks on employment outcomes for job seekers such as these producers that exit production and migrate to urban areas. All three essays reveal the limitations of the market-based reforms of the early 1990s in Mexico and elsewhere; each suggests a policy intervention that can increase welfare.

Unpacking Side-Selling: Experimental Evidence from Rural Mexico

My job market paper examines the reasons why members of marketing cooperatives engage in side-selling. Marketing cooperatives have emerged in many contexts where rural smallholder producers grow cash crops for export. These cooperatives use contracts up the value chain to offer a higher, more stable price than local traders for cooperative members' products. The viability of these cooperatives, however, depends on the commitment of their producer-members to market their harvest through the cooperative. This commitment cannot be enforced because of weak institutional arrangements. When producer members deviate from their commitment, their side-selling threatens the viability of the cooperative.

To understand the reasons for side-selling, my coauthors and I partner with a coffee cooperative in southern Mexico to design an experimental game in which each round represents a growing season. We randomize harvest size, outside buyer price, the presence of complimentary services, and the presence of extra income. In each round, participants choose how to allocate their harvest between a certain-price buyer and an outside trader. Depending on the round, the harvest size and the approximate price offered by the outside trader change. In addition, in some rounds the certain-price buyer offers a nudge reminder of microcredit or technical assistance. Furthermore, half of the participants receive additional income every round of the game.

Our results show that most participants prefer price certainty. On average, they allocate 82% of their harvest to the cooperative. Other factors do not change this allocation very much: harvest size, outside trader price, or the nudge reminders of complementary services. Additional income, however, impacts side-selling greatly. Participants who receive it are 10% more likely to always sell their entire harvest to the cooperative. Sub-analyses reveals that this effect is limited to existing cooperative members. One policy implication is that either the producer members or these cooperatives will require subsidies to survive.

Sweet and Timely Income: The Effect of Honey Production in Reducing Food Insecurity

The second essay examines the effect of an alternative source of income for honey producers, viz. honey production. Smallholder cash crop farmers often struggle to smooth income and consumption throughout the agricultural year, leading to potentially serious food insecurity risk. My coauthors and I find that honey production is associated with generally reduced food insecurity during the “lean months” after the coffee harvest, when food insecurity is otherwise generally rising. Leveraging clustering in the spatial distribution of honey production to identify the adoption of honey production via social learning effects, we find that honey production causes a decrease in food insecurity more than large enough to offset the non-honey-producing population’s worsening outcomes. Our results provide insight into the efficacy of a key alternative livelihood strategies for vulnerable smallholder producers. This strategy is only effective, however, when producers learn about honey production through their social networks. Thus additional promotion is necessary to encourage adoption of honey production.

It's all about who you know: Social Networks and Job Turnover in Mexico

The third essay examines the effect of job referrals from former coworkers on labor market outcomes. In general, job seekers face two challenges: finding out about jobs and demonstrating that they are a good fit for jobs. Social networks can help address these challenges. Recent work with matched employer-employee data has found that job seekers with better networks find jobs faster and receive a higher starting salary. This result indicates a more efficient matching process that is better for both employer and employee. Labor markets of developing countries differ from those developed countries in important ways, however: higher levels of informality, lower level of education, and higher turnover. I would like to determine whether social networks can improve the job search process in a developing country such as Mexico.

Through a collaboration with the Bank of Mexico, I have access to matched employer-employee data from the Mexican social security system (IMSS) on the entire Mexican formal sector from 2005-2020. I use establishment (firm) closings as a natural experiment that release a group of workers into the labor market. For these displaced workers, I use past employment history to build their social network and then examine the relationship between this social network and labor market outcomes: time unemployed and starting salary of new job. My results will provide insights in the way informal job-referral networks are already functioning in the Mexican labor market and help inform policies that strengthen them.

Future Research

As a junior faculty member, I will continue this research trajectory on market failures and structural transformation in developing countries. I have two early-stage ideas: 1) the overlooked distinction between corn varieties (yellow and white) in the anticipated impacts of NAFTA in Mexico, and 2) the unintended consequences on internal migration of the Progresas/Oportunidades conditional cash transfer program in Mexico. Both ideas challenge conventional wisdom about the anticipated welfare improvements of these policies. Moreover, after a recent experience as a field coordinator for an RCT with cacao and lime producers in Peru, I would like to examine the effect of agricultural market reforms there as well, focusing on the middle of the value chain as well as rural-urban migration. In all cases, I hope that my research yields insights that help design more effective policies for smallholder producers around the world.