The Puzzling Rise in Male Non-Employment

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Abstract

Prime-aged men (ages 25-54) have become increasingly detached from employment, a trend with far-reaching social and economic implications. This paper uses five decades of data from the Current Population Survey Annual Social and Economic Supplement (CPS ASEC), the American Time Use Survey (ATUS), and the Panel Study of Income Dynamics (PSID) to provide a new and more complete portrait of the trends, sources of support, time use, and dynamics of non-employed men. The non-employment rate of prime-aged men nearly quadrupled from 2.9% in 1965 to 11.1% in 2023, with the increase concentrated during recessions: across the 15 recession years in our sample, non-employment cumulatively surged by 11.1 percentage points, while during the 44 non-recession years it fell by only 2.8 percentage points. We find that 82% of the increase was among men living with other adults, and that about two-thirds of the increase was among men primarily supported by those they live with, most commonly family. Non-employed men reallocated most of their non-work time to socializing, leisure, and sleep rather than education, home production, or caregiving. Finally, non-employment in recent years was highly persistent: half of non-employed men were also non-employed two years prior, and job loss during the Great Recession was associated with meaningful long-run scarring.

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1. Introduction

A number of studies have documented that the non-employment of prime-aged men (ages 25-54) has been rising over time (e.g., CEA 2016; Krueger 2017; Abraham and Kearney 2020). This rise in non-employment is critical for both economic and social reasons. Economically, rising non-employment can lower economic output and slow growth. It can reduce economic mobility and increase the use of social safety net programs, straining public finances. Socially, employment is commonly thought to be an important source of purpose, so its absence may lead to decreased life satisfaction. Non-employment can also worsen physical and mental health and lead to greater family instability.

The rise in male non-employment has received significant policy attention from bipartisan circles.[1] Prime-aged men merit particular interest for several reasons. First, they have historically had the highest rates of labor force participation and have been a primary source of economic support for families. Second, they have been among the groups with the largest and most consistent increases in non-employment in recent decades (Krueger 2017; Abraham and Kearney 2020). Third, prime-aged men, despite receiving substantial benefits through disability and other programs, often have less access to government support (or reduced generosity of support) than other demographic groups, largely because the safety net screens on the presence of dependent children and prime-aged men are disproportionately likely to be childless or non-custodial. For instance, able-bodied adults without dependents (ABAWDs) face more restrictions in accessing the Supplemental Nutrition Assistance Program (SNAP), and those without dependents receive lower amounts through the Earned Income Tax Credit (EITC). This uneven access to the safety net means that prime-aged men may be particularly vulnerable to the negative consequences of non-employment, raising the policy stakes of understanding both the level and composition of non-employment in this population.

[1] In July 2023, Senator Chris Murphy wrote about the crisis facing men, and in September 2023, then-Senator Marco Rubio released a report on the "state of the working (and non-working) man" that detailed the deep and persistent challenges men face as providers. See https://www.chrismurphyct.com/p/the-reason-to-care-about-the-plight and https://www.rubio.senate.gov/wp-content/uploads/2023/09/The-State-of-the-Working-and-Non-Working-Man-vf-1.pdf (p. 39). A recent New York Times article highlighted that many college-educated men have been experiencing long-term non-employment in recent years (https://www.nytimes.com/2025/09/15/business/long-term-unemployment-college-grads.html). In *Men Without Work* (2016, 2022), Nicholas Eberstadt of the American Enterprise Institute used a large set of statistical evidence to investigate the magnitude, nature, and causes of the rise in prime-aged male non-employment. And in *Of Boys and Men* (2022), Richard Reeves of the Brookings Institution examined the broader social and economic malaise facing modern-day males.

These broader implications highlight the importance of investigating not only how many men are non-employed and how that has changed over time, but also who the non-employed are, what their economic situation is, and how these circumstances have evolved. The circumstances of non-employed men matter because their well-being depends on the amount of non-labor income they receive as well as the resources of other members of their households. Moreover, analyzing the circumstances of non-employed men can also help policymakers understand the public and private resources they receive, which can be used to more effectively design public programs. Yet, while there is a large literature documenting trends in the magnitude of prime-aged male non-employment, far less work has examined trends in the circumstances and material conditions of non-employed men, including their sources of support, time use, and employment dynamics.

In this paper, we use data from the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) for reference years 1965-2023, the American Time Use Survey (ATUS) for 2003-2023, and the Panel Study of Income Dynamics (PSID) for 1979-2023 to provide a new and more complete portrait of the trends, sources of support, time use, and dynamics of non-employed prime-aged men. We answer five main research questions. First, how has prime-aged male non-employment changed over time? Second, which groups of prime-aged men have been most affected? Third, what are the means of support of non-employed men and how have they changed over time? Fourth, how do non-employed men allocate their time? Fifth, how persistent is non-employment over time, and does job loss or initial difficulty in finding work lead to scarring with persistent non-employment?

Extending prior work (e.g., CEA 2016; Abraham and Kearney 2020; Eberstadt 2022), we find that the non-employment rate of civilian, non-institutionalized men aged 25-54 nearly quadrupled from 2.9% in 1965 to 11.1% in 2023. The pace of the increase was relatively stable until the mid-2000s but has slowed over the past 20 years. After adjusting for demographic controls (age, education, region, and race), we find an even larger increase in non-employment from 2.9% in 1965 to 14.3% in 2023. In other words, the rise in non-employment occurred despite demographic shifts, particularly the increase in educational attainment, that should have reduced it. Using an Oaxaca-Blinder decomposition, we estimate that over 100% of the rise in non-employment came from factors aside from demographics. That is, demographic changes

alone would have predicted a decline in non-employment, which makes the actual increase even more striking.

The increases in non-employment were broadly similar across age groups in percentage point terms, though the oldest group (45-54) had the highest levels of non-employment throughout. Non-employment was also higher and grew faster among those with the lowest levels of education, with the gap between education levels widening considerably after the 2008 recession. Non-employment differed sharply by race, with Black prime-aged men having the highest levels and white men the lowest. The Black-white gap widened from 2.8 percentage points in 1965 to 10.8 percentage points in 1980 and then partially narrowed but remained large at 7.6 percentage points in 2023. This timing contrasts with evidence of Black-white convergence in other labor market outcomes, such as wages and occupation during the 1960s and 1970s (Smith and Welch 1977, 1989; Freeman 1981; Brown 1984; Heckman and Payner 1989; Donohue III and Heckman 1991), though convergence among employed men can still occur (and may occur more quickly) if the composition of who works shifts over time.

Beyond these findings, several of our most novel contributions concern the timing of non-employment increases as well as the sources of support, time use, and dynamics of non-employed men. First, the increases in non-employment were concentrated during recessions: during the 15 recession years in our sample, non-employment rose by 11.1 percentage points, while during the 44 non-recession years it fell by only 2.8 percentage points. This pattern is suggestive of labor market scarring, where recessionary job losses have persistent effects that are not fully undone during recoveries. It also has implications for the relative importance of competing explanations for the rise in non-employment: forces such as import competition from China or technological change, which operated gradually and were not concentrated during recessions, appear less consistent with this pattern than cyclical mechanisms involving job loss and incomplete recovery.

Second, we find that 82 percent of the increase in non-employment between 1967 and 2022 (7.56 percentage points) was among men who lived only with other adults (i.e., married, living with parents, or living with other adults) while 18 percent of the increase was among men who lived alone or with their own children. Consistent with this finding, 66 percent of the increase in non-employment of men since 1967 (5.81 percentage points) was among men primarily supported by those with whom they live, most commonly family, while 25 percent of

the increase (2.17 percentage points) was among those primarily supported by their own disability benefits, and 10 percent of the increase (0.87 percentage points) was among those primarily supported by other means. Thus, over more than five decades, most of the increase in non-employment has been accommodated by support from those with whom they live, most commonly family. This suggests that the rise in non-employment has been enabled in large part by private transfers within households rather than by public programs, and the economic consequences of non-employment are shared broadly across family networks.

Third, a key question is whether non-employed men use their time away from work productively through, for instance, education, home production, or caregiving, or whether they primarily redirect it toward leisure. Using the ATUS for 2003-2023, we find that non-employed men reallocated most of the 5.51 fewer hours on average per day they were not working into socializing, leisure, and related activities (3.39 hours per day, or 62%) and personal care and sleep (1.08 hours per day, or 20%). Very little of the reallocated time went to education (0.41 hours per day, or 7%), home production (0.35 hours per day, or 6%), or caregiving (0.17 hours per day, or 3%). That is, non-employed men devoted relatively little of their additional time to activities that could be considered productive non-market uses, such as investing in human capital, maintaining the household, or caring for family members.

Fourth, using the PSID for 1979-2023, we document that non-employment among prime-aged men was highly persistent: in 2023, 50.5% of non-employed men were also non-employed two years before (in 2021). Persistence across many years was also substantial: 21.3% of non-employed prime-aged men in 2023 were also non-employed in 2021, 2019, and 2017. Persistence rose moderately after the Great Recession: in 2005, 46.2% of non-employed men were also non-employed two years earlier, compared to 50.5% in 2023. One mechanism for this rise in persistence was labor market scarring from recessionary job loss. Among prime-aged men who lost their job during the Great Recession, 12.5% were non-employed in at least 3 of the next 5 interviews (10 years) and 18.9% were non-employed in at least 2 of the next 3 interviews (6 years). These results indicate that non-employment is not simply a short-term transitional state for a large share of the men who experience it: for a substantial share, it becomes a persistent condition. The rise in persistence after the Great Recession also suggests that severe economic downturns can have lasting effects on labor force attachment that extend well beyond the recovery period.

These findings build on a substantial prior literature. The secular rise in prime-aged male non-employment has been well documented (CEA 2016; Krueger 2017; Abraham and Kearney 2020; Eberstadt 2022), though the time period examined in this paper is longer than that of most prior studies. Prior work has also shown that increases in non-employment were larger for the least educated (Moffitt 2012; CEA 2016; Krueger 2017; Binder and Bound 2019; Abraham and Kearney 2020) and that the shift toward higher education levels among prime-aged men should have reduced non-employment, all else equal (CEA 2016; Abraham and Kearney 2020). Regarding racial differences in non-employment, Moffitt (2012) found the increase in non-employment to be similar across racial groups between 1989 and 2007. On the circumstances of non-employed men, prior studies have emphasized the role of marriage (CEA 2016; Eberstadt 2022) and disability support (CEA 2016; Krueger 2017), while Stewart (2006, 2008) showed that family members are an important source of support for non-employed men at a point in time. Stewart (2008) and Eberstadt (2022) have also examined the time use of non-working men at a point in time. Lastly, some prior papers have provided evidence on the persistence of non-employment, but the evidence only extends through 2011 (Coglianese 2018; Binder and Bound 2019).

Our paper fills several gaps in this literature. First, while prior work has mainly emphasized the secular increase in male non-employment (Krueger 2017; Binder and Bound 2019), we highlight that the increase is concentrated during recessions and is not fully reversed in subsequent expansions. Second, by examining a longer time horizon than Moffitt (2012), we show that increases in non-employment have been much larger for Black men, with most of the Black-white divergence occurring before his study period. Third, we show more broadly than prior work that the increase in non-employment is concentrated among men in co-resident adult households and that most of the increase over five decades has been accommodated by support from family rather than from disability benefits, extending Stewart's (2006, 2008) point-in-time findings to the long run. Fourth, we update the evidence on time use with more recent data and confirm that non-employed men continued to reallocate most of their non-work time toward leisure in recent years. Finally, we extend the evidence on persistence of non-employment beyond 2011 and document a rise in persistence following the Great Recession, as well as meaningful long-run scarring from recessionary job loss.

The remainder of the paper is structured as follows. Section 2 presents an overview of the prior literature on prime-aged male non-employment and describes our contribution to this literature in more detail. Section 3 describes the survey data. Section 4 presents our main results on the estimated rise in non-employment, the groups most affected, the family structure and sources of support of prime-aged men, the time use of non-employed men, and the dynamics of non-employment. Section 5 concludes.

2. Previous Literature

In this section, we summarize the prior literature on prime-aged male non-employment, organized around the five research questions that we answer in our paper. We then discuss our contribution to this literature.

2.1: Findings from Prior Literature

Trends in the Magnitude of Non-Employment

A large body of work has documented the long-run decline in employment among prime-aged men. CEA (2016) found that the labor force participation rate (LFPR) of prime-aged men decreased by 8.3 percentage points from 1965 to 2016, while Eberstadt (2022) showed that the work rate for prime-aged men fell from 94.1% in 1965 to 84.4% in 2015, driven mainly by men leaving the labor force entirely. Other studies have documented similarly large declines using alternative measures and time periods (Moffitt 2012; Krueger 2017; Abraham and Kearney 2020). Regardless of the exact measure or time frame, these studies agree that the decline has been ongoing for decades and is of substantial magnitude.

An important question in this literature is how much of the long-run decline reflects shifting demographics versus within-group changes in the propensity to work. Several papers have shown that the population of prime-aged men has shifted toward higher levels of education over time (CEA 2016; Abraham and Kearney 2020). Since men with more education are less likely to be non-employed, this compositional change should have reduced non-employment, all else equal, implying that within-group factors are more than fully responsible for the observed increase in non-employment. Moffitt (2012), examining 1989-2011, found that the drop in male employment was very similar with and without controls for age, education, and race, confirming that compositional changes explain little of the decline over his study period.

Despite the large number of studies documenting the secular increase in male non-employment, relatively few have emphasized the role of recessions in driving the trend. Most prior work has characterized the rise as a gradual, secular phenomenon (Krueger 2017; Binder and Bound 2019), without systematically distinguishing between the contributions of recession and non-recession years. This is a notable gap in the literature given that standard models of labor market scarring predict that recessionary job losses can have persistent effects on employment (Jacobson, LaLonde, and Sullivan 1993; Davis and von Wachter 2011; Farber 2017).

Heterogeneity by Demographic Characteristics

A number of studies have examined which groups of prime-aged men have been most affected by rising non-employment. On age, CEA (2016) found that the increase in non-employment from 1965 to 2016 was relatively similar across age groups, while Abraham and Kearney (2020) showed that younger men (aged 25-34) experienced the largest decline in employment-to-population ratio between 1999 and 2018. These findings do not contradict one another given the different time periods examined, but they suggest that the age pattern of non-employment has shifted in recent decades.

On education, there is a broad consensus that the least-educated men have experienced the largest increases in non-employment. CEA (2016) found that the LFPR for men with a high school degree or less decreased from 97% to 83% between 1964 and 2015, compared to a much smaller decline from 98% to 94% for college graduates over this period. Moffitt (2012), Krueger (2017), Binder and Bound (2019), and Abraham and Kearney (2020) all found similar patterns, with the gap between education levels widening substantially over time.

On region, CEA (2016) noted that the LFPR was generally highest in the West and Midwest and lowest in the South, though formal regional analyses have been limited.

On race, Moffitt (2012) found that the decline in employment was similar across racial groups between 1989 and 2007, and CEA (2016) reached the same conclusion for 1981 to 2015. However, these studies examined relatively recent periods that began well after the major initial divergence in Black-white non-employment during the 1960s and 1970s. A large literature has documented convergence in other labor market outcomes between Black and white men during this earlier period, including wages, earnings, and occupational status (Smith and Welch 1977,

1989; Freeman 1981; Brown 1984; Heckman and Payner 1989; Donohue III and Heckman 1991). Yet the relationship between this convergence and trends in the extensive margin of employment has received less attention.

Circumstances and Sources of Support

Relatively few studies have systematically analyzed the characteristics of non-employed prime-aged men, and fewer still have examined how these circumstances have changed over time. Eberstadt (2022) provided the most comprehensive point-in-time analysis, showing that non-employed men are disproportionately Black and less-educated, that only about one-third of those not in the labor force were married in 2015 (compared to three-fifths of employed men), and that annual household incomes of non-employed men (excluding their own earnings) averaged just under $40,000. Additionally, Krueger (2017) found that 34% of prime-aged men not in the labor force reported having at least one disability between 2008 and 2016.

On sources of support, prior work has emphasized two main channels: disability benefits and family support. CEA (2016) and Krueger (2017) highlighted the role of disability programs, noting that a substantial share of non-employed men receive disability benefits. On the other hand, Stewart (2006, 2008) showed that family members are also a major source of support for non-employed men: in 1993-1999 and 2003-2004, many non-employed men lived in households where other members provided most of the support. However, all of these studies examined the sources of support at a point in time rather than documenting how the support structure has evolved over time.

Time Use of Non-Employed Men

A small number of studies have examined how non-employed prime-aged men allocate their time. Stewart (2008) and Eberstadt (2022) both found that men who are not in the labor force spend more time on personal relaxation and leisure and are no more likely to spend time on childcare or care for others than employed men. More broadly, Aguiar and Hurst (2007) documented a general increase in leisure time for all men over the latter half of the twentieth century, and Aguiar et al. (2021) examined the role of technology, particularly video games and personal computers, in the rise of leisure among younger men. However, existing studies have

generally examined time use at a point in time or for the general population of men, rather than documenting how non-employed prime-aged men specifically allocate their time in recent years.

Persistence and Dynamics of Non-Employment

A small literature has examined the persistence and dynamics of non-employment among prime-aged men. Coglianese (2018) documented that a substantial share of non-employed men remained non-employed across multiple years, and Binder and Bound (2019) provided additional evidence on persistence, showing that many lower-educated non-employed men are persistently non-employed. However, the evidence from these two studies extends only through 2011, meaning it captures the immediate aftermath of the Great Recession but not the subsequent decade of recovery.

2.2: Our Contribution

Our paper makes five main contributions to this literature. We discuss each in turn.

While prior work has mainly characterized the rise in non-employment as a secular phenomenon (Krueger 2017; Binder and Bound 2019), we show that the increase is concentrated during recessions and is not fully reversed in subsequent expansions. During the 15 recession years in our sample, non-employment rose by 11.1 percentage points, while during the 44 non-recession years it fell by only 2.8 percentage points. This finding reframes the rise in non-employment as fundamentally cyclical in nature, with implications for the relative importance of competing explanations: gradual forces such as import competition or technological change appear less consistent with this pattern than cyclical mechanisms involving job loss and incomplete recovery.

By examining a longer time horizon than most prior studies, we document that the Black-white gap in non-employment widened sharply before 1980, from 2.8 percentage points in 1965 to 10.8 percentage points in 1980, even as Black and white men's wages and occupational outcomes were converging (Smith and Welch 1977, 1989; Freeman 1981; Brown 1984; Heckman and Payner 1989; Donohue III and Heckman 1991). While Moffitt (2012) found similar increases across racial groups between 1989 and 2007, our longer time frame reveals that most of the Black-white divergence in non-employment occurred before his study period. This finding suggests that the extensive margin of employment may tell a different story about racial

progress than the intensive-margin outcomes that have been the focus of the convergence literature.

Prior work on the circumstances of non-employed men has emphasized marriage (CEA 2016; Eberstadt 2022) and disability support (CEA 2016; Krueger 2017) as the primary channels of support, while Stewart (2006, 2008) showed that family support is important at a point in time. We extend this evidence over more than five decades and show that 82 percent of the increase in non-employment between 1967 and 2022 was among men living with other adults, and that 66 percent of the increase was among men primarily supported by those they live with, most commonly family. This suggests that the rise in non-employment has been enabled in large part by private transfers within households rather than by public programs. This finding has important implications for understanding both the sustainability of non-employment and the distribution of its economic consequences across family networks.

Stewart (2008) and Eberstadt (2022) examined the time use of non-working men at a point in time. We update the evidence using the ATUS for 2003-2023 and confirm that non-employed men continue to reallocate most of their non-work time toward socializing, leisure, and sleep rather than education, home production, or caregiving. This finding indicates that the additional time away from work is not being redirected toward productive non-market activities.

Prior evidence on the persistence of non-employment extends only through 2011 (Coglianese 2018; Binder and Bound 2019), and therefore misses the longer-run aftermath of the Great Recession. Using the PSID through 2023, we document that persistence rose moderately after the Great Recession and that recessionary job loss generated meaningful long-run scarring: among men who lost their job during the Great Recession, 12.5% were non-employed in at least 3 of the next 5 interviews. While the broader scarring literature has established that job displacement has lasting effects on individual workers (Jacobson, LaLonde, and Sullivan 1993; Davis and von Wachter 2011; Farber 2017), we provide direct evidence linking recessionary job loss to the aggregate persistence of non-employment among prime-aged men.

3. Data and Methods

This section begins by discussing the survey data used in this paper. We then discuss how we define non-employment in each data source before describing our empirical methods.

3.1: Data

Our primary data come from three sources: the Current Population Survey Annual Social and Economic Supplement (CPS ASEC), the American Time Use Survey (ATUS), and the Panel Study of Income Dynamics (PSID).

The CPS ASEC is an annual supplement to the Current Population Survey and provides a large, nationally representative sample of the civilian, non-institutional population of the United States. We use the 1966-2024 CPS ASEC, which covers reference years 1965-2023. The survey interviews households between February and April of the survey year about their incomes in the prior (reference) year. For each year of the survey, we have detailed demographic information and self-reported income and program receipt for prime-aged men. We can also use the income information for members of the prime-aged man's household to derive measures of household support. We use the CPS ASEC to study long-run trends in prime-aged male non-employment, differences by demographic characteristics, and the family structure and sources of support of non-employed men.

The ATUS is a time-diary survey in which respondents report how they allocate their time across the activities of a single day. The survey draws from a nationally representative sample of non-institutionalized civilians and is conducted by the Bureau of Labor Statistics. We use the 2003-2023 ATUS, excluding 2020 due to data quality issues associated with the COVID-19 pandemic. We use the ATUS to study how non-employed prime-aged men allocate their time across job search, leisure, home production, caregiving, education, and personal care relative to employed men.

The PSID is a long-running longitudinal household survey in the United States, tracking the same individuals and their descendants over time. We use the cross-year individual file for 1979-2023, which includes all prime-aged men who are part of a PSID family in a given year.[2] Starting in 1997, the PSID switched from annual to biennial interviews. For our main analyses, we use the PSID's longitudinal weights, which are designed for tracking sample members and their descendants over time, and show results using cross-sectional weights as a robustness check

[2] We use the cross-year individual file rather than the family-file sample (which is available for a longer time period but restricted to heads of families and spouses of the head) because our CPS ASEC results show a rising share of prime-aged men who are dependents so restricting the sample to heads and spouses would miss an important component of the trend in non-employment.

for the post-1997 period.[3] We use the PSID to study the persistence of non-employment among prime-aged men and sources of labor market scarring.

3.2: Methods

Defining Non-Employment

Our definition of non-employment differs across data sources, reflecting differences in the survey questionnaires. In the CPS ASEC, we define an individual as non-employed for a particular reference year if (1) they report working zero weeks in the reference year and (2) they are not an active-duty member of the armed forces. The second condition is necessary because before reference year 1989, the CPS ASEC mechanically codes individuals who are active-duty members of the armed forces as working zero weeks in the reference year.[4]

We chose to define non-employment using a measure of hours worked instead of a measure of earnings because of classification issues with self-employed individuals. Those who are self-employed can have stretches where they work some hours but receive no (or negative) income, so an income-based classification would misclassify such individuals as non-employed. Thus, to avoid this misclassification, we adopt the measure based on hours worked.

In the ATUS, we define non-employment as being unemployed or not in the labor force at the time of the survey. This is a contemporaneous measure, which is in contrast to the CPS ASEC's annual measure based on number of weeks worked. In the PSID, we similarly define non-employment as not currently working at the time of the interview. In Section 4, we compare the non-employment rates in the PSID and ATUS to those in the CPS ASEC and find that the trends in non-employment are similar across the three data sources.

Unconditional Trend in Non-Employment

When we are interested in finding the unconditional trend in non-employment over time, we estimate a regression of the following form:

$$NE_{it} = \sum_{\tau=1965}^{2023} \beta_\tau D_{it}^{\tau} + \varepsilon_{it}, \quad (1)$$

[3] Cross-sectional weights were added in 1997 and are designed to produce a nationally representative sample.
[4] If we only use the first condition for reference years beginning in 1989, our estimated non-employment rates are identical to what we get when using both conditions. We maintain both conditions for all reference years in order to maintain the consistency of our definition.

where NE_{it} is an indicator for whether person i is non-employed in year t and $D_{it}^{\tau} = 1\{t = \tau\}$, i.e., an indicator for whether the year t is τ. We estimate the regression using survey weights and heteroskedastic-robust standard errors. Our objects of interest are the set of β_{τ}, which gives us the estimated non-employment rate in reference year τ.

Conditional Trend in Non-Employment

Beyond the raw trend in non-employment, we are also interested in the trend in non-employment over time controlling for demographic characteristics such as age, education, etc. To begin, for each control dummy X_{kit}, we subtract the weighted mean in reference year 1965 as follows: $\tilde{X}_{kit} = X_{kit} - \bar{X}_{k,1965}$. Then we estimate a regression of the following form:

$$NE_{it} = \sum_{\tau=1965}^{2023} \gamma_{\tau} D_{it}^{\tau} + \sum_{k \in \{Controls\}} \theta_k \tilde{X}_{kit} + \eta_{it}, \quad (2)$$

where NE_{it} and D_{it}^{τ} are defined as in equation (1). The regression is estimated using survey weights and robust standard errors.

When estimating equation (2), we control for age, education, region, and race. We discretize each type of control and include mutually exclusive and exhaustive dummy variables (omitting one) for each type of control. For age, we include dummies for being aged 30-34, being aged 35-39, being aged 40-44, being aged 45-49, and being aged 50-54, so the omitted group is those aged 25-29. For education, we include dummies for having a high school degree, having some college, and having college or more, so the omitted group is those with less than a high school degree. For region, we include dummies for living in the Midwest, living in the South, and living in the West, meaning the omitted group is those who live in the Northeast. Lastly, for race, we include dummies for being Black and being other race, thus the omitted group is white men.

Our objects of interest are the set of γ_{τ}, which gives us the estimated non-employment rate in reference year τ after adjusting for age, education, region, and race. We subtract the 1965 weighted mean to ensure that the estimated β_{1965} from equation (1) is equal to the estimated γ_{1965} from equation (2).

Heterogeneity of Trend in Non-Employment

We are also interested in calculating the trends in non-employment for different categories of a categorical variable. As an example, we want to see the trend in non-employment over time for those with less than a high school degree as well as for those with college or more. To do so, let our categorical control be called G (age, education, etc.) with categories g. Let G_i^g be an indicator for person i belonging to category g. We can then estimate a regression of the following form:

$$NE_{it} = \sum_{\tau=1965}^{2023} \sum_{g} \theta_{\tau g}\left(D_{it}^{\tau} \cdot G_i^g\right) + \varepsilon_{it}. \tag{3}$$

The regression is again estimated using survey weights and heteroskedastic-robust standard errors. The objects of interest are $\theta_{\tau g}$, where the estimated values of $\theta_{\tau g}$ give us predicted non-employment for group g in reference year τ.

Decomposition of Trend in Non-Employment

We want to quantify how much of the change in non-employment we find from the previous analyses can be explained by demographic characteristics. To do this, we can implement an Oaxaca-Blinder decomposition. To begin with, we start with some notation. Let $t \in \{0,\ 1\}$ index years, where 0 is 1965 and 1 is 2023. Let NE_i^t be an indicator for person i being non-employed in year t and X_i^t be a vector of demographic characteristics (i.e., age, education, region, and race) for person i in year t. Finally, let $\overline{NE}_t$ be the weighted mean of non-employment in year t and $\bar{X}_t$ be the weighted mean of the controls in year t.

We then run two separate linear probability models by year:

$$NE_i^t = \alpha_t + X_i^{t\prime}\beta_t + \varepsilon_i^t.$$

If we anchor the returns at 1965 levels, we decompose the change in mean non-employment between 1965 and 2023 as follows:

$$\overline{NE}_1 - \overline{NE}_0 = (\bar{X}_1 - \bar{X}_0)'\hat{\beta}_0 + \bar{X}_1{}'\left(\hat{\beta}_1 - \hat{\beta}_0\right) + (\hat{\alpha}_1 - \hat{\alpha}_0).$$

The first term on the right-hand side represents the effect of the change in mean characteristics. The second term represents the effect of the change in non-constant coefficients, or the effect of the change in the return to demographic characteristics. The third and final term represents the

effect of the change in the constant. Equivalently, we can anchor returns at 2023 levels and get the following decomposition:

$$\overline{NE}_1 - \overline{NE}_0 = (\bar{X}_1 - \bar{X}_0)'\hat{\beta}_1 + \bar{X}_0'\left(\hat{\beta}_1 - \hat{\beta}_0\right) + (\hat{\alpha}_1 - \hat{\alpha}_0).$$

Family Structure and Sources of Support

To examine the family structure and sources of support of non-employed men, we use the CPS ASEC and compute joint rates, i.e., the share of all prime-aged men who are both non-employed and in a given category, so that the changes across categories sum to the total change in non-employment.

We classify men into five mutually exclusive and exhaustive family structure categories: married; unmarried and living with own child aged 18 or under; living alone; unmarried and living with parents; and unmarried and living with other adults (and no children). We classify men as living only with other adults if they are married, living with parents, or living with other adults.

To measure within-household economic support, we calculate per-adult cash income, defined as total household cash income divided by the number of adults (aged 18 and over) in the household. Total household cash income includes earnings (wages, self-employment, and farm income), government income (Social Security, public assistance/welfare, SSI, unemployment benefits, workers' compensation, and veterans' benefits), and asset and other non-labor income (interest, dividends, rent, and retirement/pension/annuity income).[5] We then classify non-employed men into four mutually exclusive and exhaustive groups: (1) single-person households with positive household income; (2) multi-person households where the man's income is less than or equal to 50% of household per-adult income; (3) multi-person households where the man's income is greater than 50% of household per-adult income; and (4) households with zero or negative measured cash income.

Finally, to distinguish between disability-related and family-based support, we identify non-employed men who receive any disability program income. Because the CPS ASEC measures disability income differently over time, we define disability program receipt using the best available sources in each time period: SSDI for reference years 1967-1974, SSDI, SSI, or

[5] The ACS also considers education benefits as part of cash income, but we exclude such benefits when calculating cash income because these benefits are non-fungible.

workers' compensation for 1975-1986; and SSDI, SSI, workers' compensation, veterans' disability, or other disability insurance for 1987-2023.

Time Use Analysis

To examine how non-employed men allocate their time, we use the ATUS for 2003-2023, excluding 2020. Our sample consists of men aged 25-54. We first classify each respondent as employed or non-employed based on their current labor force status and then compare the average time spent per day across six mutually exclusive and exhaustive categories of time use: work and job search; education; home production and errands (including maintaining the household, purchasing goods and services, and commuting); caregiving (including caring for household members and non-household members); socializing, leisure, and recreation (including relaxation, sports, religious activities, and volunteering); and personal care and sleep (including eating and professional appointments). We compute weighted means using the ATUS survey weights and report the difference in time allocation between employed and non-employed men. We also examine whether these patterns are stable over time by comparing time use across subperiods and across age groups.

Persistence of Non-Employment

To study the persistence of non-employment, we use the PSID's cross-year individual file for 1979-2023. Because the PSID switched from annual to biennial interviews starting in 1997, we measure persistence in two-year steps to maintain comparability over time. For the biennial period, we focus on odd-numbered years and define persistence as being non-employed in consecutive interview waves.[6] Specifically, for a given year t, we identify whether a man is non-employed in t and whether he was also non-employed in $t-2$ (the previous interview), $t-4$, and $t-6$. We then decompose the non-employed population in each year into mutually exclusive duration bins based on how many consecutive interviews they have been non-employed.

[6] Someone could be employed at some point in the two years between interviews and still be considered as persistently non-employed due to the structure of the data.

The sample for each persistence measure is restricted to men aged 25-54 who are present in the PSID in all required interview years. Thus, for two-wave persistence, they must be present in t and $t-2$, while for four-wave persistence, they must be present in $t, t-2, t-4$, and $t-6$.

Scarring from Recessionary Job Loss

To examine whether recessionary job loss leads to persistent non-employment, we use the Great Recession as a case study. We define Great Recession (GR) job loss as transitioning from employed in $t-2$ to non-employed in t, where t is either 2009 or 2011. That is, a man is classified as experiencing a GR job loss if he was employed in 2007 and non-employed in 2009 or employed in 2009 and non-employed in 2011. We then examine the subsequent labor market outcomes of these men, measuring scarring using two definitions: being non-employed in at least 3 of the next 5 interviews (spanning 10 years) or being non-employed in at least 2 of the next 3 interviews (spanning 6 years).

4. Results

This section proceeds as follows. We begin by showing how prime-aged male non-employment has changed over time and which groups have been most affected. We then examine the family structure and sources of support of non-employed men, followed by the time use of non-employed men. Lastly, we present results on the persistence and dynamics of non-employment.

4.1: How Has Prime-Aged Male Non-Employment Changed Over Time?

Figure 1 shows our headline results on how prime-aged male non-employment has changed over time. In blue, it plots the β_τ from equation (1) from 1965 to 2023 while in red, it plots the γ_τ from equation (2). Note that, by construction, $\beta_{1965} = \gamma_{1965}$.

Beginning with the unadjusted estimates from equation (1), we see a large and persistent increase in the rate of non-employment, from 2.9% to 11.1%, an increase of 291%.[7] The pace of the increase was relatively steady up until the mid-2000s, but the increase has been slower over

[7] The rise in the share of men not productively engaged would be even higher if one considered those who are incarcerated.

the past 20 years. From 1965-1985, the non-employment rate increased from 2.9% to 6.3%; from 1985-2005 it increased from 6.3% to 9.6%; and from 2005-2023, it increased from 9.6% to 11.1%.[8]

Looking at the shaded recession indicators, we see that most of the increase was concentrated during periods of recession. During the 15 recession years, non-employment rose by 11.1 percentage points while during the 44 non-recession years, non-employment fell by only 2.8 percentage points. Of particular note is the 2008 recession: non-employment rose precipitously during this recession and was very slow to recover, never again reaching the pre-recession levels. This pattern is suggestive of labor market scarring from recessionary job loss, a mechanism we investigate directly using longitudinal data from the PSID in Section 4.5. The concentration of non-employment increases during recessions also has implications for the relative importance of competing explanations for the rise in non-employment. Forces such as import competition from China or technological change, which operated gradually and were not concentrated during recessions, appear less consistent with this pattern than cyclical mechanisms involving job loss and incomplete recovery.

Moving on to the demographic-adjusted estimates from equation (2), we see an even larger increase in non-employment, from 2.9% in 1965 to 14.3% in 2023, though the trends are largely identical to what we see from the raw estimates. The fact that this increase was larger after controlling for demographic characteristics implies that the composition of prime-aged men shifted towards groups with lower non-employment rates. To identify which control was driving the larger increase, Figure 2 shows the results of estimating equation (2) using only one set of controls at a time. We find that education was the primary reason for the larger increase after controlling for demographics: when we control for just age, region, or race, the increase in non-employment is slightly lower than the increase without controls. Education was the primary driver because the population of prime-aged men shifted towards education categories with lower non-employment rates (i.e., some college and college or more). This means that the increase in non-employment would have been even larger had the composition of prime-aged men remained the same and the relationship between education and employment also remained the same.

[8] All of the years listed here are during mid-recovery periods (i.e., not during a recession), so these conclusions are reasonable.

The fact that the increase in non-employment was larger after controlling for demographics implies that demographic changes were not the main cause of the increase in non-employment. To quantify this more formally, we implement our Oaxaca-Blinder decompositions, as described in Section 3.2, in Table 1. With either method of anchoring, we find that the effect of the change in the constant term made up more than 100% of the overall change in non-employment. That is, demographic changes alone would have predicted a decline in non-employment, making the actual increase even more striking.

4.2: Who Has Been Most Affected?

Figures 3a-d present our results on heterogeneity, separately for age, education, region, and race. Each figure shows the estimates from equation (3).

Beginning with age in Figure 3a, we see that those aged 45-54 had higher levels of non-employment than those aged 25-34 or 35-44 throughout our time period. Looking over the whole period, each of these three age groups had very similar percentage point increases in their rates of non-employment. But since the oldest age group had the highest baseline level, they had the smallest percentage increase. Those aged 25-34 and 35-44 had very similar levels of non-employment up until the 2008 recession, after which those 25-34 had consistently higher levels of non-employment.

Moving on to education in Figure 3b, we see that, throughout our period, those with lower levels of education had the highest levels of non-employment: those with less than a high school degree had the highest, followed by high school graduates, those with some college, and those with at least a college degree, in that order. We also see a much larger increase in non-employment for those with lower levels of education. While all education levels saw increases in non-employment, the increases (both in terms of percent and percentage points) were larger for those with less education. The gaps between education levels in non-employment also widened substantially after the 2008 recession.

For region in Figure 3c, we see that the non-employment rates were extremely similar across geographic regions. The levels and trends in non-employment were hard to distinguish between the four geographic regions, so differences across regions did not appear to be driving the overall trend.

Lastly, we turn to heterogeneity by race in Figure 3d. Non-employment differed sharply by race throughout 1965-2023, with Black prime-aged men having the highest levels and white men the lowest. The Black-white gap widened from 2.8 percentage points in 1965 to 10.8 percentage points in 1980, with Black men's non-employment rate rising much more rapidly than that of white men during this period. Starting in the 1980s, however, the rates evolved very similarly for Black and white men, with the gap remaining relatively constant. This timing contrasts with evidence of Black-white convergence in other labor market outcomes, such as wages and occupation, during the 1960s and 1970s (Smith and Welch 1977, 1989; Freeman 1981; Brown 1984; Heckman and Payner 1989; Donohue III and Heckman 1991), though convergence among employed men can still occur (and may occur more quickly) if the composition of who works shifts over time. Those men who were classified as other race had non-employment rates between the rates for white and Black men and roughly followed the trends of these two groups.

4.3: What Are the Family Structure and Sources of Support of Non-Employed Men?

We next examine the family structure and sources of support of non-employed prime-aged men and how they have changed over time. As described in Section 3.2, we compute joint rates, the share of all prime-aged men who are both non-employed and in a given category, so that the changes across categories sum to the total change in non-employment.

Family Structure

Figure 4 plots the joint rates of non-employment and family structure over time. The two largest increases in joint rates were for living with parents and living with other adults. The joint rate of being non-employed and living with parents rose from 0.56% in 1967 to 3.45% in 2022, and the joint rate of being non-employed and living with other adults rose from 0.34% to 2.77% over the same period. In total, 82 percent of the increase in non-employment between 1967 and 2022 (7.56 percentage points) was among men who lived only with other adults (i.e., married, living with parents, or living with other adults), while 18 percent of the increase (1.66 percentage points) was among men who lived alone or with their own children. These patterns indicate that the increase in non-employment has been concentrated among men living in co-resident adult households.

Sources of Support

Figure 5 plots the joint rates of non-employment and within-household economic role over time, classifying men by whether their own income was less than or equal to 50% of household per-adult income (primarily supported by others), greater than 50% (primarily self-supporting), living alone with positive income, or in a household with zero or negative measured income. The largest growth by far was in multi-person households where the man's income was less than or equal to 50% of per-adult household income: the joint rate for this group rose from 0.9% in 1967 to 6.7% in 2023.

We next examine whether household support or disability support played a larger role in accommodating the rise in non-employment of prime-aged men. To investigate this, we create three mutually exclusive and exhaustive types of men: (1) those who are primarily supported by others (as defined in the prior paragraph); (2) those who are not primarily supported by others and receive any disability program income; and (3) those who are not primarily supported by others and do not receive any disability program income. Figure 6 plots the joint rate of non-employment and these three categories over time. We see that the largest increase over time was from those who are primarily supported by others. Overall, 66 percent of the increase in non-employment since 1967 (5.81 percentage points) was among men primarily supported by those with whom they live, most commonly family. By contrast, 25 percent of the increase (2.17 percentage points) was among men primarily supported by their own disability benefits, and 10 percent of the increase (0.87 percentage points) was among those primarily supported by other means. This suggests that the rise in non-employment has been enabled in large part by private transfers within households rather than by public programs.

4.4: How Do Non-Employed Men Allocate Their Time?

We next examine how non-employed men allocate their time using the ATUS for 2003-2023 (excluding 2020). We first compare the non-employment rates in the ATUS to those in the CPS ASEC. Figure 7 plots the estimated non-employment rates from both data sources over the 2003-2023 period. In most years, non-employment rates were slightly higher in the ATUS than in the CPS ASEC, which is expected given the difference in definitions: the ATUS classifies men as non-employed based on their contemporaneous labor force status, while the CPS ASEC uses

annual weeks worked. Despite this difference in levels, the trends in non-employment were similar across the two data sources, giving us confidence that the ATUS is a good source to use for examining the time use of non-employed men.

Figure 8 compares the average hours spent per day across six categories of time use for employed and non-employed prime-aged men. About 18 of the 24 hours of the day were shared between employed and non-employed men. Both groups spent 10.1 hours per day on personal care and sleep, 4.3 hours per day on socializing and leisure, and 2.9 hours per day on home production and errands. The main difference was that employed men spent 5.5 more hours per day on work and job search than non-employed men (5.97 hours versus 0.47 hours).[9]

Figure 9 shows how non-employed men reallocated the 5.51 fewer hours per day they were not working. The largest share went to socializing, leisure, and related activities (3.39 hours per day, or 62% of the gap) and personal care and sleep (1.08 hours per day, or 20%). Very little of the reallocated time went to activities that could be considered productive non-market uses: education accounted for 0.41 hours per day (7%), home production for 0.35 hours per day (6%), and caregiving for 0.17 hours per day (3%).

4.5: How Persistent is Non-Employment?

Finally, we use the PSID to examine the persistence and dynamics of non-employment among prime-aged men. We first compare the non-employment rates in the PSID to those in the CPS ASEC. Figure 10 shows that non-employment rates were consistently higher in the PSID than in the CPS ASEC, but the trends were similar across the two data sources.

Persistence of Non-Employment

Figure 11 plots the rates of non-employment persistence over time. The blue series shows the share of all prime-aged men who were non-employed in year t, while the red, green, and yellow series show the shares who were non-employed in t and $t-2$; in $t, t-2$, and $t-4$; and $t, t-2, t-4$, and $t-6$, respectively. All four series rose over time, with a particularly sharp increase during the Great Recession. The share of prime-aged men who were non-employed in year t rose from 9.8% in 1985 to 15.0% in 2023, while the share non-employed in all four waves

[9] This gap is lower than 8 because the time use data includes time spent on weekends.

$t, t-2, t-4$, and $t-6$ nearly quadrupled from 1.4% in 1985 to 5.2% in 2023. The fact that the longer-duration measures grew more rapidly than the one-period measure indicates that the rise in non-employment was not simply driven by more men cycling briefly into non-employment, but also by more men remaining non-employed for extended periods of time.

Figure 12 shows the composition of non-employed men by duration, expressing each duration bin as a share of all non-employed men in year t. In 1985, 55.2% of non-employed men were newly non-employed (non-employed in t but not in $t-2$), while 8.8% were non-employed across all four interview waves. By 2023, the share of newly non-employed men had fallen to 49.5%, while the share non-employed across all four waves had risen to 21.3%. This shift in the composition confirms that persistence rose over time: an increasing share of non-employed men were experiencing multi-year spells of non-employment. The shift was most pronounced after the Great Recession, when the share of long-duration non-employed men increased sharply and did not fully revert during the subsequent recovery.

Scarring from Recessionary Job Loss

To investigate one mechanism for the rise in persistence over time, we examine whether job loss during the Great Recession led to persistent non-employment. Among prime-aged men in the 2011 PSID, 29.3% experienced a Great Recession job loss (defined as transitioning from employed in $t-2$ to non-employed in t, where t is 2009 or 2011).

Among those men who experienced a Great Recession job loss, 12.5% were non-employed in at least 3 of the next 5 interviews (spanning 10 years) and 18.9% were non-employed in at least 2 of the next 3 interviews (spanning 6 years). Among the non-employed in 2011, 7.1% both had a Great Recession job loss and were subsequently non-employed in at least 3 of the next 5 interviews, while 17.6% had a Great Recession job loss and were subsequently non-employed in at least 2 of the next 3 interviews.

Figure 13 plots the share of non-employed men in each year from 2009 to 2023 who had experienced a Great Recession job loss. In 2011, 66.2% of non-employed men had lost their job during the Great Recession, with this share declining in subsequent years. Even by 2023, 21.7% of non-employed men had experienced a Great Recession job loss, suggesting that the labor market effects of the recession persisted for well over a decade. Taken together, these results suggest that recessionary job loss was one important mechanism behind the rise in persistence of

non-employment after the Great Recession: severe economic downturns can have lasting effects on labor force attachment that extend well beyond the recovery period.

5. Conclusion

In this paper, we use five decades of data from the CPS ASEC, the ATUS, and the PSID to provide a new and more complete portrait of the trends, sources of support, time use, and dynamics of non-employment among prime-aged men.

We find that the non-employment rate of prime-aged men nearly quadrupled from 2.9% in 1965 to 11.1% in 2023, with the increase concentrated during recessions: non-employment rose by 11.1 percentage points during the 15 recession years in our sample while falling by only 2.8 percentage points during the 44 non-recession years. This pattern suggests that cyclical mechanisms involving job loss and incomplete recovery may be more important drivers of the long-run rise than gradual secular forces. After adjusting for demographic controls, the increase in non-employment was even larger, implying that compositional shifts, particularly the rise in educational attainment, would have predicted a decline in non-employment, making the actual increase all the more striking.

The increases in non-employment were broadly similar across age groups, were larger for those with less education, and differed sharply by race. The Black-white gap in non-employment widened dramatically before 1980, even as other labor market outcomes were converging, highlighting that the extensive margin of employment can tell a different story about racial progress than intensive-margin outcomes like wages.

Turning to the circumstances of non-employed men, we find that 82 percent of the increase in non-employment was among men living with other adults, and that two-thirds of the increase was among men primarily supported by those with whom they live, most commonly family. This implies that the rise in non-employment has been sustained largely through private transfers within households rather than through public programs like disability insurance. At the same time, non-employed men devoted relatively little of their additional time away from work to productive non-market activities such as education, home production, or caregiving, instead reallocating most of it toward socializing, leisure, and sleep.

Finally, non-employment was highly persistent, with half of non-employed men in 2023 also non-employed two years prior, and persistence rose after the Great Recession. Recessionary

job loss was one mechanism behind this rise: among men who lost their job during the Great Recession, a meaningful share experienced repeated non-employment over the following decade. These findings underscore that non-employment is not simply a short-term transitional state for many of the men who experience it, and that severe economic downturns can have lasting effects on labor force attachment.

This paper is part of a series analyzing male non-employment. In subsequent work, we will link the CPS ASEC to longitudinal tax and administrative program records to provide a more detailed and accurate understanding of the rise in non-employment. The longitudinal nature of these data will allow us to control for changes in cohort composition over time, examine the length and persistence of non-employment spells with greater precision, and leverage much larger sample sizes to analyze more granular subgroups. We will also use these data to more rigorously examine causal hypotheses for the decline in male employment, including labor demand shocks, labor supply factors, changes in family structure, and the impacts of incarceration.

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Tables and Figures

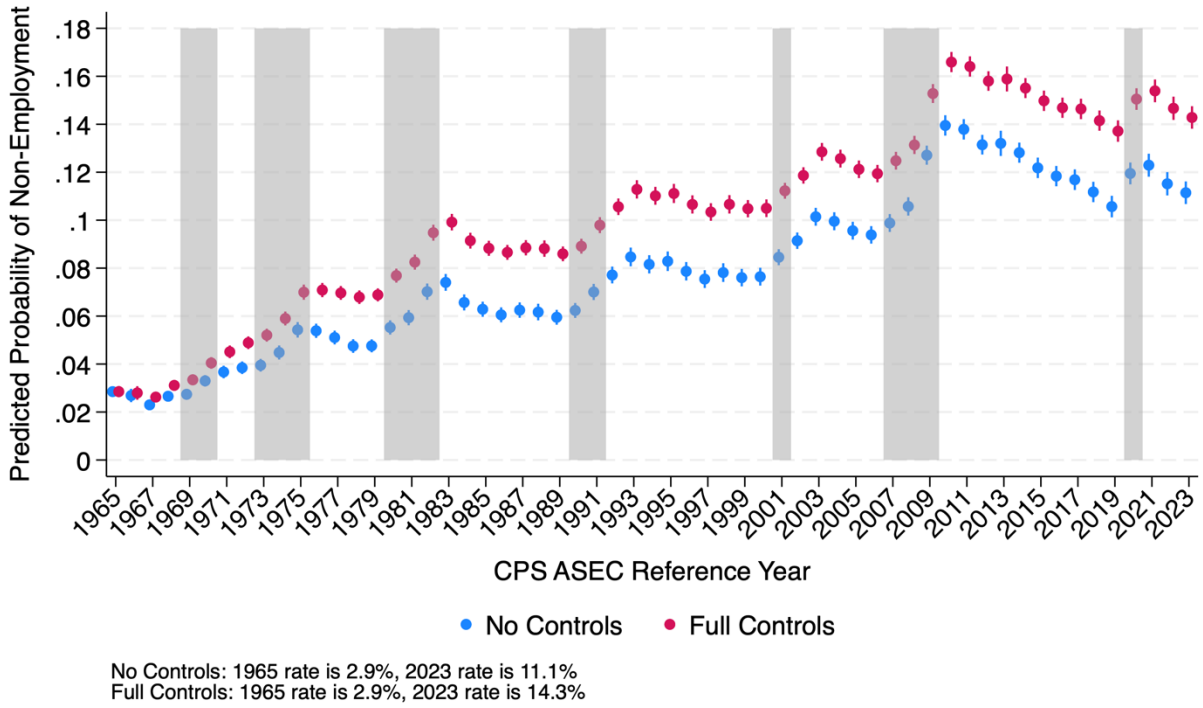
Table 1. Oaxaca-Blinder Decomposition of Non-Employment by Demographic Controls

	Anchor Returns at 1965 Levels	Anchor Returns at 2023 Levels
Overall Difference in Non-Employment (p.p.)	8.29	
Effect of Change in Mean Characteristics (p.p.)	0.06	-3.63
Effect of Change in Non-Constant Coefficients (p.p.)	-2.19	1.50
Effect of Change in Constant (p.p.)	10.42	10.42
% Due to Change in Mean Characteristics	0.75%	-43.80%
% Due to Change in Non-Constant Coefficients	-26.45%	18.10%
% Due to Change in Constant	125.70%	125.70%

Data: 1966 and 2024 CPS ASEC

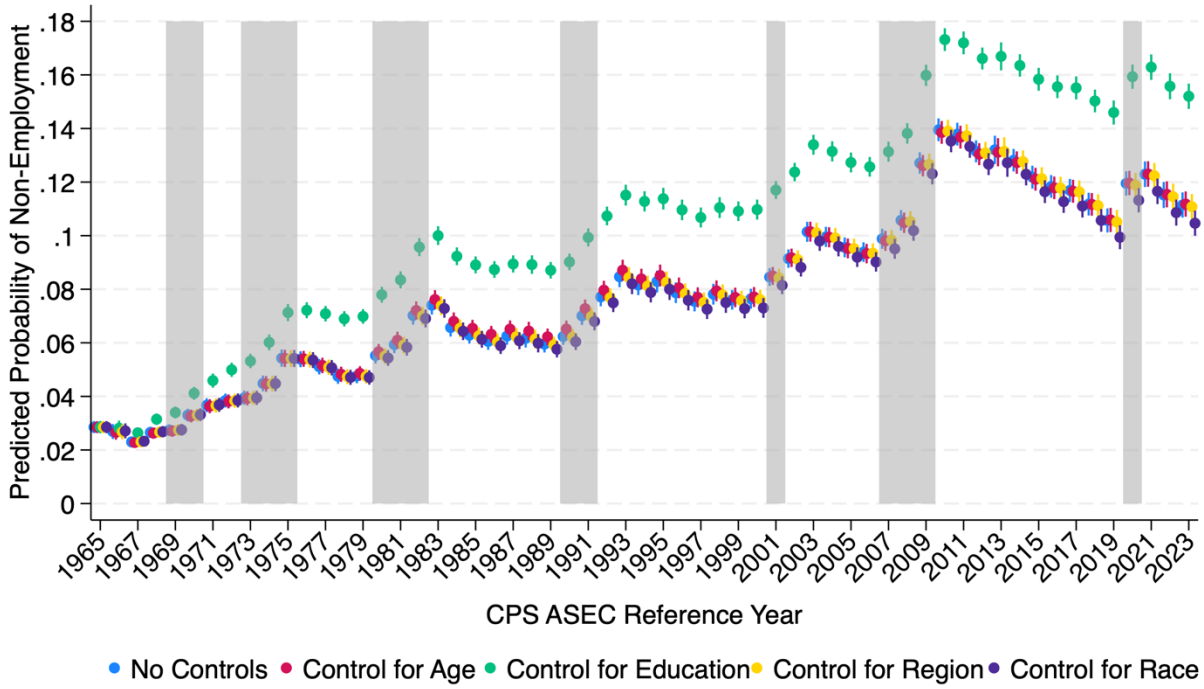
Notes: Sample is men aged 25-54. This table shows the results of an Oaxaca-Blinder decomposition, breaking the rise in non-employment into the component that comes from a change in mean characteristics, the component that comes from a change in coefficients on the characteristics, and the component that comes from a change in the constant (i.e., the pure effect of time). The characteristics considered are age, education, region, and race. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Breakdown is weighted by survey weights.

Figure 1. Overall Change in Non-Employment of Men Aged 25-54, With and Without Demographic Controls



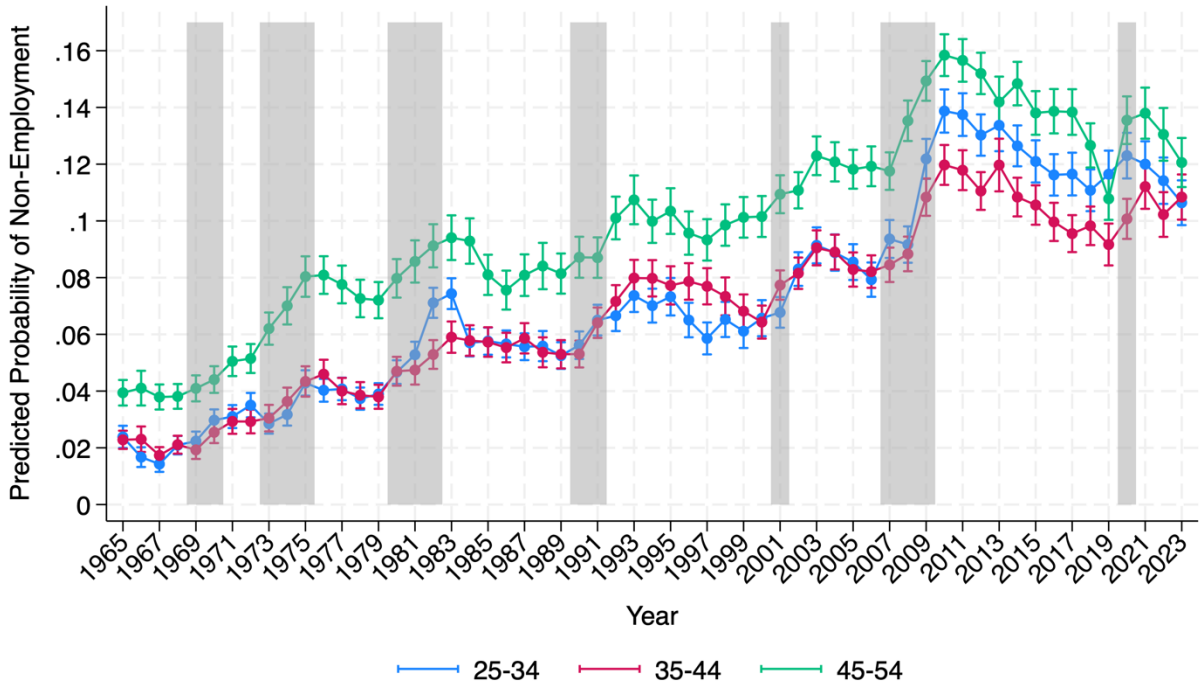
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies without a constant. Red points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies, years of education (dummies for high school graduate, some college, and college or higher), age (dummies for 30-34, 35-39, 40-44, 45-49, and 50-54), region (dummies for Midwest, South, and West), and race/ethnicity (dummies for Black and Other) without a constant. All controls were demeaned using the weighted mean in 1965 to ensure that the 1965 points are equal. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 2. Trends in Non-Employment of Men Aged 25-54, One Demographic Control at a Time



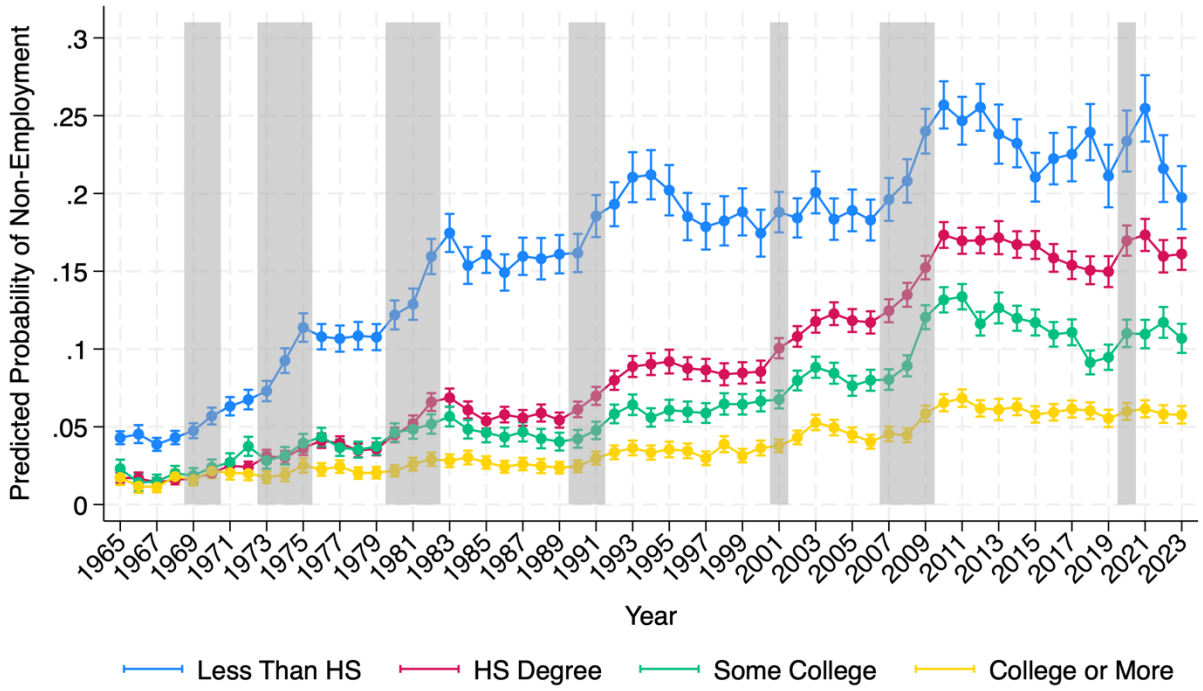
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies without a constant. All other points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies and just the control listed without a constant. All controls are defined as in Figure 1. All controls were demeaned using the weighted mean in 1965 to ensure that the 1965 points are equal. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 3a. Heterogeneity of Non-Employment of Men Aged 25-54 by Age



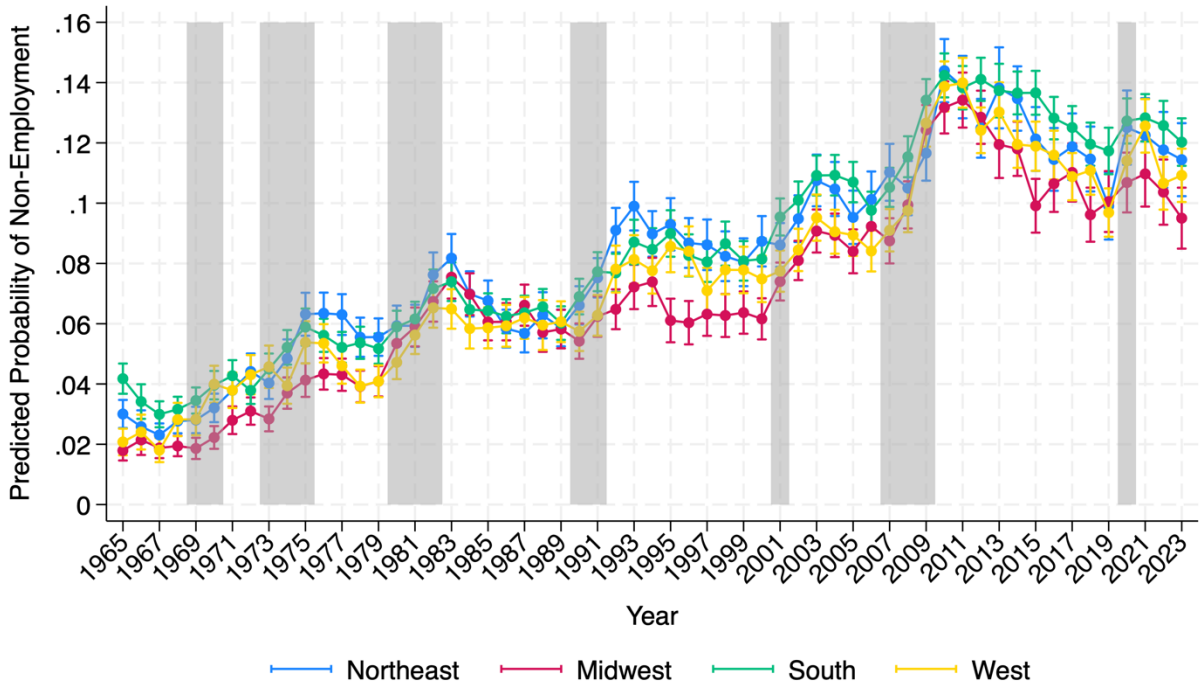
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Points and bars represent predicted average non-employment (and the 95% confidence interval) by year and age group. Predicted values derived from a linear regression of non-employment on year dummies interacted with indicators for being 35-44 and being 45-54 (25-34 was the omitted group). Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 3b. Heterogeneity of Non-Employment of Men Aged 25-54 by Education



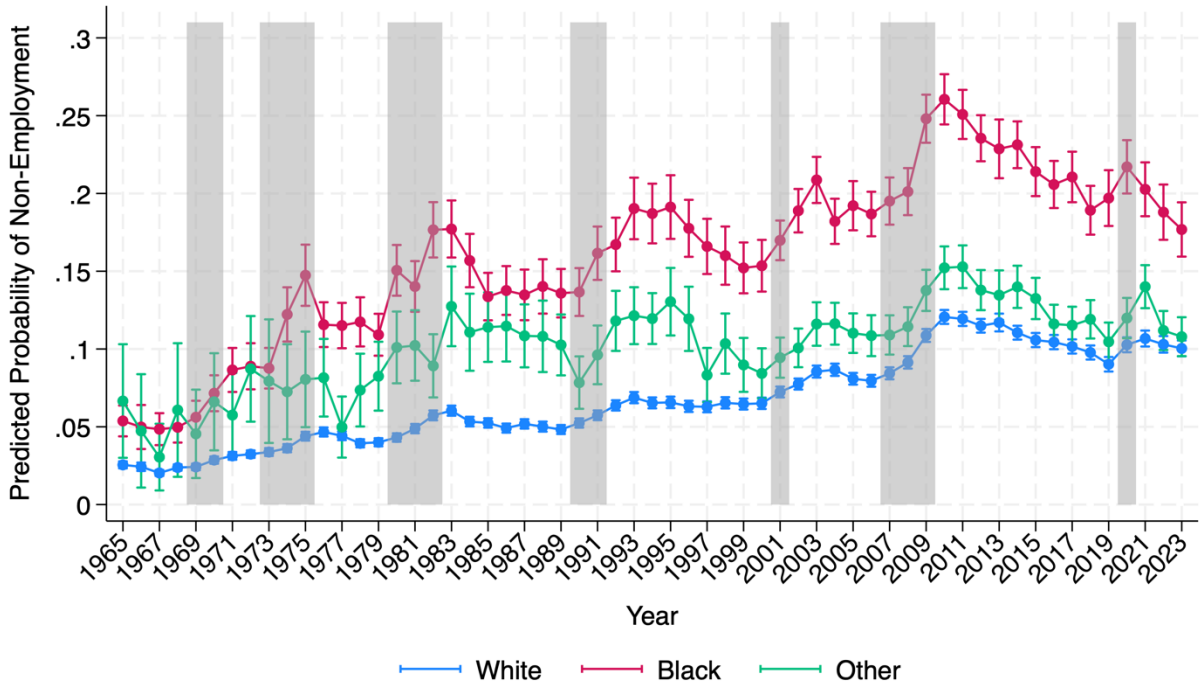
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Points and bars represent predicted average non-employment (and the 95% confidence interval) by year and education level. Predicted values derived from a linear regression of non-employment on year dummies interacted with indicators for having a high school degree, having some college, and having a college degree or more (less than high school was the omitted group). Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 3c. Heterogeneity of Non-Employment of Men Aged 25-54 by Region



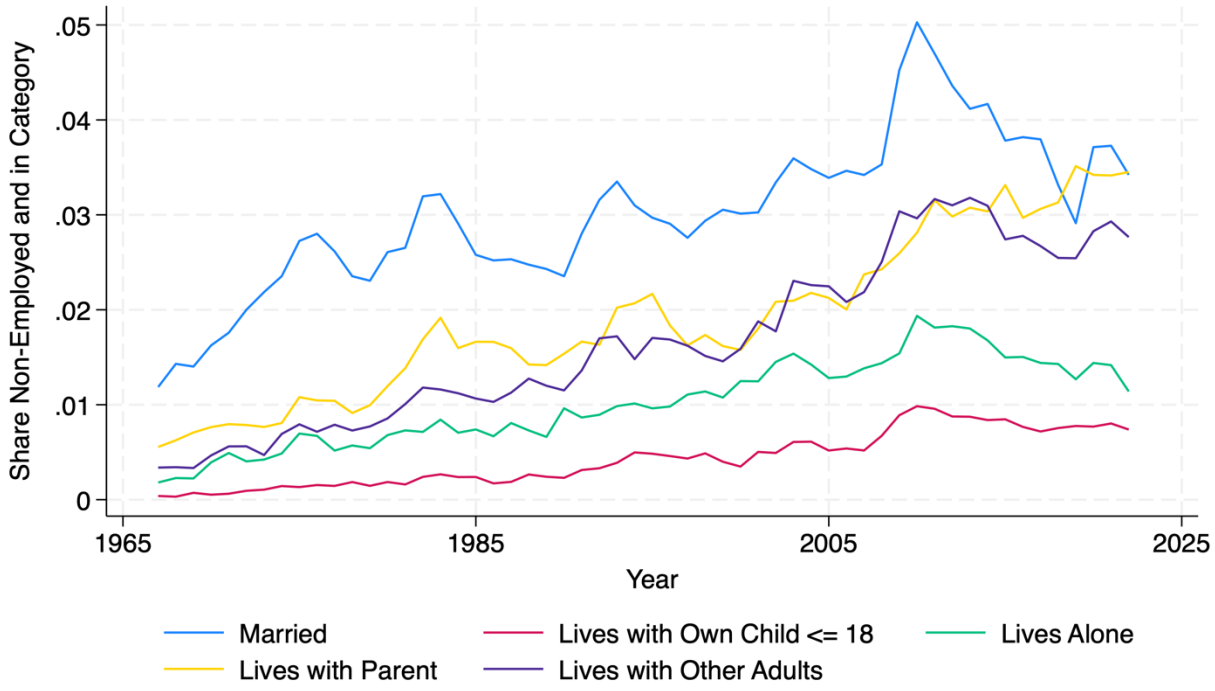
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Points and bars represent predicted average non-employment (and the 95% confidence interval) by year and region. Predicted values derived from a linear regression of non-employment on year dummies interacted with indicators for being in the Midwest, being in the South, and being in the West (the Northeast region was the omitted group). Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 3d. Heterogeneity of Non-Employment of Men Aged 25-54 by Race



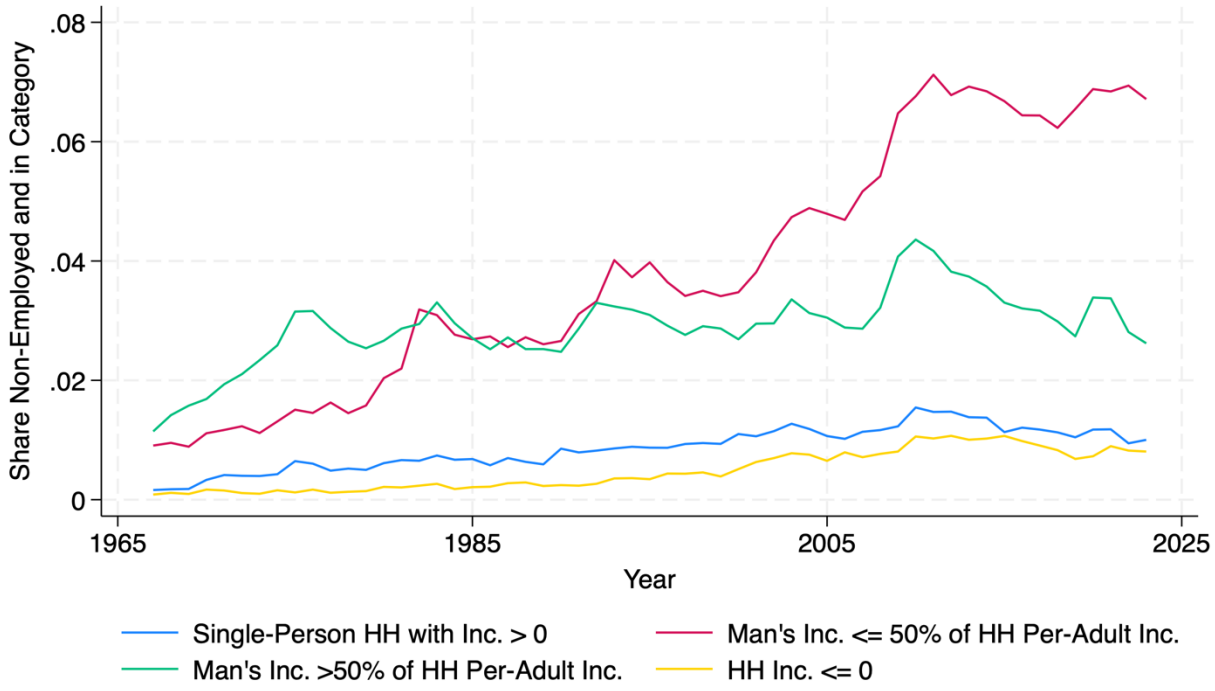
Data: 1966-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Points and bars represent predicted average non-employment (and the 95% confidence interval) by year and race. Predicted values derived from a linear regression of non-employment on year dummies interacted with indicators for being Black and being Other (white individuals were the omitted group). Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Regressions are weighted by survey weights and use robust standard errors. Grey regions are recessions, as defined by the NBER.

Figure 4. Family Structure of Non-Employed Men Aged 25-54 Over Time



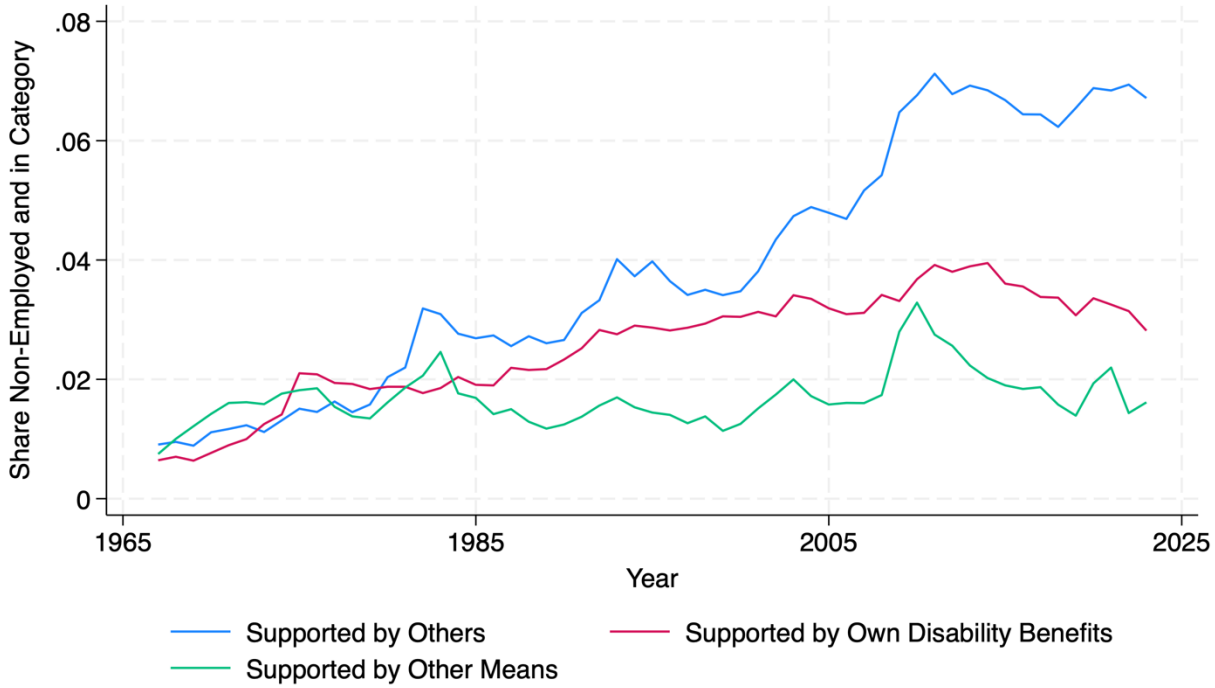
Data: 1968-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue line is proportion of sample who are not employed and married. Red line is proportion of sample who are not employed and live with their own child <= 18. Green line is proportion of sample who are not employed and live alone. Yellow line is proportion of sample who are not employed and live with their parents. Purple line is proportion of sample who are not employed and live with other adults. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Proportions weighted by survey weights.

Figure 5. Sources of Support of Non-Employed Men Aged 25-54 Over Time



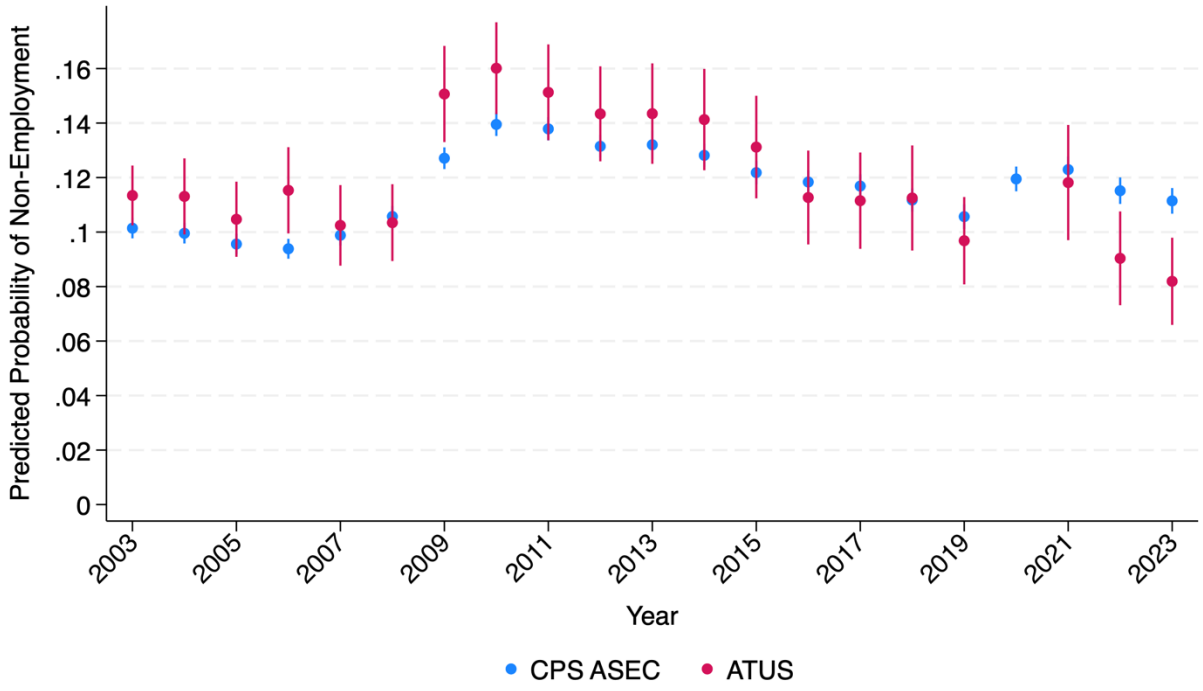
Data: 1968-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue line is proportion of sample who are non-employed, live by themselves, and receive positive income. Red line is proportion of sample who are non-employed, live with others, and have income <=50% of per-adult household income. Green line is proportion of sample who are non-employed, live with others, and have income > 50% of per-adult household income. Yellow line is proportion of sample who are non-employed and have a household income <= 0. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Proportions weighted by survey weights.

Figure 6. Support From Others vs Support From Disability Benefits for Non-Employed Men Aged 25-54 Over Time



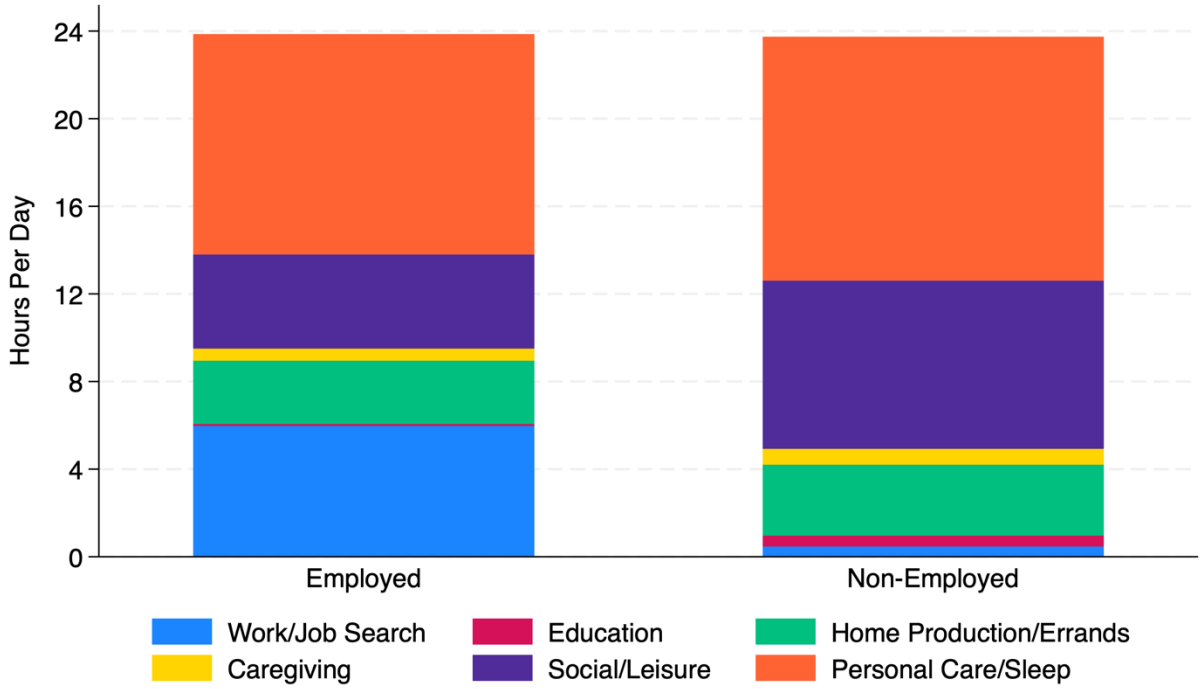
Data: 1968-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue line is proportion of sample who are non-employed, live with others, and have income <= 50% of per-adult household income (i.e., primarily supported by others). Red line is proportion of sample who are non-employed, not primarily supported by others, and receive any disability program income. Green line is proportion of sample who are non-employed, not primarily supported by others, and do not receive any disability program income. Non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. Proportions weighted by survey weights.

Figure 7. Non-Employment of Men Aged 25-54 Over Time in CPS ASEC and ATUS



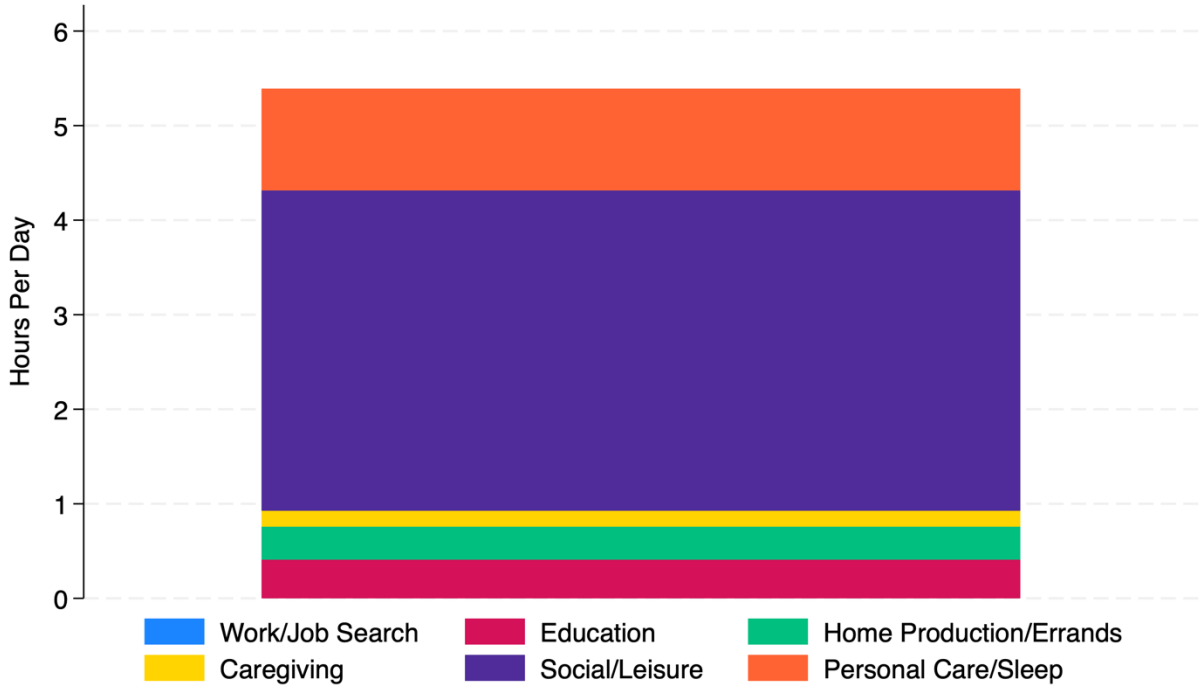
Data: 2003-2023 American Time Use Survey, 2004-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies without a constant using the CPS ASEC while the red points and bars represent analogous concepts using the ATUS. In the CPS ASEC, non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. In the ATUS, non-employment is defined as being unemployed or not in the labor force. Regressions are weighted by survey weights and use robust standard errors.

Figure 8. Time Use of Employed and Non-Employed Men Aged 25-54 (2003-2023, Excluding 2020)



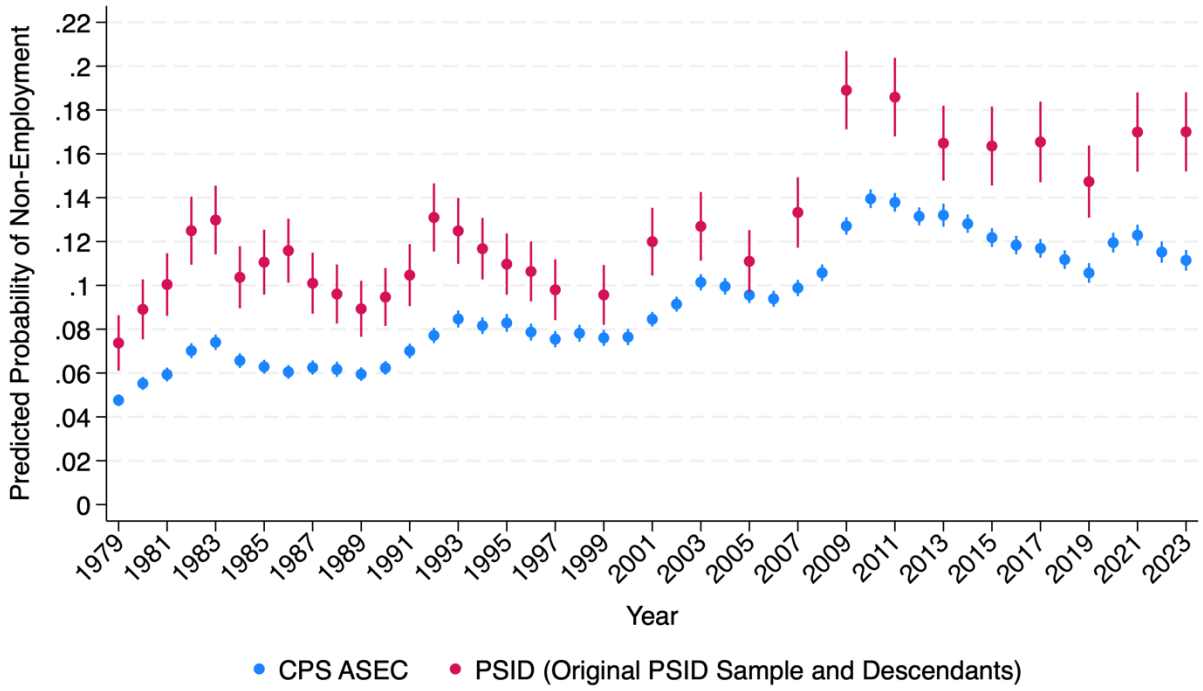
Data: 2003-2023 American Time Use Survey. 2020 is excluded due to data quality issues.
Notes: Sample is men aged 25-54. For each group, we plot the average hours spent per day on six categories of time-use. Non-employment is defined as being not in the labor force or being unemployed. Means weighted by survey weights.

Figure 9. Extra Time Use for Non-Employed Men Aged 25-54 Relative to the Employed (2003-2023, Excluding 2020)



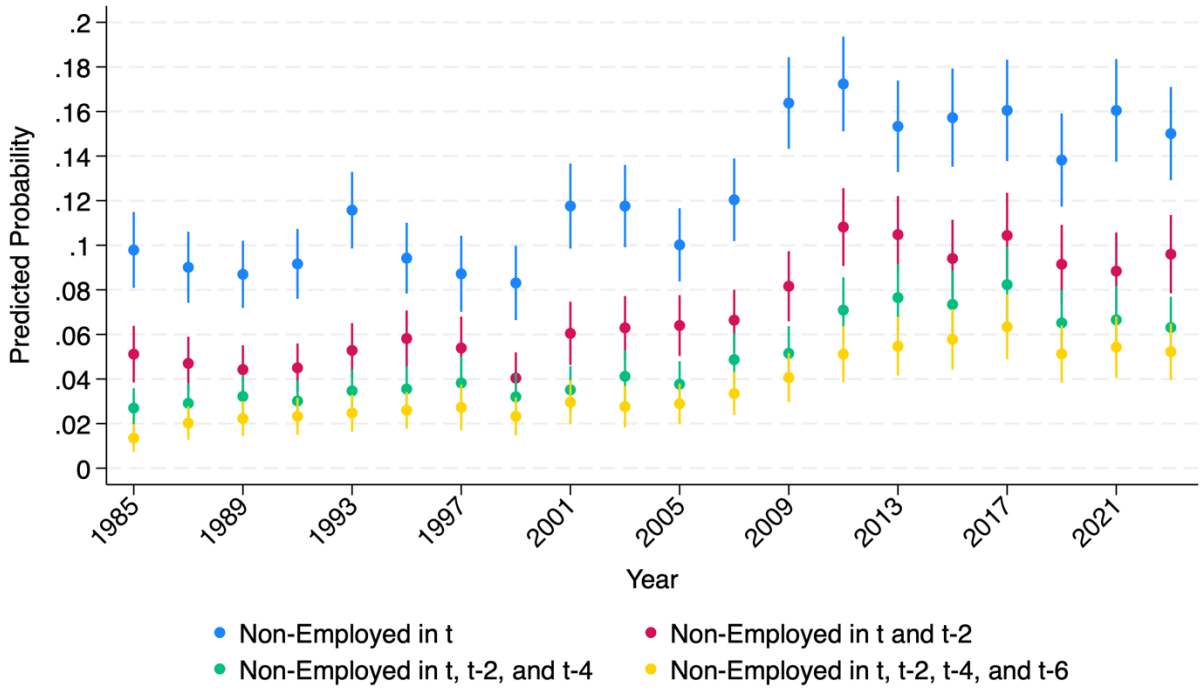
Data: 2003-2023 American Time Use Survey. 2020 is excluded due to data quality issues.
Notes: Sample is men aged 25-54. This figure shows the activities for which, on average, non-employed men spent more time than employed men. In particular, for each category of time-use, we take the maximum of 0 and the difference between non-employed and employed's time-use. Non-employment is defined as being not in the labor force or being unemployed. Means weighted by survey weights.

Figure 10. Non-Employment of Men Aged 25-54 Over Time in CPS ASEC and PSID



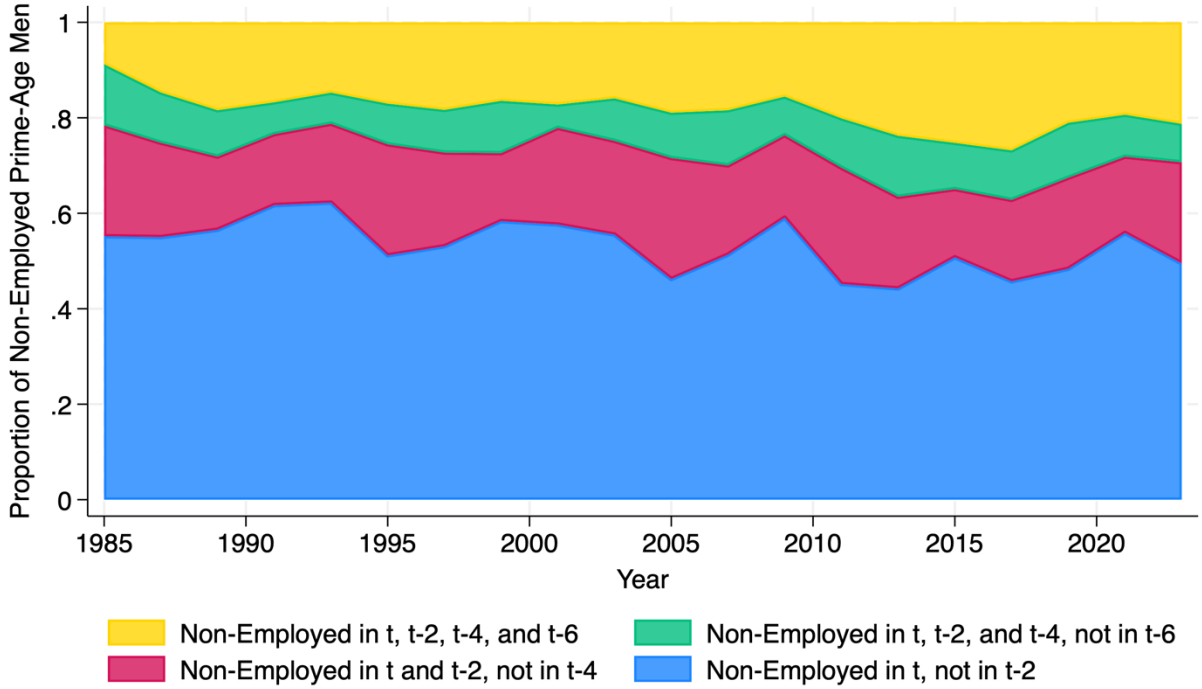
Data: 1979-2023 Panel Study of Income Dynamics, 1980-2024 CPS ASEC.
Notes: Sample is men aged 25-54. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies without a constant using the CPS ASEC while the red points and bars represent analogous concepts using the PSID. In the CPS ASEC, non-employment is defined as having zero weeks worked in the reference year and not being an active-duty member of the armed forces. In the PSID, non-employment is defined as not currently working. Regressions are weighted by survey weights (the PSID uses longitudinal weights) and use robust standard errors.

Figure 11. Non-Employment of Men Aged 25-54 in Years t, t-2, t-4, and t-6



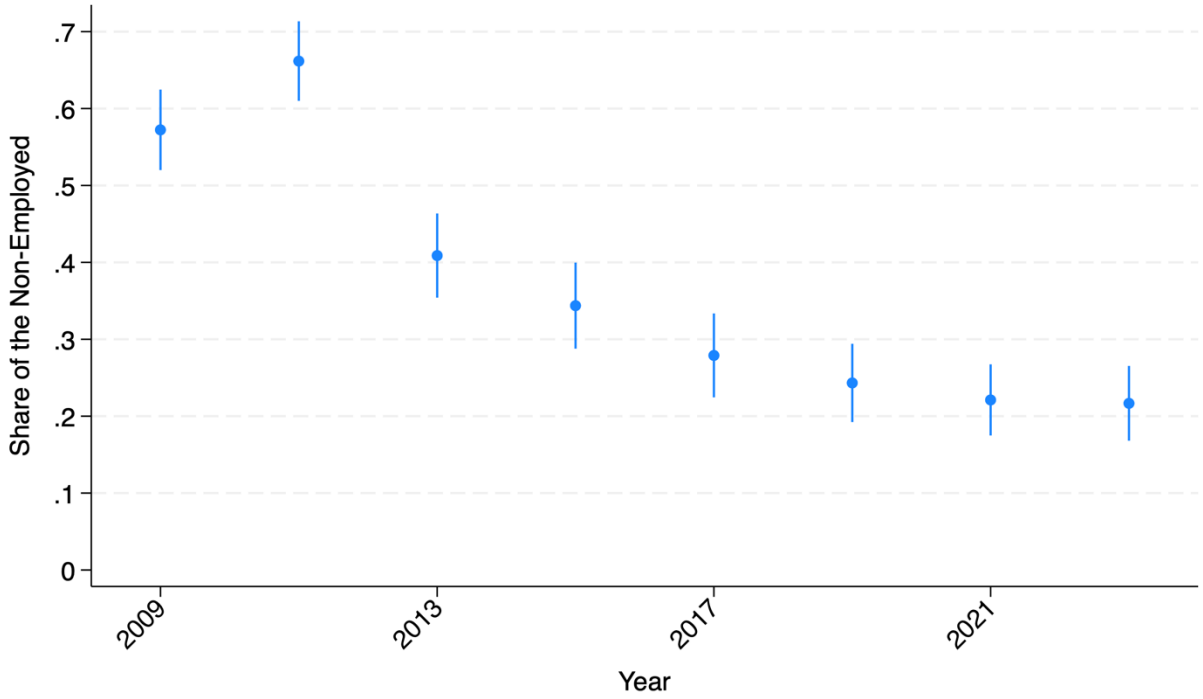
Data: 1979-2023 Panel Study of Income Dynamics
Notes: Sample is men aged 25-54 who are present in the PSID in year t, t-2, t-4, and t-6. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of non-employment on the full set of year dummies without a constant, the red points and bars represent analogous concepts using t-2 non-employment as the outcome variable, the green points and bars represent analogous concepts using t-4 non-employment, and the yellow points and bars represent analogous concepts using t-6 non-employment as the outcome variable. Non-employment is defined as not currently working. t-2 non-employment means the individual was non-employed in year t and t-2. t-4 non-employment means the individual was non-employed in year t, t-2, and t-4. t-6 non-employment means the individual was non-employed in year t, t-2, t-4, and t-6. Regressions are weighted by longitudinal survey weights and use robust standard errors.

Figure 12. Persistence of the Non-Employment of Men Aged 25-54



Data: 1979-2023 Panel Study of Income Dynamics
Notes: Sample is men aged 25-54 who are not employed. Blue region is proportion of sample who are non-employed in year t but employed in year t-2. Red region is proportion of sample who are non-employed in years t and t-2 but employed in year t-4. Green region is proportion of sample who are non-employed in years t, t-2, and t-4 but employed in year t-6. Yellow region is proportion of sample who are non-employed in years t, t-2, t-4, and t-6. Non-employment is defined as not currently working. Proportions weighted by longitudinal survey weights.

Figure 13. Share of Non-Employed Men Aged 25-54 Who Experienced a Great Recession Job Loss



Data: 2007-2023 Panel Study of Income Dynamics
Notes: Sample is men aged 25-54 who are non-employed. Blue points and bars represent estimated coefficients and 95% confidence intervals, respectively, on year dummies from a linear regression of GR job loss on the full set of year dummies without a constant. Non-employment is defined as not currently working. GR job loss defined as transitioning from employed at t-2 to non-employed at t (where t is either 2009 or 2011). Regressions are weighted by longitudinal survey weights and use robust standard errors.