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Research Statement

I have a broad research agenda with several studies underway related to my job market research, two published papers, and multiple ongoing research projects. In general, my research is focused on public policy, poverty, links between childhood experiences and adult outcomes, responses to taxation, and applied econometrics.

Job Market Paper and Dissertation Research

I - Job Market Paper
A wealth of correlational results suggest a strong relationship between experiences in childhood and later life outcomes. Understanding how these relationships work is critical for designing better policies to help children.

In this paper, I add to this literature by looking at the causal effects of income in infancy on later-life outcomes. I use a discontinuity in after-tax income created by the timing of birth of children. I find that a $1,000 income shock in infancy increases the probability of children being grade-for-age by high school, a basic measure of academic achievement and social maturity. This result is largely driven by changes for children from families that are likely more disadvantaged at a child's birth, including families with low education attainment and Black families. Moving forward to post-schooling outcomes, I find evidence that small effects on labor force attachment, earnings and education attainment persist for years after the adults leave high school.

These results add substantially to the literature on the relationship between income and child outcomes. Although research has long suggested that conditions in early childhood are consequential for long-term outcomes for children, my paper is one of the first papers to look at the causal effect of income in infancy. Furthermore, the pattern of results in my paper has important implications for transfer policy. The effect sizes recorded in my paper are somewhat larger than effects found by other researchers for similarly-sized income shocks at later ages. This finding suggests that policies that increase family economic resources in infancy and early childhood may be more cost-effective for improving child outcomes than transfers that happen later in a child's life.

II - Second Chapter
Policy interventions that require individuals to meet a means test for eligibility may incentivize actions that counteract the intervention. It is well-documented that, in some settings, low-income households lower their income and labor supply in the short-run to qualify for means-tested benefits. The consequences of families lowering their earnings in this manner are unclear, as family economic resources outside of the benefit would be lower but the family would also then be eligible for the benefit. Program evaluations often measure these short-term actions, and incorporate them in cost-benefit analyses as a cost.

However, it is possible that these short-term actions over time result in longer-term consequences. Families that choose lower hours, lower earnings or no labor force participation may see their earnings potential erode over time. Such erosion would constitute an additional cost of implementing the program, and the reduction

in family economic resources would likely have negative impacts on children. Distinguishing these long-term consequences from short-term actions is hard in typical program evaluations, as the time frame for analysis is often too short.

I examine whether there is evidence of these long-term consequences by looking at a unique feature of the Medicaid program. A series of expansions of eligibility in the 1990s made children eligible for Medicaid under substantially more generous family income cutoffs if the children were born after September 30th, 1983. However, over time states removed this difference in eligibility rules. So, parents with children born before September 30th, 1983 experienced for several years a more restrictive set of eligibility standards that were eventually lifted. Parents with children born after that date were exposed to less restrictive standards for much longer.

Comparing the economic decisions of families with children born before and after September 30th, 1983 offers two compelling tests for short and long-term consequences of reactions to the eligibility standards. Comparing their economic decisions in the early years, when families are eligible under different rules, tests for whether there are the short-term responses to the more restrictive eligibility cutoffs. Comparing their decisions in the later years, when both are eligible under the same rules, tests whether short-term responses to more restrictive eligibility cutoffs had long-term consequences. If long-term damage to earnings potential occurred, then differences in earnings and labor force participation might be present in the long-run, even though the eligibility rules they experience at that point are the same.

In the first test, I find weak evidence of short-term decreases in earnings and labor force participation in response to the more restrictive eligibility requirements. This result verifies findings from pre-existing research, and suggests that parents experiencing the more restrictive requirements strategically lowered their income and labor supply to qualify. However, for the second test, I find no difference in long-term earnings and labor force participation when both families are eligible under the same income cutoffs. This finding suggests that those short-term reductions in earnings and labor supply did not damage their earnings potential in the long-run.

III - Third Chapter
Lastly, my third chapter grew out of my research work with my adviser Martha Bailey on the LIFE-M project. It was recently published in the *Journal of Economic Literature*. In this chapter, we look at the performance of various linking algorithms, which are often an essential feature of many "big data" projects that require combining different data sources. Our paper is the first to look at how the most commonly-used linking algorithms perform, and what their consequences are for inference.

We find that no method (including hand-linking) consistently produces representative samples. We also find that 15 to 37 percent of links chosen by prominent machine linking algorithms are identified as false links by human reviewers. Furthermore, these false links are systematically related to baseline sample characteristics, suggesting that machine algorithms may introduce complicated forms of bias into analyses.

We then extend our analysis to look at the effect of linking algorithms on inference by computing intergenerational income elasticities. Many of the methods produce estimated elasticities that are statistically distinguishable from the estimated intergenerational elasticity with hand-linked data. This finding suggests that the linking algorithms themselves may bias inference. Furthermore, we find that prominent linking algorithms attenuate point estimates of the intergenerational income elasticity by up to 20 percent and common variations in algorithm choices result in greater attenuation.

Overall, these findings suggest that researchers should carefully document the quality of their linked data,

and perform robustness checks on results by isolating attention to links that are more likely to be correct. From this research, we came up with a series of recommendations of best practices in linking processes, and simple strategies for relevant robustness checks. This work was published in *Historical Methods*.

Ongoing Projects and Future Research Plans

Mechanisms of Results from Job Market Paper
My job market paper was primarily interested in recording the effects of family income on later life outcomes among children. Moving forward, I would like to further explore the mechanisms producing the results I find. A natural first extension is to look at whether the income shock creates differences in reported health and health care utilization among children. Differences in health status open up for poorer children early and only grow with time, and it is possible that changes in income early in life could make a difference. I also plan on looking at whether the income shock I analyzed has effects on earnings and labor force attachment of parents. Other research has found that one year income shocks can increase family earnings for years in the future, presumably by enabling families to seek better paying employment opportunities. If these patterns are present here, it would mean that small and temporary income shocks can also produce permanent changes in family income. Researching these relationships would help clarify the context for the effects I find, but also contribute more broadly to the causal literature looking at the effects of family income on children.

Tax Filing Responses in the Tax Policies Analyzed in the Job Market Paper
I am also investigating households' tax reporting responses to the tax incentives I discuss in my job market paper. As described in the paper, parents with children born in December are eligible for tax benefits for that child for that tax year, but parents with children born a few days later in January are only eligible starting with the next tax year. Parents with children born in December see different tax rates in that first year, which will change their incentives for earning money and reporting that income on their tax return. Normally changes in tax rates would result in shifts in both real economic responses, such as changes in labor force participation and earnings, and changes in tax reporting (e.g. evasion, avoidance, changes in income timing). However, if the timing of birth is somewhat random in a region, as my job market paper argues, then differences in tax filings in that first tax year between parents of children born in December and January are likely primarily changes in tax reporting. This change in tax treatment happens at the end of the tax year, and tax filers have limited ability to change their real labor supply.

Thus, this research setting offers a unique opportunity to measure the scope of reporting responses among tax filers. These findings may have important consequences for how researchers think about the economic consequences of taxation. If reporting responses can explain a large share of responses to taxation, then many estimates that do not distinguish between real and reporting responses may overstate excess burden of taxes. Preliminary work shows that there are sharp differences in reported income for parents across the birth timing threshold that appear to reflect reporting responses. I am applying to use restricted access U.S. tax data to pursue this project further.

Other "Big Data" Research
I am continuing to work with my adviser Martha Bailey on the LIFE-M project described in my cover letter. Our work on this project has also inspired me to pursue other research projects using large data resources. The availability of public records online and the decreased cost of accessing proprietary data allow for a number of potential projects. This research typically involves matching through machine-learning, techniques with which I am well-experienced from my work on the LIFE-M project. Some of the projects I am currently investigating with these data include research into assortative marriage patterns in the early 20th century U.S., the effects of increased sentence length in prison, the effects of criminal record expungement, effects of eviction, and mechanisms of intergenerational transmission of health.