The Unequal Geography of Working Longer: How Local Labor Market Conditions Matter for Older Workers

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Introduction

With an aging population and growing inequality, America is at a crossroads in its approach to work and retirement. As Americans live longer than they did half a century ago and need income for more years of life, U.S. policy has responded with incentives for Americans to work longer, delay retirement, and spend more of these years in the paid labor force. Indeed, the gradual rise in the age at which Americans can claim full Social Security benefits from age 65 to 67 is premised partly on the expectation that people can work longer.

But even as average rates of employment among older adults have increased over the past three decades (until interrupted by the Covid-19 pandemic), the question arises: who is left behind? The answer matters because early labor force exit raises the chance of poverty at older ages by reducing earned income and opportunities to save for retirement, while early claiming of Social Security retirement benefits locks in lower monthly payments for life.[1]

While researchers have increasingly noted that average trends in working longer obscure large, persistent, and in some cases growing inequalities between groups defined by race/ethnicity, education, and gender (e.g., Coile 2018; Berkman and Truesdale *forthcoming*), much less is known about geographic inequalities. This gap in our knowledge is surprising because large bodies of research demonstrate the importance of "place" for individuals' well-being in general and of local labor markets (LLMs) for employment opportunities in particular (e.g., Sampson 2013; Bartik 2021). LLM characteristics such as economic distress, the occupation and industry mix, age distribution, population health, density, and rurality are likely to affect which older workers can find and keep suitable jobs. In a given LLM, job opportunities may change substantially as workers age. For instance, a robust manufacturing economy may be good for prime-age workers without college degrees, but older workers may not fare as well in these physically demanding jobs. How well workers

[1] For example, an adult born in 1975 who earned the U.S. mean income across their working life would receive Social Security benefits of $1,720 per month if they began claiming at age 62, compared to $3,215 if they began claiming at age 70 (Shoven, Slavov, and Watson *forthcoming*).

in manual jobs fare when they are old may depend instead on the availability of suitable jobs in services. We might expect LLMs to be particularly important for older adults in general, and those without college degrees in particular, because those groups are relatively less geographically mobile (Asquith 2021). Geographic considerations prompt vital unanswered questions about how prosperity is shared – or not shared – among older and younger Americans.

In the working-longer conversation, relatively little attention has been paid to the quality of jobs available locally to older adults. This is an important gap because the degree to which LLMs offer jobs that pay a living wage to older adults has important consequences both for individual well-being and for the broader success of working-longer policies.. The goals of policies that encourage delayed retirement include improving financial security among older Americans, boosting national income, and shoring up Social Security financing by increasing tax revenue. Low-wage jobs may not contribute much to any of these goals. Although there is a great deal of research on "good jobs" for prime-age workers (e.g., Ton 2014; Osterman 2019), less research has applied a good-jobs perspective to older adults.

Recent research shows that geography is an important lens to view inequalities in working longer. Coile (2021) finds a difference of more than 20 percentage points across U.S. commuting zones in employment rates among those aged 60-69. However, we know of no research on working longer that investigates (a) both *levels* of employment and *trajectories* over age across LLMs, (b) heterogeneity in employment trajectories by race/ethnicity, education, and gender *within* LLMs as well as *between* LLMs, or (c) the availability of *jobs that pay a living wage* for older adults and the *consequences of sub-living-wage jobs* for individuals' chances of working longer and of poverty in retirement. These are the questions we investigate in this project.

Conceptually, we bring together two large and growing bodies of research: (a) on older workers, Social Security, and retirement and (b) on the importance of place and local labor market conditions for employment, inequality, and well-being. The former has tended to focus on national rather than local concerns; the latter has tended to focus on prime-age workers rather than older adults. Bringing the two bodies of research together can broaden the Social Security and retirement security conversations. Ultimately, we aim to shed light on place-based policies that could increase the number of good jobs available to older workers, improving their long-term well-being.

Methodology, Approach, and Data Sources

Our project examines the availability and quality of jobs for older workers across U.S. LLMs, with attention to heterogeneity within LLMs among groups defined by race/ethnicity, education, and gender. In particular, we seek to understand how and why LLMs with similar levels of employment among prime-age workers differ in their prospects for older workers in different demographic groups. While our research design cannot provide rigorous tests of causality, we investigate whether, if all else really were equal, the data exhibit patterns consistent with causal hypotheses.

A life course perspective makes clear that a low employment rate among a cohort of Americans in their 60s can be produced in at least two ways. First, if a cohort has low employment rates in middle age, these are likely to translate directly into low employment rates at older ages because reentering the labor force at older ages is often difficult (Johnson and Gosselin 2018). Second, if a cohort has high employment rates in middle age but leaves the labor force rapidly in the years before official retirement ages, this too will produce low rates of working longer (see, e.g., Chan and Huff Stevens 2015). The distinction matters because policies designed to bring more middle-aged adults into the labor force are likely to be different than policies designed to keep employed older adults in the labor force longer.

Thus, empirically, we distinguish between (a) the *level of employment around age 50* and (b) the *trajectory of employment between ages 50 and 67,* the Social Security full retirement age for younger cohorts (for brevity, the "dropoff rate"). We are interested in LLMs that do better or worse for older adults than one might expect, given the level of employment around age 50 – that is, LLMs that have particularly steep or flat age trajectories.

We define LLMs as commuting zones (CZs).[2] Every county in the U.S. is assigned to one of more than 700 CZs, which are geographic units designed to reflect the local economy where people live and work. Building on Coile (2021), we match CZs to a wide range of location-based data that may shed light on how LLM characteristics such as demographics, occupation and industry mix, population health, density and other spatial

[2] Crosswalks provided by Autor, Dorn, and Hanson (2013) allow us to construct CZ-level estimates based on Census/ACS microdata.

characteristics, and economic conditions may shape the likelihood of employment differentially for older versus younger workers in various demographic groups in ways that are not always predictable.

Phase 1. How does the LLM context shape employment trajectories of different demographic groups?

In the first phase, we will use microdata from the U.S. Census and American Community Survey (ACS). The large samples available via usa.ipums.org allow us to estimate employment rates within CZs for detailed demographic groups. We use the 1990, 2000, 2006-2008, 2008-2012, and 2015-2019 waves, providing widely spaced observations covering nearly three decades.[3] We use the employment to population ratio (EPOP) as our measure of employment rates, and we consider how employment rates evolve between ages 50 and 67. Examining differences between age groups in a single cross-section of data may be misleading because such an approach cannot distinguish between age and cohort effects; today's 50-year-olds may have had very different educational, health, and employment histories than today's 67-year-olds. We therefore construct synthetic cohorts from the Census/ACS data. We focus on the 1936-45 and 1946-55 birth cohorts. The middle members of the former (the 1940 babies) turned 50 in 1990, 60 in 2000, and 67 in 2007, while the middle members of the latter (the 1950 babies) turned 50 in 2000, 60 in 2010, and 67 in 2017.

We first set an EPOP level ***baseline around age 50*** for each LLM as a whole and for specific groups defined by race/ethnicity, educational attainment, and gender within each LLM. Then we examine ***trajectories between ages 50 and 67***. We investigate the following questions: How does the age-related decline in EPOP vary across LLMs, and what distinguishes LLMs with faster dropoff rates (steeper age trajectories) from those where EPOP rates are more persistent? That is, which LLMs perform better or worse for older workers than we might expect based on their strength for middle-aged workers?

Conditional on baseline EPOP levels around age 50, we rank LLMs by the dropoff rate, i.e., the rate of change in EPOP as each cohort ages from 50 to 67. We conduct a parallel exercise for each demographic group. We then investigate the relationship between these dropoff rates and a wide range of time-varying and invariant

[3] To increase sample size, we use the three-year pooled ACS sample centered on 2007, the five-year pooled ACS sample centered on 2010 and the five-year pooled ACS sample centered on 2017.

LLM characteristics (such as those discussed above) in order to identify characteristics that may be driving steeper or flatter age trajectories.

This phase will give us new information about how LLMs shape individuals' chances of delaying retirement and working longer. But the repeated cross-sectional design of the Census/ACS cannot tell us how employment unfolds within individual lives.[4] This matters in the aggregate as well because workers' current employment decisions are shaped by past labor market factors that cannot be easily accounted for using these large cross-sectional datasets. For that, we turn to panel data.

Phase 2. How does the LLM context shape the quality of job options available to older workers?

We turn from examining the *availability* of jobs, as reflected in the EPOP ratio, to the *quality* of jobs, reflected in the adequacy of wages to meet a basic budget. For working longer to be a healthy option, older workers need good-quality jobs that match their skills and experience. Here we introduce individual-level microdata from the 1992-2020 waves of the Health and Retirement Study (HRS), a biennial, nationally representative longitudinal survey of Americans who are first interviewed in their early 50s, with new cohorts added every six years. We merge these data with the LLM characteristics we identified in Phase 1.[5]

We will investigate the degree to which older adults have access to living-wage jobs, and the role that employment plays in helping them make ends meet. As a living wage benchmark, we use the Elder Index (EI), created by the Gerontology Institute at the University of Massachusetts (elderindex.org). The EI is a measure of the income older adults need to meet their basic needs, specific to county, household size (single or partnered), and housing tenure. We will crosswalk the county-level data to the LLM level. The EI exists from 2011-2021, so we will match it to the HRS 2012-2020 survey waves, using earlier waves for employment history.

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[4] Changes in EPOP within a cohort reflect not only employment entries and exits, but also changes in the population due to migration or mortality. While the overall effects of both are likely to be small among adults in their 50s and 60s, we would expect them to differ disproportionately across groups: relatively more highly-educated adults will move (Asquith 2021), while relatively more less-educated and non-white adults will die (Woolf et al. 2018). We will assess the importance of both migration and mortality using the HRS data in Phase 2.

[5] We have begun the process of applying for access to the HRS restricted geoidentifiers file, which we have used effectively for other projects (Asquith 2021). We are also exploring alternative data sources to construct typical wages for specific groups, including the Current Population Survey, Quarterly Census of Employment and Wages, and Upjohn Institute resources currently being developed by Tim Bartik and Brad Hershbein for the Smith-Richardson Foundation.

We create a measure of employment income for each respondent. Among employed respondents, we simply use their self-reported earned income. Among respondents not currently employed, we use the HRS's employment history data, which records the industry and occupation of (a) the job in which respondents were last employed and (b) the job in which they were employed the longest.[6] We can then match the LLM-level median wage for their occupation, industry, age group, and education level (constructed from the data we use in Phase 1). The results indicate what wages HRS non-employed respondents would likely have to accept.

We consider two types of income adequacy. First, we calculate the level of individual employment income required to meet the LLM-specific EI benchmark if every HRS respondent were a single renter with no other income. This is a straightforward measure of whether the local jobs that match an individual's skills and experience pay enough to make ends meet on their own. Second, we examine how job opportunities in a LLM contribute to making ends meet, given the nuances of each individual's situation. Individual employment income does not provide a full picture of the financial situation of older adults, many of whom own a home, share costs with a spouse, and have household income from savings, pensions, Social Security, or other government transfers. We match each HRS household to the EI benchmark that aligns with their household size and housing tenure, and use the HRS's detailed data on other sources of income to identify households whose alternative income sources may put them over the EI benchmark even if their employment income (or, if not employed, their likely employment income) is below it.

To examine how LLMs shape the quality of suitable jobs, we will model how the LLM characteristics we identified in Phase 1 relate to the availability of jobs that pay a living wage for older adults, and how this relationship varies by race/ethnicity, education, and gender. We will examine how LLM characteristics relate to the trajectory of income adequacy with age – that is, what types of LLMs do better or worse in job quality for older workers than we might expect from how (late) middle-aged workers fare. Taking advantage of the HRS longitudinal structure, we will also model the consequences of sub-living-wage jobs for individuals' chances of working longer and of poverty when they do leave the labor force.

[6] Asquith has experience matching industry and occupation coding between the Census/ACS data and the HRS.

Research Team

This project is part of a larger program of research on inequalities in work and aging that draws on our interdisciplinary skills and perspectives. Abrams (CV here) is a population health researcher currently at the Harvard Center for Population and Development Studies who studies ways to disrupt the cycle of low-quality working conditions, poor health, and early labor force exits. Abrams will become an assistant professor at Tufts University this fall. Asquith (CV here) is an economist at the W.E. Upjohn Institute who uses quantitative methods to study older workers and how place-based policies can improve employment and housing prospects of U.S. residents. Truesdale (CV here) is a sociologist at the W.E. Upjohn Institute who uses mixed qualitative and quantitative methods to study the challenges faced by adults without college degrees as they try to work longer. We are early career scholars committed to research that aims to improve public policy, especially as it affects vulnerable populations, and the NBER's support for this project will help us build our research pipeline on this topic further.

Overall, this project will identify the characteristics of LLMs that serve older adults in different demographic groups particularly poorly or particularly well, compared to middle-aged adults, providing valuable information for researchers and policymakers about how, why, and for whom local labor markets work. We believe that our work can help inspire those interested in retirement security to consider how place-based policies can aid older workers, as well as to prompt those interested in place-based policy to consider the needs of an aging workforce.

Budget outline

Research Assistant (RA)	11 hrs/wk for 52 weeks, at Upjohn Institute rate of $32.69/hr ($18,699), plus fringe at 32.8%	$24,832
Investigator Salary	$11,000 per investigator, including fringe (fringe benefit rate varies by institution)	$33,000
Data Acquisition	Use of the Elder Index supplied by the Gerontology Institute of the University of Massachusetts, Boston	$6,000
Travel	$1,000 per investigator to attend a conference to present our work	$3,000
Indirect Costs	12% of direct costs of $66,832	$8,020
	TOTAL	$74,852

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