

Making Ends Meet: The Role of Informal Work in Supplementing Americans' Income

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Abstract

We present new evidence on the role of informal work as a source of income for U.S. households. Data from the Survey of Household Economics and Decisionmaking imply that over the course of a month about a quarter of adults engage in some informal work activity outside of a main job. About two-thirds of those doing informal work say it is to earn money and about one-third say that informal work is an important source of household income. Informal work plays a particularly important role in the household finances of minorities, the less educated, those who report financial hardship, those who work part-time involuntarily, independent contractors, and the unemployed. Although aggregate earnings from informal work may be modest, informal work appears to be important in helping many households make ends meet. It cannot, however, compensate for the lack of benefits commonly associated with part-time and contractor work.

In recent years, widespread media reports have trumpeted the rise of the so-called “gig” economy, characterized by a workforce increasingly composed of independent contractors, consultants, freelancers and others in “non-employee” arrangements. Given the widely-held belief that the traditional employee-employer relationship is in decline, many were surprised by the findings from the 2017 Contingent Work Supplement (CWS) to the Current Population Survey (CPS) released in June 2018 by the Bureau of Labor Statistics. The new CWS data show no increase in the prevalence of any of the alternative work arrangements the supplement measures (independent contractors, on-call workers, temporary agency employees and contract firm employees) compared to the last time the CWS was administered twelve years earlier. In fact, the CWS data show a slight decline in the prevalence of independent contractor arrangements—captured by asking survey respondents if they worked as an independent contractor, independent consultant, or freelance worker—between 2005 and 2017. This finding is especially surprising given evidence from other sources suggesting that non-employee work arrangements have become more common (e.g., Farrell and Greig 2016a, 2016b; Jackson, Looney and Ramnath 2017; Abraham et al. 2018a; Farrell, Greig and Hamoudi 2018).

Reactions to the new CWS data have varied. On the one hand, some have characterized the CWS findings as showing that any changes in the prevalence of gig and other non-employee work arrangements are of little significance and do not merit the large amount of attention they have receive. Mishel (2018), for example, described the new CWS data as providing “the best measure of independent contracting” and throwing “cold water on those hyping the explosion of freelancing and the rapidly changing nature of work.”

Others have pointed to potentially important shortcomings in the CWS data. Some people involved in informal work activities may not think of that work when answering the standard CPS employment questions (Bracha and Burke 2017, Abraham and Amaya 2018). Because the CWS questions are asked only of those identified as employed in the basic monthly CPS , such individuals’ informal work activity will be missed. Another limitation is that the CWS questions on alternative work arrangements are asked only about a person’s main job. Other evidence has established that earnings from

work done as an independent contractor, consultant or freelancer often supplement other sources of income, rather than representing a worker's main source of income (e.g., Farrell and Greig 2016a, 2016b; Jackson, Looney and Ramnath 2017; Abraham et al. 2018a, 2018b; Farrell, Greig and Hamoudi 2018; Koustas 2018).

While acknowledging that the prevalence of supplemental non-employee work may have grown, some have argued that the aggregate volume of such activity as measured by the amount of earnings it generates is a more meaningful metric than the head count of participants (Mishel and Wolfe 2018). Simply looking at the aggregate earnings generated by informal work, however, arguably is not the best way to gauge its importance. As documented in ethnographic studies of low-income communities (e.g., Edin and Lein 1997, Seefeldt and Sandstrom 2015), even a relatively small amount of money from non-employee work activity can make a critical contribution to enabling a low-income household to make ends meet. The value of informal work to the households engaging in it could be considerable even if the aggregate amount of income it generates is modest.

Our paper's primary contribution is to present new evidence on the role of informal work as a source of income for individuals and households with different characteristics. Our analysis utilizes data from the Survey of Household Economics and Decisionmaking (SHED), a large household survey sponsored by the Board of Governors of the Federal Reserve System. In 2016 and 2017, the SHED included a special module with detailed questions about various types of informal work done outside of a person's main job. Given the extensive information the survey collects on respondents' demographic characteristics, financial situation, and employment status, these data are especially well suited to examining who is involved in informal work and the role that earnings from informal work play in household incomes. We also exploit the limited panel structure of the survey to examine the persistence of informal work from one year to the next.

Although the SHED data do not allow us to make statements about how the prevalence of informal work has changed over time, they imply that 28 percent of adults age 18 and older participated in informal work for pay during the survey reference month. Two-thirds of those reporting informal work

said that their motivation was to earn money; more than a third said that the money earned from informal work over the previous twelve months was a very or somewhat important source of household income; and just under a third said that it usually accounted for 10 percent or more of their household's monthly income. Although there is reason to suspect that the overall incidence of informal work is higher among respondents to the SHED than in the population as a whole, informal work nonetheless appears to be an important source of income for many who are doing it.

The share of people reporting that they do informal work to earn money varies considerably across groups based on their demographic, financial, and employment characteristics. A disproportionate share of respondents who are low-educated, minority, low-income, unemployed or experiencing financial distress report working in informal jobs to earn money. Informal work to earn money also is more prevalent among workers who are part-time, sole proprietors, contractors, or consultants on their main job or who have unpredictable work schedules. Moreover, informal work appears to be more persistent and important to household income among those with these same characteristics.

The paper proceeds as follows. Section I briefly reviews the literature on informal work, focusing primarily on evidence about the prevalence of informal work and the role of informal work in participants' household finances. The SHED survey data that we analyze are described in section II. Section III reports estimates from the SHED on the prevalence of informal work, the characteristics of those involved in informal work, and the contributions of earnings from informal work to household finances. This section also examines the persistence of participation in informal work. The paper concludes with a summary of findings and discussion of policy challenges.

I. Background

Despite a widespread perception that nonemployee work has become more common, data from standard household surveys such as the Current Population Survey (CPS) and the American Community Survey (ACS) show no upward trend in self-employment in recent decades. In contrast, substantial growth in the number of people with income from nonemployee work is apparent in administrative data

(Katz and Krueger 2016, Jackson, Looney and Ramnath 2017, Abraham et al. 2018a). Based on an analysis of data for a sample of respondents to the Annual Social and Economic (ASEC) supplement to the CPS linked to tax records, Abraham et al. (2018a) conclude that roughly a third of the growth in self-employment between 1996 and 2012 captured in administrative data but missing from the CPS-ASEC occurred among people for whom no work-related income was reported on the CPS-ASEC and roughly a third among people for whom secondary self-employment was not captured in the CPS-ASEC.

Findings such as these have contributed to fears that the questions asked on standard household surveys may be missing informal work activity. Abraham and Amaya (2018) report on a study of a sample of respondents recruited via Amazon's Mechanical Turk in which they first asked subjects the CPS employment questions and then asked additional questions to probe for informal work activity. In their sample, probing uncovered a substantial amount of additional work activity when respondents were reporting both for themselves and for others in their household.

The periodic Contingent Work Supplement to the CPS collects information about work arrangements to augment the information collected in the basic monthly CPS, but the CWS asks only about the arrangements on individuals' main jobs as reported in the basic monthly CPS. If informal work activity is not reported in response to the standard CPS employment questions or is reported but is not considered to be a subject's main job, the CWS does not ask about it. Even if people report informal, nonemployee work as their main job in the CPS, they may not consider themselves to be independent contractors, independent consultants or freelance workers, and thus not be captured by the CWS question used to identify the independent contractor group.

The possibility that informal work is under-reported in existing household surveys has generated considerable interest in new approaches to measuring its prevalence. In a series of innovative papers, researchers at the J.P. Morgan Chase Institute have used data on deposits from online platform companies into the checking accounts of Chase banking customers to measure trends in online platform work. Their latest estimates incorporate payments originating from 128 separate platforms. Farrell, Greig and Hamoudi (2018) report that, in March of 2018, 1.6% of J.P. Morgan Chase checking accounts received

deposits that originated with an online platform company, up from a little over one percent in March of 2016 and less than half a percent in March of 2014.

The J.P. Morgan Chase data, however, may be missing some online platform payments and thus understating to some unknown extent the share of households with online platform income. First, while lengthy, the list of online platform companies considered in compiling the data is not exhaustive. Second, some online platform payments may not flow through recipients' checking accounts. The largest share of online platform payments are those for transportation services. In 2015, Lyft introduced its Express Pay option; Uber followed in 2016 with Instant Pay. Both services allow drivers to transfer money they have earned instantly to a debit card rather than have it deposited at regular intervals into in their checking account. Other platforms' payment arrangements vary, with some offering deposit to a checking account as the only option, others offering multiple payment options that include deposit to a checking account, and still others not having deposit to a checking account as an option at all.

While there has been considerable interest in the prevalence and growth of online platform activity, work mediated through online platforms represents only a subset—and quite likely a small subset—of all informal work. Other researchers seeking to measure the overall prevalence of informal work activity have carried out household surveys designed specifically for that purpose. The Federal Reserve Bank of Boston's Survey of Informal Work Participation (SIWP) has been fielded several times since 2013 as a supplement to the Survey of Consumer Expectations (SCE). The SCE is a rotating online panel with participants who may remain in sample up to 12 months. Respondents to the January and December 2015 SIWP's were given a list of different types of informal work activity and asked to indicate those in which they were "currently engaged." Based on these responses, Bracha and Burke (2017) estimate that 33 percent of adults age 21 and older were currently engaged in one or more types of informal work activity.

The Enterprising and Informal Work Activities (EIWA) Survey sponsored by the Federal Reserve Board was administered online to the GfK KnowledgePanel in October and November of 2015

(Robles and McGee 2016). Like the SIWP, the EIWA contained a battery of items asking respondents about different informal income-generating activities, but with a six-month reference period. The EIWA estimates indicate that 36 percent of the U.S. population age 18 and older engaged in at least one of these activities during the six-month reference period. According to the EIWA data, 27% of the adult population earned income by housecleaning, house sitting, yard work or other property maintenance tasks and 17% earned income by babysitting or providing childcare services.

The 2015 Survey of Household Economics and Decisionmaking (SHED), also administered online via the GfK KnowledgePanel, contained a single question about whether a respondent was currently engaged in informal work activity. This question focused specifically on informal work that was not part of a job the respondent had already reported or, in the case of a respondent with more than one job, not part of their main job. In 2016, the SHED adopted the more detailed set of questions about informal work activity developed for the EIWA and a one-month reference period, again focusing specifically on work that was not part of an already reported job or main job.¹ SHED respondents were told to exclude taking GfK surveys when answering these questions. According to our tabulations of pooled data from the 2016 and 2017 SHED described more fully later in the paper, 28 percent of adults age 18 and older reported participating in informal work outside of a main job during the survey reference month; excluding activities that involved selling or renting property, that figure was 24 percent.

The SIWP, the EIWA and the SHED are consistent in estimating very high prevalence rates for informal work activity. All three are based on online panels weighted to match the demographic characteristics of the adult population as a whole. A possible concern is that the type of people who are willing to participate in an online panel also might be more likely than others with similar observable characteristics to participate in informal work activity.² In our analysis of the 2016 and 2017 SHED data,

¹ The SHED's focus on informal work outside of a main job is different than the focus in the SIWP and EIWA, both of which asked about all informal work activity.

² Although there is not a monotonic relationship between response rates and nonresponse bias (Groves and Peytcheva 2008), very low response rates may exacerbate concerns about sample representativeness. Response rates

we have attempted to assess the extent to which the nature of the sample may have affected the prevalence of informal work activity among SHED respondents, but this is difficult to do and some uncertainty unavoidably remains. There is no obvious reason, however, to doubt our findings regarding the correlates of participation in informal work.

Ethnographic research suggests that, at least in certain populations, income from informal work is an important supplement to households' income from other sources. In a seminal study, Edin and Lein (1997) examined the household budgets of low income mothers in four cities, documenting the multiple sources of income these mothers drew on to make ends meet. Among mothers in their sample who were on welfare, about 40 percent engaged in informal work that was not reported to their caseworkers; about 30 percent of the mothers in their sample who were not on welfare engaged in informal work in addition to their primary job. In a more recent study of mothers in Los Angeles and southeastern Michigan who were neither working at a regular job nor receiving cash welfare benefits, Seefeldt and Sandstrom (2015) similarly find evidence of substantial reliance on informal work, though they observe that the amounts of money earned from such work can be quite unstable. Focus groups conducted by one of us in connection with a related project also produced evidence of substantial reliance on a variety of types of informal work in economically depressed areas of southwest Michigan.

A limitation of the findings from qualitative research is that they cannot readily be generalized. Research using tax data has established that, in the population as a whole, a considerable share of self-employment activity supplements income from a primary wage and salary job (Jackson, Looney and Ramnath 2017, Abraham et al. 2018a, 2018b). Farrell and Greig (2016a, 2016b) and Farrell, Greig and Hamoudi (2018) find that income from work mediated through online platforms helps to supplement earnings from other sources and compensate for fluctuations in income from individuals' primary jobs. In a study of the earnings of Uber drivers based on data obtained from a large online personal financial

for the EIWA and the 2016 and 2017 SHED are under 5 percent; no response rate is reported for the SIWP, but based on the description of how the survey sample was constructed, it likely is similarly low.

management service, Koustas (2018) similarly finds that earnings from driving help to smooth fluctuations in earnings from a main job and thus help to smooth consumption.

Related to the question of how informal work is being used is the question of whether informal work activity tends to be short-term or persistent. Studies of participation in online platforms have found that many participants do not remain on the platforms for long. Analyzing records for Uber drivers, for example, Cook et al. (2018) report that more than 60 percent of those who started driving between January 2015 and March 2016 were no longer active on the platform six months later, where drivers were considered active if they made at least one trip within 26 weeks after a given date. Farrell and Greig (2016b) report that turnover in the online platform economy as a whole is high. In their study, they identify online platform participants from deposits to bank accounts and find that more than half of participants exited within 12 months of entry. Relatively little is known, however, about the persistence of participation in informal work more generally.

II. Data

The Survey of Household and Economic Decisionmaking (SHED) is sponsored by the Board of Governors of the Federal Reserve System. It has been conducted annually since 2013, and detailed questions about informal work have been included on the survey since 2016. GfK, a consumer research firm, administers the survey using its online KnowledgePanel. The cumulative survey response rate—reflecting the response rate to the invitation to join the KnowledgePanel, the response rate to an initial profiling survey carried out as part of the process of developing the sample for the SHED, and the response rate to the SHED itself—was about 4.4 percent in 2016 and 4.2 percent in 2017, rates that are very low compared to those for the surveys underlying official labor market statistics but that are fairly typical for probability-based online survey panels.³

³ See Board of Governors (2017, 2018) for additional details about the 2016 and 2017 SHEDs.

We make use of information about the demographic characteristics of SHED respondents, their household incomes and their employment situation. In the employment section of the SHED questionnaire, respondents are asked whether at any point during the prior month they were employed for someone else, self-employed, temporarily laid off from a job, or not employed. An individual may report multiple statuses. Additional employment-related information also is collected, including information about the main job of those who report being employed. Everyone—whether or not they report employment during the prior month—then is asked whether they have engaged in any of 11 (2016) or 12 (2017) different types of “occasional work activities or side jobs” during the month. Those who previously reported working during the month are instructed not to include activities on their main job. Thus, the survey is designed to capture informal work activities that the respondent did not consider when answering the initial employment questions or that are secondary to a primary job.

The survey groups informal activities into three broad categories: personal services, on-line activities, and off-line sales and other activities. Within each category, respondents are asked about three or four more specific types of work. Personal services include babysitting, child care services, dog walking, or house sitting; disabled adult or elder care services; house cleaning, house painting, yard work or other property maintenance work; and providing other personal services such as running errands, helping people move, etc. On-line activities include completing paid online tasks, such as those on Amazon Services, Mechanical Turk, Fiverr, Task Rabbit or You Tube; renting out property online, such as a car or residence; selling goods online through eBay, Craigslist, or other websites; driving using a ride-sharing app such as Uber or Lyft (2017 survey only); and other online paid activities. Respondents are instructed not to include taking GfK surveys in reporting their online activities.⁴ The final category includes selling goods or services at flea markets, garage sales, or other temporary locations; selling

⁴ GfK maintains a modest incentive program to encourage panel members to participate in surveys. In addition to the standard GfK incentives, those completing the SHED received the equivalent of \$5 through the GfK rewards system, in the form of points that could be used for online purchases from participating merchants.

goods at consignment shops or thrift stores; and any other paid activity that the respondent had not previously mentioned.

Individuals who report having engaged in informal work activity during the prior month are asked additional questions about their reasons for doing so, allowing us to identify those whose primary motivation is to earn money. In addition, the survey asks questions about the importance of informal work to household income and the amount of time that the respondent usually devotes to informal work activity.

The SHED questionnaires are available for download from the survey website. Several changes were made to the work-related questions between 2016 and 2017. For example, although obtaining essentially the same information, the sequence of questionnaire items used to collect the information for determining a person's employment status was modified; a question was added to allow those working part-time voluntarily to be distinguished from those working part-time who would have preferred full-time work; and, in the question about informal work activity, driving for Uber, Lyft or another ridesharing company was added as an explicit response option and minor changes were made to the wording of several other response options. We have created a data set that harmonizes the two years' responses.

There were a total of 6,610 responses to the 2016 SHED, fielded in October, and 12,447 responses to the 2017 SHED, fielded in November and December, for a total of 19,057 responses. GfK has created survey weights for use in analysis that are constructed so that the characteristics of the weighted sample match those of the population age 18 and older based on the March Current Population Survey with respect to age, gender, race, ethnicity, education, census region, metropolitan area status, and household income. Among those interviewed for the 2016 SHED, 2,995 were re-interviewed in 2017. GfK also has created weights suitable for use with this smaller panel sample.

Most of the results we report are based on a sample created by pooling the 2016 and 2017 responses, treating the two years' data as independent cross sections. We dropped 497 cases that were missing values for variables needed for our analysis, reducing the usable sample from 19,057 cases to 18,560 cases. Our analysis of the smaller panel interviewed in both 2016 and 2017 focuses either on the

608 people who reported being engaged in informal work in the 2016 SHED or on the 395 people in that group who said their reason for doing informal work in 2016 was to earn money. We drop 87 cases from the first group and 79 cases from the second group due to missing values for variables of interest, leaving us with usable samples of 521 and 316 cases, respectively. All reported tabulations of sample distributions make use of the survey weights constructed by GfK.

III. Informal Work: Evidence from the SHED

The detailed information about informal work collected on the SHED together with the rich set of demographic, financial and employment variables also available on the survey make it well suited to exploring who performs informal work and their reasons for doing so. The smaller panel subsample allows us also to use these data to examine the persistence of informal work.

Incidence of informal work activities

Tables 1a and 1b show the incidence of informal work activities by the respondent's demographic characteristics, income and finances, and employment status and job characteristics, based on pooled data from the 2016 and 2017 surveys. The first column of each table shows the percent of the population with various characteristics. Column (2) shows the percent engaged in any informal work activity during the last month, while columns (3) through (5) display the percent engaged in each of the three categories of informal work. Column (6) shows the percent who report being engaged in two or more informal work activities during the month.

Overall, 28.1 percent of respondents reports being engaged in some type of informal work activity during the last month, with 13.0 percent engaged in personal services, 15.0 percent in on-line activities, and 10.6 percent in off-line sales or other activity. Among all respondents, 11.7 percent—or about 42 percent of those reporting any informal work activity—reported being engaged in at least two types of informal activities during the month.

Table 1a shows the incidence of informal work by demographic characteristic. Informal work declines monotonically with age, although a sizable minority of older adults reports some type of informal work activity in the preceding month (16.5 percent among those age 65 to 74 and 13.4 percent among those 75 and older). The relative importance of various types of informal work activities also varies systematically by age. The most common form of informal work among the youngest age group, 18-24, perhaps not surprisingly, is personal services, which includes child care, elder care and home maintenance work. Among prime age working adults—those age 25 to 54—online tasks are the most common form of informal work, while the incidence of informal work is relatively evenly distributed across the three categories among those age 55 and older. The percentage of those engaged in two or more types of informal work activities also declines with age, with 20.4 percent of respondents age 18 to 24 but only 3.2 percent of those age 75 and older reporting more than one type of informal work activity.

The incidence of informal work activity varies little by gender. Minority groups generally are only somewhat more likely to report working in an informal arrangement than whites, but the mix of types of work activities varies considerably more by race and ethnicity than the overall incidence. Blacks and Hispanics are much more likely than whites to have provided personal services and to have engaged in two or more types of informal work activity.

Interestingly, the incidence of informal work activity is, if anything, slightly *higher* among those who are more educated. Those with a bachelor's degree are about two percentage points more likely than those with a high school education or less to report doing informal work in the last month (29.5 versus 27.2 percent). The patterns for the overall incidence of informal work, however, mask considerable heterogeneity in the patterns by type of activity. The share of people providing personal services declines sharply with education level; among those with a four-year college degree, the percent providing personal services is only about half (8.7 percent) that among those with a high school education or less (16.5 percent). In contrast, the percent engaging in online work activities rises sharply with education, with college-educated individuals about 50 percent more likely to engage in online activities (18.4 percent) than those with a high school education or less (12.0 percent). College educated respondents are also

somewhat less likely than less educated respondents to report having engaged in two or more informal work activities in the last month.

Table 1b reports the incidence of informal work activities by three measures of the household or respondent's finances: household income, a subjective assessment of financial well-being, and variability of the respondent's income. Annual household income is reported in categories, and in Table 1b we report three aggregated groupings that correspond roughly to household income terciles: less than \$50,000, \$50,000 or more but less than \$100,000, and \$100,000 or more. The overall incidence of informal work is similar across the household income terciles, but as with race and education, the composition of that informal work varies greatly across the categories. Most striking, those in the bottom tercile are more likely to provide personal services (16.8 percent) than those in the middle (12.2 percent) and top terciles (9.9 percent). Those in the bottom tercile are also somewhat more likely to report working in more than one informal arrangement (13.8 percent) than those in the second (10.7 percent) or third terciles (10.5 percent).

In addition to reporting their household income, respondents provide a subjective assessment of their financial well-being, answering that they find it "difficult to get by," they are "just getting by," they are "doing okay," or they are "living comfortably." Compared to those who report living comfortably, those who report finding it difficult to get by are 14 percentage points more likely to have worked in an informal arrangement (38.4 versus 24.4 percent) and almost 10 percentage points more likely to have worked in two or more arrangements (19.0 versus 9.4 percent).

Respondents also are asked about the stability of their monthly income. About 9 percent indicate that it often varies from month-to-month, 21 percent that it is mostly the same but sometimes varies, and about 70 percent that it varies little. Those who report that their monthly income often varies are more than 10 percentage points more likely to report having engaged in informal work activities in the last month (36.6 percent) than those whose income varies little (24.8 percent). They also are nearly twice as likely to have worked two or more side jobs than those with stable incomes (18.4 percent versus 9.3 percent). These statistics of course are descriptive in nature; the higher incidence of informal work could

be a response to unstable income from a main job or periodic spells of unemployment, or the higher variability of income could be a consequence of periodically having side jobs.

Table 1b also shows the incidence of informal work arrangements by employment status and, among employees, contractors and consultants, by how the individual's work schedule is determined and its variability. The prevalence of informal work exceeds 40 percent among those who are self-employed, sole proprietors or partners, consultants or contractors, and not employed but looking for work. These numbers are 13 to 15 percentage points higher than among full-time employees. In 2017, part-time employees were asked whether they preferred part-time or full-time hours; we find a similarly high prevalence of informal work among those stating they would have preferred full-time work, a group we label as involuntary part time.⁵ The incidence of working multiple side jobs also is quite high in each of these groups, ranging from about 19 to 25 percent. The prevalence of informal work is lowest among those who are not employed and not looking for work, but even in this group, about one in five reports having engaged in some informal work activity in the prior month.

The relatively high reported prevalence of informal work during the past month among those who report not being employed at any point during the month is notable. Some researchers have suggested that those engaged in informal work for pay may not think of these activities as regular jobs and so may fail to report them in response to the questions about employment on government household surveys. To the extent this occurs, it will lead to an understatement of the employment to population ratio and potentially to an understatement of the labor force participation rate and an overstatement of the unemployment rate (see, for example, Bracha and Burke 2017, Abraham and Amaya 2018).⁶ Although

⁵ Although we label part time workers who said they would have preferred full time work as involuntary part-time, this measure does not correspond exactly to the measure of involuntary part-time employment in the Current Population Survey. The CPS measure requires not only that individuals working part-time prefer full-time work but that they were available during the survey reference week to work longer hours.

⁶How taking into account previously unmeasured informal work activity affects the labor force participation rate and unemployment rate will depend on whether those participating in such activity had previously been categorized as unemployed or as out of the labor force.

not the focus of our paper, the descriptive statistics reported in Table 1b suggest that under-reporting of employment that consists of informal work may indeed be a significant problem in official statistics.

The final variable in Table 1b describes work scheduling among those who are full-time employees, part-time employees or working as a consultant or contractor.⁷ Three-fourths of employees normally work the same hours each week. For about one in six (16.6 percent), the schedule varies at the employer's request; within this group, about two-thirds (10.6 percent of all employees) usually receive less than one week's notice from their employer about their upcoming work schedule and another 20 percent (3.5 percent of all employees) usually receive only 1 to 2 weeks' notice of their schedule. Work schedules vary at the employee's request for 8 percent of employees. Compared to employees with a fixed schedule, the incidence of informal work is 9 to 10 percentage points higher among employees who receive short notice about their schedules from their employer (2 weeks or less) or whose schedule varies at their own request. For the former, the high rate is consistent with individuals using informal work to supplement hours and income. For the latter, however, the direction of causality may be reversed, with employees choosing variable hours to accommodate informal work activities.

Importance of informal work to income

For policy analysis, what matters is not simply who has informal work arrangements but their reasons for engaging in these casual work activities. Some may engage in these activities as a hobby or a way of making social connections, but the tabulations reported in Tables 1a and 1b show that informal work is especially prevalent among those who are economically disadvantaged or work in nonstandard arrangements. This suggests that economic motivations also are likely to play an important role.

Tables 2a and 2b provide descriptive evidence that bears more directly on this issue. The SHED asks respondents who had done informal work in the prior month their main reason for this activity. Column (1) of Tables 2a and 2b repeats information from Tables 1a and 1b on the percent of respondents reporting any informal work activity during the last month. Column (2) reports the percent indicating that

⁷Employees accounted for 97 percent of the respondents asked the survey's work scheduling questions.

they did informal work activities primarily to earn income, and columns (3) and (4) show the percent for whom informal work was their primary source of income and the percent for whom informal work supplemented their income or their family's income.

While the questions about participation in informal work pertain only to activities in the last month, those who report informal work also are asked about its importance to their income and the intensity of such work over a longer time horizon. Column (5) shows the percent of respondents indicating that informal work was an important source of household income over the last 12 months, column (6) reports the percent of respondents indicating that such activities usually account for at least 10 percent of their household income, and column (7) shows the percent indicating that they usually spend at least 20 hours per month on informal work activities.

As in Table 1a, the top row of Table 2a reports statistics for all respondents and subsequent rows report breakouts by demographic characteristics. Table 2b reports breakouts by financial and job characteristics. Among the 28.1 percent of all respondents who reported working in an informal arrangement in the preceding month, about two-thirds (18.0 percent of all respondents) reported working in such arrangements primarily to earn money. Of those who gave earning money as the main reason for doing informal work, three quarters (13.5 percent of all respondents) said that they work side jobs to supplement their income or assist family members, but a quarter (4.5 percent of all respondents) said that informal work activities were the primary source of income. Regarding the significance of informal work activities over the longer term, 10.7 percent said that it was an important source of household income during the last 12 months, 9.6 percent reported that it usually constituted at least 10 percent of their household income, and 7.1 percent reported usually spending at least 20 hours per month on informal work activities.

Large differences across some demographic groups are apparent with regard to the importance of income from informal work and the hours spent in these activities. The importance of informal work as an income source declines sharply with age, but nonetheless 15.8 percent of respondents age 25 to 34 and 12.5 percent of respondents age 35 to 44 regard income from informal work as an important source of

household income over the last 12 months. Minorities generally appear more reliant than whites on income from informal work. Among blacks, for example, 8.2 percent indicate that informal work arrangements are their primary source of income, 15.7 percent regard these arrangements as an important source of household income during the last 12 months, and 16.5 percent indicate that these sources usually account for at least 10 percent of their income. These rates are 65 to 110 percent larger than those for whites. Table 2a also shows that less-educated individuals are considerably more likely than those with a bachelors' degree to say that informal work is their primary source of income and to consider it an important component of their household's income over the prior 12 months.

With respect to the respondent's financial situation, the various indicators of reliance on informal work for income decrease with household income, decrease as respondents' subjective assessment of their financial well-being improves, and decrease as monthly income becomes less volatile (Table 2b). Notably, among those who report finding it "difficult to get by," 31.8 percent report being engaged in informal work to earn money, 14.0 percent report that such work is their primary source of income, 21.5 percent report that informal work has been an important income source during the prior year, 17.3 percent report usually earning at least 10 percent of their income from informal work, and 11.6 percent report usually working at least 20 hours per month on informal jobs.

A strong correlation also exists between an individual's employment status and working in informal jobs to earn money. The data in Table 2b show that sizable minorities of part-time employees, particularly those who would prefer full-time work, and of those who are not employed but are looking for work rely significantly on income from informal work arrangements to supplement their income. Use of informal work arrangements to earn money is strikingly high among those in non-employee arrangements as well. Over 30 percent of those who report that they are self-employed, a sole proprietor, a partner, a consultant or a contractor report doing informal work outside of their main job to earn income in the last month; over 20 percent of those in these groups report that this income was an important source of their household's income during the preceding year; and over 20 percent indicate that at least 10 percent of their household's income usually comes from such side jobs. Among those working under the

same set of employment arrangements, more than 15 percent reported usually spending at least 20 hours a month on informal work activities. Similarly, the data indicate that a large minority of those with unpredictable work schedules—employees, contractors, or consultants who are given two weeks or less notice regarding their schedule—rely on income from informal work.

Many of the variables measuring demographic characteristics, financial well-being, and job characteristics are highly correlated with each other, and it is difficult to know from the descriptive statistics presented in Tables 1 and 2 whether these variables have any independent relationship with individuals' propensity to work in informal jobs and rely on income from these jobs over the short and medium term. To partially address this issue, we estimate linear probability models in which the dependent variables alternately indicate 1) the respondent had informal work in the past month, 2) the respondent had informal work to earn money in the past month, 3) informal work was an important source of household income in the last 12 months, 4) informal work usually accounts for 10 percent or more of the respondent's household income, and 5) the respondent usually spends 20 hours or more per month on informal work activities. We include all of the demographic, financial, and job characteristic variables from Tables 1 and 2 that are available for both 2016 and 2017 as right-hand side variables.⁸ Table 3 reports selected coefficient estimates from these descriptive regressions.

Controlling for other factors, those in the lower and middle income terciles, those who report being under some level of financial stress, and those with variable monthly incomes are significantly more likely to indicate not only that they worked in side jobs to earn income in the last month but that such jobs are an important source of income over a longer time horizon and that they spend significant time working in side jobs. For example, relative to those who report being financially comfortable, those who are finding it difficult to get by are 14 percentage points more likely to have worked a side job in the last month to earn money, 10 percentage points more likely to report that income from side jobs is important to household income, and 4 percentage points more likely to report both that income from these

⁸ Breakouts for part-time workers who want and do not want full-time work are only available in the 2017 data and so are not included in the regressions.

jobs accounts for at least 10 percent of their household income and that they spend at least 20 hours per month in informal work activities.

Even after controlling for other factors, an individual's employment status continues to be an especially strong predictor of working in informal activities to earn income and of the intensity and economic importance of that work. Compared to full-time employees, those who are self-employed, a sole proprietor, a partner, a consultant or a contractor in their main job are 11 to 13 percentage points more likely to have worked in one or more informal activities in the last month, 9 to 11 percentage points more likely to view income from these side jobs as important to household income in the last year, and 13 to 14 percentage points more likely to report that side jobs usually account for at least 10 percent of their household income. They also are 9 to 10 percentage points more likely to report that they spend at least 20 hours per month working in such jobs. Although there is considerable heterogeneity in self-employment arrangements, for a sizable minority of the self-employed, informal work appears to be an important supplement to income from the main job. In all models, the coefficient estimates for those who are not employed but looking for work are generally similar in magnitude to the coefficients estimates for those in nonemployee arrangements, indicating heavy reliance on income from informal work during unemployment spells. As noted above, these findings suggest that government surveys may not fully capture casual work, raising the possibility that employment, labor force, and unemployment statistics are biased.

Among employees, contractors, and consultants, having a variable or unpredictable work schedule also is associated with a higher incidence of working informal jobs to earn income and with various measures of the importance of those earnings to income and the intensity of that work. For example, compared to those with stable work schedules or considerable advance notice of their work schedules, those whose hours vary mainly at their own request and those who typically receive 2 weeks or less notice about their schedule from their employer are 5 and 3 percentage points more likely, respectively, to work an informal job to earn income. Particularly for the latter group, informal work may

be a way to supplement income from a job characterized by unpredictable and variable hours and earnings.

Persistence of informal work

Although people participate in informal work activities or side jobs for a variety of reasons, the evidence presented in the preceding section indicates that individuals who have relatively low earnings, are in precarious or nonstandard work arrangements, or are unemployed frequently use casual work arrangements to help make ends meet. The policy implications of these findings depend in part on whether casual work is typically a short-term fix for individuals who are temporarily in financial difficulty, or something that people rely on over a longer time horizon, whether because they experience frequent spells of nonemployment or because their main job provides insufficient or unreliable income.

In this section, we present evidence regarding the persistence of informal work based on the subsample of SHED respondents who were interviewed in both 2016 and 2017. The first column of Table 4 shows, conditional on reporting informal work during the prior month in the 2016 survey, the percent who reported informal work during the prior month in the 2017 survey. Column (2) of Table 4 shows the percent of those who reported doing informal work to earn money in the 2016 survey who gave the same response in the 2017 survey. As in previous tables, we report these statistics for all respondents and by selected demographic, financial, and employment or job characteristics. Because the sample sizes for these tabulations are considerably smaller than those underlying earlier tabulations—521 for the column (1) percentages and 316 for the column (2) percentages—we have aggregated categories for some variables. The weights developed by GfK for the 2016-2017 panel sample were used in preparing these tabulations.

Among those who had reported informal work during the prior month in 2016, exactly half reported informal work during the prior month in 2017, just over a year later. Among those reporting in 2016 that they worked a side job primarily to earn money, 42.7 percent gave the same response in 2017. Although some of the cell sizes are quite small once the data are broken out by demographic, financial, and employment characteristics, the data in Table 4 are generally consistent with the findings reported

earlier. For example, although there is no clear pattern in the persistence of informal work activity by level of education overall, conditional on having done informal work to earn money in 2016, those with a high school education or less were 15 percentage points more likely to be doing informal work to earn money in 2017 (49.5 percent) compared to those with a bachelor's degree (34.7 percent). Similarly, conditional on having a side job to earn money in 2016, those whose household income fell below \$50,000 in that year were 20 percentage points more likely still to be working a side job to earn money in 2017 (50.4 percent) compared to those with household incomes of \$100,000 or more (30.4 percent). Those who reported "finding it difficult to get by" or who said they were "just getting by" in 2016 were over 10 percentage points more likely to report still having a side job to earn money in 2017 (47.4 and 46.8 percent, respectively) compared to those who in 2016 reported "living comfortably" (36.4 percent). The year-over-year persistence rate in working a side job to earn income is also somewhat higher for those who work part-time jobs or who are not employees (47.4 and 45.1 percent, respectively) compared to full-time employees (43.4 percent).

Generalizing from the SHED findings

A natural concern about the findings we have reported is whether the SHED respondents are typical of the overall population with respect to their participation in informal work activities. One might be concerned that, even among those with similar observable characteristics, someone who is willing to participate in an online panel also might be more likely to participate in other informal work activity.

One strategy for assessing the potential for this sort of bias is to compare estimates of informal work activity from the SHED to estimates from other sources. The SHED estimates of the overall prevalence of informal work activity are very similar to the estimates from the SIWP and EIWA, but because the data for all three of these surveys are collected in a similar fashion, this finding is unsurprising. Arguably more illuminating is a comparison between the 2017 SHED estimate of the share of people who had been paid within the past month for "driving using a ride-sharing app such as Uber or Lyft" and the J.P. Morgan Chase estimate of the share of households with income in a given month from a transportation platform. The estimate based on the 2017 SHED, for which data were collected in

November and December, is that 1.5 percent of individuals had driving income during the prior month; the J.P Morgan Chase estimate is that, in the month of March 2018, deposits from online transportation platforms were recorded for 1.0 percent of checking accounts. While not an apples-to-apples comparison, the two are similar in magnitude. Moreover, there is reason to suspect that the J.P. Morgan Chase estimate, which is lower than the SHED estimate, misses some online platform income and thus may understate the prevalence of participation in online driving platforms.

Another approach to assessing the sensitivity of our results to possible selection bias is to exclude online activity from our measures of participation in informal work activity. The rationale for doing this is that participants in the online GfK panel may be more likely than is typical to take on other online work and, if so, estimates that exclude online work may more closely approximate the prevalence of informal activity in the population. In the same spirit, we also go further and construct estimates that exclude *all* informal activity carried out by anyone in the SHED sample who reports *any* online activity. Not surprisingly, restricting the set of informal work activities considered in this way substantially reduces the estimated prevalence of informal work activity. Our baseline estimate is that 28.1 percent of adults age 18 and older engaged in informal work activity over the prior month; excluding those who were involved only in online activities reduces this to an estimated 20.1 percent; and dropping anyone who did any online work, even if they also were involved in other types of informal work, reduces the estimate to 13.1 percent. Although clearly lower—indeed, perhaps too low—these numbers still imply a substantial level of participation in informal work activities. Moreover, the basic patterns seen in our baseline estimates hold up when we use these alternative measures: Groups that are relatively disadvantaged (by race, by education, by financial circumstances, or by employment status) are far more likely to rely on informal work to earn money and, moreover, to report that informal work is an important source of income. Online Appendix Tables A1a and A1b and Online Appendix Tables A2a and A2b mirror the information provided in Tables 2a and 2b for these two other definitions of informal work.

IV. Discussion and Policy Challenges

According to the SHED data presented in this paper, as many as 28 percent of adult Americans engage in informal work activities outside their main job in the month prior to being interviewed. Although informal work is common regardless of race, ethnicity, education and household income, the reasons individuals hold side jobs and the extent to which they rely on them for income differ systematically across groups. Minorities, the less educated, those with lower incomes or experiencing financial stress, those in non-standard work arrangements and the unemployed are far more likely to work side jobs to earn money. They are also more likely to report that earnings from these jobs were important to household income over the prior year, that these earnings usually make up at least 10 percent of their income, and that they usually spend at least 20 hours or more per month in these activities.

Reliance on informal work for income also varies strikingly by work arrangement. Compared to full-time employees, part-time employees—particularly those who would prefer full-time work—and those who are sole proprietors, partners, contractors, consultants, or in some other nonemployee arrangement are considerably more likely to hold side jobs to earn money and to indicate that it is an important source of income over short and longer time horizons. Among employees, contractors and consultants, those with unstable or unpredictable schedules are considerably more likely to have informal jobs to earn money. The relative importance of informal work to supplement income among those in part-time, precarious or other alternative work arrangements may be a symptom of the inadequate or unstable hours and earnings often associated with these forms of work.

It is important to acknowledge that, for most people, informal work accounts for a relatively small share of income. Yet, consistent with evidence from ethnographic studies, the SHED estimates suggest that informal work may play an important role in helping the economically vulnerable and those in alternative work arrangements make ends meet.

Informal work is not, however, a panacea. Those most likely to hold informal jobs to supplement income are the least likely to work in arrangements that provide critical benefits such as sick pay, health

insurance, and retirement plans. According to data from the Bureau of Labor Statistics (Bureau of Labor Statistics 2018), whereas 88 percent of full-time employees were offered employer-provided health care benefits, 81 percent were offered employer-provided retirement benefits, and 88 percent were offered paid leave, the corresponding figures for part-time employees were just 40 percent, 22 percent and 43 percent. Workers in contract and consultant arrangements generally are treated as self-employed and so, like sole proprietors and others in non-employee arrangements, not eligible for employer-provided benefits. Because informal work generally is treated as self-employment as well, it rarely comes with employee benefits. Thus, while informal jobs may boost earnings, they do not help workers access benefits, which are an important component of the compensation package for most full-time employees. Lacking benefits such as health insurance or a pension during retirement is a common source of financial hardship.

The perceived growth in independent contractor and other non-employee arrangements has focused considerable policy attention on increasing access to benefits among these so-called gig workers. Recent proposals at the federal and state levels primarily target large platform companies, such as Uber and Lyft, that help to connect workers providing services with customers. Although the specifics vary, the proposed legislation typically would enable or require such companies to provide workers' compensation or to contribute to benefit plans that are portable across jobs (Fitzpayne and Greenberg 2018, Maxim and Muro 2018). Yet, available evidence suggests that workers in these arrangements typically use them to supplement income from a main job. Moreover, the evidence presented above shows that, while work done on-line or through mobile apps accounts for a significant share of informal work, traditional types of informal work are more common among the economically vulnerable populations most dependent on this work for income. A more comprehensive approach for addressing the lack of benefits among workers in part-time and nonemployee arrangements is needed.

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Table 1a: Percent with Informal Work Outcome by Type of Arrangement and Demographic Characteristics

	Percent of Population	<i>Of which:</i>				
		Any Informal Work in Past Month	Personal Services	On-line Tasks	Off-line Sales and Misc. Activities	Percent with 2+ Informal Arrangements
		(1)	(2)	(3)	(4)	(5)
ALL	100.0	28.1	13.0	15.0	10.6	11.7
Age (years)						
18-24	7.9	41.3	27.9	20.7	13.1	20.4
25-34	19.8	38.2	18.7	22.8	13.8	17.7
35-44	17.6	32.7	14.0	20.0	12.1	14.6
45-54	15.2	25.7	10.3	13.7	9.6	10.0
55-64	20.0	23.0	9.9	9.8	9.8	8.1
65-74	13.6	16.5	6.2	7.4	6.7	5.1
75 plus	5.9	13.4	4.8	5.0	6.0	3.2
Gender						
Male	48.3	27.5	12.7	15.4	9.5	11.3
Female	51.7	28.7	13.3	14.7	11.6	12.1
Race/ethnicity						
White	65.2	26.9	10.9	14.5	10.7	10.2
Black	11.8	28.6	17.9	14.0	8.6	14.0
Hispanic	15.0	31.7	18.7	15.8	11.2	15.3
Multiracial	1.3	37.1	19.9	19.5	12.7	15.2
Other	6.8	29.4	11.0	19.2	11.1	13.7
Education						
High school or less	39.2	27.2	16.5	12.0	9.8	12.5
Some college	28.9	27.9	13.1	15.3	10.2	11.5
College plus	31.8	29.5	8.7	18.4	11.8	10.9

Notes: Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560.

Table 1b: Percent with Informal Work Outcome by Type of Arrangement and Financial and Job Characteristics

	Percent of Population	Any Informal Work in Past Month	Personal Services	Of which: On-line Tasks	Off-line Sales and Misc. Activities	Percent with 2+ Informal Arrangements
	(1)	(2)	(3)	(4)	(5)	(6)
Household income						
Less than \$50,000	35.1	28.6	16.8	14.0	9.9	13.8
\$50,000 to \$99,999	31.3	28.0	12.2	14.8	10.3	10.7
\$100,000 or more	33.5	27.7	9.9	16.3	11.5	10.5
Financial well-being						
Difficult to get by	7.3	38.4	21.2	19.5	14.5	19.0
Just getting by	20.6	29.9	15.9	15.6	10.8	13.4
Doing okay	40.5	28.3	13.4	14.7	10.2	11.3
Living comfortably	31.6	24.4	8.8	14.0	10.0	9.4
Monthly income changes						
Often varies	9.2	36.6	21.9	20.2	10.9	18.4
Sometimes varies	21.0	35.4	18.6	19.6	14.1	16.8
Roughly the same	69.8	24.8	10.2	12.9	9.5	9.3
Employment status						
Full-time employee	42.9	28.3	10.7	16.5	11.1	11.2
Part-time employee	9.7	35.0	18.7	17.9	12.9	15.2
<i>Part-time preference (2017, N=12,115)</i>						
Voluntary part-time	6.4	31.6	16.0	15.3	11.8	14.3
Involuntary part-time	3.3	44.8	26.7	21.7	12.9	18.9
Self-employed or partner	7.4	44.8	26.4	23.3	17.4	23.5
Consultant or contractor	1.6	44.3	23.8	30.1	16.2	24.6
Not employed, looking	4.3	41.7	26.8	19.6	12.5	20.6
Not employed, not looking	34.2	19.9	9.2	9.2	7.2	7.1
Work schedule status (employees, consultants, contractors, N=8,682)						
Varies at own request	8.3	36.9	16.4	23.1	15.5	18.9
<i>Employer determines</i>						
Less than 1 week notice	10.6	37.9	20.9	20.9	11.9	20.7
1 to 2 weeks notice	3.5	36.4	20.5	20.1	12.3	16.2
3 plus weeks notice	2.5	32.0	12.0	21.3	13.6	11.8
Normally the same hours	75.2	27.7	10.6	15.7	11.0	10.2

Notes: Data on voluntary part-time and involuntary part-time (those desiring full-time hours) are available only for 2017. Questions on work scheduling were asked only of those identifying themselves as employees, consultants or contractors. Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560 unless otherwise indicated.

Table 2a: Percent with Informal Work by Reason and Intensity of Use and Demographic Characteristics

	Any Informal Work in Past Month	Any Informal Work to Earn Money in Last Month	<i>Of which:</i>		Important Source of Household Income	Usually 10% or More of Household Income	Usually Do 20 or More Hours per Month
	(1)	(2)	Primary Source of Income	Supplements Income	(5)	(6)	(7)
ALL	28.1	18.0	4.5	13.5	10.7	9.6	7.1
Age (years)							
18-24	41.3	31.2	10.5	20.7	20.2	21.3	10.1
25-34	38.2	27.5	7.3	20.2	15.8	14.2	10.8
35-44	32.7	21.2	5.2	16.0	12.5	11.0	8.0
45-54	25.7	15.7	4.0	11.7	9.3	7.3	6.2
55-64	23.0	13.5	2.8	10.7	7.8	6.7	5.7
65-74	16.5	7.3	0.9	6.4	4.7	4.1	4.3
75 plus	13.4	4.5	0.4	4.1	3.0	2.9	2.4
Gender							
Male	27.5	17.9	4.8	13.1	11.7	10.2	7.6
Female	28.7	18.1	4.3	13.8	9.8	9.1	6.7
Race/ethnicity							
White	26.9	17.2	3.9	13.4	9.5	8.1	6.5
Black	28.6	20.5	8.2	12.3	15.7	16.5	10.6
Hispanic	29.4	18.5	4.1	14.4	8.2	6.7	6.0
Multiracial	37.1	26.9	6.3	20.6	20.2	15.5	15.6
Other	31.7	18.2	4.4	13.7	12.6	11.6	7.1
Education							
High school or less	27.2	17.7	6.1	11.7	12.4	11.1	7.2
Some college	27.9	17.9	4.3	13.6	10.7	10.0	7.6
College plus	29.5	18.3	2.7	15.6	8.7	7.4	6.6

Notes: Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560.

Table 2b: Percent with Informal Work by Reason and Intensity of Use and Financial and Job Characteristics

	Any Informal Work in Past Month (1)	Any Informal Work to Earn Money in Last Month (2)	Of which		Important Source of Household Income (5)	Usually 10% or More of Household Income (6)	Usually Do 20 or More Hours per Month (7)
			Primary Source of Income (3)	Supplements Income (4)			
Household income							
Less than \$50,000	28.6	19.8	6.5	13.3	13.7	12.3	8.5
\$50,000 to \$99,999	28.0	17.6	3.9	13.7	10.7	8.5	7.0
\$100,000 or more	27.7	16.4	3.0	13.4	7.6	7.8	5.8
Financial well-being							
Difficult to get by	38.4	31.8	14.0	17.8	21.5	17.3	11.6
Just getting by	29.9	22.5	5.9	16.7	14.0	12.4	9.0
Doing okay	28.3	18.1	3.7	14.4	10.5	9.3	6.9
Living comfortably	24.4	11.7	2.5	9.2	6.3	6.4	5.3
Monthly income changes							
Often varies	36.6	26.8	11.6	15.2	20.1	20.3	12.4
Sometimes varies	35.4	24.6	6.6	18.0	16.0	14.3	9.9
Roughly the same	24.8	14.8	3.0	11.9	7.9	6.8	5.6
Employment status							
Full-time employee	28.3	18.7	3.0	15.8	9.8	7.4	6.2
Part-time employee	35.0	25.9	7.1	18.8	15.5	16.1	11.4
<i>Part-time preference</i> (2017, N=12,115)							
<i>Voluntary part-time</i>	31.6	21.9	3.8	18.1	15.1	13.2	10.5
<i>Involuntary part-time</i>	44.8	31.1	10.7	20.4	20.9	19.3	14.4
Self-employed or partner	44.8	30.4	11.2	19.2	22.0	22.4	15.8
Consultant or contractor	44.3	34.6	9.1	25.5	21.4	23.7	17.3
Not employed, looking	41.7	32.0	18.8	13.2	24.2	25.0	14.4
Not employed, not looking	19.9	9.6	2.2	7.3	5.8	5.2	3.9
Work schedule status (employees, consultants, contractors, N=8,692)							
Varies at own request	36.9	26.9	5.8	21.1	17.6	14.3	13.4
<i>Employer determines</i>							
Less than 1 week notice	37.9	27.8	6.5	21.3	15.6	13.3	10.5
1 to 2 weeks notice	36.4	26.5	4.8	21.7	15.6	14.5	11.3
3 plus weeks notice	32.0	18.4	4.1	14.3	10.0	6.0	6.1
Normally the same hours	27.7	18.5	3.3	15.3	9.7	8.2	6.2

Notes: Data on voluntary part-time and involuntary part-time (those desiring full-time hours) are available only for 2017. Questions on work scheduling were asked only of those identifying themselves as employees, consultants or contractors. Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560 unless otherwise indicated.

Table 3: Selected Coefficient Estimates from Linear Probability Models of Informal Work Outcomes on Demographic, Financial, and Job Characteristics

	Any Informal Work (1)	Informal Work to Earn Money (2)	Important Source of Household Income (3)	Usually 10% or More of Household Income (4)	Usually Spend 20 or More Hours per Month (5)
Household income					
Less than \$50,000	0.03** (0.01)	0.04** (0.01)	0.05** (0.01)	0.04** (0.01)	0.02** (0.01)
\$50,000 to \$99,999	0.03** (0.01)	0.02** (0.01)	0.03** (0.01)	0.01~ (0.01)	0.02** (0.00)
Financial well-being					
Difficult to get by	0.08** (0.01)	0.14** (0.01)	0.10** (0.01)	0.04** (0.01)	0.04** (0.01)
Just getting by	0.03** (0.01)	0.09** (0.01)	0.05** (0.01)	0.02* (0.01)	0.02** (0.01)
Doing okay	0.03** (0.01)	0.05** (0.01)	0.03** (0.00)	0.01~ (0.00)	0.01 (0.00)
Monthly income changes					
Often varies	0.04** (0.01)	0.04** (0.01)	0.06** (0.01)	0.06** (0.01)	0.04** (0.01)
Sometimes varies	0.05** (0.01)	0.04** (0.01)	0.04** (0.01)	0.03** (0.00)	0.02** (0.01)
Employment status					
Part-time employee	0.04** (0.01)	0.04** (0.01)	0.04** (0.01)	0.06** (0.01)	0.03** (0.01)
Self-employed or partner	0.19** (0.01)	0.13** (0.01)	0.11** (0.01)	0.14** (0.01)	0.10** (0.01)
Consultant or contractor	0.15** (0.03)	0.11** (0.03)	0.09** (0.02)	0.13** (0.02)	0.09** (0.02)
Not employed, looking	0.11** (0.02)	0.09** (0.02)	0.09** (0.02)	0.12** (0.02)	0.05** (0.01)
Not employed, not looking	-0.01 (0.01)	-0.04** (0.01)	-0.02** (0.01)	-0.01 (0.01)	-0.01 (0.00)
Work schedule status					
Varies at own request	0.05** (0.02)	0.05** (0.02)	0.04** (0.01)	0.03* (0.01)	0.04** (0.01)
≤ 2 weeks notice	0.03* (0.01)	0.03* (0.01)	0.01 (0.01)	0.00 (0.01)	0.02~ (0.01)
R-squared	0.062	0.087	0.076	0.079	0.041

Notes: Each column represents a separate regression with the indicated dependent variable. Standard errors are clustered on individual and reported in parentheses. Controls for demographic characteristics (age, gender, race/ethnicity, education) were included but are not reported. The reference categories for each set of variables is as follows: household income \$100,000 or more; living comfortably; monthly income generally the same; full-time employee; and work schedule is mostly the same. ** indicates significance at the 0.01 level, * at the 0.05 level, and ~ at the 0.10 level. N=18,560.

Table 4: The Persistence of Informal Work

	Percent Informal Work in 2017/Informal Work 2016 (1)	Percent Informal Work to Earn Money in 2017/Informal Work to Earn Money in 2016 (2)
ALL	50.0	42.7
Age (years)		
18-24	39.1	31.4
25-54	54.4	46.4
55-64	36.2	25.7
65 plus	56.5	57.0
Gender		
Male	51.8	38.2
Female	48.1	46.5
Race/ethnicity		
White	46.8	38.8
Hispanic	61.6	56.5
Other	50.0	42.7
Education (2016)		
High school or less	50.1	49.5
Some college	48.5	42.4
College plus	50.8	34.7
Household income (2016)		
Less than \$50,000	55.9	50.4
\$50,000 to \$99,999	49.9	46.7
\$100,000 or more	43.6	30.4
Financial well-being (2016)		
Difficult to get by	41.0	47.4
Just getting by	56.8	46.8
Doing okay	49.7	41.5
Living comfortably	49.1	36.4
Monthly income changes (2016)		
Often varies	50.3	44.9
Mostly same, sometimes varies	49.1	43.1
Roughly the same	50.1	42.0
Employment status (2016)		
Full-time employee	51.2	43.4
Part-time employee	47.8	47.4
Self-employed/contractor	53.5	45.1
Not employed	47.6	38.1
Work schedule status (2016) (employees, consultants, contractors, N=271 and 187)		
Varies at own request	46.9	45.8
2 or fewer weeks notice	46.7	34.9
3 plus weeks notice	49.6	45.6

Notes: The sample includes individuals interviewed in both the 2016 and 2017 SHED. The number of cases for the first column is 517 and for the second column is 314.

Online Appendix Tables

Appendix Table 1a: Percent with Informal Work, Excluding Online Tasks, by Reason and Intensity of Use and Demographic Characteristics

	Any Informal Work in Past Month (1)	Any Informal Work to Earn Money in Last Month (2)	<i>Of which</i>		Important Source of Household Income (5)	Usually 10% or More of Household Income (6)	Usually Do 20 or More Hours per Month (7)
			Primary Source of Income (3)	Supplements Income (4)			
ALL	20.12	13.04	3.65	9.39	8.59	7.75	5.69
Age (years)							
18-24	32.63	24.29	9.13	15.16	18.22	18.95	7.93
25-34	27.30	19.73	6.23	13.50	12.74	12.22	8.98
35-44	21.60	14.65	4.20	10.45	9.17	7.75	6.20
45-54	17.27	10.52	2.73	7.78	6.92	5.18	4.26
55-64	17.44	10.31	2.15	8.16	6.54	5.59	4.96
65-74	12.03	5.58	0.65	4.94	3.77	3.15	3.33
75 plus	9.95	3.60	0.29	3.31	2.29	2.21	1.81
Gender							
Male	18.78	12.40	3.78	8.62	8.97	7.83	5.79
Female	21.38	13.64	3.52	10.11	8.22	7.67	5.61
Race/ethnicity							
White	18.69	12.04	3.05	9.00	7.42	6.28	5.09
Black	22.33	16.84	6.93	9.92	12.85	14.01	9.03
Hispanic	18.80	11.59	3.14	8.45	5.90	4.73	3.25
Multiracial	28.35	22.30	5.71	16.59	16.65	13.13	12.36
Other	24.52	14.24	3.73	10.51	10.81	10.11	6.23
Education							
High school or less	22.10	14.31	5.16	9.15	10.59	9.57	6.12
Some college	19.62	13.00	3.50	9.51	8.64	8.20	6.13
College plus	18.14	11.51	1.92	9.60	6.06	5.10	4.78

Notes: Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560.

Appendix Table 1b: Percent with Informal Work, Excluding Online Tasks, by Reason and Intensity of Use and Financial and Job Characteristics

	Any Informal Work in Past Month (1)	Any Informal Work to Earn Money in Last Month (2)	Of which		Important Source of Household Income (5)	Usually 10% or more of Household Income (6)	Usually Do 20 or More Hours per Month (7)
			Primary Source of Income (3)	Supplements Income (4)			
Household income							
Less than \$50,000	22.69	15.64	5.45	10.19	11.47	10.42	7.26
\$50,000 to \$99,999	19.43	12.18	3.18	9.00	8.44	7.00	5.60
\$100,000 or more	18.09	11.11	2.19	8.92	5.70	5.64	4.14
Financial well-being							
Difficult to get by	29.79	24.44	11.10	13.34	18.27	15.06	8.95
Just getting by	22.14	16.58	4.50	12.08	11.14	9.70	7.33
Doing okay	20.62	13.31	3.16	10.16	8.51	7.68	5.71
Living comfortably	15.94	7.74	2.00	5.75	4.78	4.87	3.85
Monthly income changes							
Often varies	27.29	20.27	9.31	10.97	16.25	16.17	9.76
Sometimes varies	26.37	18.73	5.36	13.38	13.22	12.16	8.13
Roughly the same	17.30	10.37	2.39	7.99	6.18	5.31	4.43
Employment status							
Full-time employee	19.01	12.49	2.27	10.22	7.65	5.73	4.91
Part-time employee	25.92	20.42	6.38	14.04	13.47	13.34	8.61
<i>Part-time preference (2017, N=12,115)</i>							
<i>Voluntary part-time</i>	24.33	18.30	3.55	14.75	12.96	10.81	8.35
<i>Involuntary part-time</i>	32.69	24.29	9.34	14.96	17.47	15.94	10.32
Self-employed or partner	34.33	23.98	8.93	15.05	17.47	17.99	13.52
Consultant or contractor	33.59	26.74	7.87	18.87	17.18	18.69	12.39
Not employed, looking	32.07	24.58	14.32	10.26	18.87	19.49	11.30
Not employed, not looking	14.69	7.19	1.93	5.26	4.76	4.50	3.15
Work schedule status (employees, consultants, contractors, N=8,692)							
Varies at own request	25.90	18.52	4.51	14.00	13.48	11.22	9.87
<i>Employer determines</i>							
Less than 1 week notice	28.51	22.20	5.23	16.97	13.23	11.14	8.13
1 to 2 weeks notice	27.05	20.27	3.94	16.33	12.45	11.56	7.60
3 plus weeks notice	21.40	11.22	2.41	8.81	8.50	4.75	5.64
Normally the same hours	18.68	12.59	2.72	9.87	7.74	6.46	4.94

Notes: Data on voluntary part-time and involuntary part-time (those desiring full-time hours) are available only for 2017. Questions on work scheduling were asked only of those identifying themselves as employees, consultants or contractors. Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560 unless otherwise indicated.

Appendix Table 2a: Percent with Informal Work, Excluding All Informal Work by Individuals Performing Any Online Tasks, by Reason and Intensity of Use and Demographic Characteristics

	Any Informal Work in Past Month (1)	Any Informal Work to Earn Money in Last Month (2)	Of which		Important Source of Household Income (5)	Usually 10% or More of Household Income (6)	Usually Do 20 or More Hours per Month (7)
			Primary Source of Income (3)	Supplements Income (4)			
ALL	13.11	7.72	2.08	5.64	4.88	4.65	3.48
Age (years)							
18-24	20.59	14.97	6.09	8.88	10.69	11.78	4.56
25-34	15.49	10.39	3.38	7.01	6.56	6.83	5.05
35-44	12.70	7.76	1.81	5.95	4.27	3.84	3.15
45-54	11.97	6.83	1.73	5.10	4.27	3.16	2.65
55-64	13.16	6.99	1.44	5.55	4.42	3.92	3.50
65-74	9.07	3.76	0.38	3.39	2.54	2.43	2.82
75 plus	8.45	2.79	0.21	2.58	1.79	1.67	1.37
Gender							
Male	12.19	7.39	2.11	5.27	5.01	4.56	3.48
Female	13.97	8.03	2.06	5.98	4.76	4.74	3.48
Race/ethnicity							
White	12.41	7.33	1.84	5.49	4.43	3.93	3.39
Black	14.65	10.43	3.74	6.69	6.88	8.18	5.15
Hispanic	10.17	5.33	1.07	4.25	2.74	2.28	1.68
Multiracial	17.54	13.92	3.34	10.58	9.88	6.77	6.44
Other	15.91	7.85	2.19	5.66	5.81	5.92	3.13
Education							
High school or less	15.15	9.01	3.3	5.71	6.44	5.82	3.75
Some college	12.64	7.70	1.83	5.87	4.78	4.82	3.77
College plus	11.04	6.15	0.82	5.33	3.06	3.07	2.90

Notes: Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560.

Appendix Table 2b: Percent with Informal Work, Excluding All Informal Work by Individuals Performing Any Online Tasks, by Reason and Intensity of Use and Financial and Job Characteristics

	Any Informal Work in Past Month (1)	Any Informal Work to Earn Money in Last Month (2)	Of which		Important Source of Household Income (5)	Usually 10% or More of Household Income (6)	Usually Do 20 or More Hours per Month (7)
			Primary Source of Income (3)	Supplements Income (4)			
Household income							
Less than \$50,000	14.65	9.29	3.17	6.12	6.59	6.15	4.50
\$50,000 to \$99,999	13.26	7.63	1.81	5.82	5.29	4.61	3.43
\$100,000 or more	11.37	6.17	1.21	4.96	2.71	3.12	2.47
Financial well-being							
Difficult to get by	18.95	15.47	6.67	8.80	11.69	9.62	5.52
Just getting by	14.31	9.94	2.79	7.14	6.69	5.77	4.49
Doing okay	13.62	7.81	1.81	6.00	4.70	4.64	3.44
Living comfortably	10.33	4.37	0.91	3.46	2.37	2.79	2.41
Monthly income changes							
Often varies	16.41	11.78	5.12	6.67	9.19	9.02	5.61
Sometimes varies	15.79	10.02	2.56	7.46	6.47	6.91	4.68
Roughly the same	11.87	6.49	1.54	4.95	3.83	3.40	2.84
Employment status							
Full-time employee	11.72	6.80	1.11	5.69	3.83	3.12	2.75
Part-time employee	17.09	13.16	3.89	9.27	8.56	8.80	5.40
<i>Part-time preference</i> (2017, N=12,115)							
<i>Voluntary part-time</i>	16.33	12.51	2.08	10.43	10.05	7.53	6.03
<i>Involuntary part-time</i>	23.08	16.79	8.54	8.25	11.52	11.21	7.64
Self-employed or partner	21.56	14.32	5.03	9.29	9.45	10.43	7.83
Consultant or contractor	14.20	10.17	2.74	7.44	6.13	5.42	5.14
Not employed, looking	22.14	16.23	9.93	6.30	13.59	12.84	8.01
Not employed, not looking	10.73	4.72	1.14	3.58	3.02	3.10	2.28
Work schedule status (employees, consultants, contractors, N=8692)							
Varies at own request	13.76	8.65	1.96	6.69	6.19	5.15	5.22
<i>Employer determines</i>							
Less than 1 week	16.97	12.44	3.09	9.35	7.22	7.36	4.76
1 to 2 weeks notice	16.21	13.09	2.95	10.14	7.91	5.38	4.01
3 plus weeks notice	10.68	4.63	0.90	3.73	2.62	0.99	2.58
Normally the same hrs	11.96	7.24	1.39	5.85	4.17	3.71	2.86

Notes: Data on voluntary part-time and involuntary part-time (those desiring full-time hours) are available only for 2017. Questions on work scheduling were asked only of those identifying themselves as employees, consultants or contractors. Tabulations are based on SHED data pooled for the years 2016 and 2017 and are weighted using GfK weights designed to make the sample representative of the U.S. population 18 and over. N=18,560 unless otherwise indicated.