

# Statement of Purpose

In support of my application to the Public Policy Ph.D.(Economics)  
Program at Harvard University

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I want to use economics research to combat inequality, and a doctoral study in public policy with a focus in economics at Harvard University will get me to that goal. Over the past few years, I have gained skills and experiences that make me an ideal candidate for the admission for Fall 2022. The combination of my applied research experience and the theoretical discussions in my Chicago classrooms makes me appreciate the intricacy of research driven by economic theories. I am pursuing applied microeconomics so I can use mathematically rigorous models to shed light on social issues. Currently, I am interested in further studying the effects of local policy on the population of the cities. By expanding on my previous work on the effects of sanctuary city policies, I can build a framework that describes and predicts migration patterns and residential sorting following local policy shocks. Although my research interests may evolve through exposure to other social issues, delving into this idea will allow me to demonstrate my passion and purpose in pursuing this next chapter of learning.

In the four years of the Trump presidency, Sanctuary City Policy [SCP]<sup>1</sup> has become a platform over which the general public have polarizing opinions. The elusive nature of data on undocumented immigration and the complexity of sub-national immigration laws have warded off attempts at using an economic model to examine the effects of SCPs on the residents of sanctuary cities. Further, most existing studies examining policies related to undocumented immigration have either been limited to case studies like *Muriel boat-lift* or focusing solely on the consequences on the labor market<sup>2</sup>. In my MA thesis: *Moving To Inclusion: The Migration Effects of Sanctuary City Policies*, I built a framework to analyze the effect of sanctuary city policies. My main thesis connected three main models that form a complex system describing migration patterns. I took advantage of the rich American Community Survey to examine the individuals' decisions, the cities' decisions, and the general equilibrium effects of sanctuary city policies.

The estimation of my individual decision model showed patterns of diversity and SCPs as substitute goods in individuals' migration decisions. This led to and was confirmed by a model treating cities as individual agents making utility-maximizing decisions based on their preferences of residents. The last piece of the puzzle was an event history model with estimation results confirming what the first two models would predict. I plan to build on this framework and examine changes in migration patterns due to sub-national resistances to national policies such as abortion law, cannabis

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<sup>1</sup> Although there is no official definition of Sanctuary City Policies, this term represents policies that prohibit local law enforcement from taking legal actions solely based on immigration purposes.

<sup>2</sup> Albert, C., 2017, "The Labor Market Impact of Undocumented Immigrants: Job Creation vs. Job Competition," CESifo Working Paper Series No. 6575

laws, and voter ID laws. Building upon the Schelling (1969; 1971)<sup>3</sup> framework such as Caetano & Maheshri (2017)<sup>4</sup>, these policies can be viewed as providing both realized amenities and signaling devices. Combined with a comprehensive framework, I will be able to examine the role of local policies in affecting migration patterns, providing policy makers with a robust decision tool.

My research at school encouraged me to further my pursuit of economics but I want to gain more experience and exposure to different topics before I start a PhD program. After finishing my Master's degree, I accepted a research position to work for professor Amy Ellen Schwartz at Syracuse University. Much of my work revolves around urban economics and the economics of education with a team of economists from different institutions. My daily work includes programming in Stata and R, data exploration and briefing, estimating different models, brain-storming ideas for the theoretical mechanisms, and editing papers for publication. In one project, I used a routing machine to estimate public school students' morning commute options to school in New York City. In another current project with the USDA, I am exploring how different meal varieties in NYC school lunch can affect student participation in school. In this position, I have witnessed full cycle of projects from conception to fruition, learned from both experienced and new researchers alike, and seen first-hand how the research from our group influences education policy in NYC.

Aside from my experience in applied economics research, my academic coursework has also prepared me for the road ahead. I gained both the necessary skills through my math courses and the appreciation for applied work through my economics courses at The Ohio State University. I was trained to thrive on the mathematical rigor in my PhD level courses during my Master's program at the University of Chicago. *Price Theory I* and *Social Interaction and Inequality* taught me the flexibility of a parsimonious model and the importance of integrating ideas from other social science disciplines. Taking courses from other departments throughout my studies also gave me new perspectives on how to approach social issues in practice. My technical training and continuous exposure to numerous research topics fueled my pursuit of applied microeconomics.

I am certain in my desire and am confident in my ability in pursuing a doctoral study in public policy with a focus in economics at Harvard University. I believe that my training, experiences, and revelations leading up to this point have prepared me to be an ideal candidate for the program; and I believe that Harvard University provides the rigorous training and fosters the inspiring environment and support system that make it an ideal place for me to grow as an economist. I know what I can accomplish with the proper training and I know just how influential my research can be. I hope to learn from the leading researchers, who make good impact on the world daily, and develop an academic career that benefits the world in similar ways.

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<sup>3</sup>Schelling, TC, 1969. Models of segregation. Am. Econ. Rev. 59 (2), 488–493; Schelling, TC, 1971. Dynamic models of segregation. J. Math. Sociol. 1, 143–186

<sup>4</sup>Caetano, G., and V. Maheshri, 2017. School Segregation and the Identification of Tipping Behavior. Journal of Public Economics 148: 115-135.