## ABSTRACT

## THE LOCAL ECONOMIC IMPACT OF DEMOGRAPHIC CHANGE

Little research exists exploring the relationship over time between changes in demographic concentrations and economic outcomes such as tax, spending and income. Given the speed of demographic transformation in the United States over the past few decades, it is important for policymakers to understand the relationship between demographics and economic indicators, as well as potential mechanisms which may drive these relationships.

The following dissertation research is divided into five chapters, with Chapters 1 and 5 introducing the topic and concluding, respectively. In Chapter 2, I argue that there is an endogenous relationship between demographic change and economic outcomes such as tax and expenditure per capita which is biasing previously published results. Taking into account the time impact of unobservable variables in Census data 1980-2010, Census Places which are becoming more diverse have lower tax and expenditure per capita. Because Census Places do not capture the entire US demographic landscape, especially in rural areas, Chapter 3 makes use of ACS 5-year estimates 2010-2019 to show that there is also a robust negative relationship between non-White composition and income per capita at the Census Tract level in Colorado. The fact that Census Places and Tracts which become more diverse over time suffer from reduced tax, expenditure and income per capita is an important consideration for public policymakers moving forward. Still, these results cannot be taken as causal and further research is warranted into mechanisms which may be driving this negative relationship in order to implement policies aimed at reducing residential segregation and inequality. Chapter 4 uses a voluntary contribution game embedded in a list survey to determine whether demographic information about a community could be altering individuals' willingness to contribute to public programs.

In Chapter 2, I begin by commenting on a famous publication by Alesina, Baqir and Easterly (1999) which finds that the relationship at the Census Place level between race heterogeneity and tax/spending per capita is positive. That is, places with higher levels of race heterogeneity have higher levels of tax and spending, but lower spending on `productive' public goods such as road maintenance and sewerage in 1990 Census Data. I begin by

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reproducing similar results for the most recently available 2010 Census data, then arguing that these results are likely biased due to endogeneity. Unobserved variables such as bargaining power, culture, and political representation impact both demographic change and tax/spending over time. As a result, cross sectional results which do not incorporate the time impact of these unobserved variables are likely to be inaccurate.

More recent economic literature, especially associated with Opportunity Insights, has produced an extensive analysis of individual-level outcomes given a place of birth. Chapter 3 shifts the unit of analysis from the individual to the place, using US Census Tracts. I argue that demographic change at the Tract level is occurring in predictable ways along racial and income lines. Tracts which increase their White Non-Hispanic population over time are becoming wealthier in terms of aggregate income and income per capita, while Tracts which increase in Minority population become less wealthy. This result suggests that policymakers may be able to combat inequality by understanding and responding to the mechanisms which drive demographic segregation.

Individuals' support for public funds is a complex decision which is influenced by the information the respondent has about the public fund, its contributors, and its use. Individuals may be less willing to contribute to public projects if they perceive (correctly or incorrectly) that others will not contribute. Policymakers would like to understand what types of information are important factors in the contribution decision. Since perceptions and beliefs about the likeliness of others to contribute is a potentially sensitive question, respondents may choose not to answer questions about their beliefs and perceptions truthfully. This effect is known as social desirability bias. To combat social desirability bias, social scientists have in recent years employed the list survey experiment. Chapter 4 combines a list survey type experiment into a voluntary contribution game to examine perceptions about race which could underlay the negative relationship found in Chapters 2 and 3. I find that individuals do use demographic information to influence contribution to public funds, and that contribution levels are highest when the community which will benefit from the public fund is similar in race/ethnicity to that of the respondent.

The results of this body of work suggest that the conflict and inefficiency hypothesis as presented in the literature is flawed. That is, lower public goods spending in diverse areas is not produced by mismanagement of available funds, but rather by a dearth of funds available. Nonetheless, there are elements of residential preference and voting behavior which could be driving observed differences in public goods spending and quality by creating residential segregation which perpetuates economic inequality.