

# Research Statement

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My research in labor and family economics examines how job displacement and policy interventions reshape household labor supply, with a focus on heterogeneous responses across life cycle stages, household structures, and gender. By leveraging restricted U.S. administrative datasets, longitudinal surveys, and advanced econometric methods, I provide new insights into the interplay of labor market outcomes and family structure, with implications for policy design. My job market paper investigates the added worker effect (AWE) among spouses of workers displaced during mass-layoff events, revealing compositional drivers of labor supply responses. My dissertation also includes papers on post-displacement recovery with self-employment as an emerging pathway, and on the long-run effects of childhood exposure to state child support guidelines, showing gender-differentiated labor market impacts. My future research extends these themes to family structure, retirement decisions, and the economic impacts of climate disasters, building on my expertise with datasets such as the Longitudinal Employer-Household Dynamics (LEHD), Integrated Longitudinal Business Database (ILBD), Decennial Census, American Community Survey (ACS), and Panel Study of Income Dynamics (PSID).

My job market paper, "For better or For Worse: The Added Worker Effect in the 21st Century U.S.", identifies job loss due to involuntary separations (mass-layoffs), estimates the overall AWE in the U.S. with restricted micro-data based on administrative sources, and shows that the muted aggregated AWE in developed economies conceals substantial heterogeneity across household types and life cycle stages. I find that younger spouses (age 25-49) with children increase labor supply to offset income losses, with stronger responses in households with more children but muted in low-income families due to substitution into childcare. Younger childless spouses show limited AWE among males and negative responses among females, consistent with trailing spouse dynamics, particularly when couples work in the same industry and face correlated shocks. Older spouses (age 50+) decrease participation and exhibit early retirement-like exits, especially in higher-income households with greater financial cushions. These heterogeneous effects demonstrate how household composition, childcare constraints, geographic mobility, leisure preferences and gender asymmetries drive spousal labor supply after displacement. To establish these results, I draw on restricted LEHD, ILBD and Decennial Census data from 16 states (2000-2022), constructing a sample of displaced workers aged 25-55 with at least three years of tenure. Following Jacobson, LaLonde, and Sullivan (1993), I define mass-layoffs as state-firm level employment drops of 30% or more over four quarters, and match displaced workers one-to-one with control workers using a two-stage propensity score method that accounts for worker demographics, firm characteristics and spousal pre-layoff employment. I create a novel linkage with Census data that identifies spouses and children, enabling household-level analysis. This paper is also the first to incorporate self-employment as a supplemental income source to displacement recovery. Using event studies and matched difference-in-differences (Illing, Schmieder, and Trenkle, 2024), I estimate labor supply responses over a ten-year window around the displacement event. These findings, based on millions of linked records, inform how unemployment benefits and family support policies might be tailored to diverse household needs.

The second dissertation paper shifts attention back to the displaced workers themselves. In this paper, ti-

titled "Displacement and Domestic Constraints: Life Cycle, Family Roles, and Self-Employment Transitions," my coauthor and I explore both conventional employment and self-employment as pathways to recovery from mass-layoff events. By zooming in on different life-cycle stages, we document how displaced workers recover in employment and earnings when facing unique constraints and opportunities, especially when interacting with the gender of the displaced worker. Furthermore, the conventional versus self-employment dimension prompts the question on the barriers of re-entry, as the rise of gig economy provides low-barrier employment opportunities that are not available in previous decades. My coauthor and I not only show the demographic traits of worker who take up self-employment as their paths to recovery, we also discuss which population subgroups are able to translate self-employment effort into observable income and provide potential mechanisms behind these heterogeneous outcomes. The results of this paper are undergoing Census Bureau's disclosure avoidance review process.

A third dissertation paper, "Childhood Exposure to State Child Support Guidelines and Long-Run Labor Market Outcomes," highlights how family policy can produce unintended, gender-differentiated effects. Using a newly-compiled dataset on guideline adoption years across states in the 1980s merged with the PSID, I study individuals born between 1968 and 1994. I measure exposure as the fraction of childhood years lived under these guidelines. Employment OLS for employment outcomes and quantile regressions for labor income, with controls for individual characteristics, parental education, and state and cohort fixed effects, I find no overall effects on employment or earnings. However, gender heterogeneity emerges: full childhood exposure (18 years) is associated with decreased male labor income and increased female labor income, alongside higher employment probability for females. Further analysis shows weak direct impacts on child support payments or amounts received, especially in low-income samples. Instead, exposure appears to unintentionally encourage parental separation. Exposed male children face a higher probability of single-parenthood and spend more years in such households, potentially driving adverse long-run outcomes. These findings reveal that family policies may alter labor market trajectories indirectly through union dissolution.

My AWE projects opens several avenues for future research. I plan to investigate how mass-layoffs affect family structure, analyzing couple separation and fertility outcomes using linked administrative data. Another project will examine joint retirement decisions among older couples, incorporating social security, family income, or pension data to model coordinated labor market exits. I also aim to compare the AWE under earnings cuts versus mass-layoffs, testing whether income shocks elicit distinct own and spousal responses. Additionally, I intend to revisit the definition of "mass layoff" from Jacobson, LaLonde and Sullivan (1993), exploring alternative thresholds to reflect contemporary labor market dynamics. Thinking in the long-term, I will study displacement's impact on family income and children's outcomes, using new restricted datasets to trace educational effects. Finally, I plan to explore remote work and self-employment as emerging recovery pathways, particularly in the context of digital labor platforms.

My broader research agenda is reinforced by prior research fellowships. As a research assistant, I analyzed urban economic trends, examining how housing prices and availability of job opportunities affect post-displacement mobility in metropolitan areas. This work introduced me to the displacement literature and directly informed the design of my job market paper. My current research fellowship engages with a project on the economic impact of climate disasters, where I combine LEHD data with public and proprietary sources to study employment and earnings losses following various types of natural disasters. These experiences strengthen my ability to work with restricted (LEHD, ILBD, Census), proprietary (SHELDUS) and public (CPS, ACS, PSID, OpenFEMA) datasets, and prepare me to tackle complex questions at the intersection of labor, family and environmental economics.

Together, my own research and collaborative experiences open pathways for interdisciplinary projects in labor, urban and environmental economics. By combining large-scale restricted data, rigorous econometrics and policy-relevant questions, I aim to advance academic scholarship and inform strategies to enhance economic resilience. Just as importantly, I am committed to mentoring students in research, as I have in my econometrics teaching.