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**The Independent Contractor Workforce:
New Evidence on its Size and Composition and Ways to Improve its
Measurement in Household Surveys**

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Introduction

Independent contractors are a subset of the self-employed and generally are distinguished from traditional business owners by not having employees or significant capital investments in a business. They include workers with a wide range of skills and pay, such as freelance consultants providing technical services to businesses, rideshare workers using platforms like Uber and Lyft, and informal workers providing home maintenance, childcare, and elder care services. As self-employed workers, independent contractors do not enjoy many of the basic rights and protections afforded to W-2 employees. For example, they are not covered by wage and hours laws, do not have the right to unionize, and are not eligible for workers compensation or unemployment insurance. They also are not eligible for employer-provided benefits, such as retirement plans and health insurance.

Reflecting concerns that many businesses classify workers, especially low-wage workers, as independent contractors to avoid the legal liabilities and costs associated with having employees, the Biden Administration has proposed tightening federal regulations governing the circumstances under which businesses may legally classify workers as independent contractors, reversing the loosening of these regulations during the Trump Administration. The Biden Administration also has prioritized cracking down on business misclassification of workers as independent contractors.

The urgency for policy action to address independent contractor issues depends on the size and composition of this workforce. Good data on independent contracting, however, are sparse. Large nationally representative household surveys, such as the Current Population Survey (CPS) and the American Communities Survey (ACS), do not collect information on independent contracting per se, and because independent contractors are not employees, they are rarely captured in business surveys or in data provided by businesses to federal and state agencies for administrative purposes. Recent studies have used federal and state administrative tax data to provide valuable estimates on the size of and trends in the independent contractor workforce (Jackson, Looney, and Ramnath 2017; Collins et al. 2019; Lim et al. 2019; Bernhardt et al. 2021), although this type of self-employment income is known to be significantly under-reported in tax data. Moreover, administrative tax data, like data derived from other administrative sources and from business surveys, lack the rich demographic information that often is collected in household surveys.

To help fill the data gap on independent contracting as well as on other alternative work arrangements, the Bureau of Labor Statistics launched the Contingent Worker Supplement (CWS) to the CPS, which has been conducted six times between 1995 and 2017. Data from the CWS, which collects information only on a worker's main job, suggest that independent contractor employment constitutes a relatively small share of all employment—between 6.3 and 7.4 percent—and has exhibited no trend increase over the 22-year period that the survey has been fielded. In addition, while workers in independent contractor arrangements are heterogeneous, CWS data indicate that they are disproportionately White men and have higher average earnings than traditional employees (Abraham and Houseman 2020). As described in this paper, however,

mounting evidence from a variety of sources suggests that the CWS may substantially undercount independent contracting.

The motivation for this research is to explore ways to better measure contract work in household surveys both for workers' main and secondary jobs. To this end, we contracted with Gallup to include a contract work module on a nightly telephone household survey it conducted. The module was administered in four waves in 2018 and 2019 and yielded over 60,000 completed responses from adults ages 18 to 80. To guide the development of our survey module questions, we conducted six focus groups composed of individuals who engaged in independent contractor work, were socioeconomically and racially diverse, and lived in urban, suburban, and rural areas. Among other things, our focus groups revealed that many individuals engaged in independent contract work think of themselves as employed by their clients and may not answer standard employment questions about their employment arrangement in the way intended.

Consistent with the qualitative evidence from our focus groups, data from the Gallup Contract Work Module show that a sizable minority (9 to 11 percent) of those who initially report being employed by an organization indicate, upon probing, that they are independent contractors, not employees, on at least one job that they currently hold. A comparison of findings from the Gallup module with those from the 2017 CWS reveals that, without these miscoded employees, the level of independent contracting on workers' main job and the demographic distribution of independent contractors in the Gallup is similar to that in the CWS. Accounting for those who are miscoded as employees, however, the share of employment in independent contracting is roughly double in the Gallup module. Moreover, while we find that the incidence of miscoding is high among all demographic groups, it is disproportionately higher among those with low educational attainment and among minorities, changing the overall demographic pattern of the independent contract workforce. Specifically, after accounting for miscoded employees in the Gallup module, the overall incidence of independent contracting on the main job in the Gallup module is higher among Black and Hispanic workers compared to White workers and higher among those with no more than a high school education compared to those with greater educational attainment. We argue that the high levels of miscoding we observe likely reflect not only confusion among workers about their employment status, but also question wording in household surveys that implicitly assumes that individuals who are working for an organization are hired as employees, not on a contract basis.

The incidence of secondary work activity also is considerably higher in the Gallup module than in the main CPS, with the higher level of secondary self-employment (both independent contractor and traditional self-employment) and informal work in the Gallup module explaining most of the difference. We attribute this finding to the fact that the Gallup module encouraged the reporting of very low-hours work and probed about self-employment and informal work. Independent contractors, particularly those who are miscoded as employees, have an especially high incidence of secondary job holding in the Gallup module.

Additionally, we study contract company work, which occurs when employers subcontract their workers to other organizations. Although the overall incidence of such subcontracting is low in our data, we find that it is substantially higher among those who are

hired by an employer as independent contractors than those hired as employees. To our knowledge, our study is the first to provide estimates of such multi-level contracting in which workers hired as independent contractors by one organization are subcontracted to another organization.

The remainder of the paper is organized as follows. In the next section, we review previous studies that examine measurement of employee and self-employment work including independent contracting in household surveys and other data sources, disagreement in estimates across sources, and evidence of potential undercounting of self-employment in major household surveys. We also briefly describe key observations from the focus groups that we conducted while developing our survey module. We then introduce the Gallup Contract Work Module. We discuss the module's questions and their wording, comparing them to similar questions in other household surveys and highlighting how various features of the module may help overcome challenges to the measurement of non-employee work and secondary work activities. We describe our empirical findings next, with a focus on the extent of independent contractors being miscoded as employees and how this varies across demographic groups and between the Gallup Contract Work Module and the CPS and the CWS. We also examine secondary job holding and contract company work, noting the particularly high incidence both among those in independent contractor arrangements and especially independent contractors who are miscoded as employees. Finally, we discuss the implications of our results for improving question wording in standard household surveys for more accurate measurement of independent contracting and, more broadly, self-employment.

Background

Employment falls into two broad categories—wage and salary employment and self-employment. Self-employment may take different forms, including owning a business and working as an independent contractor. In recent years, considerable attention has focused on work obtained through online platforms. From a legal perspective, online platform workers also are generally independent contractors.¹

Household surveys, including the Current Population Survey (CPS), commonly differentiate between the incorporated self-employed, many of whom are business owners, and the unincorporated self-employed, many of whom are independent contractors. Published CPS statistics count the incorporated self-employed as wage and salary workers, but they can be

¹ California's Assembly Bill 5, signed into law in September 2019, required most platform workers to be reclassified as employees. A subsequent ballot initiative exempted rideshare drivers from this requirement, but a challenge to this ballot initiative was mounted and a court has ruled that it was unconstitutional (Abraham and Houseman 2021). As of this writing, that court's decision is under appeal (Cutler 2022). In contrast to the California legislation seeking to make platform workers employees, new laws in Georgia and Alabama specify that online platform workers should be considered independent contractors (Varner 2022) and a recent Washington State law also defines rideshare drivers as independent contractors, though with minimum wage, sick leave, and workers' compensation protections (Bellon 2022). A bill recently introduced in the U.S. House of Representatives (HB 8442, the Worker Flexibility and Choice Act) would create a new hybrid category under federal law, but at present for federal purposes a worker must be either an employee or self-employed.

separately identified in the microdata and for the purposes of our analysis, we leave the incorporated self-employed in the self-employment category. The Contingent Worker Supplement (CWS) to the CPS, administered six times to date and most recently in May 2017, seeks to identify several types of alternative work arrangements, including independent contractors. Questions about independent contractor status are asked of those who are coded as self-employed incorporated and not incorporated and of those coded as employees in the main survey questionnaire. The CPS collects information about second jobs from a quarter of the monthly sample (those in the so-called outgoing rotation groups), but the CWS asks about work arrangements only on a person's main job. Additional household survey information on self-employment comes from the Annual Social and Economic Supplement (ASEC) to the CPS. The ASEC is fielded each spring and asks about earnings over the previous year from both wage and salary employment and self-employment.

Existing research suggests that standard household surveys may do a poor job of measuring self-employment, especially work as an independent contractor. The literature points to two separate measurement issues—miscoding of people as employees when in fact they are independent contractors and underreporting of self-employment work. There is considerable uncertainty, however, about the extent of these measurement problems.

Miscoding may arise if workers are confused about their employment relationship or do not interpret the questions as intended. The CWS provides suggestive evidence that the monthly CPS miscodes some independent contractors as employees. Among the independent contractors identified in the 1995 CWS, 15 percent had been coded as wage and salary workers in the monthly CPS; among those identified in the 1997 CWS, 12 percent had been coded as wage and salary workers (Cohany 1996, 1998). For reasons discussed later in the paper, the CWS questions likely do not capture all of the independent contractors who initially were miscoded as employees, meaning that the miscoding problem likely is larger than these numbers suggest.

Abraham et al. (2021) provide additional evidence on the potential miscoding of self-employed individuals as employees. Using ASEC records linked to tax records for the same people in the same years, they identify individuals who report only wage and salary income in the ASEC and only self-employment income on their tax returns. In 2015, there were an estimated 5 million such people; adding them to the number the ASEC estimates had income from unincorporated self-employment in that year would have raised the ASEC self-employment count by nearly 45 percent.² The number of people reporting the opposite pattern—only self-employment income in the ASEC and only wage and salary income on their tax return—was considerably smaller, about 1.4 million people.³ The ASEC questions about annual self-employment income are very different from the questions used to identify self-employment in the monthly CPS. Still, the large number of people incorrectly reporting wage and salary income

² The ASEC does not ask specifically whether self-employment income earned during the year is from incorporated or unincorporated self-employment. Abraham et al. (2021) consider individuals to have had income from unincorporated self-employment if they a) reported self-employment income and b) either reported that their longest job during the year was unincorporated self-employment or reported a self-employment second job.

³ These may have been self-employed individuals who owned an incorporated business but said in the ASEC that their main job was unincorporated self-employment.

rather than self-employment income in the ASEC suggests problems with how at least some ASEC respondents describe their employment arrangements.

Underreporting of self-employment may occur if individuals doing non-employee work do not think of themselves as self-employed and do not report that work in response to standard household survey questions. Two recent studies have investigated the potential underreporting of informal work by asking survey respondents the standard battery of CPS employment questions, then following up by asking about informal work the standard questions may have missed. As a follow-up question, Katz and Krueger (2019) asked “Did you work on any gigs, HITs or other small paid jobs last week that you did not include in your response to the previous question?”⁴ Because they were active on MTurk, most of their survey respondents likely did such work. Almost two-thirds said there was informal work they had not included when answering the standard CPS employment questions. Abraham and Amaya (2019) asked those not reporting other employment “Sometimes people who don’t have a job do other things to earn money. Did you do other things to earn money last week?” Those who had already reported a job or business were asked an appropriately modified version of this question. Accounting for the additional work uncovered by these questions raised the overall employment rate in Abraham and Amaya’s sample by a few percentage points and had a dramatic effect on the multiple job-holding rate. A limitation of both of these studies is that the results are based on MTurk samples that are not representative of the population as a whole. The findings nonetheless suggest that the employment questions on the monthly CPS may not do a good job of capturing informal work and that this work can be identified by asking more probing questions.

Other studies have attempted to measure the prevalence of informal work among the CPS target population. Robles and McGee (2016) analyze data from the Enterprising and Informal Work Activities (EIWA) survey fielded by the Federal Reserve Board in October and November of 2015. They find that, during the six months prior to the survey date, 36 percent of the adult population had participated in informal work that involved either selling or renting property or providing services. The estimate from the 2016 Survey of Household Economics and Decisionmaking (SHED), which included similar questions, is that 28 percent of adults earned money from informal work during the month prior to the survey (Abraham and Houseman 2019). The two waves of the Survey of Informal Work Participation (SIWP) carried out during 2015 asked whether respondents were “currently engaged” in informal paid activity or side jobs, exclusive of selling property, renting property or responding to surveys. Overall, an estimated 18.5 percent of household heads were currently engaged in labor-intensive informal employment. Accounting for informal employment raised the estimated employment rate among household heads in the SIWP from 65.1 percent to 69.6 percent (Bracha and Burke 2021). An important caveat is that the EIWA, the SHED, and the SIWP all were administered to people who were members of an online survey panel. Engagement in informal work could well be higher among those willing to participate in an online panel than among the general population. At least in the SHED, however, even after excluding all informal work done by anyone who reported any online work, the estimated prevalence of informal work activity remained

⁴ A HIT (or human intelligence task) is a small online assignment or exercise.

substantial (Abraham and Houseman 2019).

Taking a different approach, Allard and Polivka (2018) used data from the American Time Use Survey (ATUS) to gauge the effects of accounting for informal work on rates of employment and multiple job holding. The ATUS, which uses the CPS as a sampling frame, includes CPS-style questions about individuals' labor force status and collects information on each respondent's allocation of time during a 24-hour period. Allard and Polivka focus on time devoted to labor-intensive income-generating activities such as hobbies, crafts, food, performances, or services that are not part of a job or business. They estimate that, in the ATUS over the 2012–2016 period, accounting for such activities would have raised the employment count by between 0.4 and 3.0 percent and raised the multiple job-holding count by between 3.0 and 20.7 percent. In both cases, the range reflects uncertainty about the extent to which average daily participation in such activities reflects the same people engaging in the activity on multiple days as opposed to different people engaging in the activity on different days. These estimates also rely on the ATUS accurately capturing time devoted to the full range of informal income-generating activities.

Abraham et al. (2021) provide a final piece of evidence on underreporting of self-employment in household survey data. Using ASEC data linked to tax information, they estimate that, in 2015, there were 2.8 million people with no earned income in the ASEC who reported self-employment income on their tax return and 6.3 million people with only wage and salary income in the ASEC who reported both wage and salary and self-employment income on their tax return. Adding these 9.1 million people to those reporting self-employment income in the ASEC would have raised the ASEC self-employment count by almost 80 percent.⁵ Although there also are people who report self-employment income in the ASEC that is missing from their tax returns, this count is only about half as many as with the reverse reporting pattern (4.8 million versus 9.1 million).

Focus Groups with Contract Workers

To better understand why independent contractor work may not be captured in existing household surveys, we turned to focus groups. We wanted to understand how individuals who are self-employed independent contractors think about and speak about their work, and what their answers suggest about how they would respond to typical survey questions about work arrangements. We used insights from these focus groups to develop module questions and, for some questions, we randomized respondents to different question versions to test how alternate wording affects respondents' answers. We cognitively tested the survey instrument, as did the Gallup organization, and this testing led to some refinement of question wording.

⁵ Garin, Jackson and Koustas (2022) present evidence that the growth in self-employment over time as measured in tax data may be overstated, reflecting changes in reporting behavior rather than a true increase. Their findings suggest that earlier readings of self-employment from tax data may have been too low, but not that the 2015 reading is too high.

Focus groups were especially appropriate for our purposes because they allowed us to ask open-ended questions and to take advantage of the group dynamic to generate new information (Liamputtong 2011). Participants could respond to our questions with any terms they use for contract work and self-employment, not only those that have been used on previous surveys. They could also respond to and build on the suggestions made by other group members.

We conducted six in-person focus groups in and around a Midwestern U.S. city. Using personal contacts and partnerships with community organizations, we recruited 22 participants who engaged in various types of independent contractor work to be in the focus groups. Because we wanted to capture the broadest possible set of attitudes and terms, our selection strategy was to *sample for range* (Small 2009; Small and Calarco 2022). Participants' ages ranged from early 20s to mid-60s; educational levels ranged from less than high school to professional degree; racial and ethnic identities included White, Black, and Hispanic; and locations of residence and work included urban, suburban, and rural. Each focus group lasted about an hour. The conversations were audio-recorded and transcribed, and we analyzed them for terminology and common themes.

Our focus groups suggest several reasons why standard household surveys may fail to capture or miscode independent contractor work.

Working for an organization but self-employed

Employment sections on surveys frequently ask respondents if they are working for or employed by an organization, and if so, code them as employees. In the CPS, for example, respondents are asked whether they are “employed by government, by a private company, a nonprofit organization, or self-[employed] (or working in the family business).” Follow-up questions ask, as appropriate, for the name of the employer and the business or industry.

If some contractors respond to this question by thinking of the organization they “work for,” they may be miscoded as employees. In our focus groups, participants typically referred to clients as *whom they worked for*. Kenneth said he had “worked for” a large financial services firm as an IT consultant.⁶ Brianna said she had “worked for” an auction house—first as an unpaid intern, then as a salaried employee, and finally as an independent contractor—but her sense that she was “working for” the organization did not seem to change even as her formal work arrangement changed.

In many cases, participants knew that they were independent contractors even as they described working for an organization. They sometimes used the word “technically” to distinguish between the *practical* and *legal* work relationships between a worker and a controlling or lead organization. George, a self-employed journalist, noted that he typically tells people he works for the local newspaper: “I don’t want to take the time to try to explain, okay, *technically* I don’t work for the [newspaper name].”

⁶ All names used in this section are pseudonyms.

While some independent contractors may understand their contractual arrangement and still describe themselves as “working for” organizations, others, in fact, may believe they are employees of their client. During the cognitive testing phase, we interviewed Gloria, a woman who walked dogs for five clients. The cognitive testing revealed that Gloria considered herself as having five employers and being an employee of each. Nonetheless, we confirmed with her that none of her “employers” took any taxes out of her pay and that she was working for them as an independent contractor.

Independent contractors who have contracts with one or a few organizations may be particularly vulnerable to being incorrectly categorized as employees. The CWS defines an independent contractor as someone who finds their own clients. Many of our participants, especially those in the predominately White focus groups, described long-term contracting arrangements with organizations such as school districts, nonprofit organizations, and firms of all sizes. Platforms may also reduce the sense of finding one’s own clients if the platform effectively finds clients for the contractor. Those who had experience driving for Uber, for instance, spoke of themselves as “working for” Uber; they did not think of individual riders as clients.

Focus groups also revealed that the labels “self-employed” and “independent contractor” sometimes carry negative connotations. Some focus group members indicated that they or others they knew would be reluctant to describe themselves as self-employed or independent contractors because the income was “erratic and unstable” and because, they believed, people resorted to that type of work only when they did not have a traditional employee job.

Common terms to capture independent contracting arrangements mean different things to different people

To measure independent contracting, the CWS asks respondents if they are “independent contractors, independent consultants, or freelance workers.” People’s understanding of these terms varied widely, however, among our focus group members. Although independent contracting encompasses a wide range of jobs, for many focus group participants, the term “independent contractor” or simply “contractor” was associated narrowly with the skilled trades or construction work. Many associated freelance work with project-based professional work in the arts, journalism, or white-collar consulting. Few of our participants thought of platform work, such as work for Uber, Lyft, Doordash, Instacart, Amazon Flex, Upwork, or Mechanical Turk, as contract work or independent contracting. Indeed, Kenneth specifically excluded Uber and other non-professional work from his definition of independent contracting: “[Independent contracting] is like, ‘Hey, we’re going to contract you to work for X months on this.’... That does go with web design and stuff like that, but not necessarily a masseuse or the Uber driver even—that’s something different.”

The term “gig work” has become popular in recent years to describe on-demand, short-term independent contractor work that is often done through online platforms or apps.⁷ However, we found that the phrase “gig work” fell flat in many of our groups, especially but not only

⁷ For example, the IRS includes such a [definition of gig work](#) on its website.

among Black participants, who associated the term with music “gigs.” Other participants thought of gig work as short-term work (low- or high-wage), and still others thought of it as a hobby. Although platform work is frequently the intended meaning of “gig work” in media and research, other definitions came to mind for our participants, and few used the term to refer to platform work.

In place of gig work, “hustle,” “side hustle,” “odd jobs,” “under-the-table work,” and “moonlighting” were alternative terms that our focus group participants used to refer to short-term, on-demand non-employee work. Several participants mentioned various types of off-the-books work they saw in their local area. Two candidly described strategies they used to avoid giving out 1099s to tradespeople who did work for their businesses.

Multi-layered contracting

Our focus groups also uncovered a couple of instances of multi-layered contracting, in which independent contractors were subcontracted to others. Bob, for example, was a painter and hired workers as independent contractors to help him, but another company gave him his jobs and told him exactly when they needed to be done. Although he recognized that he was self-employed, he did not feel he controlled his business or “called the shots.” Kenneth, who used to work in IT, described a situation in which he worked as an independent contractor for one company that in turn assigned him to jobs in other companies. Kenneth initially reported being an employee, but when we asked whether his employer took taxes from his pay, he indicated that his employment status varied over time.

Independent contract workers often have several streams of work

A goal of our study is to identify all work, including secondary work, which prior evidence suggests is important for helping many middle and lower income households make ends meet and often is in the form of informal nonemployee work (Abraham and Houseman 2019). Findings from our focus groups pointed to the prevalence and potential importance to household income of secondary work activities. Although we recruited focus group participants who were doing at least one type of non-traditional work, it was notable that many people had two, three, four, or more streams of income—some done concurrently, others done sequentially. These came in different mixes of tasks and legal work arrangements, including W-2 employment, traditional self-employment, and independent contracting.

Collectively, evidence from our focus groups points to challenges in capturing the wide variety of primary and secondary work activities falling under the independent contractor rubric. Individuals in independent contractor arrangements may identify more as working for an organization than they do as being self-employed. There is no well-established terminology to describe independent contracting and the terms used vary across the types of independent contractor arrangements and among workers with different demographic characteristics, making it difficult for household surveys to capture these arrangements for all workers. Additionally, people in multilayered contracting arrangements may be less likely to report themselves as self-employed on surveys, and even when they do, the survey may fail to capture the nuances of their

arrangement. The prevalence of different streams of income among those in independent contractor arrangements may further complicate efforts to collect information on all work.

The Gallup Contract Work Module

The Gallup Contract Work Module was designed to improve the information available on contract employment—including independent contractors and contract company workers—by asking questions that address the miscoding and underreporting problems with standard household survey questions. We contracted with the Gallup organization to add our module questions to the Gallup Education Consumer Pulse Survey, a large, nationally representative telephone survey. Like the Current Population Survey (CPS), the Gallup survey collects employment information for a specified week (the seven days preceding the interview), and so should be subject to little recall bias. Also like the CPS, the Gallup Education Consumer Pulse is an interviewer-administered survey, rather than an online survey. This should mean that our findings are more likely to be directly applicable to the possible modification of the current CPS questions.

Employment Questions on the Gallup Survey

The Gallup Education Consumer Pulse Survey includes a standard battery of questions on respondents' employment status used in other Gallup surveys. The employment section of the Gallup survey begins by asking respondents if they do any work for an employer. Those who answer in the affirmative are coded as employees. Those coded as employees next are asked the number of hours per week they usually work for an employer (across all employers if they have more than one). Respondents then are asked about self-employment work activities and, if applicable, the usual hours they work per week in self-employment.

Our module consists of 14 questions that are interspersed, as appropriate, among the standard employment questions in the Gallup survey. Gallup's flexibility and the size of the survey sample also permitted us to vary the wording for selected questions randomly in order to test the effects of alternative phrasing on respondent answers. In this paper, we focus on three sets of questions that

- Identify potential problems in standard household surveys with respondents being miscoded as employees and test alternative wording for capturing such miscoding;
- Measure all sources of work for pay, including self-employment and other informal, low-hours nonemployee work, and test alternative question wording for eliciting this information;
- Measure employment arrangements in which employers contract out workers to clients and test alternative wording for capturing this type of outsourcing in household surveys.⁸

⁸ In addition, the Gallup Contract Work Module included questions designed to 1) provide evidence on the workers' use of mobile apps or online platforms and to test alternative household survey question wording for eliciting this information, and 2) provide evidence on older workers' use of independent contractor arrangements as a transition to retirement. The latter topic is discussed in Abraham, Hershbein, and Houseman (2020).

Testing for Miscoding of Workers as Employees in the Gallup Survey

The standard employment section of the Gallup Education Pulse Survey begins by asking respondents about any employment they had with an employer in the preceding 7 days:

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.)

Consider how individuals—such as IT workers, engineers, construction workers, or maintenance workers—who are hired on a contract basis by a private company might answer the Gallup question about whether they are employed by the company. Respondents may know that legally they are treated as self-employed and so reply “no.” On the other hand, the workers obtain employment through the company, and, unless they are cued to think about their legal employment arrangement, it would be reasonable for them to report that they are “employed by an employer.” Consistent with the term’s common usage, such workers may even think of themselves as the company’s “employee.” As described earlier, we found that individuals working on a contract basis often described themselves as working for their client in focus groups and cognitive testing.

Note that, although the question wording used in the CPS to classify workers as employees differs from that in the Gallup survey, the CPS arguably suffers from similar problems of interpretation. CPS respondents who reply “yes” to the question “Last week, did you do ANY work for either pay or profit?” are classified as employed.⁹ To distinguish whether they are employees or self-employed, employed respondents are asked: “Were you employed by government, by a private company, a nonprofit organization, or were you self-employed or [if applicable] working in the family business?” Someone working on a contract basis for a company or organization might respond that they are self-employed if they are thinking about their legal employment status when answering the question. Alternatively, it would be reasonable and accurate for respondents to answer that they are employed by a company or organization. Respondents for whom the term self-employment carries certain connotations, such as running a person’s own business, may be particularly inclined to report being employed by an employer.

To test whether miscoding of workers as employees is a significant problem in the standard Gallup survey, we probed about the nature of the employment arrangement in our Contract Work Module. Those answering that they were “employed by an employer” in the preceding seven days were randomly asked one of two questions. The first variant asked, “Were you an employee on this job or were you an independent contractor, independent consultant, or freelance worker?” Those reporting that they had more than one employer were asked, “Were you an employee on each of your jobs; an independent contractor, independent consultant, or freelance worker on each of your jobs; or did the arrangement vary across jobs?” This question

⁹ CPS respondents also are asked about the employment of other working-age household members (proxy reporting), whereas in the Gallup survey, individuals answer only for themselves.

asks respondents explicitly whether they are employees, and they must choose between the two classifications.

“Independent contractor,” “independent consultant,” and “freelance worker” are the terms used in the Contingent Worker Supplement (CWS) to the CPS to classify workers as independent contractors. Based on our focus group findings, we were concerned that these terms may have different connotations for different groups of respondents. For example, some focus group participants indicated that they thought of independent contractors, independent consultants, and freelance workers as terms applying only to professionals or workers in the construction trades. Some thought that an independent contractor was “the boss” who directed the work of others, as on a construction site. Our focus groups offered other terms to describe independent contractor arrangements, including “gig work” and “side hustle.” We considered incorporating these alternative phrases into the question, however Gallup’s cognitive testing found that some respondents objected to their work being described by informal terms.

To avoid vague terminology, the second variant asked respondents reporting a single employer, “Did this employer take any taxes out of your pay?” If respondents reported more than one employer, they were asked, “Did all of your employers take out taxes from your pay, did none of them take out taxes from your pay, or did it vary across employers?” If the worker is not an employee (or the employer is misclassifying the worker as an independent contractor), then the employer will not withhold social security taxes (mandated for employees) or other taxes from the worker’s pay. Although cognitive testing indicated that respondents would be able to answer this question accurately, we were concerned that any question about taxes might be sensitive and cause some respondents to terminate the interview or refuse to answer the question. According to Gallup, however, the question did not prompt interview terminations; further, the question’s item nonresponse rate was very low and comparable to the item nonresponse rate for other questions.

Measuring All Sources of Work for Pay

Another of the survey’s goals is to capture all sources of work for pay, including work that involves low usual weekly hours or is informal in nature. The wording of the standard Gallup employment questions encourages respondents to report low-hours jobs, asking whether they are employed by an employer, “even minimally like for an hour or more,” and the question instructions clarify that this work “could be for one or more employers.” Similarly, the standard Gallup question about self-employment encourages respondents to think broadly about the types of work that are considered self-employment and to include activities that involve a small number of hours:

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.

The Gallup survey normally asks the self-employment question only of respondents who do not report being employed by an employer or who 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, our Contract Work Module asks this question of *all* respondents.

Given the structure of the Gallup questions, there is a risk that those who report being employed by an employer but who with further probing indicate that they are not employees might subsequently report this work again in response to the self-employment question. To avoid double counting, we ask 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 ask about the hours worked in this 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?”

Although the standard employment questions on the Gallup survey probe for even minimal work for an employer or in self-employment, these questions may miss certain types of informal work if those doing it do not consider themselves to be working for an employer or do not view themselves as self-employed, an independent contractor, or a freelance worker. To capture such work, our survey randomly assigns all respondents to one of two questions. The first asks “Did you do anything in the last 7 days that you have not already mentioned for which you received (or expect to receive) payment?” The second repeats that question and adds examples of such work, stating, “Examples might include babysitting or eldercare, cleaning or maintenance work, data entry tasks, driving for a car service, or making and selling handicrafts.” Findings in the survey methodology literature suggest that adding examples to questions encourages more accurate reporting, whether 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). We expect that providing examples of different types of informal work should increase the share of respondents reporting such work. If respondents report doing additional work for pay, they are asked the number of hours that they spend on such activities in a typical week.

Measuring Contract Company Work

As in the CWS, we also probed whether those working for an employer were contracted out to work for another organization. Because our focus groups identified situations of multilayered contracting in which individuals working as an independent contractor for one organization were contracted out to another, we asked this question to all respondents indicating that they worked for an employer, even if they subsequently indicated that they were working as an independent contractor for that employer. Individuals were randomly assigned to one of two question versions. The first, which closely follows the wording used in the CWS, asks “In the last 7 days, did your employer [any of your employers] contract you or your services out?”

To avoid possible confusion over what it meant for an employer to contract out individuals or their services, a second version asks, “In the last 7 days, [on any of your jobs] were you doing work for a business or organization that was different from the business or organization that paid you?”

If individuals answered yes to either of the questions about contract work, they were asked if they were usually assigned to more than one client or customer. If they indicated that they usually worked for just one client or customer, they were asked if they usually worked at the client’s or customer’s worksite. Our broad definition of contract company work includes all contracted workers who primarily work for one client or customer, whether remotely or at the client’s worksite. Our narrow definition of contract work is further restricted to workers who primarily work at the client or customer’s worksite. The latter corresponds to the definition applied in the CWS. In this paper, we focus on the incidence of contracting out by employers of individuals who are miscoded as employees on their jobs.

Fielding the Contract Work Module

The target population for the Gallup Education Consumer Pulse survey, the vehicle for fielding our Contract Work Module, is adults ages 18 to 64. During the periods that our survey module was in the field, however, Gallup asked core survey questions together with our module questions of individuals ages 18 to 80.¹⁰ Gallup administered our module in four waves spread at roughly three-month intervals across a year. In each wave of data collection, Gallup fielded our questions until about 15,000 completed interviews were obtained, roughly a month in each case. 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. Across the four waves, the survey collected information on contract and informal work from some 61,000 respondents, more than any other household survey that has investigated related topics other than the CWS.

Among other information, the Gallup Education Consumer Pulse survey collects respondents’ age, gender, race, ethnicity and education. Gallup uses this information together with respondents’ region of residence to weight the survey responses so that they match the characteristics of the adult population as recorded in the CPS-ASEC. We use these survey weights in all of the analyses reported below.

Findings

Our analysis of independent contracting is divided into three parts. We begin by examining the incidence of miscoding of independent contractors as employees in our Gallup

¹⁰ Few adults over age 80 work for pay. Because we compare findings in our Gallup module to those from the CPS and CWS and age in the latter surveys is available only in intervals starting at age 80, we focus on individuals who are ages 18 to 79 in the analyses below.

data and the characteristics of these miscoded employees. In this analysis, we include miscoding in both primary and secondary jobs. Next, we compare findings in the Gallup survey with those in the CPS (for the overlapping months in which both were fielded) and those in the May 2017 Contingent Worker Supplement to the CPS, focusing on comparisons of independent contractor work in the Gallup module and CWS. Because measures of independent contracting and other employment arrangements are available only for the main job in the CWS, we limit our analysis to the main job when making these comparisons. We examine differences across surveys in measures of the incidence of independent contracting and other employment arrangements, the characteristics of workers in the various employment arrangements, and the incidence of secondary work by employment arrangement in the main job. Finally, we examine the phenomenon of multilayer contracting among miscoded employees in the Gallup data.

Miscoding of Workers as Employees

Table 1 shows, for those who report being employed by an employer, the percent who, when questioned further, indicate they are not employees. The first column of Table 1 reports tabulations for the first version of the probing question—the percentage who answered that they are (on at least one job) an independent contractor, independent consultant, or freelance worker rather than an employee. The second column reports tabulations for the second version of the question—the percentage who indicate that their employer (or, if they have multiple employers, that at least one employer) does not take taxes out of their pay. The third column of the table combines responses from the two question versions.

A significant minority of those reporting themselves as working for an employer—and thus typically categorized as employees—are miscoded. Among respondents who say that they work for an employer, 10.9 percent of those responding to version 1 and 8.9 percent of those responding to version 2 of the follow-up probe indicate that they are not employees.¹¹ The difference in percentages between the two question versions is statistically significant (p -value < 0.01) but substantively modest. Combining the responses to the two question versions, 9.9 percent of respondents saying that they are employed by one or more employers are miscoded in the survey as an employee on at least one job.

Although the estimate of miscoding is somewhat higher when asking version 1 of the question than when asking version 2, as shown in the rest of the table the incidence patterns by demographic and job characteristics are similar. Compared to prime-age workers, younger (age 18–24) and older (age 65–79) workers are more likely to be miscoded as employees. The incidence of miscoding is also relatively high among minorities—especially Black and Hispanic workers—and among men, and among those with lower levels of education.

¹¹ We should emphasize that the classification problem lies in the way individuals working on an independent contractor basis answer questions *in the survey* and does not necessarily imply that employers have misclassified these individuals as independent contractors.

Table 1: Among Those "Employed by an Employer," Share Who Indicate They Are Not an Employee on at Least One Job

	Q ver. 1		Q ver. 2		Total	
All Respondents	10.9	(0.3)	8.9	(0.3)	9.9	(0.2)
Age						
18-24	11.8	(1.0)	17.9	(1.2)	14.8	(0.8)
25-54	9.7	(0.4)	7.0	(0.4)	8.4	(0.3)
55-64	11.5	(0.7)	6.7	(0.5)	9.2	(0.4)
65-79	21.4	(1.2)	15.5	(1.0)	18.4	(0.8)
Race						
White, non-Hispanic	9.7	(0.3)	8.2	(0.3)	9.0	(0.2)
Black, non-Hispanic	12.3	(1.0)	9.1	(0.9)	10.6	(0.7)
Hispanic	13.8	(1.0)	11.6	(1.0)	12.7	(0.7)
Other	11.6	(1.5)	8.3	(1.3)	10.0	(1.0)
Missing	10.4	(1.2)	8.4	(1.3)	9.4	(0.9)
Gender						
Female	9.8	(0.4)	8.5	(0.5)	9.2	(0.3)
Male	11.9	(0.4)	9.3	(0.4)	10.6	(0.3)
Education						
High school or less	11.4	(0.7)	11.6	(0.7)	11.5	(0.5)
Some college	10.8	(0.5)	8.1	(0.5)	9.5	(0.3)
College+	10.5	(0.4)	7.2	(0.4)	8.9	(0.3)
Number of employers						
1 employer	7.6	(0.3)	6.5	(0.3)	7.0	(0.2)
2 employers	43.4	(2.0)	32.2	(1.9)	37.8	(1.4)
3+ employers	63.9	(4.0)	48.6	(3.9)	56.2	(2.8)
Hours worked for an employer, last week						
30+	8.8	(0.3)	6.4	(0.3)	7.6	(0.2)
15 to 29	16.4	(1.1)	18.2	(1.4)	17.3	(0.9)
Less than 15	34.7	(2.1)	31.9	(2.1)	33.3	(1.5)
N	14,235		13,961		28,196	

SOURCE: Authors' tabulations of Gallup Contract Work module data.

NOTE: Estimates are share of those "employed by an employer" on one or more jobs who indicate when asked a probing question that they are an independent contractor on at least one job. Question version 1 asks whether person is an employee or an independent contractor, independent consultant, or freelance worker. Question version 2 asks whether employer takes out taxes from pay ("no" answers coded as independent contractors). Total column reports estimates pooled across both question versions. Estimates not shown for cases with missing number of employers or missing hours worked for an employer last week. All estimates are weighted. Standard errors are shown in parentheses.

The incidence of this type of employee miscoding jumps dramatically when the worker reports having multiple employers. For versions 1 and 2 of the question, the estimated incidences are 7.6 and 6.5 percent, respectively, among workers with only one employer; 43.4 and 32.2 percent among those with two employers; and 63.9 and 48.6 percent among those with

three or more employers.¹² Those with multiple jobs who report not being an employee for *at least* one employer indicate that their non-employee status “varies across employers” in about two-thirds of the cases. These patterns suggest that the employment arrangement in a secondary job is especially likely to be on a contract basis, something we explore later in the paper.

Miscoding of workers as employees is also strongly associated with work hours, with miscoding much more common among low-hours workers. Among those who report that they usually work 30 or more hours per week for an employer, 8.8 and 6.4 percent indicate that they are not an employee in versions 1 and 2 of the follow-up probe, respectively. In contrast, those figures are 34.7 and 31.9 percent among those usually working less than 15 hours per week.¹³

In the remainder of the paper, we term those who report working for an employer but who indicate that they are not employees “independent contractors, miscoded employees.” Additionally, because our qualitative conclusions are not sensitive to question version, we combine answers to the two versions of the probing question to simplify presentation.

Prevalence of Independent Contractor Work in the Gallup Contract Work Module and the Contingent Worker Supplement

We are interested in how measures of the prevalence of independent contracting and the characteristics of those doing such work in the Gallup Contract Work Module compare to estimates from the May 2017 CWS, which asked questions specifically designed to identify independent contractors that are not asked on the monthly CPS. The Gallup module was fielded one to two years after the May 2017 CWS, and differences in economic conditions might explain some of the differences in the employment patterns observed in the Gallup and CWS data. To address this concern, we have constructed employment estimates based on data for the months in 2018 and 2019 in which our Gallup module was administered. The CPS employment rate is 0.4 percentage points higher in the months the Gallup was conducted than in May 2017 when the CWS was fielded, but this difference is not statistically significant. The distribution of employment between employees and self-employed as measured in the CPS was the same in the two periods.

Because the CWS asks questions only about the respondent’s main job, we focus primarily on the main job in our comparisons across these surveys. We identify the main job in the Gallup data using answers to the questions on hours worked. The CWS includes two questions on independent contracting. Individuals who were coded as self-employed in the basic CPS are asked the first question, which inquires whether they (or the household members for whom they are reporting) are “self-employed as an independent contractor, independent consultant, free-lance worker, or something else?” We code as “self-employed independent contractors” those who answer independent contractor, independent consultant, or free-lance worker. Those who were coded as employees on their main job in the basic CPS were asked

¹² Slightly over 6 percent of those who report being employed by an employer have jobs with two employers; just under 2 percent report having jobs with three or more employers.

¹³ Approximately 5 percent of those who report being employed by an employer say they work less than 15 hours per week in all employer jobs.

whether last week they were “working as an independent contractor, an independent consultant, or a free-lance worker? [That is, someone who obtains customers on their own to provide a product or service.]” Corresponding to the categories in the Gallup data, we term those who respond affirmatively to this question “independent contractors, miscoded employees.” Notably, unlike the definition for self-employed independent contractors, the independent contractor question for these latter respondents specifies that independent contracting entails obtaining customers on their own (the clause in brackets); we discuss the potential implications of this definition for measures of independent contracting in the CWS further below.

Table 2 reports the employment rate (percent of the population age 18–79 with any employment in the survey week) and, conditional on working, the distribution of employment by arrangement in the main job. For each data source, we report four distinct arrangements: employees (not miscoded); the self-employed who are not independent contractors; the (self-reported) self-employed who are independent contractors; and miscoded employees who are actually self-employed independent contractors. For the Gallup module, we also include those who did not report any employer or self-employment work in the prior week but did report work in response to the probe at the end of the module about other work for pay; we term this group “informal work only.” All tabulations are weighted by the population weights provided in the relevant survey. By construction, the weighted distribution of the population by demographic characteristics (age, gender, race/ethnicity, and education) in the Gallup module closely resembles that in the CWS.

The first column in Table 2 reports the employment rate in each survey. The top panel, which displays estimates for all workers, shows that the estimated employment rate in the Gallup module is 2.4 percentage points higher than the May 2017 CWS estimate (64.6 percent). A key purpose of the Gallup module is to capture all work, and we would like to know whether the higher employment rate in the Gallup module can be attributed to capturing more low-hours work. The middle panel in Table 2 restricts employment to those working at least 15 hours per week in their main job. With this restriction, the employment rate is now slightly lower in the Gallup module (61.3 percent compared to 61.9 percent in the CWS).¹⁴ The bottom panel, which shows the share of the population working less than 15 hours per week in their main job, confirms the higher incidence of low-hours work in the Gallup module, roughly double that in the CWS.¹⁵

The subsequent columns in Table 2 break out employment on main job by distinct employment arrangement. The second column shows the share who are employees on their main job, while the following three columns break self-employment out into three types—the self-employed who are not independent contractors, self-employed independent contractors, and independent contractors who have been miscoded as employees in the survey. The sixth column

¹⁴ The employment rate in the CPS for the same months in which the Gallup module was fielded is 65.0 percent counting all work and 62.2 percent for those working at least 15 hours on their main job.

¹⁵ Note that, here and elsewhere, if a Gallup respondent reports working more than one job *for an employer*, hours of employer work pertain to the hours on *all employer* jobs. We do not have a breakout for each employer job individually. The self-employment questions do not allow for multiple self-employment jobs.

reports those who only report informal work during the survey week (collected only in the Gallup module).

Table 2: Employment Rate and Distribution of Work Arrangements, Gallup Contract Work Module and Contingent Worker Supplement

	Employment rate	Percent in work arrangement					Total
		Employee	Self-employed, not IC	Self-employed, IC	Self-employed IC, miscoded	Informal work only	
<i>All workers</i>							
Gallup	67.0 (0.2)	76.1 (0.3)	8.1 (0.2)	8.1 (0.2)	6.7 (0.2)	1.1 (0.1)	100.0
CWS	64.6 (0.2)	89.0 (0.2)	4.0 (0.1)	5.9 (0.1)	1.0 (0.1)	--	100.0
<i>Working 15+ hours</i>							
Gallup	61.3 (0.3)	80.2 (0.3)	6.5 (0.2)	7.0 (0.2)	5.9 (0.2)	0.4 (0.0)	100.0
CWS	61.9 (0.2)	89.6 (0.2)	3.8 (0.1)	5.5 (0.1)	1.0 (0.1)	--	100.0
<i>Working <15 hours</i>							
Gallup	5.7 (0.1)	32.0 (1.0)	25.4 (0.9)	20.3 (0.8)	14.3 (0.8)	8.0 (0.6)	100.0
CWS	2.7 (0.1)	75.8 (1.0)	7.5 (0.6)	14.7 (0.9)	2.0 (0.3)	--	100.0

SOURCE: Authors' tabulations of Gallup Contract Work module data and CWS data.

NOTE: CWS=Contingent Worker Supplement. IC=independent contractor. CWS does not ask questions to identify informal work. All estimates are weighted. Standard errors in parentheses.

N=35,475 (total), N=31,795 (15+ hours) and N=3,680 (<15 hours) for Gallup estimates. N=59,276 (total), N=56,671 (15+ hours) and N=2,605 (<15 hours) for CWS estimates.

Focusing on the top panel (all workers), a considerably smaller share of workers is recorded as employees in the Gallup module compared to the CWS—76.1 percent versus 89.0 percent. Those who have only informal work account for just 1.1 percentage points, or 8 percent, of the difference in the share of workers who are employees between the Gallup and the other surveys.¹⁶ The largest contributor to the differential—44 percent of the difference between the Gallup and CWS shares—is the high rate of employee miscoding we identify in the Gallup module. Like the Gallup module, the CWS asks those coded as employees on the main CPS whether they work on a contract basis for their employer, but the incidence of miscoding is much lower in the CWS—1.0 percent, compared to 6.7 percent in the Gallup module. Yet, as discussed in a recent National Academies of Sciences, Medicine, and Engineering consensus study report (NASEM 2020), there are reasons to suspect that many workers who are independent contractors

¹⁶ We assume that workers in informal arrangements are not treated as employees, though it is possible some of them are.

on their job are not captured in this CWS question. As already noted, respondents in the CWS question are told that independent contracting involves obtaining customers on their own. Many individuals, however, work as an independent contractor for just one client and do not solicit other clients in their job. We suspect that these individuals, who are sometimes referred to as “dependent contractors,” are likely to report working for an employer. Similarly, most individuals working for platform companies should be classified as independent contractors, but while they may perform work for many clients, the platform connects them with their clients and so they may think of themselves as working for the platform company. Further, as was apparent in our focus groups, some employers hire workers as independent contractors and then subcontract these workers out to other clients. In a variety of circumstances, therefore, independent contractors do not obtain their own clients and finding one’s own clients is not a defining feature of independent contracting (NASEM 2020).

The share of workers who are self-employed independent contractors is about 2 percentage points higher in the Gallup module compared to the CWS, but this difference accounts for relatively little (17 percent) of the lower employee share of work in the Gallup module. Finally, the share of the employed whose main job is in non-independent-contractor self-employment is about 4 percentage points higher, or roughly double, in the Gallup module.

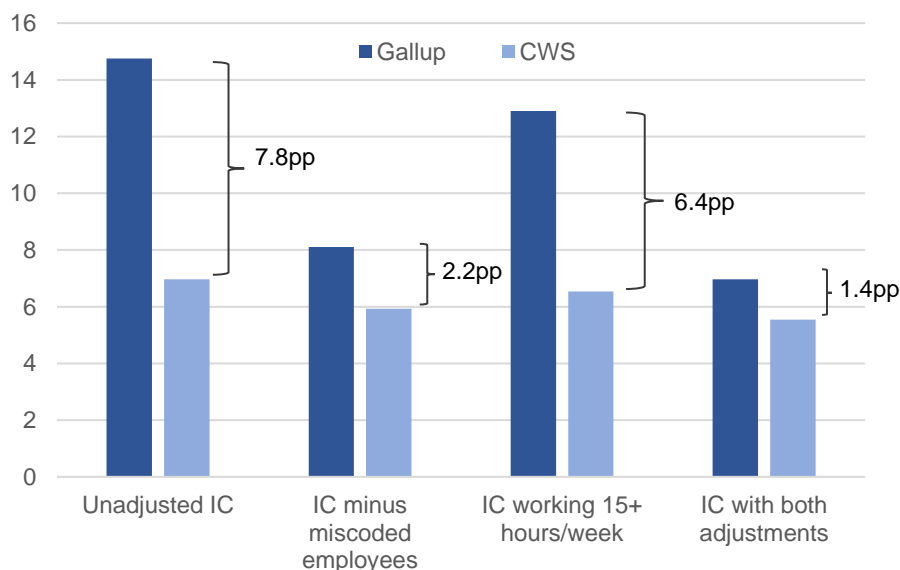
The middle and bottom panels of Table 2 report the distributions of employment arrangements separately for those working at least 15 hours per week and those working less than 15 hours per week on the main job. The distribution of employment arrangements on the main job in the Gallup data is more similar to the distribution in the CWS data when the sample is limited to those working at least 15 hours per week, but sizable differences remain. The largest contributor to the differences in the employee share is still independent contractors miscoded as employees, as the CWS captures far fewer miscoded employees than the Gallup survey. Among those working at least 15 hours per week, miscoding accounts for 52 percent of the difference in the Gallup and CWS sources. In contrast, the difference between the Gallup and the CWS measures of the share of workers who are self-employed independent contractors accounts for only 16 percent of the difference in the employee share.

Correspondingly, the bottom panel of Table 2 shows that, compared to those working at least 15 hours in their main job, low-hours workers are much more concentrated in self-employment arrangements in all surveys. In the CWS, the overall self-employment rate among low-hours workers exceeds 20 percent, and in the Gallup survey, where the incidence of low-hours work is about double that in the other two surveys, the self-employment rate is nearly 70 percent.

Figure 1 provides a graphical depiction of the factors contributing to the differences in measures of independent contracting in the Gallup module and the CWS. As can be seen in the first pair of columns in Figure 1, the overall incidence of independent contracting in the Gallup data is more than double that in the CWS, 7.8 percentage points higher. This difference shrinks considerably, to just 2.2 percentage points, when miscoded independent contractors are excluded

from the estimates. Restricting the samples to individuals working at least 15 hours per week further shrinks the gap between the two estimates to just 1.4 percentage points.¹⁷

Figure 1: Independent Contract Work on Main Job as Share of All Work Arrangements under Different Definitions, Gallup Contract Work Module and May 2017 Contingent Worker Supplement



SOURCE: Authors’ analysis of Gallup Contract Work module data and CWS data

NOTE: CWS=Contingent Worker Supplement. IC=independent contractor. Percentages shown on vertical axis. All estimates are weighted. Figures derived from Table 2.

Characteristics of the Independent Contractor Workforce in the Gallup Contract Work Module and the Contingent Worker Supplement

We next explore who, according to our Gallup data, the CWS measures of independent contracting are missing. Figures 2A through 2D display, for both data sets, the share (or unconditional probability) of independent contracting among the employed by age, gender, race and ethnicity, and education.¹⁸ All figures are created using the population weights provided by the respective source. In each figure, the blue portion of the bar shows the share of workers who

¹⁷ Although not a focus of this study, differences in the incidence of *non*-independent contractor self-employment in the Gallup module and the CPS or CWS also may be partly explained by the fact that the Gallup module captures more low-hours self-employment work. Those who initially report being employed by an employer are separately asked if they were self-employed—“even minimally like for an hour or more”—in the prior week. The CPS does not include such a follow-up prompt for those who report working for an organization. Other differences in question wording potentially could also contribute to the higher incidence of non-independent contractors, but we leave such testing to future research.

¹⁸ To make the measures in the Gallup and CWS data sets more comparable, we drop workers who hold only informal jobs from our definition of employment in the Gallup data.

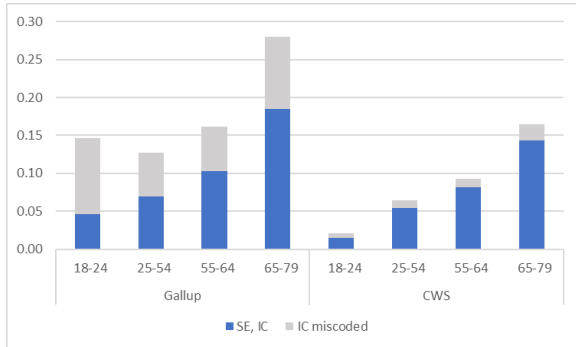
are self-employed independent contractors and the gray portion shows the share who are independent contractors miscoded as employees.

In each figure, the self-employed independent contractor share (blue) is only somewhat higher in the Gallup data than in the CWS, and the overall demographic patterns of self-employed independent contractor employment are similar in the two data sets. In both surveys, prevalence rises monotonically with age, is higher among men than women, is higher among White, non-Hispanic workers than among Black, non-Hispanic and Hispanic workers, and varies little by educational attainment.

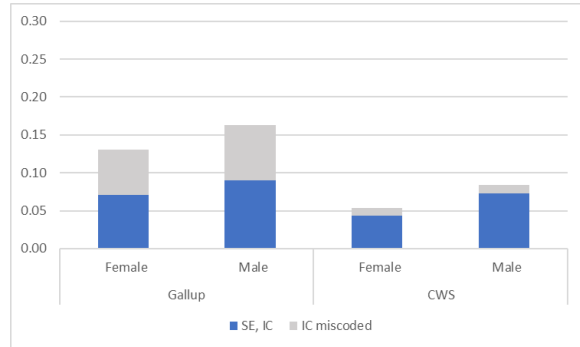
The incidence of independent contractors miscoded as employees (gray) is considerably higher for all demographic groups in the Gallup data than in the CWS. The relative probabilities also differ by demographic characteristic and, in some cases, capturing the miscoded independent contractors fundamentally alters the picture of who is most likely to work as an independent contractor. For example, young workers, age 18–24, are more likely than older workers to be miscoded as independent contractors, and in the Gallup data the incidence of independent contracting no longer monotonically rises with age once the miscoded independent contractors are taken into account. Moreover, although the incidence of miscoding is high among all racial and ethnic groups, it is considerably higher among Black, non-Hispanic and Hispanic workers than among White, non-Hispanic workers. While the CWS data suggest that independent contracting is most prevalent among White, non-Hispanic workers, the Gallup data suggest that it is more prevalent among Black, non-Hispanic and especially Hispanic workers, owing to the inclusion of miscoded independent contractors. Similarly, the inclusion of miscoded independent contractors in the Gallup data fundamentally alters the patterns observed by educational attainment. The incidence of miscoding is highest among those with a high school degree or less, and with the inclusion of these miscoded independent contractors, those with the lowest level of educational attainment have the highest overall probability of independent contracting.

Figure 2: Share of Workers Who Are Independent Contractors, by Age, Gender, Race and Ethnicity, and Education, Gallup Contract Work Module and May 2017 Contingent Worker Supplement

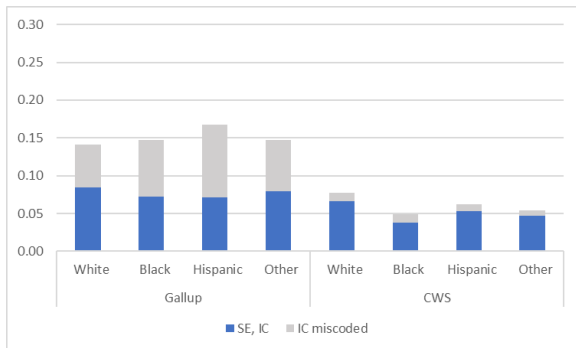
Panel A: Share by Age



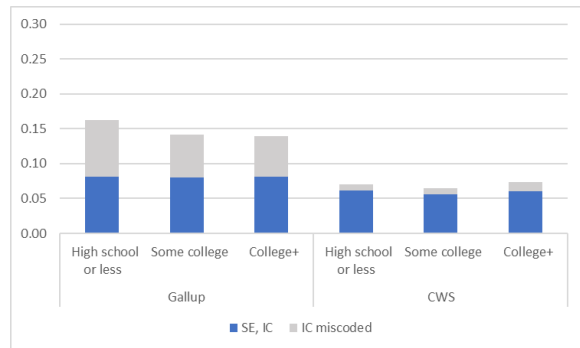
Panel B: Share by Gender



Panel C: Share by Race and Ethnicity



Panel D: Share by Education



SOURCE: Authors' analysis of Gallup Contract Work module data and CWS data

NOTE: CWS=Contingent Worker Supplement. SE=self-employed. IC=independent contractor.

Probabilities on a scale from zero to one shown on vertical axis. All estimates are weighted. N=35,475 for Gallup estimates and N=47,438 for CWS estimates.

Correlations between demographic and job characteristics may help account for the high incidence of miscoding among some demographic groups. For example, young workers may be especially likely to work low hours, a factor that is associated with high levels of miscoding, as shown in Table 1. We next examine the association of demographic characteristics with independent contractor status on the main job, controlling for other demographic and job characteristics. Table 3 reports the results of linear probability models with dependent variables for a worker identifying as a self-employed independent contractor, being miscoded as an employee, or being in either independent contractor category, both for the Gallup module and for the CWS. For each dependent variable, we report the results from models that control only for other demographic factors and region of residence and from models that also control for hours worked and occupation.

Table 3: Predictors of Identifying as a Self-Employment Independent Contractor and Being Miscoded as an Employee on Main Job, Gallup and Contingent Worker Supplement

	Gallup						CWS					
	IC, Self-emp		IC, miscoded		ALL IC		IC, Self-emp		IC, miscoded		ALL IC	
Age (25-54 omitted)												
18-24	-0.024** (0.005)	-0.042** (0.005)	0.039** (0.007)	0.028** (0.007)	0.015 (0.008)	-0.014 (0.008)	-0.038** (0.002)	-0.048** (0.003)	-0.038** (0.001)	-0.006** (0.002)	-0.041** (0.003)	-0.054** (0.003)
55-64	0.034** (0.005)	0.026** (0.004)	0.006 (0.004)	0.001 (0.004)	0.040** (0.006)	0.026** (0.005)	0.026** (0.003)	0.024** (0.003)	0.001 (0.001)	0.001 (0.001)	0.027** (0.004)	0.025** (0.004)
65-79	0.121** (0.006)	0.070** (0.007)	0.046** (0.005)	0.016* (0.006)	0.167** (0.008)	0.086** (0.008)	0.083** (0.007)	0.067** (0.007)	0.010** (0.003)	0.007~ (0.003)	0.094** (0.007)	0.075** (0.007)
Gender (Female omitted)												
Male	0.017** (0.003)	0.018** (0.004)	0.011** (0.003)	0.014** (0.004)	0.028** (0.005)	0.032** (0.005)	0.027** (0.002)	0.023** (0.002)	0.001 (0.001)	0.001 (0.001)	0.029** (0.002)	0.025** (0.003)
Race/ethnicity (White, non-Hispanic omitted)												
Black,non-Hispanic	-0.001 (0.006)	0.004 (0.005)	0.019* (0.006)	0.019* (0.006)	0.018~ (0.008)	0.023* (0.007)	-0.023** (0.003)	-0.016** (0.003)	0.000 (0.002)	0.001 (0.002)	-0.023** (0.004)	-0.015** (0.004)
Hispanic	-0.005 (0.006)	-0.003 (0.005)	0.033** (0.006)	0.032** (0.006)	0.029** (0.008)	0.029** (0.008)	-0.012** (0.003)	-0.012** (0.003)	-0.001 (0.001)	-0.002 (0.001)	-0.014** (0.004)	-0.014** (0.004)
Other	0.006 (0.008)	0.005 (0.008)	0.011 (0.008)	0.008 (0.008)	0.017 (0.011)	0.013 (0.010)	-0.019** (0.004)	-0.016** (0.004)	-0.004~ (0.002)	-0.003 (0.002)	-0.023** (0.005)	-0.019** (0.005)
Missing	0.012 (0.008)	0.025~ (0.012)	0.008 (0.007)	0.001 (0.010)	0.020 (0.010)	0.026 (0.015)	--	--	--	--	--	--
Education (High school and less omitted)												
Some college	-0.001 (0.005)	0.005 (0.005)	-0.016** (0.005)	-0.011~ (0.005)	-0.016* (0.006)	-0.006 (0.006)	-0.001 (0.003)	-0.001 (0.003)	0.001 (0.001)	0.001 (0.001)	-0.001 (0.003)	0.000 (0.003)
College+	-0.007 (0.004)	0.002 (0.005)	-0.014* (0.004)	-0.003 (0.005)	-0.020** (0.006)	-0.001 (0.006)	-0.002 (0.003)	-0.001 (0.003)	0.003* (0.001)	0.005** (0.001)	0.001 (0.003)	0.003 (0.004)
Hours worked on main job (30+ omitted)												
15 to 29	--	0.077** (0.007)	--	0.050** (0.007)	--	0.126** (0.009)	--	0.046** (0.004)	--	0.013** (0.002)	--	0.059** (0.005)
Less than 15	--	0.143** (0.009)	--	0.097** (0.009)	--	0.240** (0.011)	--	0.099** (0.009)	--	0.012** (0.004)	--	0.110** (0.009)
DK/Vary	--	0.066~ (0.031)	--	0.061 (0.033)	--	0.127* (0.043)	--	-0.033** (0.003)	--	-0.005* (0.002)	--	-0.037** (0.004)
Occupation controls	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes

SOURCE: Authors' analysis of Gallup Contract Work module data and CWS data.

NOTE: CWS=Contingent Worker Supplement. IC=independent contractor. Models are weighted linear probability models; controls for region included in all models. Sample includes all employed. N=35,058 for Gallup models and N=49,446 for CWS models.

For the Gallup data, reported in the first set of columns, adding controls for demographic characteristics has little effect on the patterns shown in Figure 2. Being a young or an older worker, being male, being a racial or ethnic minority or having low educational attainment remain positively associated with being an independent contractor miscoded as an employee. One result that does not hold up to controlling for other demographic characteristics is the positive association between being age 18–24 and *any* independent contract work. With additional controls for hours worked on main job and occupation, the association between low educational attainment and being miscoded as an employee weakens, and the association between educational attainment and *any* independent contractor work is insignificant.

In contrast, the strong associations between being male or being Black or Hispanic, on the one hand, and independent contract work, on the other, are robust to the inclusion of job characteristics in the model. Compared to women, men have higher rates of self-employed

independent contract work, of being an independent contractor miscoded as an employee and of independent contract work overall. Compared to White workers, Black and Hispanic workers have considerably higher rates of being miscoded as employees and higher overall rates of being in any independent contract arrangement.

In the CWS estimates, reported in the second set of columns in Table 3, controlling for other demographic and job characteristics does not alter the patterns shown in the unconditional means displayed in Figure 2. While there are positive associations between age and having a college degree, on the one hand, and being miscoded as an employee, because the overall incidence of miscoding is low in the CWS, these have little influence on the overall patterns of independent contracting in the CWS data. Controlling for other demographic characteristics and for job characteristics, being older, male, and White are positively associated with being an independent contractor who identifies as self-employed and with independent contracting overall.

Secondary employment

Another of the Gallup module's goals is to capture all sources of work for pay, including secondary, short-hours work. Several recent surveys point to high rates of secondary or informal work to supplement earnings from main jobs (Robles and McGee 2016, Abraham and Houseman 2019, Bracha and Burke 2021). Much of this secondary work is in self-employment or informal non-employee work that the CPS may not fully capture. To measure such work, the Gallup module asks all respondents both about work for an employer and about self-employment work during the prior week, even work for as little as an hour. At the end, the module also asks respondents if they engaged in any work for pay in the prior week that they did not previously report.

The Gallup survey allows respondents to report multiple secondary jobs and thus multiple arrangements for those jobs. For example, a respondent in the Gallup module could report secondary employment in an employee job, in self-employment work (independent contractor work or traditional self-employment), and in informal work during the prior week. The standard Gallup employment questions do not allow for multiple self-employment jobs. For this reason, the Gallup data may understate the prevalence of secondary self-employment, though the final module question about other work not previously reported, which we term informal work, may capture at least some of it.

The CWS asks respondents explicitly about the employment arrangement on their main job but does not ask about second jobs. Information on a second job is only available for the quarter of the CWS sample that belongs to the CPS outgoing rotation groups. These second jobs can be disaggregated into three categories: 1) employees (some of whom may actually be independent contractors miscoded as employees), 2) self-employed who report having an incorporated business and 3) self-employed who do not have an incorporated business.¹⁹ In

¹⁹There is no direct correspondence between being self-employed and business incorporation and being an independent contractor. With respect to main jobs, where data on incorporated status and independent contractor status are available from the main CPS and CWS, respectively, we find that about two-thirds of independent

contrast to the self-employed in the Gallup data, CWS respondents who are self-employed on their main job may report a second self-employment job. All else the same, this has the potential to raise the relative importance of secondary self-employment in the CWS, though the fact that the outgoing rotation group respondents are asked about only one secondary job means that some self-employment jobs held by people with three or more jobs could be missed.

Table 4 reports the incidence of secondary work both overall and by employment arrangement in the main job. Gallup module estimates are reported in Panel A and 2017 CWS estimates in Panel B. Because the Gallup survey allows for the possibility of multiple secondary jobs, the Panel A row percentages of secondary employment in various employment arrangements sum to slightly more than the total incidence of secondary employment given in the leftmost data column. This is not the case in Panel B, as the main CPS allows respondents to report only one secondary job.

The overall incidence of secondary job holding measured in the Gallup module is 19.2 percent compared to just 5.2 percent in the May 2017 CWS. Little of this difference is attributable to secondary wage and salary employment, with the share of workers holding a second employee job estimated at 5.2 percent in the Gallup data compared to 3.6 percent in the CWS data. Rather, the considerably higher incidence of second jobs in the Gallup data is driven by greater rates of secondary self-employment. This is true even though the Gallup data do not allow for multiple self-employment jobs, other than informal work.

As is the case in the overall numbers, the incidence of secondary employment for individuals who are employees in their main job is also much higher in the Gallup module (19.8 percent) than in the CWS (5.1 percent); this difference is due mostly to higher shares of traditional or independent contractor self-employment. For those who are self-employed in their main jobs (either in a traditional or an independent contract arrangement), the higher incidence of secondary employment in the Gallup survey arises primarily from informal work, which generally captures other types of self-employment or non-employee work.²⁰

In both the Gallup and the CWS data, there is a strikingly high incidence of secondary employment among those who are miscoded as employees on their main job. In the Gallup module, over a third of these workers hold at least one second job, most commonly with other employers where they have been miscoded or as self-employed independent contractors. In the CWS sample, 18.5 percent of these workers have second jobs, with the bulk of them being in self-employed unincorporated work.

contractors report not be having an incorporated business and about one-third do.

²⁰ As a reminder, the standard Gallup questions do not allow for the possibility of a person holding two (or more) self-employment jobs.

Table 4: Incidence of Secondary Work by Type of Work Arrangement on Main Job

	Panel A: Gallup					
	Any secondary work	Arrangement on secondary job				
		Employee, not miscoded	employed, not IC	Self-employed, IC	IC, miscoded employee	Informal work
Total	19.2 (0.3)	5.2 (0.2)	5.9 (0.1)	5.2 (0.1)	2.5 (0.1)	3.1 (0.1)
Employee, not miscoded	19.8 (0.3)	5.4 (0.2)	7.1 (0.2)	5.7 (0.2)	1.8 (0.1)	2.1 (0.1)
Self-employed, not IC	7.7 (0.6)	2.8 (0.4)	--	--	1.3 (0.3)	5.0 (0.5)
Self-employed, IC	10.3 (0.7)	2.2 (0.3)	--	--	1.5 (0.3)	8.4 (0.6)
IC, miscoded employee	37.6 (1.3)	9.2 (0.7)	6.5 (0.7)	12.1 (0.9)	12.5 (0.8)	5.9 (0.6)

Panel B: CWS, May 2017

Main job arrangement	Arrangement on secondary job			
	Any secondary work	Work for employer	Self- employed, incorporated	Self-employed, not incorporated
Total	5.2 (0.2)	3.6 (0.2)	0.4 (0.1)	1.1 (0.1)
Employee, not miscoded	5.0 (0.2)	3.8 (0.2)	0.4 (0.1)	0.9 (0.1)
Self-employed, not IC	4.2 (0.9)	2.7 (0.7)	0.9 (0.4)	0.7 (0.4)
Self-employed, IC	4.4 (0.8)	1.5 (0.5)	1.2 (0.4)	1.7 (0.5)
IC, miscoded employee	18.5 (3.6)	4.9 (1.9)	1.4 (1.0)	12.3 (3.1)

SOURCE: Authors' tabulations of Gallup Contract Work module data, CPS data and CWS data.

NOTE: CWS=Contingent Worker Supplement. IC=independent contractor. CWS sample restricted to members of the Current Population Survey outgoing rotation groups. CWS categories for arrangement on main job from the supplement; CWS categories for arrangement on the secondary job determined based on CPS outgoing-rotation-group questions. In CWS estimates, incorporated self-employed on second job proxies for self-employed, not IC on second job; unincorporated self-employed on second job proxies for self-employed, IC on second job. All estimates are weighted. N=35,475 for Gallup estimates. N=11,975 for CWS estimates.

Multilevel Contracting

This paper's focus is independent contracting—situations in which self-employed workers provide services for clients, including situations in which the independent contractor primarily works for one client. Another type of contracting occurs when employers contract out their workers to other businesses. As discussed earlier, multitier contracting arrangements can blur the distinctions between these types of contracting, such as when a firm hires independent contractors who then are assigned to work for a client firm. The Gallup module includes questions to capture contract company arrangements, allowing us to investigate this possibility.

Among those who reported working for an employer, respondents were randomly

assigned to one of two versions of a question asking about contract company arrangements. The first version asked, “In the last 7 days, did your employer contract you or your services out?” The second asked, “In the last 7 days, were you doing work for a business or organization that was different from the business or organization that paid you?”²¹ The first version is modeled on a question about contract company work in the CWS. The second version avoids referring to being “contracted out,” a term respondents might find confusing. Everyone who answered affirmatively to one of these versions of the question was then asked if they were usually assigned to more than one client or customer. If respondents replied that they usually worked for just one client or customer, they were asked if they usually worked at the client’s or customer’s worksite. Both of these follow-up questions were modeled on questions in the CWS.

We define contract company workers in two ways. Our broad definition requires that individuals contracted out by their employer (or paid by a different organization than the one they work for) usually work for one client but allows this work to occur either remotely or at the client’s worksite. Our narrow definition is further restricted to those who work primarily at the client’s worksite. The latter corresponds to the definition used by the Bureau of Labor Statistics when reporting estimates based on the CWS. The shares of contract company workers under both definitions were slightly larger for the first question version, patterned on the CWS wording, than for the alternative version, both for the broad definition (3.0 versus 2.6 percent) and for the narrow definition (2.0 versus 1.6 percent). Although these differences are statistically significant at conventional levels, they are not substantively different, and we report only the results from the combined sample here.

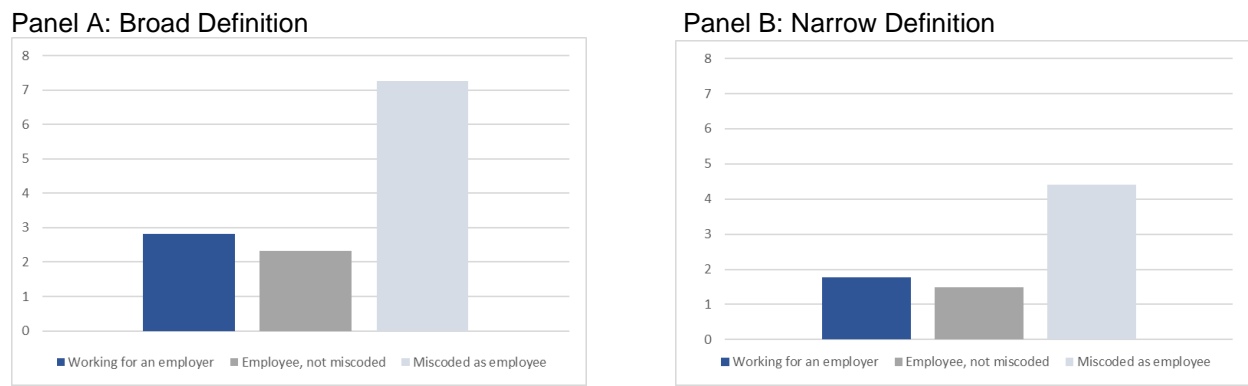
A key difference between the Gallup Contract Work module and the CWS is the sample that received the questions about contract work. The Gallup module queried all workers who said they worked for an employer (on a primary or secondary job) about contract company work, whereas the CWS asked about this only on main jobs and only for employees who were not miscoded on that job. In other words, individuals who were coded as employees on their main job in the CPS but reported being an independent contractor in the CWS were *not* asked questions about contract company work. The focus groups we conducted in developing the Gallup survey instrument, however, uncovered cases of multilayer contracting including one in which the individual initially reported being an employee, but when probed, said that he was working as an independent contractor and that his employer contracted him out to other organizations. Our survey module permits us to examine how common such instances of multilevel contracting are.

Figures 3A and 3B display statistics from the Gallup module on the percentage in a contract company arrangement, first for everyone who reported working for an employer and then separately for employees and miscoded employees. Figure 3A shows percentages for the broad definition of contract company work and Figure 3B shows percentages for the narrow definition. Among everyone working for an employer, the shares in contract arrangements are

²¹ Variants of these questions were asked of respondents reporting working for more than one employer. These questions are designed to capture whether respondents were contracted out on *any* of their jobs.

2.8 and 1.8 percent under the broad and narrow definitions, respectively.²² The incidence of contract company work is approximately three times as large among miscoded employees as among employees who are not miscoded—7.3 percent versus 2.3 percent under the broad definition and 4.4 percent versus 1.5 percent under the narrow definition. The relatively high incidence of contracting out among miscoded employees illustrates the sort of multiple contracting layers that rarely are captured in survey data. Collecting data that can shed light on the prevalence and structure of increasingly complex contract arrangements should be a priority for future research (Weil 2017).²³

Figure 3: Employees Contracted out by Employer (percent)



SOURCE: Authors’ analysis of Gallup Contract Work module data

NOTE: Sample is people working for an employer. Broad definition includes all workers contracted out to a single business or organization. Narrow definition further restricted to workers working at the customer or client’s site. Probabilities on a scale from zero to one shown on vertical axis. All estimates are weighted. N=37,475.

²² The incidence of contract company work in the CWS is 0.8 and 0.6 percent (among all employed) under the broad and narrow definitions, respectively. As noted, the Gallup statistics include contract work on second jobs and contract work among miscoded workers while the CWS statistics do not. Although we cannot construct fully comparable statistics, these measurement differences can explain only a small share of the difference in the incidence found in the two data sets.

²³ A recommendation that future iterations of the Contingent Worker Supplement collect data on the incidence of contract company work among miscoded employees was included in a consensus panel study by the National Academies of Sciences, Engineering, and Medicine (NASEM 2020).

Conclusion

Independent contractors are self-employed and therefore lack many of the employment protections afforded to W-2 employees, including coverage by employment and labor regulations, eligibility for unemployment insurance and workers compensation, and access to employer-provided benefits. Evidence has long suggested that many businesses classify workers as independent contractors to avoid certain costs and legal liabilities associated with having employees. The recent rise of online platforms has heightened awareness of these issues and prompted various policy proposals to address them.

Yet, there is considerable heterogeneity in the characteristics of individuals in independent contractor arrangements and the jobs they do. The degree to which new policies are needed to address perceived problems requires good data on the size of the independent contractor workforce and its composition. Prior research, however, points to potential gaps and biases in standard household surveys in measures of the self-employed and the subset who are in independent contractor arrangements (e.g., Abraham et al. 2021; Abraham and Amaya 2019; Abraham and Houseman 2019; Allard and Polivka 2018; Katz and Kruger 2019; Robles and McGee 2016).

Our research addresses why standard household surveys may miss many in independent contractor arrangements and tests these ideas through a module on the Gallup Education Pulse Survey administered in 2018 and 2019. Focus groups that we conducted while developing the survey module revealed that independent contractors often think of themselves as working for an organization, particularly if they have only one or only a few clients, and may not think of themselves as being self-employed, especially if they associate self-employment with owning a business. We emphasize that the standard household survey employment questions used to distinguish whether a worker is an employee or self-employed ask only whether the worker is employed by an organization or is self-employed, and so implicitly assume that those who work for an organization are its employees. Evidence from our focus groups suggests that many independent contractors are likely to report being employed by an organization in response to such a question. We also argue that although the CWS queries all workers about whether they are independent contractors, including those who are coded as employees in the main CPS, the CWS is likely to miss many in such arrangements because it defines an independent contractor as someone who finds their own clients—a definition that may not pertain, for example, to those who work primarily for one organization or for an online platform. Insights from our focus groups also suggest that those in independent contractor arrangements often have multiple income streams and sometimes are subcontracted out to other organizations.

Key findings from the Gallup survey module corroborate evidence from earlier research and observations from our focus groups. We find that a substantial minority (9 to 11 percent) of those who initially report being “employed by an employer” indicate, upon probing, that they are in a contract arrangement on at least one job held in the prior week. Our data also show that independent contracting is common in both primary and second jobs, and secondary work activities are especially common among those who are independent contractors but are miscoded as employees in their primary job. Additionally, we find that the incidence of subcontracting

among independent contractors miscoded as employees is about three times as high as among employees. The former is an example of multilevel contracting, a phenomenon that is rarely captured in household surveys.

Comparing measures of independent contracting on workers' main job in the Gallup module and the CWS, we find that the incidence is roughly double in the Gallup module, with most of the difference accounted for by the fact that the Gallup module captures far more independent contractors miscoded as employees. Moreover, while the demographic patterns among independent contractors who identify as self-employed are similar in the two surveys, incorporating independent contractors who are miscoded as employees changes the demographic picture in important ways in the Gallup data. Most notably, with the inclusion of miscoded employees, independent contractors in the Gallup data disproportionately are Black and Hispanic rather than White and have low educational attainment.

Finally, evidence from our module suggests ways that household surveys might improve future data collections on the independent contractor workforce. We tested different wording for questions designed to capture whether workers are in an independent contractor arrangement or are contracted out by their employer. Interestingly, in both cases, we found that using language modeled on existing questions in the CWS yielded a somewhat higher incidence of independent contracting and contract company work than the alternatives we tested, which indirectly asked respondents about the relevant employment arrangement and avoided use of any contract terminology. Our research, however, clearly points to the difficulty of distinguishing employee from self-employment arrangements in household surveys and indicates that adding questions that probe for clarification on a worker's employment arrangement is critical for accurately measuring independent contractor work. Our research also indicates that probing for low-hours jobs and informal work is important for capturing all primary and secondary work activities.

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