

Contract Work at Older Ages*

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The self-employment rate—the share of employed persons who are self-employed—rises markedly with age. In considering policies to ensure that older Americans who would like to do so are able to extend their work lives or phase into retirement, it thus is necessary to understand the role that self-employment work arrangements play in work at older ages. As individuals approach the traditional age of retirement, they may have financial or personal reasons for wanting to continue to work. At the same time, they may need or wish to reduce the hours they work or change the type of work they do. The greater flexibility afforded by self-employment has been advanced as an important part of the explanation for the higher rates of self-employment at older ages.

Owing to data limitations, research and policy discussions typically have treated self-employment as a homogeneous category or made only the crude distinction between incorporated and unincorporated self-employment. Yet, self-employment may take a variety of forms, from owning a business, to working as an independent contractor, consultant, or freelancer, to doing occasional informal work or work through a mobile app or online platform. These diverse types of self-employment, in turn, may be associated with varying degrees of flexibility in hours worked or type of work performed. For example, for someone who has been working in a wage and salary job, moving into platform work or other work as an independent consultant, independent contractor or freelancer may offer a way to reduce work hours or be selective in the types of tasks performed. In some cases, individuals may work as an independent contractor for a former employer. Starting a business might well involve an *increase*, not a decrease, in work effort, although someone who already has an established business may find it easier than other workers to reduce their work hours. The reasons for self-employment at older ages also are diverse. In some cases, financial necessity is the primary

driver for seeking self-employment work; in other cases, personal preferences—such as the desire to stay active, connect with others or pursue a hobby—are the primary motivation. Understanding the role of self-employment in work at older ages thus requires more detailed information than typically is available in standard data sets such as the Current Population Survey (CPS) or Health and Retirement Study (HRS).

Our study uses data from a module we developed for inclusion on the Gallup Education Consumer Pulse Survey to examine self-employment arrangements among older Americans. The module, which is designed to capture all work for pay, comprised 14 questions on respondents' employment and the nature of their work arrangements, including contract and informal work. For independent contractors age 50 and older, we asked additional questions about that work, including whether respondents were working for a former employer and their primary motivations for being in an independent contractor arrangement. This survey module was fielded during four month-long periods, spaced at three-month intervals, during 2018 and 2019. It yielded responses from approximately 61,000 adults, of whom approximately 40,000 were age 50 and older.

The paper begins with an overview of the existing literature on the need or desire for employment at older ages and the role of self-employment in obtaining that work. As background to our new findings, we then present data from the CPS and HRS on the prevalence of self-employment at different ages and how that prevalence has changed over time. Using HRS data, we also examine differences between employees and self-employed workers who are approaching retirement in the stated desire to reduce their hours and the extent to which such hours reductions actually occur. Next, we describe the new Gallup module on contract work. Our analysis of the Gallup data provides new evidence on the prevalence of different types of self-

employment at older ages, the paths that workers have taken into self-employment, and their reasons for doing self-employment work.

BACKGROUND

For many decades, labor force participation among men age 55 and older had been falling. Beginning in the 1990s, that trend reversed and official statistics began to show rising employment rates for men in the 55 and older age group. Labor force participation among women age 55 and older had been relatively stable for several decades, but in the 1990s also began to rise. Although employment at older ages is now substantially more common than was the case two decades ago, there is reason to think that, under the right circumstances, an even larger share of older Americans might be interested in working.

An extensive literature on “partial retirement” or “bridge jobs” has found that older adults often transition from full-time work to part-time work before retiring fully (see, for example, Gustman and Steinmeier 1984, Ruhm 1990, and Giandrea, Cahill and Quinn 2009). Similarly, a significant share of retirees later “unretire” and move back into the labor force, frequently taking part-time rather than full-time jobs (Maestas 2010). More recently, Ameriks et al. (2018) report that, among those in their Vanguard Research Initiative sample who had made a transition from a career job to a bridge job, more than one-third moved from a job with an inflexible schedule to a job with a flexible schedule.

There is also evidence, however, that many older adults are unable to realize their plans for work following retirement. Abraham and Houseman (2006) analyze information on plans for retirement collected during the first five waves of the Health and Retirement Study (HRS), fielded between 1992 and 2000. They focus on plans among individuals aged 50 to 69 currently

working at least 20 hours per week and at least 1,000 hours per year. In this group, nearly as many people said that they planned to keep working but reduce their hours (18.3 percent) or change the type of work they were doing (4.7 percent) as said they planned to stop working entirely (25.0 percent). Among those with definite plans for retirement over the next two years, just 35.3 percent of those planning to reduce their hours and 22.1 percent of those planning to change the type of work they were doing realized those plans, compared to 65.0 percent of those planning to stop work entirely. Maestas (2010) reports that, when asked directly in the baseline HRS interview conducted in 1992 whether they planned to work following retirement, 71 percent of working respondents said that they had such plans. She defines retirement based on a combination of self-reported status as such and either no or only part-time work hours. Only about half of workers followed for at least four years after “retiring” who had planned to continue working in some capacity or to return to work actually reported post-retirement work (either a period of partial retirement or unretirement at some point after initial full retirement).

It is possible, of course, that retirees simply discover that their post-retirement financial situation is better than anticipated or that they enjoy being retired more than they had expected. While undoubtedly true in some cases, there is reason to believe this is not the whole story. Ameriks et al. (2018) asked non-employed members of the Vanguard Research Initiative, a panel of Vanguard customers more than 55 years old, whether they would be interested in working. Almost 40 percent of those not working at the time of the survey, most in their 60s and 70s, would have been willing to work had the conditions been the same as in their last job, with about 60 percent expressing an interest in doing so if they could choose the number of hours they would work. Further, in the latter case, a significant share of those expressing an interest in work

would have been willing to accept a substantial cut in pay relative to their previous wage on a job where they could choose their hours.

As discussed by Hurd (1996), there are a variety of impediments to working part-time at older ages. On the worker side, defined benefit pension plans typically are structured to encourage full retirement rather than part-time work. Hurd also observed that, by reducing the marginal return to additional hours past a modest threshold, the Social Security earnings test may have discouraged part-time work. Compared to the 1990s, however, these factors should have become less important over time. Defined benefit pension plans cover a much smaller share of the workforce than in the past, and the defined contribution plans that have taken their place do not create the same disincentives for part-time work. Similarly, the Senior Citizens' Freedom to Work Act of 2000 (PL 106-182) eliminated the Social Security earnings test for workers over the so-called Normal Retirement Age.

Reluctance on the part of employers to allow their employees to continue working but reduce their hours also may be a significant impediment. Citing data from the first five waves of the HRS, for example, Abraham and Houseman (2006) report that only about 28 percent of older employees holding a single job and working less than 48 hours per week believe that their employer would allow them to reduce their hours on their current job. Health insurance and other fringe benefit costs may be an especially important consideration for employers; all else the same, to the extent that benefits impose per capita rather than per hour costs, they may cause employers to be reluctant to allow their full-time workers to move to a part-time schedule. As health insurance costs have grown, we would expect this to have become a more important factor, especially for older workers, a group whose health care costs tend to be higher than average.

There are additional reasons to think that, for many older Americans, if reducing hours on a current job is not an option, transitioning to a new job also may be difficult. As discussed by Abraham and Houseman (2006, 2008), employer reluctance to hire older workers may reflect not only concerns about high health insurance costs, but also unwarranted stereotyping as well as more legitimate concerns related to these workers' skills and low perceived returns to training. In an audit study in which pairs of résumés were sent to employers recruiting to fill entry-level positions in the Boston, Massachusetts and St. Petersburg, Florida labor markets, Lahey (2008) found that younger applicants were more than 40 percent more likely to be offered an interview. Another contributing factor may be that older workers—especially those who have worked for a single employer for an extended period and thus have no recent experience with having to find a job—do not have a clear idea about how to search effectively for employment. Whatever the reason, older workers' job search often is unsuccessful. In a panel of person-wave records, Maestas and Li (2006) find that fewer than half of non-working HRS respondents who reported that they were searching for work were employed two years later. Interestingly, those searching for part-time work were more than 15 percentage points less likely to be working two years later than those seeking or willing to accept full-time work.

Self-employment at older ages is of particular interest because it may provide a viable path for older workers to cut back on their hours rather than withdraw entirely from the labor force. Fuchs (1982) and Quinn (1980), both using data from the Retirement History Survey, are early studies noting that self-employment may be a means for workers to phase into retirement. Using HRS data, Zissimopoulos and Karoly (2007) find far higher rates of transition from full-time work to part-time work among individuals who were initially self-employed than among those who initially held a wage and salary job. Ameriks et al. (2018) report that, among those in

their sample who took a bridge job at the end of their careers, self-employment was substantially more common on the bridge job (23.3 percent) than on the career job (6.4 percent). Ramnath, Shoven, and Slavov (2017) use tax data rather than survey data to study transitions to self-employment. Consistent with the idea that older workers use self-employment as a way to keep working but cut back on their hours, they find that late-career transitions to self-employment are associated with significantly larger earnings reductions than mid-career transitions.

Recent years have seen growing discussion of the so-called gig economy, including the emergence of mobile apps and online platforms, such as Uber, Lyft, TaskRabbit, and Upwork, that match workers to customers with a need to have a specific task performed (see, for example, Abraham, Haltiwanger, Sandusky and Spletzer 2018a, 2018b; Farrell, Greig and Hamoudi 2018; and Collins et al. 2019). The gig economy often is seen as the province of younger workers, but relatively little is known about the participation of older workers in this sort of work, including work mediated through mobile apps and online platforms. At least in principle, gig employment could be particularly attractive to older workers who do not require employer-provided health insurance or other employee benefits and who may place a particularly high value on flexibility in their hours of work.

RECENT TRENDS IN SELF-EMPLOYMENT AT OLDER AGES

As a first step in exploring the role of self-employment at older ages, we have tabulated data on self-employment rates from the Current Population Survey (CPS), the source of official U.S. labor force statistics, and the Health and Retirement Study (HRS). The CPS measures are annual averages from the monthly CPS; self-employment refers to the person's main job. The HRS numbers are calculated using information on whether the respondent is currently working

for pay and, if so, whether the main job is self-employment as opposed to working for someone else.¹

Table 1 shows estimates of self-employment on a main job as a share of the population by age. As can be seen in the left-hand panel of the table, reflecting the drop off in labor force attachment at older ages, overall self-employment relative to population falls sharply with age. For instance, in CPS data for 1998, the overall self-employment population share falls from 12.1 percent among 50- to 54 year-olds to 2.8 percent among 75- to 79-year-olds. The CPS data also allow us to separate self-employment into incorporated businesses and unincorporated arrangements, the latter including unincorporated sole proprietors and partners, as well as independent contractors, freelancers, and consultants. Unincorporated self-employment is more common at every age. The two types of self-employment display a similar negative age gradient.

Among adults in their 50s and early 60s, the self-employed share of the population appears to have fallen somewhat over the past two decades. Above the traditional age of retirement, however, the trend appears if anything to have been slightly upwards. These patterns hold both in the CPS and in the HRS (see also Appendix Figure 1A, which graphs data on the self-employed share of the population for all available years starting with 1998).

As also shown in the left-hand panel of the table, overall self-employment in the HRS is somewhat higher than overall self-employment in the CPS. The proportional difference between the two measures is larger at older ages. One possible explanation for this divergence is that, compared to the CPS, the HRS is better at capturing casual or low-hours work. In the right hand panel of Table 1, we narrow our focus to full-time self-employed workers, defined as those who

¹ It is possible to measure self-employment on a secondary job in both surveys, although, in the CPS, information on the characteristics of second jobs is collected only for the outgoing rotation groups. We focus mainly on self-employment as the primary work activity, but plan to incorporate information on secondary self-employment in the next draft of the paper.

are working at least 30 hours per week (across all jobs). The full-time self-employed share of the population in the CPS generally is not too different from the overall self-employed share; consistent with the overall HRS numbers including more low-hours work, those differences are somewhat larger in the HRS. As a result, the full-time self-employment shares look more similar in the two data sources than do the overall self-employment shares(see also Appendix Figure 1B).

In much of what follows, we focus on older working adults. In addition to looking at self-employment as a share of the population, therefore, we also examine the self-employment rate, defined as the share of workers who are self-employed on their main job. Table 2 shows, for selected years, the share of workers, by age group, who report self-employment on their main job (Appendix Figure 2A presents these rates graphically for all available years since 1998). The left panel reveals a sharp positive age gradient: Conditional on working, the self-employment rate rises rapidly with age, both in the CPS and in the HRS. In 1998, for example, 15.2 percent of workers in the CPS age 50–54 report being self-employed, but this share reaches 27.1 percent for 65- to 69-year-olds and 39.4 percent among 75- to 79-year-old workers. Unincorporated arrangements are more common among older self-employed workers and drive much of the overall age gradient. The positive gradient for total self-employment is even more pronounced in the HRS; the self-employment rate is slightly higher in the HRS than in the CPS at younger ages but grows even faster with age.²

In the CPS, self-employment rates among older workers fell by roughly one-quarter to one-third between 1998 and 2018. This decrease is concentrated in unincorporated self-employment, with incorporated rates changing relatively little. Interestingly, the decline over

² As noted below, employment rates are higher in both the HRS and Gallup than in the CPS, especially at older ages. The differences are largely driven by the self-employment margin.

time in self-employment in the HRS is substantially smaller, especially among those age 65 or older. As a result, the discrepancy between self-employment rates at older ages between the CPS and the HRS has grown over time.

The figures on the self-employed share of the population already examined suggest that the HRS better captures casual or low-hours work. In the right panel of Table 2, we examine self-employment rates among those working at least 30 hours per week (across all jobs). While the self-employment rates in the CPS among these “full-time” workers are similar to the rates at the same ages among all workers, for individuals in their 50s and 60s, the self-employment rates for full-time workers in the HRS are slightly lower than the self-employment rates for all workers. Consequently (and as can be seen more clearly in Appendix Figure 2B), self-employment rates among full-time workers agree quite closely between the two surveys up to age 65, though there remains a gap for workers in their 70s.

Part of the reason for interest in self-employment at older ages is that self-employment may facilitate reductions in hours as part of the process of retirement. One question of interest is whether older workers approaching retirement in fact would like to reduce their hours. Table 3 summarizes the responses to a question asked on the HRS about older workers’ plans for retirement. For the purpose of these tabulations, we have restricted our sample to adults age 55 to 79 who were working at least 20 hours per week and 1,000 hours per year at the time of the HRS interview. Each of these individuals was asked the following question:

Now I want to ask about your retirement plans. Do you plan to stop working altogether or reduce hours at a particular date or age, have you not given it much thought, or what?

Responses were coded as planned to reduce hours, change type of work, stop work altogether, never stop work, haven’t given it much thought or something else. Multiple response were allowed, but few people gave more than one answer. If a person indicated a plan to make a

change, they were asked when they planned to make the change. In Table 3, we have tabulated the prevalence of changes planned within the next two years, that is, plans that if realized should have occurred by the time of the following HRS interview.³ The tabulations are weighted so that the responses should represent all workers age 55 to 79.

As can be seen in the table, a substantial share of HRS respondents reported that they planned to reduce their hours of work within the next two years. Interestingly, this share rose substantially between 1998 and 2014, from about 17 percent in 1998 to about 27 percent in 2014. The share of self-employed workers saying that they plan to reduce their hours is consistently larger than the corresponding share of wage and salary workers; the share of the self-employed saying that they plan to stop work entirely consistently is much smaller.

Table 4 reports, for the same group of workers, what these individuals actually were doing when interviewed again two years later. Workers who initially were self-employed are about twice as likely to have reduced their hours as workers who initially were working in a wage and salary job. In contrast to the increase in plans to keep working but reduce hours, however, there has been no upward trend in the share of workers in our sample actually reducing their hours between HRS waves.

These tabulations do not hold constant other factors that might affect both plans and outcomes. The regressions presented in Table 5 focus on plans to reduce hours and realizing a reduction in hours. The dependent variable in column (1) is a dummy variable for planning to reduce hours over the next two years; the dependent variable in columns (2), (3) and (4) is a dummy variable for reducing hours by eight hours per week or more between HRS interview waves.

³ Most of those planning to make a change expected to do so within the next two years.

The coefficients in column (1) show that those with some college or a college degree are more likely than others to plan to reduce their hours, as are those with incomes in the top quartile of household incomes. Holding other characteristics constant, the self-employed are about 7 percentage points more likely than those who are employees to say they plan to reduce their hours. Consistent with the tabulations in Table 3, even after controlling for other factors, there has been a pronounced increase over time in the prevalence of plans to reduce hours of work.

The model in column (2) examines the probability of reducing hours between survey waves. The probability of reducing hours is higher for those with some college or a college degree. Being self-employed has a large and statistically significant effect on the probability of reducing hours.. In contrast to the changes over time captured by the wave dummies in the column (1) regression, however, there is no evidence in column (2) that more people today are reducing their hours as they approach retirement than was the case two decades earlier.

The model in column (3) adds a dummy variable for having a plan to reduce one's hours. If plans were precisely measured and everyone who planned to reduce their hours did so, the coefficient on that variable should be 1.0 and nothing else in the model should matter. This clearly is not the case; having a plan to reduce one's hours has a positive and statistically significant coefficient, but it is relatively small in magnitude; having such plans raises the likelihood of actually reducing hours over the next two years by only about 4.4 percentage points on average.

In column (4), we add an interaction between the self-employment dummy and having a plan to reduce hours. Perhaps surprisingly, taking into account both the coefficient on the dummy for having a plan to reduce hours and the interaction coefficient, having a plan to reduce hours has no effect on the likelihood that a self-employed worker will reduce their working time.

For a wage and salary worker, having a plan increases the likelihood of actually reducing hours by about six percentage points. It may be, however, that planning simply is more necessary for wage and salary workers who want to make this sort of change.

GALLUP CONTRACT WORK MODULE

In order to learn more about self-employment among older Americans, we have collected new data on self-employment at older ages on a module fielded as part of the Gallup Education Consumer Pulse Survey, a large, nationally representative telephone survey. The target population for the Gallup Education Consumer Pulse survey is adults age 18 to 64, but during the periods that our survey module was in the field, Gallup also administered the employment and core demographic questions to individuals ages 65 to 80.

Similar to the Current Population Survey (CPS), the Gallup Education Consumer Pulse Survey collects employment information for a specified week (the seven days preceding the interview). It includes a standard battery of questions on respondents' employment status used in other Gallup surveys. This battery begins by asking respondents if they do any work for an employer. If the respondent answers in the affirmative, she is asked the number of hours per week usually worked for an employer (across all employers if more than one). Each respondent then is asked about self-employment work activities and, if applicable, usual hours worked per week in self-employment.

Our Contract Work module consists of 14 questions that were interspersed, as appropriate, among the standard employment questions in the Gallup survey. We randomly varied the wording for selected questions in order to test how alternative phrasings affected responses; Abraham, Hershbein and Houseman (2019) discusses the process of developing the survey questionnaire and our findings

with regard to the effects of question wording. In most cases, the responses to the two question versions we tested were similar and the estimates reported here are based on the pooled responses.

Based on cognitive interviews carried out while developing the survey, we were concerned that some of those classified as employees based on the standard Gallup question about work for an employer might in fact be contract workers. That question reads as follows:

Thinking about your WORK SITUATION over the past 7 days, have you been employed by an employer—even minimally like for an hour or more—from whom you receive money or goods? (This could be for one or more employers.)

A person doing work for a company on contract basis—for example, an IT worker, engineer, construction worker, or maintenance worker—might reasonably answer “yes” to that question. To learn whether miscoding of workers as employees is a significant problem in the Gallup survey, we randomly assigned those who gave an affirmative answer to the preceding question to one of two follow-up questions that probed regarding their employment arrangements. The first variant asked, “Were you an employee on this job or were you an independent contractor, independent consultant, or freelance worker?” The second variant asked, “Did this employer take any taxes out of your pay?” Those reporting that they had more than one employer were asked similar questions that provided the option to indicate a mix of arrangements across jobs. The employment questions were followed by questions about hours of work and, in the case of those reporting more than one employer who were identified as miscategorized on at least one job, a question about whether the majority of their hours were on a job or jobs in which they were miscategorized.

The standard Gallup question about self-employment asks:

Again, thinking about the last 7 days, were you self-employed, even minimally like for an hour or more? This means working for yourself, freelancing, or doing contract work, OR working for your own or your family’s business.

Self-employment also includes fishing, doing farm work, or raising livestock for either your own or your family's ranch.

Given the emphasis on reporting work of as little as an hour during the reference week and the explicit mention of freelance and contract work, this question likely does a better job of capturing self-employment work than, for example, the standard CPS employment questions.

The Gallup survey normally asks the self-employment question only of respondents who do not report being employed by an employer or report being employed by an employer for fewer than 30 hours per week. Because we want to see how individuals combine employee and self-employment work, we asked this question of *all* respondents included in our module sample.

In addition to asking the standard Gallup self-employment question, we also asked those reporting self-employment activity whether any of that work was done as an independent contractor, independent consultant or freelance worker. This allowed us to distinguish those workers from other self-employed workers.

Given the structure of the Gallup questions, there is a risk that those who report being employed by an employer but with further probing indicate that they are not employees subsequently may report this work in response to the self-employment question. To avoid double counting, we asked the relevant respondents the following question: "Just to check, was all or was some of the self-employment work you did in the last 7 days work you already told me about, or not?" For those answering that they had reported some of the work in response to an earlier question, we asked about the hours worked in the additional self-employment: "Excluding the work you already told me about, in a typical week (7 days), how many additional hours do you work as a self-employed individual?"

After asking both about work for an employer and about self-employment, including questions about the hours devoted to each type of work, in order to ensure that we had not missed anything, we asked all respondents:

Did you do anything else in the last 7 days that you have not already mentioned for which you received (or expect to receive) payment?

In a second variant, we asked the same question, but augmented it with specific examples:

Examples might include babysitting or eldercare, cleaning, maintenance work, data entry tasks, driving for a car service, or making and selling handcrafts.

Findings in the survey methodology literature suggest that adding examples to questions encourages more accurate reporting, possibly because the examples clarify for respondents what they should be reporting or because the examples remind them of things they might otherwise have forgotten (see, e.g., Tourangeau et al. 2014). If respondents reported doing additional work for pay, they were asked the number of hours that they spent on such activities in a typical week.

The last general questions about work activity on the survey module pertained to work obtained through a mobile app or online platform. Recent research has found that a small but rapidly growing number of people are obtaining work through such online intermediaries. Online intermediaries include mobile apps and websites such as Uber, Lyft, TaskRabbit, and Upwork. The increased use of online intermediaries could explain at least some of the recent rise in contractor work captured in tax data (Abraham, Haltiwanger, Sandusky and Spletzer 2018a, 2018b, Collins et al. 2019). The basic question intended to identify such activity in the Gallup survey was:

For any of the work you did in the past 7 days, did you connect directly with new customers or clients through a mobile app or online platform?

Half of the eligible working population was randomly assigned to receive a version of the question that also included the following examples, which were intended to further clarify for respondents the type of work the question intended to capture:

For example, you might have given rides to people using a ridesharing app; used an app to find people looking for cleaning, delivery or handyman services; or used an online platform where people can bid on data entry or other tasks.⁴

In our examination of the data following the first two waves of fielding, we noticed that positive responses to this question were much higher than we had expected. To reduce possible confusion and in view of problems experienced with the CWS questions on online intermediary use (Bureau of Labor Statistics 2018), for the third and fourth waves of the Gallup survey we added a question for respondents who answered affirmatively to either version of the question described above:

Did the customers pay you directly, or did they pay the mobile app or online platform which then pays you?

We have constructed two measures of mobile app or platform work, one that counts everyone who answered yes to the first question as participating in such work and a second, available only for the last two survey waves, that counts only those who among that group who also said they were paid through the mobile app or online platform.

All of the questions just described, together with some additional questions designed to identify individuals whose employers contracted their services out to other companies, were asked of all respondents age 18 and older. One of our central objectives in carrying out the Gallup survey was to provide a more comprehensive picture of independent contract work at older ages. Workers age 50 and older identified as independent contractors—both those who

⁴ Unlike the 2017 CWS, we did not attempt to distinguish between whether work *obtained* through an online intermediary was *performed* online or in-person.

originally reported themselves as employees and those reporting themselves as self-employed who also said at least some of that work was done as an independent contractor, independent consultant or freelance worker—were asked additional questions to learn more about their independent contractor work. First, all independent contractors were asked one of two versions of a question to determine whether that work was being done for a business or organization where the person had previously been an employee. Second, we asked about the person’s main reason for doing independent contractor work. Possible reasons were doing such work as a main source of income, as a supplement to retirement income, as a supplement to income from another job, because it was the only type of work the person could get, to stay active and connect with others, or to pursue an interest of a hobby.

Gallup administered the Contract Work module in four waves spread evenly across a year. The first wave was administered from mid-May through mid-June 2018, the second wave from mid-August through mid-September 2018, the third wave from mid-November through mid-December 2018, and the fourth and final wave from late February through late March 2019. The survey response rates varied from about 8 percent to about 10 percent, depending on the wave.⁵ Altogether, Gallup collected approximately 500 completed responses per day, about 15,000 interviews in each wave, and about 61,000 respondents in total.

The core Gallup survey also collects detailed demographic information (including age, gender, race, ethnicity and education) and data on the respondent’s annual income.⁶ Gallup

⁵ Because it was fielded on a survey that involved continuous interviewing throughout the year, it is not possible to calculate a precise response rate for the Contract Work module. The reported response rates were computed by isolating the days on which the module was in the field and calculating a response rate for those days. Sample records that were first dialed on days prior to when a new Contract Work Module wave started, or that were first dialed during the Contract Work field period but not fully resolved until after it finished, are not included in the computations.

⁶ Because the item non-response rate was high for income, we do not use this variable in the analysis presented below.

created and supplied us with survey weights constructed to allow us to match the demographic characteristics of the adult population in the relevant age range, as recorded in the most recent Annual Social and Economic Supplement to the CPS. We use the survey weights for all tabulations reported based on the Gallup data, but not in the reported regression results.

FINDINGS FROM THE GALLUP SURVEY MODULE

As just discussed, the Gallup survey module was designed to capture all work activities done by respondents during the preceding 7 days and to provide more detail on various types of self-employment than is found in the CPS or HRS. We are able to identify not only self-employed people who report themselves as such but also people who reported themselves as employees but indicated when probed that they in fact were self-employed as well as people doing other work that they did not think to report in response to the standard Gallup employment questions. In addition, among the self-employed, we are able to distinguish independent contractors, independent consultants and freelancers from other self-employed individuals. We also ask separately about work obtained through a mobile app or online platform.

Who Works in Self-Employment Arrangements

Table 6 provides a summary of various work activities among Gallup respondents by age group. The first column shows the percent who engaged in any work activity (including work for an employer, in self-employment, or informal work) during the preceding week. The tabulations are weighted to be representative of the population. As expected, the share working rises initially with age, is stable during the prime age years of 30 to 49, and then falls off sharply. In our Gallup sample, 26.0 percent of respondents age 70 to 74 and 18.6 percent of respondents

age 75 to 79 did some work for pay in the preceding week. This compares to about 20 percent and 12 percent, respectively, in the CPS (in 2018) and about 23 percent and 14 percent, respectively, in the HRS.⁷

In the remainder of the table, shares are reported as a percent of those with any work activity in the preceding week. The next set of columns shows the distribution of employment by main job or work activity, which is determined by hours worked. The percentages reported for the five categories sum to 100 percent. Consistent with findings from the CPS and HRS, conditional on being employed, the share whose main job is as a wage and salary employee falls sharply with age, especially after age 65. The share who are employees hovers around 80 percent for those from 18 through 49; it drops to between 70 and 78 percent for those age 50 to 64, and then to 54.5 percent, 40.3 percent and 32.5 percent for those 65 to 69, 70 to 74, and 75 to 79, respectively. These numbers imply substantially higher self-employment shares for older workers in their main employment arrangement than in the CPS data we examined earlier and also, albeit to a somewhat lesser extent, than in the data from the HRS. This likely is because the Gallup survey is picking up more low-hours and informal work⁸

The employment arrangements shown in the next four columns are different types of self-employment. These breakouts provide a more detailed picture than the data from other sources of the variety of self-employment arrangements under which work occurs. The share of workers in each type of self-employment arrangement rises with age. Those who reported working for an employer and, with further probing, indicated that they were independent contractors are disproportionately either under age 30 or age 65 and older. Between the ages of 30 and 64,

⁷ The HRS numbers refer to 2016, the most recent year for which data are available.

⁸ Consistent with the speculation, Abraham, Haltiwanger, Hou, Sandusky and Spletzer (2018) find higher self-employment rates among individuals with labor income in tax data than in the Annual Social and Economic Supplement to the CPS, with the gap between the two highest for workers age 65 and older.

independent contractors who are miscoded as employees make up an estimated 5 to 6 percent of the employed. That share rises to about 9 percent for those who are age 65 to 75 and 11 percent for those age 75 to 79. The share of respondents who reported being self-employed—both those who regard themselves as an independent contractor, independent consultant, or freelancer and those who do not—also rises steadily with age. Among the employed, the share reporting that they are self-employed but not an independent contractor is 25.7 percent among those age 70 to 74 and 29.1 percent among those age 75 to 79. The share reporting themselves as a self-employed independent contractor is over 21 percent both for those age 70 to 74 and for those age 75 to 79. Very few workers age 30 to 64—under one percent—report that their only employment is other informal activities. Perhaps not surprisingly, starting at the traditional retirement age of 65, that share begins to rise, to 1.9 percent, 3.6 percent and 5.8 percent for those in age groups 65 to 69, 70 to 74 and 75 to 79, respectively.

The next two panels display the share of workers who are part-time, defined as less than 30 hours in the preceding week, and the share with multiple jobs. Respondents are counted as having multiple jobs if they report having more than one employer, combining work for an employer with self-employment, or combining work for an employer or self-employment with informal work activities. As expected, the share working part-time rises with age, particularly after age 64. Multiple job holding declines with age, but is high in our Gallup survey, even among older workers. While the high rates of multiple job holding may partly reflect unobserved differences between those who respond to the Gallup and other surveys such as the CPS, it is likely that some of the difference is attributable to the Gallup question wording, which encourages people to report even small amounts of work activity in the week. Over 12 percent of

those still working in their 60s and over 11 percent of those still working in their 70s, both sizable shares, report combining work for employers with self-employment.

The growth of online platforms and mobile apps such as Uber, Lyft, and Upwork has garnered much attention in recent years. Some have speculated that these platforms may help older individuals connect with employment and remain in the workforce longer. The final set of columns in Table 6 pertain to the share of workers obtaining work through online platforms or mobile apps. In all waves, individuals who reported one of the four types of self-employment activities as a main job or secondary work activity were asked whether they connected directly with new customers or clients through a mobile app or online platform. Those who answered “yes” to this question were coded as having platform work under the broad definition reported in the second-to-last column of Table 6. The incidence of this work was higher than expected, and we were concerned that the question as written might be picking up activities other than those we intended. For example, someone who used an online appointment scheduler or even someone who scheduled appointments with clients via email might have answered yes to this question. For this reason, in the last two waves of the Gallup module, those who replied yes to this initial question also were asked if they received payment for their work through the platform or mobile app. Those who indicated that they received payments in this way were coded as having platform or mobile app work under the narrow definition.

Under the broad definition, the share with platform work initially falls with age and then begins to rise after age 60; conditional on working, a striking 13.5 percent of those age 75 to 79 said they obtained work through mobile apps or platforms. Under the narrow definition, which corresponds more closely to the definition used in the 2017 Contingent Worker Supplement to the CPS, the share in platform work is much lower. Among workers age 60 to 79, the share

ranges from 1.6 to 2.6 percent. These figures still suggest considerable engagement in online platform work among older workers. The extraordinarily high rates among older workers under the broad definition may suggest that many are using the internet to obtain clients or schedule work for clients, even if a platform company is not intermediating the work.

In the next several tables, we report results from linear probability models that explore the correlates of working for pay and of working in various employment arrangements. Table 7 reports models in which the dependent variable is defined as working in various self-employment arrangements. The control variables include indicators for age groups (omitted age group is 45-49), for education level (omitted group is high school or less), and for the interaction of two age ranges—50 to 64 years and 65 to 79 years—with education. All models also include controls for race, gender and wave.

In left-hand panel of Table 7, the sample for the regression models is all respondents. In the first column of that panel, the dependent variable is having any work for pay in the prior week. The coefficients on age group dummy variables follow the expected pattern, rising at first and then falling with age. More educated workers are more likely to have employment. The coefficient estimates on the interaction between the education groups and age group 50 to 64 are positive and statistically significant, indicating that the association between education and employment is stronger among this group. In contrast, the interactions between education and age 65 to 79 are negative, indicating a weaker relationship between education and employment for this older group.

In the next four columns, the dependent variable is an indicator of whether a worker's main job is in a specified self-employment or independent contractor arrangement—any type of self-employment; reported being self-employed as an independent contractor; reported being

employed by an employer but, on probing, identified as an independent contractor (miscoded employee); and independent contractor (both types). In all four regressions, holding other factors constant, the likelihood of being in a self-employment/independent contractor arrangement first rises and then falls with age. The coefficients on the education variables generally are not significant. The the coefficient estimates for the interaction of older ages (age 50 to 64 and age 65 to 79) with college and graduate education levels, however, are large, positive, and statistically significant. Taken together, these estimates imply no strong relationship at younger ages between education and being in a self-employment arrangement, but a strong positive relationship at older ages.

The next panel repeats the four models predicting working in various self-employment arrangements as a main job but restricts the sample to those who are employed. Conditional on employment, the coefficient estimates for the four oldest age categories are now positive and significant in several of the models, while the coefficients on higher education dummy variables are often negative and statistically significant. The coefficients on the interaction of age 50 to 64 with a college degree are positive and statistically significant in two of the models (the models for independent contractor, miscoded employee and for all independent contractors). The coefficient on the interaction of age 50 to 64 with having a graduate degree is significant in three of the models (the models for self-employed, self-employed independent contractor and all independent contractors). For workers age 65 to 79 the relationship between education and working in a self-employment arrangement is stronger. For this oldest age group, the interaction with having some college is positive and significant in three models; the interactions with having a college education or having a graduate degree are large, positive and statistically significant for all of the different measures of working in self-employment/ independent contractor

arrangements. Together, these results indicate that older workers with higher education levels are considerably more likely to be in self-employment arrangements compared to less-educated older workers.

The first column of Table 8 reports the results from a linear probability model in which the dependent variable indicates having informal work, not previously mentioned, in the prior seven days. The sample is all respondents. In addition to the control variables included in the models reported in the previous table, we also include controls for type of employment arrangement or reporting no work activity during the previous week; the omitted category is employees. The coefficient estimates on the age group dummy variables display a negative relationship between having informal work and age. Except for a small negative coefficient on the variable indicating a college education, none of the education variables is significant. The coefficients on the interaction of the dummy variables for the older age groups (50 to 64 and 65 to 79) with having a college education and having a graduate degree, however, are large, positive and statistically significant, indicating that older, more educated individuals are significantly more likely to have informal work relative to less educated older individuals. Interestingly, there is a strong positive association between employment arrangement and having informal work. Those whose main job is in a self-employment or independent contractor arrangement are 3 to 6 percentage points more likely than those who are employees to report informal work in the prior week. These findings suggest that many of the self-employed engage in multiple work activities to earn money. Compared to employees, those who did not report working for an employer or being self-employed are a half a percentage point more likely to report informal work.

In the remaining columns of Table 8, we examine the factors associated with platform work, using both the broad and narrow definitions. The sample in the first panel is all

respondents, while the sample in the second panel is restricted to those with some work activity in the preceding week. In the first panel, under both the broad and the narrow definition, age is negatively related to platform work, reflecting lower overall employment rates among older workers, while education is positively associated with platform work. For the broad definition, the interactions of older age groups with a college education and with more than a college education also are positive and statistically significant. The linear probability models in the second panel show that, conditional on working, there is no significant association between age and platform work. The more highly educated are significantly more likely to hold platform jobs under either definition; the interaction between the older age and highly educated dummy variables are positive and significant only for the broad definition. Apart from education, among the most robust correlates of platform work is being black. Among all respondents, blacks are significantly more likely than whites to report having platform work under the narrow definition; conditional on having work, blacks are significantly more likely than whites to report platform work under both the broad and the narrow definitions.

Why Older Workers are in Independent Contractor Arrangements

As noted earlier, there are two paths through which respondents to the Gallup module may indicate that they are independent contractors. First, they may report working for an employer, but with further probing indicate that they work for the employer as an independent contractor, not as an employee. Second, they may report being self-employed and indicate that they are an independent contractor, independent consultant or freelance worker. To learn more about older workers in independent contractor arrangements, we asked several questions of those age 50 and older who indicated through either channel that they were independent contractors.

As already discussed, all independent contractors age 50 and older were asked if they were working for a former employer and about their reasons for working as an independent contractor.

Table 9 summarizes information from these questions by age group within the 50 and older age range. The first column shows the percent of all respondents who report any work as an independent contractor, either as a main job or as a secondary work activity. That rate falls steadily with age from 14.7 percent among those age 50 to 54 years to 6.5 percent among those age 75 to 79 years. For the large majority, independent contractor work is their main job. As shown in the second column, among those with any independent contractor work, not surprisingly, the share for whom that work is in a secondary job also falls with age.

A sizable share of those with independent contractor work—between 20 and 25 percent for all age groups—report working for a former employer. In some cases, this may represent an employer seeking to shed the responsibilities that go with having an employee. In other cases, however, this may be a way to accommodate an employee’s desire for a more flexible work schedule.

The last four columns of Table 9 report, for those with an independent contractor arrangement, the reasons given for working in this arrangement. The table shows the percent who state that their main reason for working in this arrangement is to earn money. It also breaks those working as an independent contractor to earn money into the percent indicating that the income from independent contractor work is their main source of income, a supplement to income from their main job, or a supplement to their retirement income.⁹ Given policy interest in independent contractor work as a mechanism for helping older individuals meet financial

⁹ These numbers do not sum to the percent doing work as an independent contractor to earn money because, when asked to elaborate on their motivation, a small share of respondents gave answers that did not fit into one of these three categories.

needs late in life, it is striking how many of these independent contractors do not report earning income as the main reason for this work. For those age 50 to 54, about two-thirds report earning income as their main reason for independent contractor work; that share falls to under half for those age 65 to 69 and to about a third for those age 70 to 79. Instead, for these workers, connecting with others or pursuing a hobby are more important reasons for independent contractor work. As would be expected, the share who indicate that the income from independent contractor work is their main source of income or supplements income from a main job falls with age and the share indicating that income from independent contractor work supplements retirement income rises with age.

In Table 10 we use a regression framework to explore the factors associated with working for a former employer as an independent contractor and working as an independent contractor to earn income. The sample includes those age 50 and older reporting independent contractor work. Perhaps not surprisingly, independent contractors who initially reported working for an employer (and so were miscoded as employees) are about 15 percentage points more likely than those who reported being self-employed to work for a former employer. Miscoded employees also are significantly more likely (6 percentage points) to report earning income as their main reason for being in an independent contractor arrangement. As suggested in the tabulations in the prior table, conditional on having independent contractor work, there is no association between age and working for a prior employer and the probability of reporting that earning income is the main reason for this work declines with age. Conditional on being an independent contractor, Blacks and Hispanics are more likely than whites to work for a former employer while, compared to whites, those in all other racial groups are significantly less likely to report working as an independent contractor primarily to earn money. Women are also less likely to work for a

former employer and work as an independent contractor to earn money. Interestingly, there is no apparent association between education and the probability of working for a former employer or working as an independent contractor to earn money.

DISCUSSION

In this paper, we have presented new evidence on the role of self-employment among older workers using data from a module fielded as a supplement to the Gallup Education Consumer Pulse Survey. As in other data sources such as the CPS and HRS, the Gallup data show that, among the employed, self-employment rates sharply rise with age. The share of older workers identified as self-employed on their main job, however, is considerably higher in the Gallup data than in either the CPS or the HRS. While it is possible that the respondents to the Gallup survey are unrepresentative of the population in unobserved ways such that they are more likely to be self-employed, there are at least two valid reasons for the higher self-employment rates found in the Gallup module. First, our data suggest that a sizable share of workers, including older workers, are working as independent contractors but are miscoded as employees. Second, the questions in the Gallup module are designed to capture low-hours work that may be missed in other surveys such as the CPS and HRS. To the extent that standard surveys are miscoding independent contractors as wage and salary workers or are missing some low-hours work, the prevalence of and trends in self-employment rates that they capture could be misleading.

The Gallup data also provide important detail on the types of self-employment arrangements that workers hold. Even without accounting for independent contractors who are miscoded as employees, they indicate that independent contractor work is as prevalent as other

types of self-employment work; taking miscoded employees into account, they indicate that independent contractor work is considerably more prevalent than other types of self-employment work. An important path into work as an independent contractor is through a former employer: About a quarter of independent contractors age 50 and older report that their client is a former employer. Whether the implied change in employment arrangement from employee to independent contractor is driven primarily by employers or by workers' desire for greater flexibility warrants further exploration. Particularly among those age 65 and older, a significant minority (2 to 6 percent of these older workers) reports informal work as their only form of employment. Informal work tends to be associated with low and sporadic hours and so is especially apt to be missed in other surveys.

Consistent with other data sources, the Gallup data indicate that rates of online platform usage currently are low. They also suggest, however, that this is another avenue to independent contractor work for at least some older Americans. The relatively high share of older workers captured under the broad definition of platform work used in our Gallup survey suggests that older workers make considerable use of the internet. Although the incidence of employment obtained through platforms that intermediate work is lower among older workers than among younger workers, this channel of employment for older Americans is likely to grow and will be important to monitor going forward.

The data from the Gallup module show not only the variety of employment arrangements that individuals hold in their main job, but also how individuals combine different work activities to earn income. Multiple job holding rates fall with age, but nonetheless remain quite high among workers age 50 and older (between 15 and 20 percent). The high rate of multiple job holding in the Gallup data likely reflects, at least in part, the survey's ability to capture all types

of work activity, including activities that involve very low work hours. A majority of multiple job holders combine wage and salary work with various forms of self-employment work, a phenomenon that we will further explore in future work.

Among the most robust findings in the paper is the high positive association at older ages between education and self-employment work, including all types of independent contractor work and informal work. Although the share of Gallup respondents who report working as an independent contractor primarily to earn income falls with age, for a sizable minority (a third among those age 75 to 79 and just under half among those 65 to 69) earning money remains the primary driver for this type of work. To the degree that Americans need to work later in life for financial reasons, any impediments to independent contractor work faced by the less educated warrants study.

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Table 1: Percent of Population Working and Self-Employed on Main Job by Age Group, CPS and HRS, 1998, 2008, 2016 and 2018

Year	Age group	Percent of Population, Main Job Self-Employed				Percent of Population, Main Job Self-Employed and Usual Hours 30-Plus			
		CPS (any)	CPS (unincorporated)	CPS (incorporated)	HRS	CPS (any)	CPS (unincorporated)	CPS (incorporated)	HRS
1998									
	50-54	12.1	8.2	3.9	NA	10.4	6.8	3.6	NA
	55-59	12.2	8.1	4.1	13.9	9.9	6.3	3.6	10.4
	60-64	10.0	7.0	3.0	11.5	7.2	4.8	2.5	7.6
	65-69	6.3	4.6	1.7	9.0	3.6	2.4	1.1	4.6
	70-74	4.1	3.2	0.9	7.2	2.0	1.4	0.6	3.4
	75-79	2.8	2.2	0.6	5.0	1.4	1.0	0.4	1.7
2008									
	50-54	11.3	6.9	4.3	NA	9.5	5.5	4.0	NA
	55-59	10.9	7.0	3.9	12.7	8.8	5.4	3.4	9.6
	60-64	9.7	6.1	3.6	12.6	7.4	4.3	3.1	8.2
	65-69	7.0	4.6	2.4	11.9	4.5	2.7	1.8	5.7
	70-74	4.9	3.4	1.4	7.9	2.8	1.8	1.0	3.5
	75-79	3.0	2.1	0.9	5.0	1.4	0.8	0.5	2.0
2016									
	50-54	9.6	5.7	4.0	NA	8.0	4.4	3.6	NA
	55-59	9.9	6.0	3.9	11.3	8.1	4.6	3.5	8.7
	60-64	8.7	5.4	3.3	12.3	6.6	3.8	2.8	8.2
	65-69	7.1	4.6	2.5	10.5	4.5	2.6	1.9	5.5
	70-74	5.4	3.7	1.7	9.2	3.0	1.9	1.1	3.1
	75-79	3.7	2.5	1.2	6.3	2.0	1.2	0.7	2.5
2018									
	50-54	9.2	5.9	3.3	NA	7.6	4.6	3.0	NA
	55-59	9.6	5.6	4.0	NA	7.7	4.2	3.5	NA
	60-64	8.5	5.1	3.4	NA	6.4	3.6	2.8	NA
	65-69	7.0	4.5	2.5	NA	4.4	2.6	1.9	NA
	70-74	5.6	3.5	2.1	NA	3.1	1.8	1.3	NA
	75-79	3.5	2.4	1.1	NA	1.8	1.2	0.6	NA

Table 2: Percent of Workers Self-Employed on Main Job by Age Group, CPS and HRS, 1998, 2008, 2016 and 2018

Year	Age group	Percent of All Workers, Main Job Self-Employed				Percent of Workers with Usual Hours 30-Plus, Main Job Self-Employed			
		CPS (any)	CPS (unincorporated)	CPS (incorporated)	HRS	CPS (any)	CPS (unincorporated)	CPS (incorporated)	HRS
1998	50-54	15.2	10.3	4.9	NA	14.5	9.5	5.0	NA
	55-59	17.6	11.6	6.0	19.5	16.3	10.3	6.0	17.0
	60-64	21.2	14.8	6.4	23.2	19.6	12.9	6.7	20.7
	65-69	27.1	19.9	7.2	31.6	27.9	19.1	8.7	31.0
	70-74	31.6	24.5	7.1	41.6	34.2	23.4	10.8	44.6
	75-79	39.4	30.6	8.7	46.2	44.3	32.4	11.9	53.1
2008	50-54	14.2	8.7	5.5	NA	13.3	7.7	5.6	NA
	55-59	15.0	9.6	5.5	17.8	13.9	8.4	5.4	15.2
	60-64	18.0	11.2	6.8	22.6	16.7	9.7	7.0	18.6
	65-69	23.0	14.8	8.1	32.0	22.2	13.2	9.0	26.6
	70-74	26.7	18.8	7.9	35.0	26.8	17.1	9.7	32.0
	75-79	28.3	19.4	8.8	39.2	27.4	16.9	10.4	43.3
2016	50-54	12.3	7.1	5.2	NA	11.5	6.3	5.2	NA
	55-59	13.8	8.3	5.6	15.5	12.9	7.3	5.6	13.6
	60-64	15.7	9.7	5.9	21.0	14.2	8.2	6.0	17.7
	65-69	21.8	13.9	7.9	29.2	20.2	11.6	8.6	24.0
	70-74	27.9	19.2	8.7	41.0	26.9	16.9	10.0	33.0
	75-79	29.8	19.8	10.0	43.5	28.7	18.1	10.6	41.1
2018	50-54	11.6	7.4	4.3	NA	10.7	6.5	4.2	NA
	55-59	13.3	7.6	5.7	NA	12.0	6.6	5.5	NA
	60-64	14.9	8.9	5.9	NA	13.3	7.5	5.8	NA
	65-69	20.9	13.3	7.6	NA	18.6	10.8	7.8	NA
	70-74	28.2	17.7	10.5	NA	25.8	14.9	10.9	NA
	75-79	28.5	19.2	9.3	NA	27.5	18.0	9.4	NA

Table 3: Short-Term Plans for Retirement among Employed HRS Respondents Age 55-79

Employment arrangement and year	Sample size (unwtd)	Percent with specified plans for period up to and including two years from current age or year					Other	Total
		Reduce hours	Change type of work	Stop work altogether	Never stop work	Not given much thought		
<u>All</u>								
1998	3,932	16.8	1.9	21.2	10.6	39.4	10.2	100
2000	3,543	17.3	2.1	20.6	10.9	38.1	11.0	100
2002	3,305	19.9	2.6	20.5	8.8	39.7	8.5	100
2004	3,217	22.4	2.0	18.7	8.8	40.0	8.0	100
2006	3,257	21.0	2.1	20.9	9.3	39.5	7.3	100
2008	3,327	24.4	1.9	20.7	7.2	41.4	4.5	100
2010	3,796	26.0	1.1	19.4	5.4	41.0	7.0	100
2012	3,924	26.0	0.7	20.2	5.3	41.4	6.4	100
2014	3,783	27.0	0.4	21.9	3.7	39.2	7.8	100
All years	32,084	23.1	1.5	20.5	7.3	40.1	7.6	100
<u>Wage and salary</u>								
1998	3,152	15.7	2.1	25.0	9.1	37.5	10.6	100
2000	2,860	15.8	2.4	24.1	8.6	37.6	11.5	100
2002	2,643	18.0	3.1	24.4	7.5	39.1	7.9	100
2004	2,566	20.5	2.6	22.1	7.8	39.0	8.0	100
2006	2,615	20.2	2.4	23.9	7.9	38.3	7.3	100
2008	2,666	23.2	2.3	23.6	5.7	40.8	4.5	100
2010	3,099	24.6	1.2	22.4	4.8	39.8	7.2	100
2012	3,197	24.4	0.8	23.5	4.4	40.3	6.6	100
2014	3,112	25.9	0.4	25.3	3.0	37.3	8.1	100
All years	25,910	21.7	1.8	23.8	6.1	39.0	7.6	100
<u>Self-employed</u>								
1998	780	20.8	1.1	6.7	16.0	46.7	8.8	100
2000	683	23.6	0.9	6.5	20.1	40.1	8.8	100
2002	662	27.4	0.3	5.1	13.7	42.3	11.2	100
2004	651	29.9	0.0	5.2	12.9	44.0	8.0	100
2006	642	24.7	0.9	8.0	14.7	44.5	7.2	100
2008	661	29.7	0.4	8.3	13.6	43.7	4.4	100
2010	697	32.0	0.5	6.6	8.3	46.1	6.5	100
2012	727	32.7	0.1	7.0	8.8	45.8	5.6	100
2014	671	32.0	0.0	6.7	7.0	47.7	6.6	100
All years	6,174	28.7	0.4	6.8	12.2	44.8	7.2	100

Note: Sample HRS respondents age 55-79, employed, working 20 hours/week and 1000 hours/year, and interviewed again in the following wave. Other includes refusals, multiple answers, and plans for more than two years in the future. Tabulations are weighted.

Table 4: Realized Outcomes Among HRS Respondents Employed and Age 55-79 in Previous Wave

Employment arrangement and year	Sample size (unwtd)	Percent with indicated outcomes				Total
		Reduced hours	No hours reduction, but changed type of work	Stopped work	No major changes	
<u>All</u>						
2000	3,932	19.3	10.7	16.5	53.5	100
2002	3,543	20.2	16.8	20.0	43.0	100
2004	3,305	19.0	9.1	15.9	56.0	100
2006	3,217	18.3	5.4	16.8	59.6	100
2008	3,257	18.8	8.2	14.8	58.2	100
2010	3,327	17.8	4.9	21.5	55.9	100
2012	3,796	16.3	7.1	15.5	61.1	100
2014	3,924	17.5	6.5	14.1	61.9	100
2016	3,783	18.1	10.0	16.3	55.6	100
Total	32,084	18.2	8.4	16.7	56.8	100
<u>Wage and salary</u>						
2000	3,152	16.6	8.6	17.3	57.6	100
2002	2,860	17.6	16.7	21.5	44.2	100
2004	2,643	16.5	6.1	16.9	60.5	100
2006	2,566	14.7	5.8	17.2	62.4	100
2008	2,615	15.5	8.5	16.1	59.8	100
2010	2,666	15.6	4.9	21.9	57.5	100
2012	3,099	14.2	7.6	16.6	61.5	100
2014	3,197	14.4	7.2	15.3	63.2	100
2016	3,112	14.9	10.5	17.5	57.1	100
Total	25,910	15.4	8.2	17.7	58.7	100
<u>Self-employed</u>						
2000	780	29.6	18.7	13.6	38.2	100
2002	683	30.8	17.3	13.6	38.3	100
2004	662	29.3	21.1	11.8	37.8	100
2006	651	32.8	4.0	15.1	48.1	100
2008	642	32.1	7.0	9.4	51.5	100
2010	661	26.7	4.7	19.4	49.1	100
2012	697	25.3	5.0	10.7	58.9	100
2014	727	30.3	3.8	9.2	56.7	100
2016	671	32.7	7.5	10.8	49.0	100
Total	6,174	29.9	8.9	12.5	48.7	100

Note: Sample HRS respondents age 55-79, employed and working 20 hours/week and 1000 hours/year in previous wave. Reduced hours a reduction of 8 hours/week from previous wave. Changed type of work includes change in occupation, move from wage and salary to self-employed or the reverse. Tabulations are weighted.

Table 5: Probability of Plan to Reduce Hours Over Next Two Years and of Actual Hours Reduction

	Plan to reduce hours		Hours reduced	
60-64	0.021*** (0.005)	0.023*** (0.005)	0.022*** (0.005)	0.022*** (0.005)
65-69	-0.073*** (0.007)	0.029*** (0.007)	0.033*** (0.007)	0.033*** (0.007)
70-74	-0.148*** (0.009)	0.020* (0.009)	0.027** (0.009)	0.026** (0.009)
75-79	-0.173*** (0.014)	0.035** (0.013)	0.042** (0.013)	0.041** (0.013)
Less than high school	-0.006 (0.008)	0.002 (0.007)	0.003 (0.007)	0.003 (0.007)
Some college	0.029*** (0.006)	0.017** (0.006)	0.015** (0.006)	0.015** (0.006)
College or more	0.043*** (0.006)	0.036*** (0.006)	0.034*** (0.006)	0.034*** (0.006)
Male	0.034*** (0.005)	0.018*** (0.004)	0.016*** (0.004)	0.017*** (0.004)
2nd income quartile	0.010 (0.007)	-0.004 (0.006)	-0.004 (0.006)	-0.004 (0.006)
3rd income quartile	0.010 (0.007)	-0.006 (0.006)	-0.006 (0.006)	-0.006 (0.006)
4th income quartile	0.035*** (0.007)	0.010 (0.007)	0.008 (0.007)	0.009 (0.007)
Self-employed	0.068*** (0.006)	0.133*** (0.006)	0.130*** (0.006)	0.145*** (0.006)
Wave 2000/2002	-0.001 (0.009)	0.012 (0.009)	0.012 (0.009)	0.012 (0.009)

Table 5: Probability of Plan to Reduce Hours Over Next Two Years and of Actual Hours Reduction (cont'd)

	Plan to reduce hours		Hours reduced	
Wave 2002/2004	0.015 (0.010)	0.005 (0.009)	0.004 (0.009)	0.004 (0.009)
Wave 2004/2006	0.035*** (0.010)	-0.007 (0.009)	-0.009 (0.009)	-0.009 (0.009)
Wave 2006/2008	0.038*** (0.010)	-0.010 (0.009)	-0.012 (0.009)	-0.012 (0.009)
Wave 2008/2010	0.058*** (0.010)	-0.008 (0.009)	-0.011 (0.009)	-0.011 (0.009)
Wave 2010/2012	0.075*** (0.009)	-0.024** (0.009)	-0.027** (0.009)	-0.028** (0.009)
Wave 2012/2014	0.073*** (0.009)	-0.016 (0.009)	-0.020* (0.009)	-0.020* (0.009)
Wave 2014/2016	0.082*** (0.009)	-0.012 (0.009)	-0.016 (0.009)	-0.016 (0.009)
Plan to reduce hours	--	--	0.044*** (0.005)	0.058*** (0.006)
Plan to reduce hours* self-employed	--	--	--	-0.060*** (0.013)
Constant	0.139*** (0.009)	0.127*** (0.008)	0.122*** (0.008)	0.119*** (0.008)
R-sq	0.034	0.026	0.028	0.029
N	32,098	32,098	32,098	32,098

Source: Authors' tabulations, HRS.

Notes: Each column represents a separate regression with the indicated dependent variable. Sample persons age 55-79 in 1998-2014 and interviewed again two years later in 2000-2016. Standard errors in parentheses. Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

Table 6: Percent of Population with Any Work and Distribution of Employment by Job Characteristics

Age Group	Share of population with any work	Share of those with any work for pay last week									
		Employment arrangement in main job					Part-time (<30 hrs/wk)	Multiple jobs		Platform/app work	
		Employee	IC, Miscoded as employee	SE, not IC	SE, IC	Other work only		Multiple jobs	Of which, both employee and SE work	Broad definition	Narrow definition
18-30	77.9	81.2	8.3	4.5	4.6	1.4	25.0	24.7	14.8	8.2	3.8
30-34	82.6	80.7	6.0	6.0	6.4	1.0	13.4	20.6	14.3	9.1	3.7
35-39	82.2	80.4	6.0	5.5	7.2	0.8	12.8	20.9	15.5	8.4	3.0
40-44	80.7	80.3	5.7	5.7	7.7	0.6	11.6	20.0	14.1	7.9	3.7
45-49	80.4	79.9	5.2	7.3	7.1	0.5	11.9	19.4	14.0	6.9	3.0
50-54	74.8	77.6	5.4	7.8	8.9	0.4	12.3	19.5	14.8	7.7	2.1
55-59	69.1	74.8	5.8	9.5	8.9	1.0	15.8	20.1	14.7	7.4	2.7
60-64	55.8	70.4	6.0	10.6	12.1	0.9	23.6	17.8	12.7	8.0	1.6
65-69	37.1	54.5	9.0	18.2	16.4	1.9	42.8	16.4	12.7	10.0	2.6
70-74	26.0	40.3	9.1	25.7	21.3	3.6	58.0	15.8	11.4	11.8	2.1
75-79	18.6	32.5	11.4	29.1	21.2	5.8	66.0	17.6	11.2	13.5	2.0

Source: Authors' tabulations, Gallup Contract Work Module.

Notes: Shares expressed as percents. SE is self-employed; IC is independent contractor. Tabulations are weighted. Number of observations is 17,530 for last column and 59,953 for all other columns.

Table 7: Probability of Any Work, Self-Employment or Independent Contractor Arrangement in Main Job, by Age and Education

	Share of population with any employment or self-employment/independent contractor arrangement in main job					Share of employed with self-employment/independent contractor arrangement in main job			
	Any work	Self-identified as self-employed	Self-identified IC	IC, miscoded as employee	All IC	Self-identified as self-employed	Self-identified IC	IC, miscoded as employee	All IC
18-30	-0.011 (0.008)	-0.055*** (0.008)	-0.031*** (0.006)	0.030*** (0.004)	-0.003 (0.007)	-0.060*** (0.010)	-0.036*** (0.008)	0.038*** (0.006)	0.000 (0.009)
30-34	0.028** (0.010)	-0.016 (0.010)	-0.011 (0.007)	0.004 (0.005)	-0.006 (0.008)	-0.026* (0.012)	-0.016 (0.009)	0.002 (0.007)	-0.013 (0.011)
35-39	0.022* (0.010)	0.007 (0.009)	0.017* (0.007)	0.004 (0.005)	0.021** (0.008)	0.002 (0.012)	0.016 (0.009)	0.003 (0.007)	0.019 (0.010)
40-44	0.005 (0.010)	-0.007 (0.009)	0.005 (0.007)	-0.002 (0.005)	0.004 (0.008)	-0.010 (0.012)	0.005 (0.009)	-0.003 (0.007)	0.003 (0.010)
50-54	-0.095*** (0.012)	-0.033** (0.011)	-0.014 (0.008)	-0.017** (0.006)	-0.027** (0.010)	0.003 (0.016)	-0.000 (0.012)	-0.015 (0.009)	-0.010 (0.014)
55-59	-0.156*** (0.012)	-0.045*** (0.011)	-0.026** (0.008)	-0.016** (0.006)	-0.035*** (0.009)	0.013 (0.016)	-0.004 (0.012)	-0.008 (0.009)	-0.004 (0.014)
60-64	-0.297*** (0.012)	-0.069*** (0.011)	-0.027*** (0.008)	-0.026*** (0.006)	-0.049*** (0.009)	0.053*** (0.016)	0.025* (0.012)	-0.008 (0.009)	0.020 (0.014)
65-69	-0.420*** (0.011)	-0.096*** (0.011)	-0.048*** (0.008)	-0.035*** (0.006)	-0.076*** (0.009)	0.117*** (0.020)	0.007 (0.015)	-0.016 (0.012)	-0.000 (0.018)
70-74	-0.528*** (0.011)	-0.118*** (0.011)	-0.056*** (0.008)	-0.043*** (0.006)	-0.090*** (0.009)	0.236*** (0.021)	0.059*** (0.016)	-0.007 (0.012)	0.061*** (0.019)
75-79	-0.605*** (0.012)	-0.156*** (0.011)	-0.072*** (0.008)	-0.045*** (0.006)	-0.109*** (0.009)	0.296*** (0.023)	0.081*** (0.018)	0.025 (0.014)	0.109*** (0.020)
Some college	0.071*** (0.008)	0.019* (0.007)	0.017** (0.005)	-0.007 (0.004)	0.010 (0.006)	-0.001 (0.010)	0.011 (0.008)	-0.017** (0.006)	-0.005 (0.009)
College	0.158*** (0.008)	0.022** (0.008)	0.015* (0.006)	-0.011* (0.004)	0.004 (0.007)	-0.025* (0.010)	-0.004 (0.008)	-0.029*** (0.006)	-0.032*** (0.009)
College plus	0.200*** (0.010)	0.012 (0.009)	0.010 (0.007)	0.004 (0.005)	0.012 (0.008)	-0.048*** (0.012)	-0.015 (0.009)	-0.015* (0.007)	-0.030** (0.010)

Table 7: Probability of Any Work, Self-Employment or Independent Contractor Arrangement in Main Job, by Age and Education (continued)

	Share of population with any employment or self-employment/independent contractor arrangement in main job					Share of employed with self-employment/independent contractor arrangement in main job			
	Any work	Self-identified as self-employed	Self-identified IC	IC, miscoded as employee	All IC	Self-identified as self-employed	Self-identified IC	IC, miscoded as employee	All IC
50-64*Some college	0.056*** (0.011)	0.027* (0.011)	0.005 (0.008)	0.014* (0.006)	0.017 (0.009)	0.009 (0.016)	-0.003 (0.012)	0.013 (0.009)	0.007 (0.014)
50-64*College	0.072*** (0.012)	0.054*** (0.012)	0.028*** (0.008)	0.029*** (0.006)	0.055*** (0.010)	0.026 (0.017)	0.019 (0.013)	0.032** (0.010)	0.048** (0.015)
50-64*College plus	0.078*** (0.014)	0.098*** (0.013)	0.046*** (0.009)	0.020** (0.007)	0.064*** (0.011)	0.073*** (0.018)	0.038** (0.014)	0.020 (0.010)	0.056*** (0.016)
65 plus*Some college	-0.019 (0.011)	0.014 (0.011)	0.003 (0.007)	0.017** (0.006)	0.019* (0.009)	0.037 (0.021)	0.036* (0.016)	0.040** (0.013)	0.071*** (0.019)
65 plus*College	-0.062*** (0.012)	0.045*** (0.012)	0.023** (0.008)	0.025*** (0.006)	0.047*** (0.010)	0.103*** (0.022)	0.082*** (0.017)	0.054*** (0.013)	0.129*** (0.020)
65 plus*College plus	-0.047*** (0.013)	0.099*** (0.012)	0.057*** (0.009)	0.030*** (0.007)	0.083*** (0.010)	0.149*** (0.022)	0.133*** (0.017)	0.078*** (0.013)	0.194*** (0.020)
R-sq	0.285	0.029	0.014	0.011	0.020	0.063	0.021	0.009	0.025
N	59,593	59,593	59,593	59,593	59,593	35,062	35,062	35,062	35,062

Source: Authors' tabulations, Gallup Contract Work Module.

Notes: Each column represents a separate regression with the indicated dependent variable. Regressions also include controls for race, gender and wave. Standard errors in parentheses. Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

Table 8: Probability of Having Informal Work or Platform Work, by Age, Education and (for Informal Work) Main Job Status

	Among population:			Among those with any work activity:	
	Informal work	Platform work broad	Platform work narrow	Platform work broad	Platform work narrow
18-30	0.014*** (0.003)	0.004 (0.004)	0.007* (0.004)	0.006 (0.006)	0.009 (0.005)
30-34	0.007* (0.004)	0.016** (0.005)	0.010* (0.004)	0.015* (0.007)	0.009 (0.006)
35-39	0.003 (0.004)	0.010 (0.005)	0.005 (0.004)	0.008 (0.007)	0.005 (0.006)
40-44	0.002 (0.004)	0.005 (0.005)	0.005 (0.004)	0.005 (0.007)	0.005 (0.006)
50-54	-0.009* (0.004)	-0.007 (0.006)	-0.003 (0.005)	-0.009 (0.010)	-0.004 (0.008)
55-59	-0.007 (0.004)	-0.013* (0.006)	-0.002 (0.005)	-0.009 (0.010)	-0.001 (0.008)
60-64	-0.011* (0.004)	-0.022*** (0.006)	-0.012* (0.005)	-0.005 (0.010)	-0.013 (0.008)
65-69	-0.018*** (0.004)	-0.023*** (0.006)	-0.007 (0.005)	-0.010 (0.012)	-0.009 (0.010)
70-74	-0.019*** (0.004)	-0.029*** (0.006)	-0.012* (0.005)	0.007 (0.013)	-0.015 (0.011)
75-79	-0.014** (0.004)	-0.034*** (0.006)	-0.013* (0.005)	0.028* (0.014)	-0.010 (0.012)
Some college	0.000 (0.003)	0.019*** (0.004)	0.008* (0.003)	0.016** (0.006)	0.008 (0.005)
College	-0.008* (0.003)	0.027*** (0.004)	0.018*** (0.004)	0.020** (0.006)	0.017** (0.005)

Table 8: Probability of Having Informal Work or Platform Work, by Age, Education and (for Informal Work) Main Job Status (continued)

	Among population:			Among those with any work activity:	
	Informal work	Platform work broad	Platform work narrow	Platform work broad	Platform work narrow
College plus	-0.003 (0.004)	0.030*** (0.005)	0.019*** (0.004)	0.018* (0.007)	0.016** (0.006)
50-64*Some college	0.000 (0.004)	0.005 (0.006)	-0.001 (0.005)	0.011 (0.010)	-0.001 (0.008)
50-64*College	0.010* (0.005)	0.014* (0.007)	0.000 (0.006)	0.018 (0.010)	0.004 (0.009)
50-64*College plus	0.011* (0.005)	0.019** (0.007)	-0.008 (0.006)	0.024* (0.011)	-0.006 (0.009)
65 plus*Some college	0.006 (0.004)	-0.005 (0.006)	-0.003 (0.005)	0.024 (0.013)	0.010 (0.011)
65 plus*College	0.016*** (0.004)	-0.000 (0.006)	-0.009 (0.005)	0.051*** (0.014)	0.009 (0.012)
65 plus*College plus	0.011* (0.005)	0.005 (0.007)	-0.011 (0.006)	0.052*** (0.013)	0.004 (0.011)
Miscoded as employee	0.033*** (0.003)	--	--	--	--
Self-employed, not IC	0.030*** (0.003)	--	--	--	--
Self-employed, IC	0.060*** (0.003)	--	--	--	--
Not otherwise employed	0.005** (0.002)	--	--	--	--
R-sq	0.013	0.011	0.009	0.006	0.005
N	59,593	59,593	29,323	35,062	17,356

Source: Authors' tabulations, Gallup Contract Work Module.

Notes: Each column represents a separate regression with the indicated dependent variable. Regressions also include controls for race, gender and wave. Standard errors in parentheses.

Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

Table 9: Incidence of and Reasons for Independent Contractor Work, by Age

	Population	Among those with IC work:					
	Have any independent contractor work	IC work a secondary job	Work for prior employer	Main reason for IC work to earn income	IC work main source of income	IC work supplements retirement income	IC work supplements income from main job
50-54	14.7	27.5	24.8	65.3	41.3	2.7	14.7
55-59	13.9	27.1	24.2	59.7	39.0	5.4	9.7
60-64	12.3	18.3	22.6	54.9	34.6	10.8	7.4
65-69	10.6	11.0	23.8	45.6	18.2	20.1	4.6
70-74	8.6	8.5	24.0	37.8	10.7	22.7	2.1
75-79	6.5	6.9	24.1	33.6	8.3	22.6	0.9
Total	11.7	19.9	23.9	54.4	31.0	10.7	8.5

Source: Authors' tabulations, Gallup Contract Work Module.

Note: Sample persons age 50 to 79. Tabulations are weighted.

Table 10: Share of Independent Contractors Working for Prior Employer or Doing Work to Earn Money, by Age, Education and Other Characteristics

	Work for prior employer	Main reason for working as IC to earn income*
55-59	-0.010 (0.021)	-0.047 (0.024)
60-64	-0.004 (0.020)	-0.088*** (0.024)
65-69	-0.004 (0.038)	-0.193*** (0.045)
70-74	-0.001 (0.039)	-0.260*** (0.046)
75-79	-0.006 (0.041)	-0.333*** (0.048)
Some college	-0.004 (0.025)	-0.010 (0.029)
College	-0.038 (0.026)	0.002 (0.030)
College plus	-0.034 (0.026)	-0.049 (0.031)
65 plus*Some college	-0.027 (0.042)	-0.011 (0.049)
65 plus*College	0.052 (0.043)	0.002 (0.051)
65 plus*College plus	0.028 (0.041)	-0.027 (0.049)
Miscoded as employee	0.149*** (0.013)	0.060*** (0.016)
Black	0.089*** (0.025)	-0.061* (0.029)

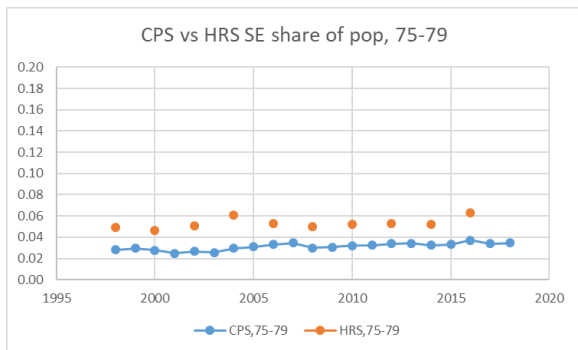
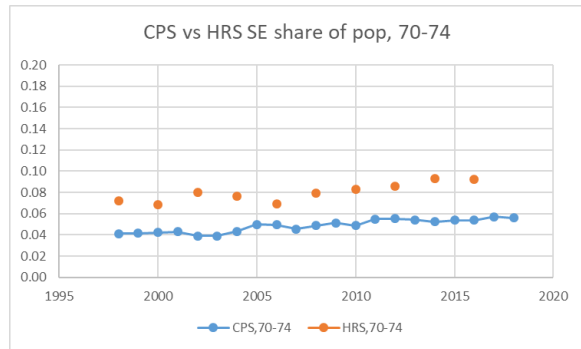
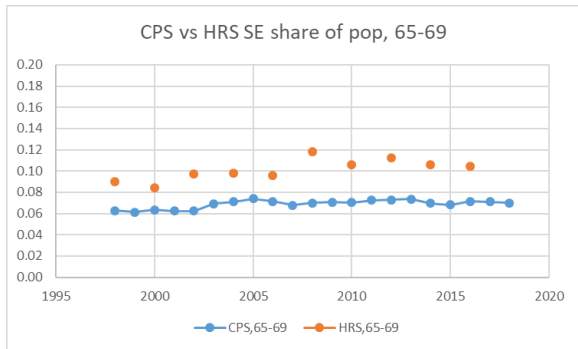
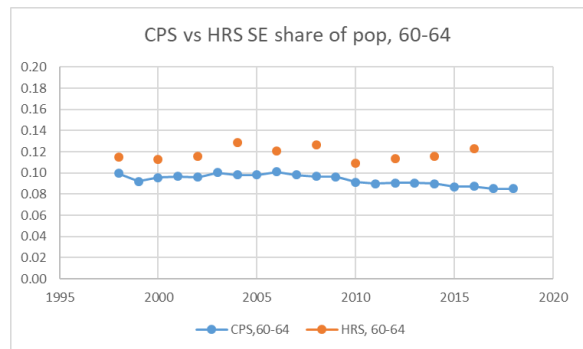
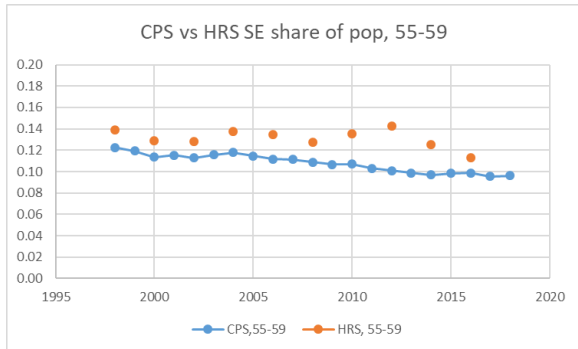
Table 10: Share of Independent Contractors Working for Prior Employer or Doing Work to Earn Money, by Age, Education and Other Characteristics (continued)

	Work for prior employer	Main reason for working as IC to earn income*
Hispanic	0.097*** (0.027)	-0.094** (0.032)
Asian	-0.010 (0.056)	-0.216** (0.066)
Other	-0.016 (0.049)	-0.182** (0.058)
Race missing	-0.011 (0.028)	-0.110*** (0.033)
Female	-0.044*** (0.013)	-0.053*** (0.015)
Wave2	-0.002 (0.017)	-0.034 (0.020)
Wave3	-0.039* (0.018)	-0.053* (0.021)
Wave4	-0.022 (0.018)	-0.062** (0.021)
Constant	0.216*** (0.027)	0.729*** (0.032)
R-squared	0.041	0.070
Observations	4,414	4,414

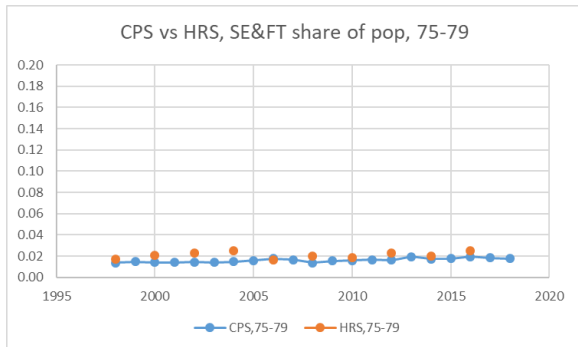
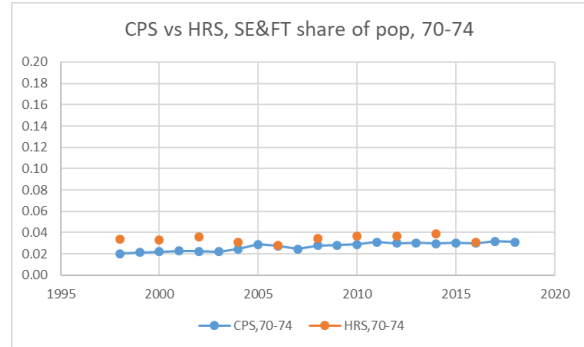
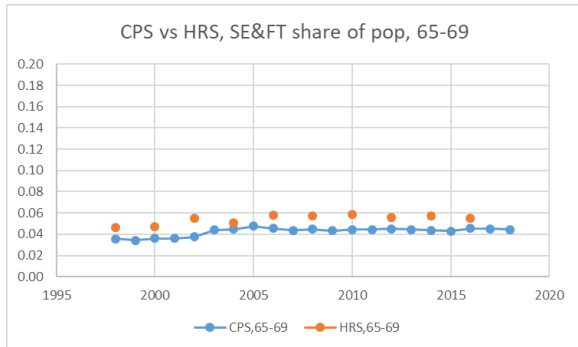
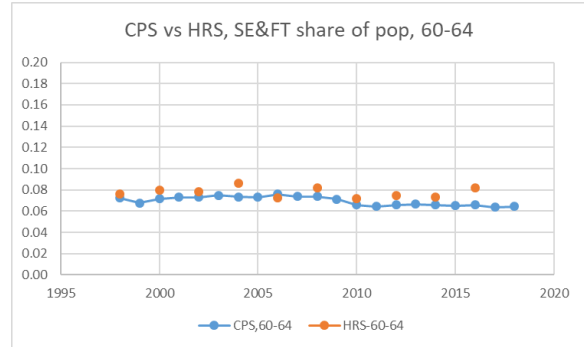
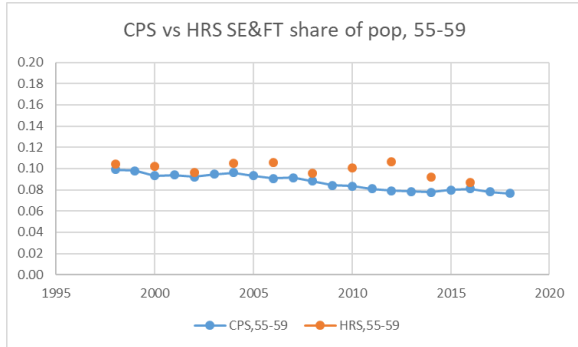
Source: Authors' tabulations, Gallup Contract Work Module.

Note: Sample persons age 50 to 79 reporting independent contract work. Standard errors in parentheses. Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

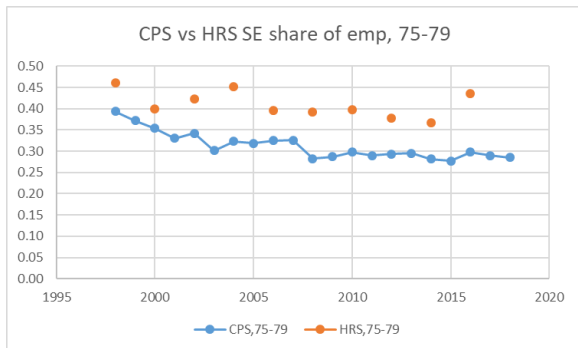
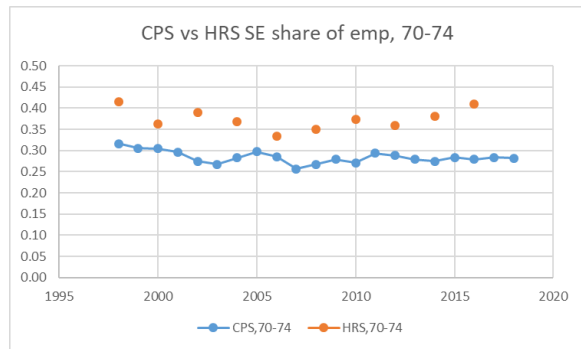
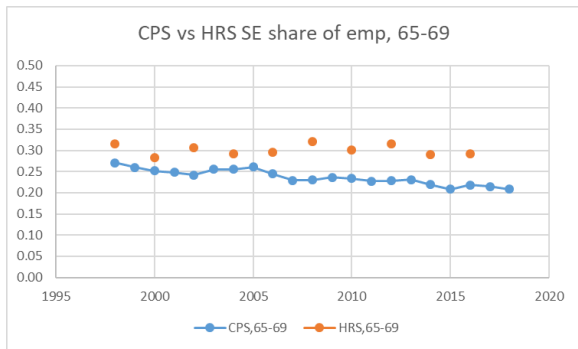
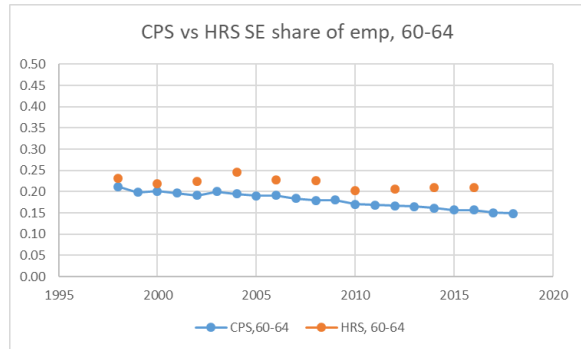
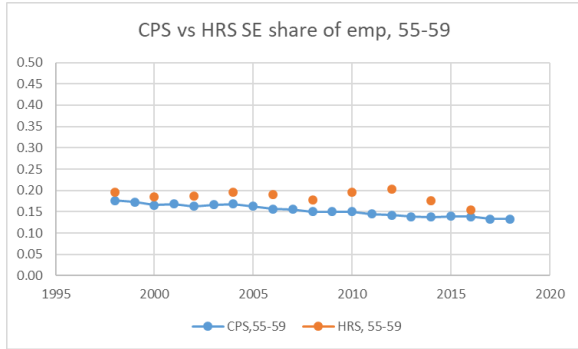
Appendix Figure 1A: Self-employment as Share of Population, CPS and HRS, by Age, 1998-2018



Appendix Figure 1B: Full-Time Self-employment as Share of Population, CPS and HRS, by Age, 1998-2018



Appendix Figure 2A: Self-employment Rate, All Workers, CPS and HRS, by Age, 1998-2018



Appendix Figure 2B: Self-employment Rate, Full-Time Workers, CPS and HRS, by Age, 1998-2018

