

Research Statement

Tara Watson

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I am an applied micro-economist with a focus on disadvantaged populations in the United States. My research lies at the intersection of three sub-fields of economics: health economics, urban economics, and economic demography. The nexus of these three areas is of particular interest to me because the interactions between health, geography, and demography are critical but under-studied determinants of economic disadvantage. I have produced eight manuscripts in these areas; six of these are published or forthcoming articles, a revision has been requested for a seventh, and the eighth is nearly ready for submission. I have also published a policy brief and a book review, and I have two new projects well underway. Below I discuss my research on issues affecting the health of disadvantaged populations and my work concerning urban inequality and segregation.

Health of Disadvantaged Populations

Poverty is tightly intertwined with health status, so studying health sheds light on both the causes and consequences of economic disadvantage. My health-related work focuses on two groups, infants and immigrants. While these groups are worthy of study in their own right, studying them also contributes to a broader understanding of policy impact and economic decision-making. For example, infant health is particularly informative for research because it is well-measured and its timing is well-defined. Researchers frequently use infant health as a marker of population health or even population well-being more generally, and it is in this spirit that I approach my two infant health papers. Similarly, my two projects that investigate immigrant participation in the Medicaid program seek to shed light on the issues that surround take-up of social safety net programs more generally. Through my contributions, I am developing a national reputation in this area, as evidenced by invitations to speak at Harvard University, the National Bureau of Economic Research Summer Institute, and the RAND Corporation, among others. I have also received two external grants supporting my recent research on immigrant Medicaid participation, and was appointed a Robert Wood Johnson Scholar in Health Policy Research in 2007-2009.

My projects concerning the health of disadvantaged populations include:

- Watson, Tara, "Public Health Investments and the Infant Mortality Gap: Evidence from Federal Sanitation Interventions on U.S. Indian Reservations," *Journal of Public Economics*, 2006, 90(8-9), pp. 1537-1560.
- Fertig, Angela and Tara Watson, "Minimum Drinking Ages and Infant Health Outcomes," *Journal of Health Economics*, 2009, 28, 737-747.
- Watson, Tara, "Inside the Refrigerator: Immigration Enforcement and Chilling in Immigrant Medicaid Participation," manuscript, June 2010.
- Watson, Tara, and Dean Yang, "Barriers to Medicaid Participation Among Immigrants: Experimental Evidence," in progress.

My first paper in this area is motivated by the sharp and previously unexplained decline in infant mortality among Native American children between 1960 and 1980. "Public Health Investments and the Infant Mortality Gap: Evidence from Federal Sanitation Interventions on U.S. Indian Reservations," was published in a top field journal, the *Journal of Public Economics*, in 2006. My analysis examines the role of public investment in water and sewer on Indian reservations starting in 1960. I document that sanitation investments had striking effects on infant mortality, that the interventions were cost-effective, and that the health impacts spilled over to neighboring non-Indian populations. This paper contributes to the debate over the degree to which public health investment ameliorates health disparities.

I continue to analyze the role of public policy in promoting infant health in "Minimum Drinking Ages and Infant Health Outcomes." In 2009, this paper was published in the *Journal of Health Economics*, the top journal in health economics. My co-author Angela Fertig and I show that a lower minimum drinking age is linked to lower birth weight and higher rates of prematurity for babies born to mothers under 21, especially for black mothers. These births are also less likely to have a father reported on the birth certificate, and we find that the adverse consequences of liberalized alcohol laws only occur in areas where it is difficult for young women to obtain an abortion. The evidence presented in the paper therefore suggests that a low drinking age increases the rate unintended pregnancy and adversely affects infant health. Our research was cited by over a dozen media outlets including Reuters Health and Foxnews.com.

My interest in immigrant populations began when I was a Scholar in the Robert Wood Johnson Health Policy Research program. It is estimated that up to half of eligible citizens fail to enroll in the Medicaid program (public health insurance for the poor) and that participation rates are even lower for eligible immigrants. Understanding why participation rates are low can help improve program design and raise insurance rates. “Chilling effects” arising from an icy policy climate are a popular explanation for low program take-up rates among non-citizens, but such effects are inherently hard to measure.

“Inside the Refrigerator: Immigration Enforcement and Chilling Effects in Medicaid Participation” examines the link between enforcement of immigration law and participation in the Medicaid program. I find robust evidence that heightened enforcement reduces Medicaid participation among children of non-citizens. This is the case even when children are themselves citizens and face no eligibility barriers to Medicaid enrollment. Up to seventy-five percent of the relative decline in non-citizen Medicaid participation around the time of welfare reform, which has been attributed to the chilling effects of the reform itself, is explained by a contemporaneous spike in immigration enforcement activity. The results imply that safety net participation is influenced not only by program design, but also by a broader set of seemingly unrelated policy choices. Although this paper is not yet published, I believe it will prove to be my most important contribution to the health economics literature to date. The project has been supported with supplementary funding from the Robert Wood Johnson Scholars in Health Policy Research Program and by an external grant from the West Coast Poverty Center.

A second project, ongoing and joint with Dean Yang, investigates barriers to Medicaid participation among legal permanent residents in Michigan. We conducted a pilot study between Summer 2009 and Spring 2010 in which nearly 300 immigrants were surveyed twice. After the initial survey, a random subset of respondents were given a flyer containing information about how to get help applying for public health insurance by visiting a local community group. Most participants knew about the Medicaid program before receiving the flyer, but recipients of the flyer were statistically more likely to visit the advertised community organization, presumably for help with the application process. We lack the statistical power to detect an effect on Medicaid participation in the pilot study, but we plan to apply for support to field a full-scale field experiment within the next year. This project is supported by the National Poverty Center at the University of Michigan and the Center for State Local and Urban Policy at the University of Michigan (with the first of these grants in my name).

Urban Inequality and Segregation

My work in urban economics is focused on the determinants and consequences of urban inequality and segregation. In particular, I investigate the effect of inequality and local policy on segregation in cities, the effect of inequality on marriage patterns in cities, and the relationship between fiscal policy and urban inequality. This work has generated invitations to speak at numerous conferences and institutions, including the Brookings Institution, the University of Michigan, and the University of California at Berkeley.

My projects in this area include:

- Morrison, Steven. A., Clifford Winston, and Tara Watson, "Fundamental Flaws of Social Regulation: The Case of Airplane Noise," ***Journal of Law and Economics***, 1999, 42(2), pp.723-43.
- Watson, Tara, "Inequality and the Measurement of Residential Segregation by Income," ***Review of Income and Wealth***, 2009, 55, 820-844.
- Watson, Tara, "Inequality, Metropolitan Growth, and Residential Segregation by Income," in ***Brookings-Wharton Papers on Urban Affairs***, Gary Burtless and Janet Rothenberg Pack, eds., 2006.
- Watson, Tara, "New Housing, Income Inequality, and Distressed Metropolitan Areas," ***Brookings Metropolitan Policy Program Policy Brief Series***, 2007.
- Watson, Tara, and Sara McLanahan, "Marriage Meets the Joneses: Relative Income, Identity, and Marital Status," manuscript June 2010. Revision requested at ***Journal of Human Resources***.
- Beeson, Patricia, Lara Shore-Sheppard, and Tara Watson, "Local Fiscal Policies and Urban Wage Structures," June 2010. Forthcoming in ***Public Finance Review***.
- Gordon, Nora, and Tara Watson, "School Choice and 'Excess' School Segregation: Does School Choice Policy Explain Which Districts Have Schools More Segregated than their Neighborhoods?," in progress.

My first published research in this area introduced me to the importance of geography in economic research and was conducted prior to entering graduate school. The paper, “Fundamental Flaws of Social Regulation: The Case of Airport Noise,” was published in 1999 in the highly regarded *Journal of Law and Economics* (joint with Clifford Winston and Kenneth Small). In the paper, we compare the costs of airport noise abatement policies with the benefits to local residents (measured by the effect on property values), and find that noise regulation is socially inefficient.

In graduate school, I continued to focus on economic geography, with a particular emphasis on patterns of residential segregation in metropolitan areas. There is an extensive literature in Economics and related fields on residential sorting by race, but much less is known about segregation by income. The existing literature at the time indicated that the rich and poor were becoming more residentially segregated from each other between 1970 and 1990, even as racial segregation declined. A plausible hypothesis is that the increase in sorting stemmed from the pronounced rise in income inequality over the same period – as the rich get richer they are more willing and able to live in isolated and homogenous neighborhoods. However, it was impossible to test this hypothesis using existing measures of income segregation because they are mechanically related to the shape of the income distribution.

To address this issue, I introduce a new measure of income sorting that is not mechanically related to the income distribution in “Inequality and the Measurement of Residential Segregation by Income” (*Review of Income and Wealth*, 2009). The paper documents that growth in residential sorting by income is closely tied to the growth of income inequality, a finding that was highlighted by the Wall Street Journal Real Time Economics blog in April 2009.

In a related paper “Metropolitan Growth, Inequality, and Residential Segregation by Income,” I examine how the link between inequality and segregation described in the RIW piece differs based on the growth of a metropolitan area. The fixed nature of the housing stock makes it unlikely that metropolitan residents re-sort immediately when there is a change in the income distribution. However, in rapidly growing areas, the configuration of the housing stock is more fluid and responds quickly to consumer demand. I show that rapidly growing areas are moving more quickly to a new equilibrium - one in which residential sorting by race is being replaced by residential sorting by income in the urban landscape. This paper was the lead article in the 2006 *Brookings-Wharton Papers on Urban Affairs*.

My Brookings piece also showed that in economically declining cities with high levels of inequality, the desire for segregation is sufficient to generate the construction of new housing stock that is not otherwise warranted. This issue became the subject a **Brookings Metropolitan Program Research Brief** in 2007, titled “New Housing, Income Inequality, and Distressed Metropolitan Areas.”

In other work, I examine another potential consequence of urban inequality: low marriage rates. My project investigates the effect of the median income of a local reference group on a man’s decision to marry. In cities where there is high urban inequality, low-income men may be less likely to marry because the norms established by families at the median may be less attainable. Given that many of these men are cohabiting and have children with their partners, deferral of marriage is hard to reconcile with traditional economic views of marriage that focus on specialization and public goods. In “Marriage Meets the Joneses: Relative Income, Identity, and Marital Status,” my co-author Sara McLanahan and I propose an economic identity model and posit that men prefer not to marry unless they can achieve a level of income consistent with an idealized norm of marriage. Empirically we find that, controlling for their absolute income, men are less likely to marry if their income falls below the median of others in a local reference group. This article was published as an NBER Working Paper in 2009 and the on-line magazine VoxEU asked me to write a short piece about it in May 2009. The paper has been recently been submitted to and revised at the request of the ***Journal of Human Resources***, a leading field journal in labor economics.

In addition to the consequences of urban inequality, I am also interested in its determinants: why are some cities more unequal than others? This question is the focus of “Local Fiscal Policies and Urban Wage Structures” with Lara Shore-Sheppard and Patricia Beeson. Though differences in wage levels across metropolitan areas are the subject of a well-developed literature, variation in wage *dispersion* remain relatively unexplored. Our paper develops a Roback-style model which suggests that, after accounting for individual characteristics, wage dispersion across income groups reflects differences in the relative valuation of local amenities and fiscal policies. We present evidence of a link between local taxes and expenditures and the degree of dispersion in the wage structure. This paper will be published in a forthcoming issue of the ***Public Finance Review***.

My ongoing work continues to explore the determinants of segregation. In a new project, I explore policies that break the link between residential location and school attendance patterns, including charter schools, magnet programs, vouchers, and court-ordered desegregation plans. Specifically, the project investigates how such policies affect residential choice and school segregation by race and income. This work has been supported by the Williams Economics department Henry George Fund and by the Spencer Foundation (the first of these in my name).

My co-author Nora Gordon and I start by examining residential patterns and school attendance patterns in the year 2000 and document the degree to which sorting across schools mimics sorting across neighborhoods. We use GIS modeling to compare the school segregation that would arise if every student attended his or her nearest school to the level of school segregation actually observed. The results suggest that, conditional on public school attendance and residential patterns, schools are about as segregated as one would expect. Therefore, the high degree of isolation of poor and minority students in schools is due to the distribution of poor and minority families across neighborhoods and to disproportionate private school attendance by non-poor non-minority students. These results imply that the typical school district is not exacerbating segregation through public school choice programs and gerrymandered attendance zones, except to the extent these policies shape residential patterns and the private schooling decision.

Next, we aim to investigate how residential patterns and private school decisions respond to school choice and related policies. Once geographically detailed Census data are released later this year, we will link changes in district policies over the past decade – which have been substantial - to changes in residential choice and school segregation.

In conclusion, my work examines the determinants and consequences of economic disadvantage, viewed through the lenses of health, economic geography, and demography. I am particularly excited about my new projects in these areas, one examining the effect school district policy on residential choice and school segregation and the other using a field experiment to better understand Medicaid participation among immigrants.