

# Paul Shaloka Research Interests Statement

pshaloka@nd.edu, +1 (267) 994-2840, <https://sites.google.com/nd.edu/paul-shaloka/home>

My research interests lie in applied microeconomics, with a focus on labor and development. My current work is focused on how changing employment opportunities affect outcomes outside the labor market, primarily health and well-being. In what follows below, I describe the projects I am working on in detail and talk about future plans.

## Labor Demand and Health in the United States

My Job Market Paper (JMP), written with previous Notre Dame graduate student Vivek S. Moorthy, focuses on the mortality effects of localized employment booms. Specifically, we study the labor market and mortality effects of the hydraulic fracturing (fracking) boom. The development of new technologies enabled the extraction of previously inaccessible and under-surveyed deposits of oil and natural gas, spurring local labor demand.

We first show that the fracking boom did lead to sizeable employment and earnings growth. Male wages and employment continued to increase for up to 6 years after the introduction of fracking technology, topping off at around 3% growth. Wages for women increased by roughly half that amount over the same time frame, even though very few women work in the mining or transportation jobs directly associated with well production, implying fracking led to positive spillovers into other industries. We then find that overall mortality declined in boom counties by about 1%, driven by working-age adults. We further decompose the overall mortality declines and show that the effects are driven by fewer internal causes of death, with no robust support for decreased deaths of despair. Lastly, we show that uninsurance rates declined in boom counties, suggesting a plausible mechanism.

Our paper makes three main contributions to the existing literature. First, we provide some of the only causal evidence on the health effects of fracking, a policy-relevant question given that New York actually banned fracking citing health concerns. Secondly, we provide evidence on the mortality effects of job growth. Interestingly, the effect sizes we observe are similar to the *increases* in mortality shown in other studies looking at the effects of employment *loss* on mortality. Finally, economic opportunity has been linked to the troubling rise in deaths of despair, although we know little about whether improving conditions for low-education workers can reverse this trend.

These findings suggest that employment and earnings growth can have important downstream consequences. In future work I intend to leverage the fracking variation to explore more granular health-related effects of the fracking boom, including water and air quality, which are especially important to the ongoing debate around whether fracking should be banned in various municipalities.

## Investments in Health and Education in Sri Lanka

Additionally, I have work in progress looking at the effects of changes in labor market opportunities on health and well-being in a much different context. My coauthors and I consider the effects of a female-based migration ban on household consumption and expenditure. Similar migration limits and/or bans specifically restricting women's mobility are common throughout South Asia, despite low domestic female labor force participation and the much higher relative wages that women can earn abroad. Since the policy specifically targeted women with children, we use detailed data from the Demographic and Health Surveys and the Household, Income, and Expenditure Survey to show how household decision making changes in response to curtailing women's earning and employment potential.

Our initial results suggest that education for children declines in households containing banned women, which complements other work showing that remittances from migrants are an important source of spending on education in migrant sending locations. However, we do not find any evidence that other investments in children like health (as measured by height or weight) change. We also provide evidence that banned women are not able to substitute towards formal domestic employment, suggesting that even sizeable labor supply shifts may not impact female employment in areas with historically low demand for female workers.

## Intergenerational Mobility and Labor Market Opportunity

My other work considers the intergenerational mobility effects of localized labor demand changes. Leveraging the previously discussed fracking variation, I also exploit changes in exposure to Chinese import competition to show how the county-level measures of intergenerational mobility published in the widely publicized Opportunity Atlas are influenced by local booms and busts. Specifically, I show how the otherwise surprising mobility of Western Pennsylvania, West Virginia, and the Dakotas relates to the fracking boom. I also highlight how the movement of manufacturing firms to the South in search of lower wages led that region to be particularly hard hit because of China's entry into the World Trade Organization. Overall, variation explaining the fracking boom and manufacturing bust are about as important for upward mobility as measures of educational attainment and the percent of a counties population that is Black.

Specifically, 10-15% of the spatial variation in intergenerational mobility can be explained by the fracking boom and the manufacturing bust alone. Further, this paper highlights that measures of mobility can be highly sensitive to local labor market changes depending on when parental and child income is measured. These results imply that researchers should use caution when interpreting geographic heterogeneity in mobility (or other measures) as the result of place-based characteristics when not accounting for time-varying, cohort specific labor demand changes.

## Agricultural Tenure Choice

While most of my research is focused on how changes in employment opportunities effect important measures of welfare like health and mobility, I am also interested in the incentives that shape the types of opportunities available to workers. For example, I have work-in-progress considering how changes in the underlying agricultural production technology can affect the types of contracts landlords offer to agricultural workers. Tenure choice is important for agricultural productivity and long-term investments; but this decision is relatively understudied. While sharecropping has perverse incentive implications for agricultural laborers, it persists and is relatively common in Sub-Saharan Africa and parts of South Asia. To empirically test some of the implications of the vast theoretical literature on contract choice, I compare and contrast the effects of output risk and the labor intensity of production on tenure choice using historic data from the US Agricultural Census. To accomplish this, I exploit rainfall risk using historic weather data and quasi-exogenous variation in the labor intensity of production using crop-specific labor input estimates and measures of potential yield based on climate and soil characteristics. I find that labor intensity is strongly predictive of increased sharecropping, consistent with the theoretical literature that highlights the importance of moral hazard and monitoring costs. This relationship holds using both within-state variation and excluding the former slave states. Output/rainfall risk, however, seems to have small and statistically insignificant effects on the types of contracts offered. Overall, my findings suggest that the labor intensity of production is an important determinant of tenure contracts. This suggests that technologies or policies which reduce labor intensity in agriculture may have additional benefits as landlords shift away from tenure contracts (like sharecropping) which are widely seen as exploitative and inefficient.