HOW DO OLDER WORKERS USE NONTRADITIONAL JOBS?

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Introduction

Nontraditional jobs – defined here as jobs without health and retirement benefits – are on the rise, and this trend extends to older workers as well as the young. But the impact of this trend depends on how long the jobs last and what older workers do subsequently. If older workers end up in nontraditional work for much of their later careers, then the lack of benefits will put their retirements at risk. If, instead, they use nontraditional jobs only temporarily before returning to traditional work or as a bridge to retirement, these jobs may offer the flexibility that enables them to keep working and improve their retirement prospects.

To address these issues, this *brief*, which summarizes a recent study, follows workers from ages 50-62 in the *Health and Retirement Study* (HRS) to identify how they use nontraditional jobs and the effect of these employment patterns on their retirement security.[1]

The discussion proceeds as follows. The first section clarifies how the "no-benefits" definition of nontraditional work used in this analysis relates to other, more job-based, definitions. The second section describes a technique called sequence analysis, which allows for grouping the sample workers together by similar employment patterns based on how they use nontraditional work. The third section identifies the socioeconomic characteristics of the group that uses nontraditional work most frequently. The fourth section estimates, for all groups in the sequence analysis, how the different work patterns affect retirement security. The final section concludes that just 26 percent of the workers in the sample are in a traditional job with benefits throughout their 50s and early 60s, and that nontraditional jobs are clustered among frequent users rather than serving as a temporary landing spot or a bridge job for workers more generally. The group that works consistently in nontraditional jobs ends up with about 25 percent less in retirement income than those consistently in traditional jobs.

## Defining Nontraditional Work

To date, much of the literature has defined nontraditional work based on workers' relationships with their employers. Using this approach, researchers have come up with a wide range of estimates. The narrowest definitions are limited to workers in the

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"gig economy" (e.g., Uber, TaskRabbit) or those in short-term employment relationships.[2] These groups include just 1 and 2 percent of workers, respectively (see Figure 1).[3] At the other extreme, the U.S. Government Accountability Office's (GAO) broad concept of nontraditional work – which includes self-employed and part-time workers – covers 31 percent of the workforce.[4] In between these extremes are two other definitions. The "alternative" work measure, defined by the Bureau of Labor Statistics (BLS), includes independent contractors and workers who are either with a temp agency, employed by a contract firm, or on-call. The so-called "1099 workers," who account for about the same percentage of the workforce, include self-employed individuals who work for firms (i.e., freelancers and "gig" work) and file 1099 tax forms.[5]

FIGURE 1. PERCENTAGE OF WORKERS AGES 50-62 IN NONTRADITIONAL JOBS BY DIFFERENT DEFINITIONS
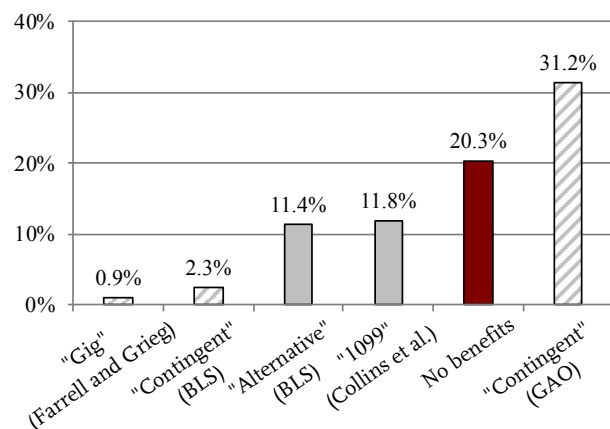
Notes: Gig and 1099 definitions cover workers of all ages. *Sources:* Farrell and Grieg (2016); Collins et al. (2019); and authors' calculations using U.S. Census Bureau, *Current Population Survey* (CPS) (2017) and U.S. GAO (2015).

Regardless of the definition, nontraditional jobs often lack basic benefits, such as health insurance and retirement plans. For this reason, our analysis adopts a more direct measure of nontraditional jobs – namely, any job lacking both health insurance and retirement benefits. As shown in Figure 1, 20 percent of workers ages 50-62 are employed in these types of nontraditional jobs. (The full study also includes a narrower definition of nontraditional work that combines no benefits with job instability; the findings mirror those reported here for the broader definition.)[6]

Using Sequence Analysis to Identify Patterns of Work

To find out how workers use nontraditional jobs, this analysis uses the 1992-2016 waves of the *Health and Retirement Study* (HRS), a biennial longitudinal survey of Americans ages 50 and older, to characterize workers' labor force patterns from ages 50 to 62. While the total sample has 42,053 respondents, the sequence analysis requires restrictions to allow mostly continuous viewing of workers over the decade-long period considered. These restrictions reduce the sample to 4,174 respondents, who fortunately have characteristics consistent with the total sample.[7]

The first step in the sequence analysis is to identify each individual's work status at each wave from ages 50-62. Work status consists of four categories: 1) not working; 2) retired; 3) working in a traditional job; and 4) working in a nontraditional job. "Not working" is defined as earning less than $5,000 a year but not claiming to be fully retired.[8] "Retired" is defined as not working and classified as retired by the RAND labor force status variable.

The next step is to use sequence analysis to identify work patterns from ages 50-62. Sequence analysis is a relatively novel technique in the social sciences; its strength is that the outcome of interest is an individual's entire employment history rather than employment status or job transition at any given age. The basic goal of sequence analysis is to group together employment patterns that are similar in both the time and order of their work statuses. Consider the hypothetical example in Table 1, which shows how three workers move between traditional work (T), nontraditional work (N), not-working (U), and retired (R).

TABLE 1. EMPLOYMENT SEQUENCES FOR HYPOTHETICAL WORKERS

|	Age						
	50	52	54	56	58	60	62
Worker A	T	T	N	N	T	T	R
Worker B	T	T	N	T	T	T	R
Worker C	T	T	N	N	N	U	R

Source: Authors' illustration.

In this example, the sequence analysis will likely group workers A and B together, because they both started as traditional workers, used nontraditional work temporarily before returning to traditional work, and then retired at the same age. The only difference between them is small: how long they experienced nontraditional work. That experience differs distinctly from the pattern for worker C, who moved from traditional to nontraditional work at the same age as A and B, and retired at the same age, but never returned to traditional work. Sequence analysis proceeds in two steps: 1) calculating the difference between all sequences (i.e., the number of changes it takes to transform one sequence into another); and 2) using hierarchical cluster analysis to group similar sequences together.[9]

Applying sequence analysis to the HRS data reveals five work patterns (see Figure 2). The first two involve individuals who do not work consistently throughout their 50s and 60s. These individuals are either in an Early Retirement sequence with retirement in their 50s (21 percent of sample members) or a Weak Attachment sequence, with frequent spells of not working despite not retiring (16 percent). The next three sequences consist of people who work most of the time, and include sequences of work that are: Mostly Nontraditional (11 percent); Mostly Traditional (26 percent); and Traditional (26 percent). The "ideal" employment pattern of working throughout one's 50s and early 60s in a job with benefits is rare – only about one quarter of workers do it.[10]

With respect to how nontraditional jobs are used within the employment sequences, it turns out that the vast majority of such work is done by those who do it often – workers who engage mostly in nontraditional jobs account for 53.7 percent of all nontraditional job observations in the sample compared to 25.7 percent for those with weak attachment to the labor force (see Figure 3). It is used less often as a stopgap to unemployment or as a bridge to retirement.

FIGURE 3. PERCENTAGE OF ALL NONTRADITIONAL JOB OBSERVATIONS BY SEQUENCE GROUP
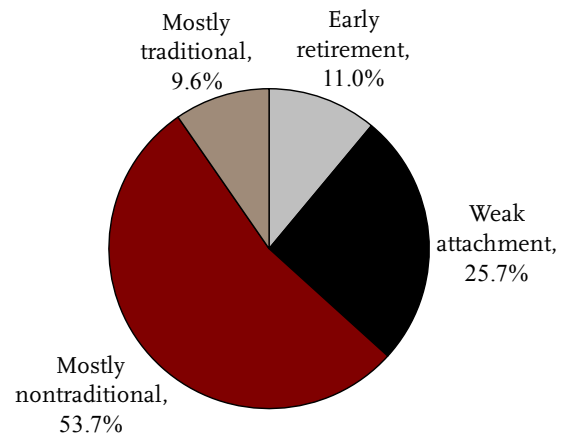
Source: Authors' calculations from HRS (1992-2016).

FIGURE 2. OLDER WORKERS' WORK HISTORIES FROM AGES 50-62 UNDER "NO BENEFITS" DEFINITION OF NONTRADITIONAL WORK
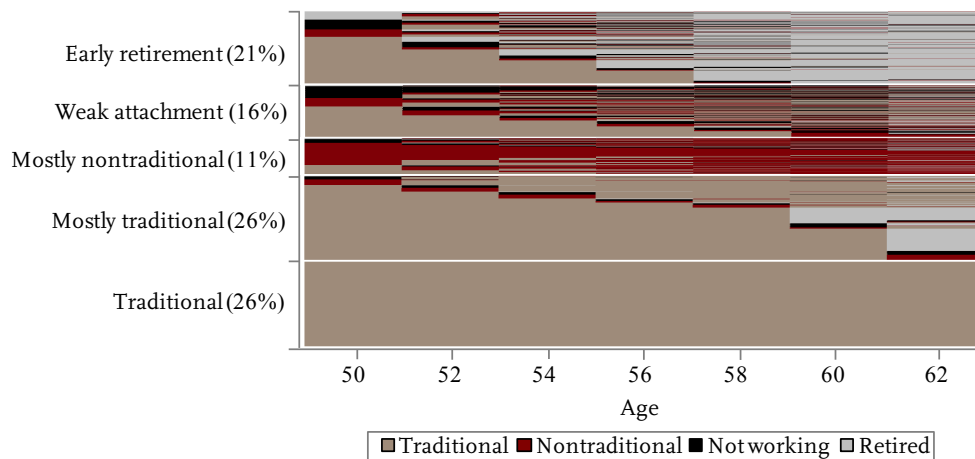
Source: Authors' calculations using University of Michigan, *Health and Retirement Study* (HRS) (1992-2016).

Who Uses Nontraditional Jobs?

It would be nice to understand why some people spend most of their late worklife in nontraditional jobs. Perhaps they are less educated and therefore vulnerable or unhealthy and in need of a flexible environment. Or maybe they just have a high-earning spouse. One way to identify groups of people with similar characteristics is a technique called Latent Class Analysis (LCA).

Performing LCA on the group of people who do mostly nontraditional work shows that they fall into three basic categories (see Table 2).[11] The first group is defined by a lack of education – it consists of the 15.4 percent of the Mostly Nontraditional sample that does not have a high school degree. The second is defined by their marital status – the 35.5 percent of workers in this sequence who are married and have an earning spouse. For these two groups, working in mostly nontraditional jobs makes sense. The

TABLE 2. LCA ANALYSIS OF MOSTLY NONTRADITIONAL SEQUENCE GROUP

Characteristic	High school dropouts (15.4%)	Married w/ an earning spouse (35.5%)	Solo earners (49.1%)
Female	53.7%	60.4%	52.1%
Married	80.4	100.0	40.4
Non-white	44.8	16.9	22.1
Education			
High school dropouts	100.0	0.6	0.0
High school graduates	0.0	39.6	47.9
Some college	0.0	33.8	28.2
College graduate	0.0	26.0	23.9
Employer-sponsored plans from past job			
Defined benefit	0.0	31.2	8.4
Defined contribution	7.5	24.7	7.5
Other limiting factors			
Own health limits work	18.5	5.8	13.2
Caregiving	9.6	12.9	17.9

Source: Authors' calculations from HRS (1992-2016).

less educated group likely has trouble finding good work, and the group with an earning spouse likely has much less need to hold a job with benefits. The third group is a little less clear, as they are defined by not having an earning spouse, but otherwise appear fairly similar to the typical worker in the HRS sample – albeit more likely to be non-white, slightly less educated, and slightly less healthy.

How Employment Patterns Affect Retirement Resources

The final question is how employment patterns affect available retirement resources at age 62. To identify this impact, a regression equation relates the individual's retirement income at 62 to his sequence group, controlling for other factors.

Specifically, the dependent variable is the log of retirement income at 62, including defined benefit pension income, Social Security benefits, and the annuitized value of defined contribution plan assets and other financial wealth.[12] With respect to the independent variables, the sequence group indicator measures the percentage point change in the individual's retirement resources associated with being in a given sequence group relative to the base sequence group that works consistently in a traditional job. Demographic controls include education, gender, race/ethnicity, and age-50 marital status.[13] The equation also controls for the individual's initial health with higher values indicating worse health.[14]
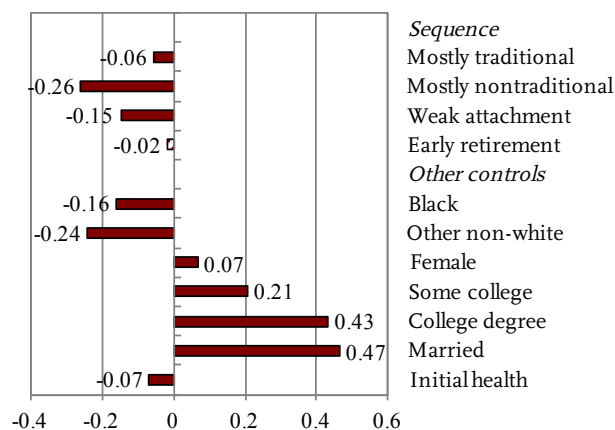
The regression results presented in Figure 4 (on the next page) are largely intuitive. Workers who do mostly traditional work and use nontraditional jobs only sparingly have 6-percent less retirement income at age 62 than those who work traditional jobs consistently. On the other hand, those who use nontraditional jobs frequently have 26-percent less retirement income than those who work traditional jobs consistently. The effect of early retirement in the regression is insignificant, perhaps because the early retirement sequence is comprised mainly of people working traditional jobs and then completely retiring, a group that may be relatively well prepared. The other coefficients in the regression are consistent with expectations, with being a person of color or in poor health associated with less available retirement income, and more educated and married with more retirement income.

Figure 4. Effect of Select Variables on Retirement Income at Age 62 by Nontraditional Job Definition

Notes: Solid bars are statistically significant.
Source: Authors' calculations from the *Health and Retirement Study* (1992-2016).

Conclusion

Applying sequence analysis to the work patterns of a sample of older workers shows that only 26 percent have the "ideal" sequence of late-career employment, a traditional job with benefits consistently from ages 50-62. Many retire early or have brief bouts of not working or nontraditional work and, worse, many have a weak attachment to the labor force or are in nontraditional jobs consistently. The regression results show that having only a brief period of nontraditional work decreases retirement income by 6 percent, but doing that work consistently decreases income by a full 26 percent. Indeed, the effect of consistent nontraditional work is similar to being only weakly attached to the labor force. This finding illustrates the importance of ensuring that all workers have access to affordable health benefits and convenient retirement savings vehicles.

Endnotes

1 Munnell, Sanzenbacher, and Walters (2019).

2 Short-term is defined as jobs that are expected to last less than one year.

3 See Farrell and Grieg (2016); U.S. Bureau of Labor Statistics (2018); and Collins et al. (2019).

4 U.S. Government Accountability Office (2015).

5 Collins et al. (2019).

6 One potential problem with identifying health insurance being offered by an employer is that the line of questioning in the HRS only asks if individuals are covered by their employers' plan, not whether they are offered it. So, married individuals with coverage through their spouse would look like they are not offered health insurance. Looking at the CPS, it turns out that roughly 70 percent of married individuals with health insurance through their spouse were also offered it at their job – so, we assume that if a person's spouse has employer health insurance that the person was offered coverage through her employer as well. This approach provides a conservative estimate of nontraditional work.

7 Although individuals generally enter the HRS sometime between ages 50-56, the sample is restricted to those who enter at age 52 or earlier to increase the sample size, with those entering at 52 having their age 50 work status imputed. All imputations use STATA's multiple imputation framework, as described in Halpin (2013). The sample is further restricted to respondents who live to at least 62, do not otherwise exit the HRS prior to 62, do not have missing demographic variables (described below), and work at least one time between 50-62. Within this sample, some people are missing information for individual waves – if this omission happens for three or more waves, the individual is dropped from the analysis; if it is for two or fewer waves, their work status is imputed for the missing periods.

     It is worth noting that the final sample used for the analysis is somewhat more likely to be white and slightly more educated than the initial sample, mainly due to the restriction that sample members work at least once from 50-62.

8 This definition also includes those who claim not to be working because they are disabled and those who are unemployed or are otherwise out of the labor force.

9 The difference between sequences is the sum of all substitutions, insertions, and deletions required to transform one sequence to another. The 'cost' of these transformations is based on observed transition probabilities – transitions that are observed frequently in the data (e.g., from not working to retired) are assigned a lower substitution cost than those that are uncommon. Once substitution costs are assigned, this analysis follows the approach commonly taken in the literature and sets the cost of insertions/deletions to one-tenth of the highest substitution cost (MacIndoe and Abbott 2004; Hollister 2009). To group similar sequences together, the project used Ward's hierarchical clustering linkage criteria to group sequences that are similar to each other such that the groupings minimize the difference between sequences within the group and maximize the difference between sequences among the groups.

10 Although somewhat surprising, the result does not seem to be an artifact of the HRS data used here; a look at individuals in the *Panel Study of Income Dynamics* (PSID) from 1998-2010 showed almost the same low share of workers fitting this pattern. In that dataset, both retirement plans and health insurance were identified for a sample of 403 individuals ages 50-52 in 1998 (the same start wave as the War Baby Cohort in the HRS), who worked at least once, and who were observed continuously through 2010. Among this sample, only 24.6 percent worked in a traditional job the entire time – remarkably similar to the number in the HRS. It seems that it really is not that common to be in a consistent, traditional job between ages 50 and 62.

11 Three groups were chosen because the Bayesian Information Criterion (BIC) was lower for three groups than for either two or four groups. An LCA analysis was also conducted for the more narrow definition of nontraditional work and is available upon request. Overall, the results were similar, with one group composed disproportionately of dropouts, the second of individuals in dual-earner relationships, and the third of individuals without an earning spouse. The main differences were that, under the narrow definition, the less-educated group included some high school graduates and the group without an earning spouse included no married individuals at all.

12 Social Security wealth is obtained based on RAND imputations that use Social Security administrative data. Defined contribution and financial wealth are assumed to be annuitized at a rate consistent with the private market, based on data from ImmediateAnnuities.com.

13 For those who are not observed at age 50, the wave closest to age 50 is used.

14 For more details on the methodology, see Munnell, Sanzenbacher, and Walters (2019).

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