

I am a labor economist studying how regional shifts driven by immigration affect workers, industries, and firms. In my job market paper, I study how historical immigration-induced exogenous shifts in local human capital impacts the industrial skill composition of employment and establishment shares in US counties. In a joint work with my colleague, we examine the effects of religiosity on local labor markets in the US, leveraging the historical immigrant settlement patterns for identification. My work also highlights how recent immigration policies affect firm creation at the US commuting zone level, offering new insights into the effectiveness of legalization policies in shaping the local economic impact of undocumented immigration. In addition, I aim to examine the skill heterogeneity in emigration in response to weather shocks and violence in Mexico. My secondary field of interest is health economics, with one of the works in my future research agenda focusing on the effects of religiosity on mortality and sexual health outcomes in US commuting zones. To address these empirical questions, I use advanced causal inference methods, particularly the shift-share instrumental variable (SSIV) approach as well as the triple difference (TD) estimator. The following projects describe my current and future works:

## Human Capital, Immigration, and Skill Composition

The spatial differences in the skill structure of industries across the United States are amongst the best documented phenomena. These variations could be explained by a variety of factors including local demand shocks ([Moretti, 2010](#)) along with amenities and industrial policies. Yet, the causal impact of human capital on industrial skill distribution of US regions remains largely unknown. My job market paper, [“Human Capital, Immigration, and Skill Composition”](#), studies how immigration-induced shifts in human capital of local population affect the industrial skill composition of employment and establishment shares in US counties. The importance of this topic lies in its potential to inform policymaking. For instance, if the objective is to establish community colleges that grant associate degrees in a specific locality with the aim of attracting industries that typically employ community college graduates or demand their labor, the policy may fall short of its intended outcomes. One possible reason for it could be the underlying economic conditions that have changed the path of development in that location due to “persistence” and “path dependence” ([Allen and Donaldson, 2020](#)). Therefore, my paper exploits the persistence of historical immigrant settlement patterns to investigate the role of human capital in shaping changes in the industrial skill structure across US regions.

Nevertheless, human capital formation is an endogenous process, influenced by various factors. To address this endogeneity concern, I utilize a two-step procedure. First, I predict immigration stocks by leveraging the origin-by-destination immigration patterns from 1850 to 2010. Second, using this quasi-random variation in immigration, I isolate skill-specific exogenous working-age population for the 1970–2010 period. The mechanisms behind this strategy stem from (i) the transmission of human capital from “ancestors” to “descendants”, (ii) the immigrant selection process, and (iii) the presence of “ethnic enclaves” and “social networks” amongst immigrants. I make two major contributions to the literature. My first contribution pertains to generating skill-specific exogenous variation in working-age population at the county level. In particular, I use an enhanced version of the shift-share instrumental variable (SSIV) approach that handles the issues associated with the use of canonical SSIV methods in the spirit of [Terry et al. \(2021\)](#). My second contribution relates to quantifying the causal effects of the exogenous shift in human capital of local population on the industrial skill composition of employment and establishment shares in US counties.

I find that, relative to low-skill worker shares, an increase in medium- and high-skill worker shares raises employment and establishment shares of high-skill industries and reduces those of low-skill industries. The heterogeneity analysis along industry tradability demonstrates that a substantial portion of the positive effects originates from the nontradable sector, whereas a significant fraction of the adverse impacts arises from the tradable sector. These empirical results are supported by a CES model in which representative firms with differentiated products employ labor of a certain skill type more intensively. On the whole, my investigation bridges the literature on historical persistence and local labor markets, offering insightful and policy-relevant findings.

## Holy Work: How Religiosity Shapes Local Labor Market Outcomes

Religious affiliation is associated with a range of economic outcomes. However, identifying a causal impact of religiosity is difficult, since an individual's religious identity is not random and is driven by a multitude of factors, including culture and upbringing. In a co-authored work with my colleague, Mary Peshoff, titled [“Holy Work: How Religiosity Shapes Local Labor Market Outcomes”](#), we utilize a novel identification strategy to causally quantify the effects of religiosity on local labor markets in the United States. Religion can impact local economic development by strengthening social ties, facilitating networking, and promoting community involvement. It also contributes to human capital accumulation, which can have significant effects on local economies. As such, exploring the causal effects of religious identity on local labor market outcomes is essential to better understand the broader role of religious norms.

To address the endogeneity issue in religiosity, we leverage the interaction of the quasi-random variation in immigration with origin-specific religiosity measures to isolate destination-specific religiosity shocks in US commuting zones. We first predict immigration stocks using the historical origin-by-destination immigration patterns per [Terry et al. \(2021\)](#). Later, we interact these predicted immigration stocks with country-specific religiosity measures to construct the instruments for commuting-zone-specific religious affiliations. Our aim is to show that the interplay between historical immigrant settlements in commuting zones and religiosity measures by origin (*i.e.*, home country) is a good predictor of current church memberships in commuting zones, since immigration and religious faith are correlated ([Gagliarducci and Tabellini, 2022](#)).

We demonstrate that, relative to the share of religiously unaffiliated group, higher shares of Protestant, Liminal and Orthodox Christian, and “Other” lead to lower employment and labor force participation, college attainment, and marriage in commuting zones. In contrast, a higher share of Jewish population causes an increase in these outcomes. Our results reveal considerable heterogeneity by gender, with the main effects primarily concentrated amongst females. Overall, we contribute to the literature by using a novel identification strategy to document new findings for the local labor market effects of religiosity.

## Firm Creation under DACA

Undocumented immigration remains a central issue in US policy debates, prompting the federal government to implement various reform efforts. One such policy is the Deferred Action for Childhood Arrivals (DACA), enacted in August 2012. While prior research has mainly focused on DACA's effects on

human capital and labor market outcomes, the response of establishments to the policy remains largely unexplored. In my paper titled [“Firm Creation under DACA”](#), I examine the impact of DACA on establishment entry and exit using a triple-difference (TD or DDD) framework.

Since immigrant legal status is not directly observable in survey data, I utilize an enhanced version of the “residual” method proposed in [Borjas \(2017\)](#) to impute undocumented status amongst the foreign-born population. This approach draws on characteristics such as year of arrival, age, citizenship, veteran status, and receipt of government benefits. DACA eligibility is determined based on criteria including schooling, age, and arrival year. To determine the treatment status by sectors and regions, I map the individual DACA eligibility to two-digit NAICS sectors and commuting zones, exploiting pre-policy exposure to likely DACA-eligible undocumented immigrants.

I find that DACA leads to a 2.4 percent increase in establishment entry and a temporary decline in the exit rate in treated sectors relative to control sectors. Furthermore, the policy increases the employment share of natives by 2.1 percentage points and reduces the share of undocumented immigrants ineligible for DACA by a similar margin. These effects are concentrated in low- and medium-skill sectors. Taken together, the results suggest that legalization policies such as DACA can stimulate firm creation, promote labor reallocation without crowding out native workers, and spur entrepreneurship.

## Future Agenda

The existing literature documents both positive and negative selection of immigrants across various contexts, yet there is limited evidence on how emigration patterns by skill level respond to weather shocks and violence. My objective is to examine whether such shocks differentially affect the emigration of low-versus high-skilled individuals from Mexican municipalities to US counties. This project aims to provide new empirical evidence on how adverse events shape the skill composition of Mexican emigrants and may also help explain variation in return intentions amongst Mexican immigrants in the US. One of my current works investigates how religiosity affects local labor market outcomes in US commuting zones. Building on this, my coauthor and I plan to explore the causal effects of religiosity on mortality and female sexual health outcomes, an area with limited causal studies. Motivated by concerns around “deaths of despair” and the stigma surrounding contraception in certain religious communities, this work seeks to provide new empirical insights into the health implications of religiosity within a quasi-experimental setting, contributing to the broader literature on the economics of religion and health.

## References

- Allen, T. and Donaldson, D. (2020). Persistence and path dependence in the spatial economy. Technical report, National Bureau of Economic Research. [Cited on page [1](#).]
- Borjas, G. J. (2017). The labor supply of undocumented immigrants. *Labour Economics*, 46:1–13. [Cited on page [3](#).]
- Gagliarducci, S. and Tabellini, M. (2022). Faith and assimilation: Italian immigrants in the us. Technical report, National Bureau of Economic Research. [Cited on page [2](#).]
- Moretti, E. (2010). Local multipliers. *American Economic Review*, 100(2):373–377. [Cited on page [1](#).]
- Terry, S. J., Chaney, T., Burchardi, K. B., Tarquinio, L., and Hassan, T. A. (2021). Immigration, innovation, and growth. Technical report, National Bureau of Economic Research. [Cited on pages [1](#) and [2](#).]