The Distribution of Independent Contractor Activity in the United States: Evidence from Tax Filings*

Andrew Garin† and Dmitri Koustas‡

August 30, 2021

*This work is part of a project being conducted through the Joint Statistical Research Program of the Statistics of Income Division of the IRS. All data work for this project involving confidential taxpayer information was performed in the IRS computing environment, on IRS computers, by IRS employees. Garin and Koustas are IRS employees under an agreement made possible by the Intragovernmental Personnel Act of 1970 (5 U.S.C. 3371-3376). The views and opinions presented in this paper reflect those of the authors and do not necessarily reflect the views or the official position of the Internal Revenue Service.

†University of Illinois Urbana-Champaign

‡University of Chicago

1 Overview

In recent years, many state legislatures have considered legislative provisions to modify or clarify the appropriate classification of workers as direct-hire employees subject to employment law or as self-employed independent contractors not covered by such laws. Such proposals have led to substantial public debate about which types of workers might be impacted and what those impacts might be. However, data on contract arrangements is scarce. This note draws on de-identified IRS tax filing data from 2018 to detail the prevalence of contract work among different segments of the workforce and the distribution of activities among independent contractors. This analysis builds on and extends recent research using tax returns by Jackson, Looney, and Ramnath (2017), Collins, Garin, Jackson, Koustas, and Payne (2019), and Lim, Miller, Risch, and Wilking (2019).

2 Methodology

We leverage a key feature of the United States tax system: Not only are firms required to report all payments to each employee to the IRS on W2 forms, they are also required to report nonemployee compensation to independent contractors on 1099 information returns. Specifically, firms are required to report all compensation of $600 or more to self-employed independent contractors in Box 7 of Form 1099-MISC ("nonemployee compensation").[1] For this note, we classify all workforce participants with nonemployee compensation reported on a 1099-MISC issued to their SSN as independent contractors.[2]

A new and growing class of independent contract work mediated by online platforms has received a significant amount of attention in recent years, which we refer to as the "online platform economy" (OPE). In this note, we separately measure contract work done on such platforms, focusing on labor platforms where workers directly provide services (for exam-

[1] As of 2020, such income is now reported on a separate form, the 1099-NEC.

[2] A small fraction of 1099-MISCs are issued to EINs associated with an individual's sole proprietorship rather than their SSN; we omit 1099s issued to small-business EINs in this analysis.

ple, ridesharing or delivery), as opposed to platforms where individuals sell goods or rent capital (for example, craft merchandise sites or homesharing). We measure participation in the labor OPE based on a list of EINs classified as OPE companies from Collins, Garin, Jackson, Koustas, and Payne (2019). We also identify the subset of these platforms that are driving-oriented (focused on ridesharing or delivery). Historically, OPE companies reported payments to workers in 1099-MISC Box 7. However, in recent years, several OPE companies shifted to reporting payments on Form 1099-K (which, unlike the 1099-MISC, only needs to be reported for individuals with more than $20,000 in revenues or 200 transactions)—we include recipients of 1099-Ks from OPE companies in our definition of independent contractors.[3]

In our analysis, we define the 2018 adult workforce as all individuals aged 18 to 100 with wages reported on a W2 or positive self-employment profits reported on Form 1040 Schedule C. When measuring the prevalence of independent contract work among this population, we differentiate between contractors who are primarily self-employed—classified as such when Schedule C net income exceeds their wage income—and all other workers whose main source of annual income comes from wage or salary employment with secondary self-employment income. To examine differences across the personal income distribution, we measure total personal income as W2 wage/salary payments plus any positive profits on Schedule C (attributed to the SSN of the individual engaged in the activity). We then measure percentiles of the national 2018 individual-level earnings distribution to group individual into earnings bins.

We characterize the primary activities of independent contractors using the two-digit NAICS codes reported by the recipient on their Schedule C. In principle, this approach captures the actual type of work done by the individual contractor. However, this approach has limitations. First, not all contractors file Schedule C—although in principle all profit from

[3]This reporting threshold is not always binding in practice. In some instances, we observe OPE firms issuing 1099-Ks for amounts below $20,000. Further, OPE may issue a 1099-K for processed payments but a separate 1099-MISC for direct payments from the firm (for example, incentive or bonus payments) to the worker, in which case a lower $600 threshold applies.

nonemployee compensation is meant to be reported on schedule C, individuals in practice may not report their profits (this could be due to noncompliance or because they may not have positive profits from their contract work) or may report their Box 7 income elsewhere on their 1040. Moreover, many individuals who file Schedule C do not enter a valid business activity code.

As an alternative approach, we classify individuals based on the NAICS codes of the *firm* that issues them the largest 1099 for contractor payments in 2018. This approach enables us to classify what types of firms contractors work for, even if they do not fill out a Schedule C.[4] However, the industry of the firm using the services of an independent contractor may have little relationship to the activity of any specific contractor. For example, a driver on a rideshare platforms may list themselves as a transportation worker on their Schedule C, but the platform company might list itself as an information technology company.

3 Findings

Prevalence of Contract and OPE Work by Age, Gender, and Earnings

We begin with basic descriptive statistics on the prevalence of contract and OPE Work by age, gender, and earnings. All tabulations presented in the figures below are available in tabular form in the supplemental table file.

Figure 1 tabulates the share of adult workforce participants within specified groups who have 1099-reported independent contractor income in 2018. Panel A displays the prevalence of contract work by age bins and gender. Conditional on working, older workers are more likely to have contract income than younger workers. Moreover, younger workers are less likely to be primarily self-employed contractors. Panel B displays the prevalence of contract

[4]In this analysis, however, we restrict the sample to individuals with either positive Schedule C profits or W2 income.

work across the earnings distribution: specifically P1-P25, P25-P50, P50-P75, P75-P90, P90-P95, P95-P99, and P99-P100.[5] We observe a U-shaped pattern, where contract work is most common at the bottom and the top of the income distribution. However, there are key differences between contract work done by high-income and low-income workers. In particular, low-income contract workers tend to rely on self-employment earnings as their primary source of income, whereas high-income contract workers are much likely to have contract earnings supplement their majority-W2 income.

Figure 2 highlights the prevalence of online platform economy work among these same segments of the workforce. Unlike broader contract work, OPE work is most prevalent among the youngest workers and least prevalent among older workers. It is also less prevalent among higher earners. Our definition of OPE work includes approximately 50 platforms over many industries. Figure 3 breaks out the portion of OPE workers in each group that do driving-based platform work, and Figure 4 replicates Figure 2 just for those who do driving-based platform work. We find that driving-based work constitutes a large majority of OPE work—particularly among men and among workers with incomes below the 90th percentile.

Distribution of Activities by Age, Gender, and Earnings

We next investigate in more detail the types of activities being undertaken by contract workers.

Figure 5 plots the industry distribution of 1099 contractors filing Schedule C forms within each age-by-gender group, based on the self-reported NAICS codes on Schedule C. Within each bin, we plot the percentage of 1099 recipients filing a Schedule C that are in each two-digit NAICS code. Individuals with invalid or missing NAICS on their Schedule C are included in the denominator, so bars do not add up to 100. We separately break out 1099 recipients who are primarily self-employed (i.e., they have Schedule C net earnings greater than wages) in dark shading, and those whose self-employment earnings are secondary to

[5] Percentiles are rounded to the nearest $100 increment to protect taxpayer confidentiality.

their wage earnings during the tax year (the complement to the former set) in lighter shading. Any group with 10 or fewer individuals have been suppressed, and we exclude NAICS 55 and 92, which are rarely reported.

We find major differences in activities by gender and age. Large shares of male contractors of all ages are engaged in construction work and transportation work (driving and trucking), while these activities are rare among female contractors. By contrast, female contractors are more likely to be involved in retail, healthcare, and service activities. For workers of both genders, many report being engaged in professional services, and this propensity increases with age; older contractors are more likely to work in finance, insurance, and real estate (FIRE) or professional services—generally high-wage, high-skill sectors.

We also find significant differences in the distribution of activities done by contractors at the top and bottom of the earnings distribution. Figure 6 displays the distribution of industry codes reported by Schedule C filers with contractor income reported on a 1099 among individuals within each earnings bin (reflecting the same percentiles of the national personal earnings distribution from Figures 1–4.) To provide greater detail on activities of top earners, Panel A displays the distribution within quartiles 1–3 and the top quartile excluding the top 10 percent, while Panel B presents the top 10 percent of the earnings distribution. Note that the y-axis scale varies across plots.

At the low end of the earnings distribution, large shares of contractors are primarily self-employed workers in construction, transportation, administrative services, and personal services (the latter of which is contained in NAICS 81). These activities are rare among higher earners. By contrast, contractors at the top of the earnings distribution are concentrated largely in professional services, healthcare, and FIRE industries. Professional services is by far the most common industry reported by contractors at the top of the earnings distribution on their Schedule C—though, most such workers earn the majority of their labor income from W2 work.

Figures 7 and 8 plot the distribution of the industries of the firms issuing each contractor's

largest 1099 among the same groups in Figures 5 and 6. The overall patterns are similar to the patterns in Figures 5 and 6. However, there is greater dispersion across client firms' industries than across contractors' reported industries.

Conclusion

Independent contractors in the United States constitute a heterogeneous group, comprising both low-earning service workers who rely on self-employment work for their main source of income and high-earning professional workers, many of whom do contract work to supplement a main (W2) job. While a nontrivial number of workers engage in online platform work, such work is mostly limited to driving activities and amounts to a small fraction of the freelance workforce, even among low earners. We hope these tabulations will be useful in policy discussions going forward.

References

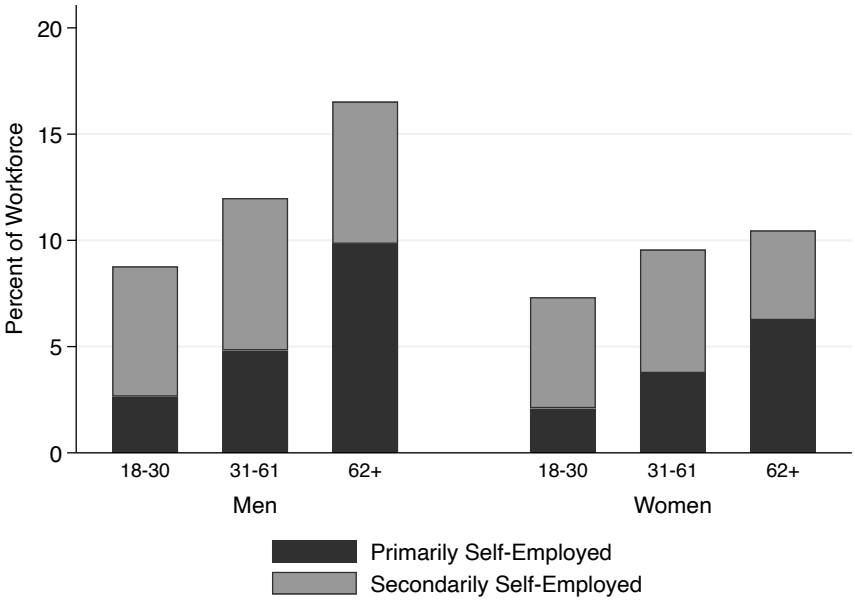
Collins, B., A. Garin, E. Jackson, D. Koustas, and M. Payne (2019): "Is Gig Work Replacing Traditional Employment? Evidence from Two Decades of Tax Returns," *SOI Working Paper*.

Jackson, E., A. Looney, and S. Ramnath (2017): "The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage," *Office of Tax Analysis Working Paper 114*.

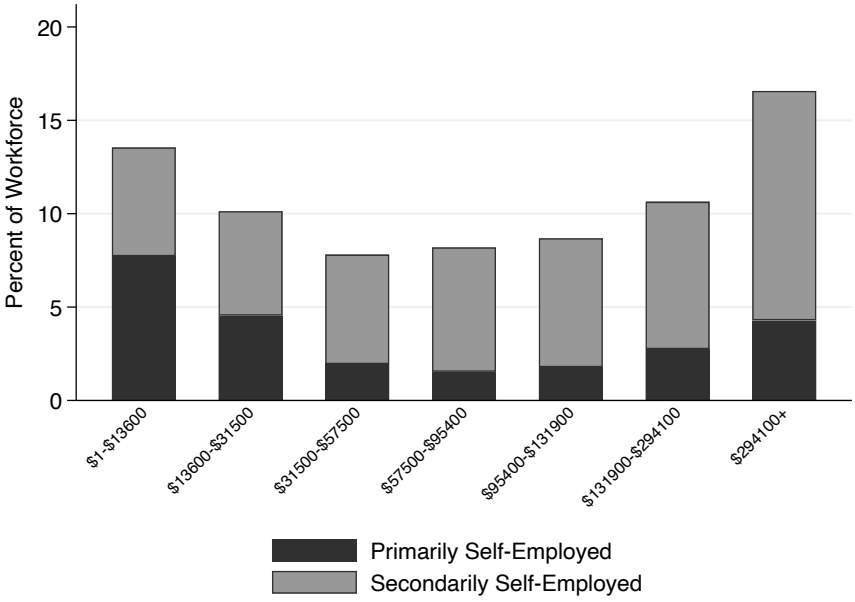
Lim, K., A. Miller, M. Risch, and E. Wilking (2019): "Independent Contractors in the U.S.: New Trends from 15 years of Administrative Tax Data," *SOI Working Paper*.

Figure 1: Share With Contract Work Payments Reported on 1099-MISC/K, 2018

(a) By Gender and Age



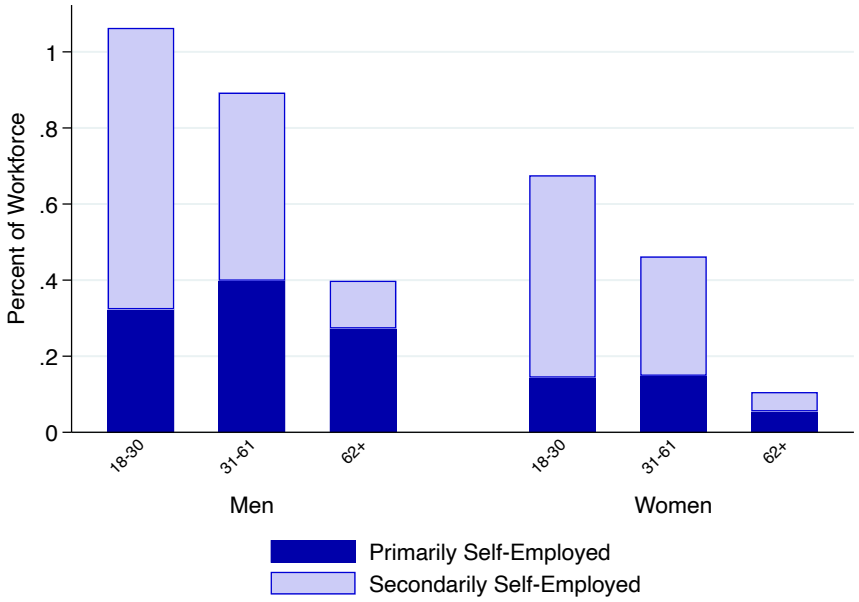
(b) By Personal Earnings Quantiles



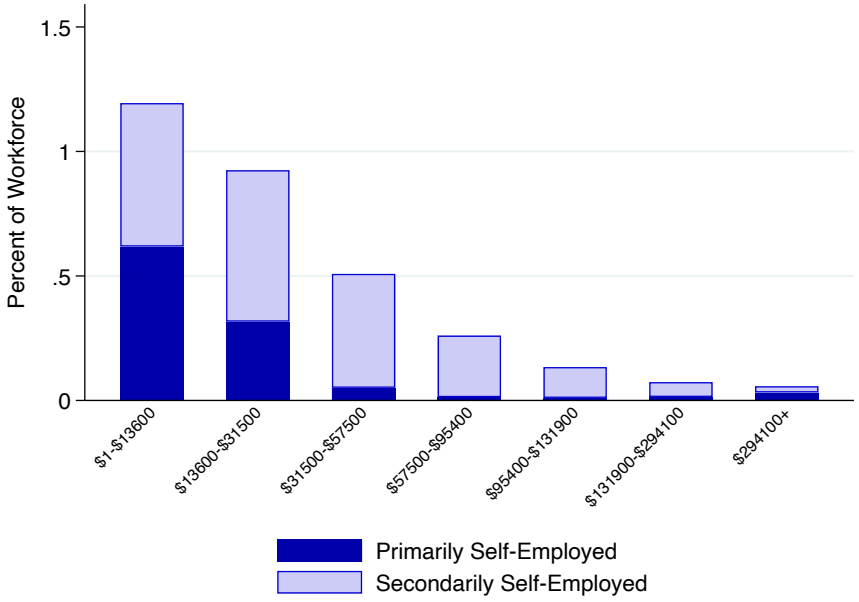
Notes: Figure displays percent of individuals in the adult workforce within the specified group who have non-employee compensation reported in Box 7 of a 1099-MISC from any firm issued to their SSN, or who have payments from an online platform company as identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported on a 1099-K. The adult workforce is defined as all individuals aged 18 to 100 with wages reported on a W-2 or positive net profits reported on Form 1040 Schedule C. Individuals are classified as primarily self employed if their Schedule C net income exceeds their wage income, and as secondarily self-employed otherwise. Income bins correspond to quantiles of the 2018 personal earnings (Wages + C Profits) distribution, specifically P1-P25, P25-P50, P50-P75, P75-P90, P90-P95, P95-P99, and P99-P100.

Figure 2: Share With Online Platform Work Reported on 1099-MISC/K, 2018

(a) By Gender and Age



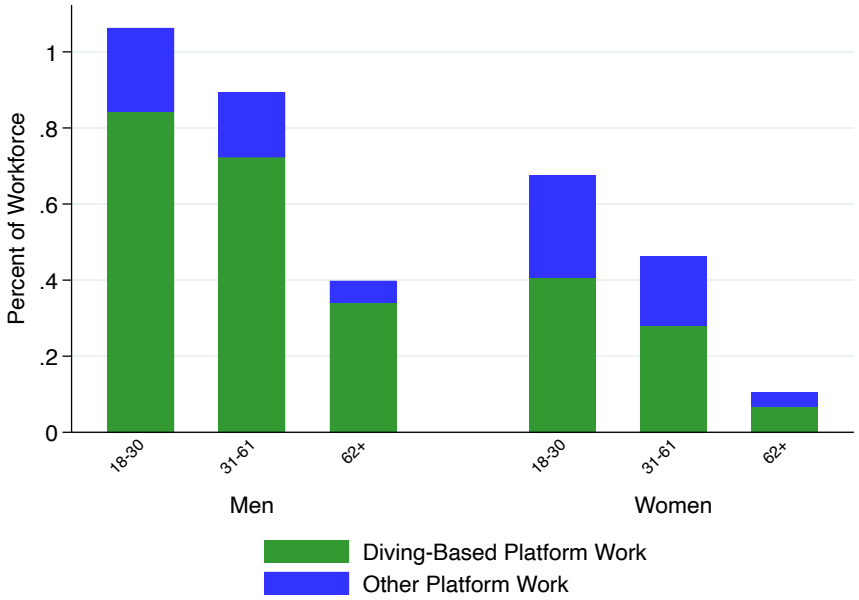
(b) By Personal Earnings Quantiles



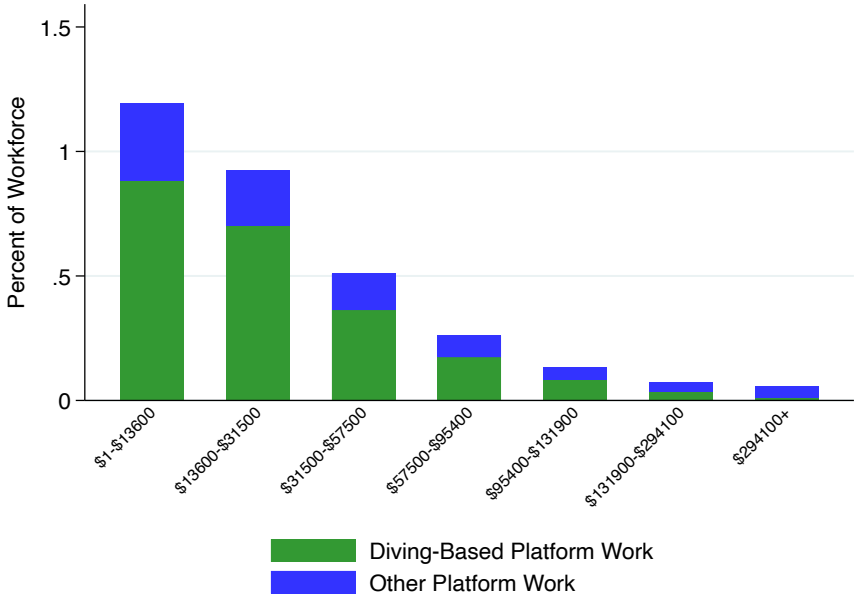
Notes: Figure displays percent of individuals in the adult workforce within the specified group who have non-employee compensation from one the online platform companies identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported in Box 7 of a 1099-MISC or on a 1099K issued to their SSN. Income bins correspond to quantiles of the 2018 personal earnings (Wages + C Profits) distribution, specifically P1-P25, P25-P50, P50-P75, P75-P90, P90-P95, P95-P99, and P99-P100. See Notes to Figure 1 for additional Details

Figure 3: Share With Online Platform Work, Driving Versus Other, 2018

(a) By Gender and Age



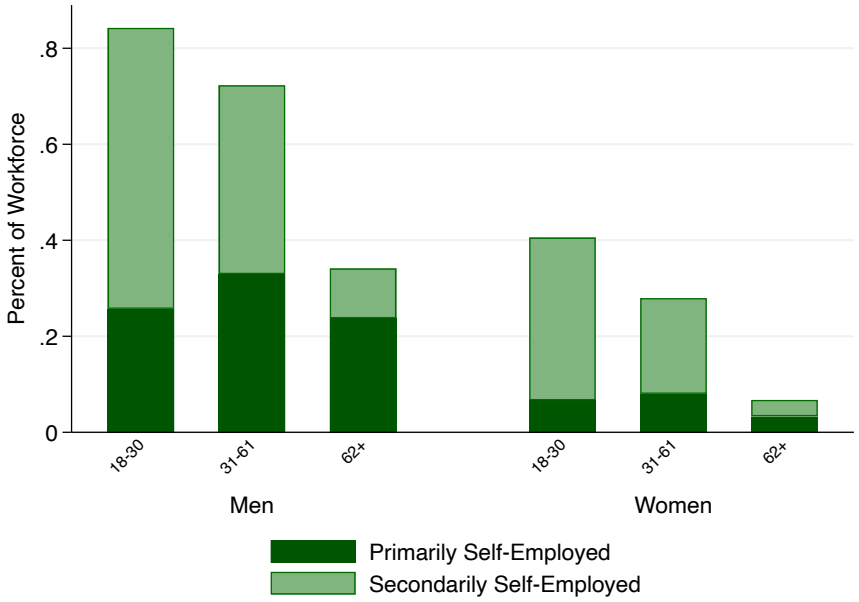
(b) By Personal Earnings Quantiles



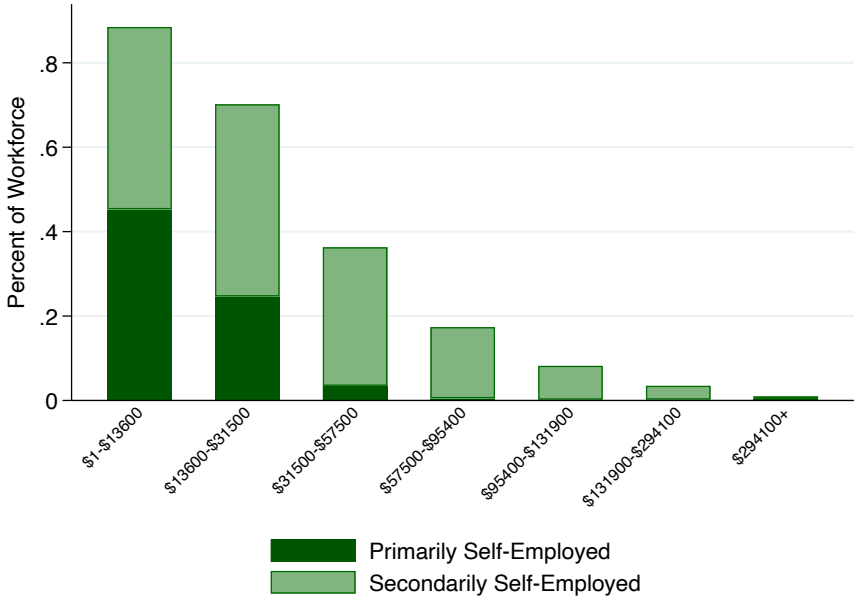
Notes: Figure displays percent of individuals in the adult workforce within the specified group who have non-employee compensation from one the online platform companies identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported in Box 7 of a 1099-MISC or on a 1099K issued to their SSN. Income bins correspond to quantiles of the 2018 personal earnings (Wages + C Profits) distribution, specifically P1-P25, P25-P50, P50-P75, P75-P90, P90-P95, P95-P99, and P99-P100. The subset of individuals with 1099s from OPE companies specializing in driving work (rideshare or delivery) are broken out separately. See Notes to Figure 1 for additional details.

Figure 4: Share With Driving OPE Reported on 1099-MISC/K, 2018

(a) By Gender and Age



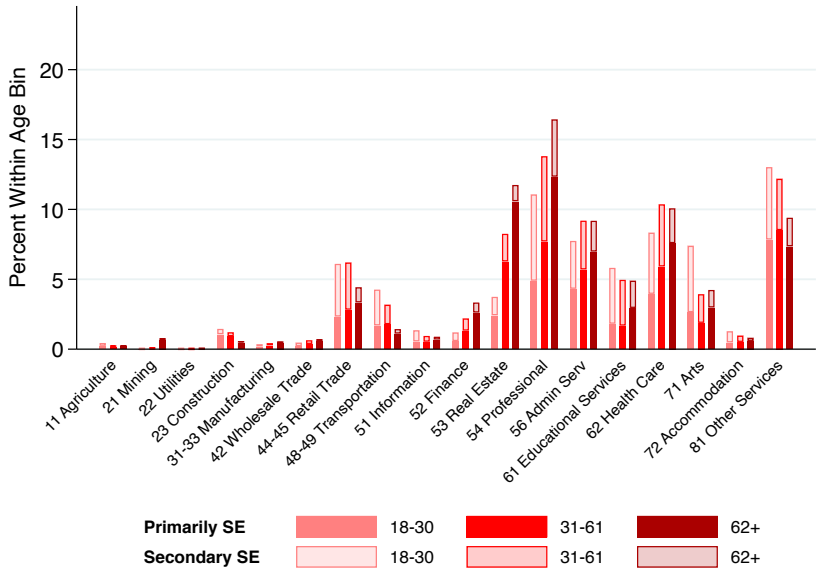
(b) By Personal Earnings Quantiles



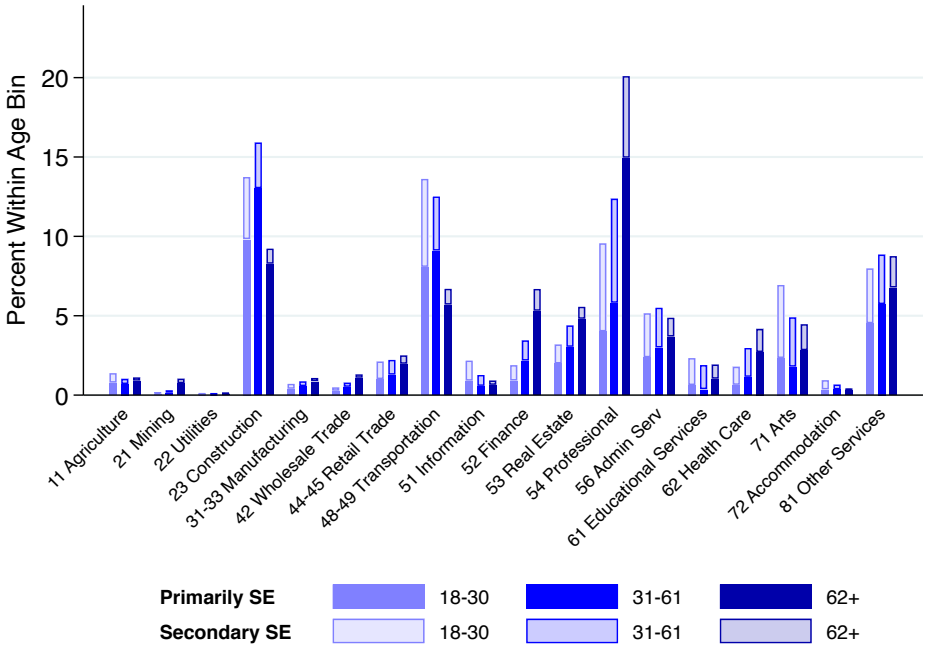
Notes: Figure displays percent of individuals in the adult workforce within the specified group who have non-employee compensation from a driving-based (rideshare or delivery) online platform companies identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported in Box 7 of a 1099-MISC or on a 1099K issued to their SSN. Income bins correspond to quantiles of the 2018 personal earnings (Wages + C Profits) distribution, specifically P1-P25, P25-P50, P50-P75, P75-P90, P90-P95, P95-P99, and P99-P100. See Notes to Figure 1 for additional details.

Figure 5: Distribution of Schedule C Industries of Contractors, Within Age Groups

(a) Women



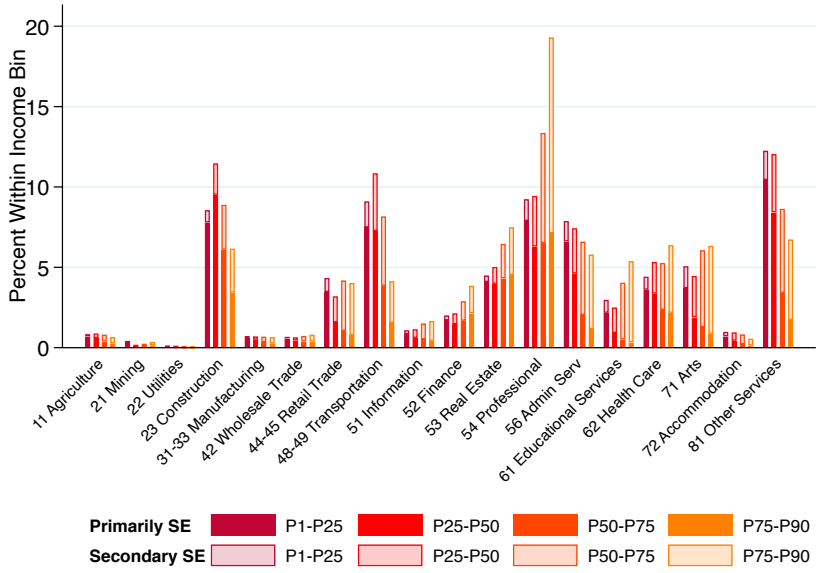
(b) Men



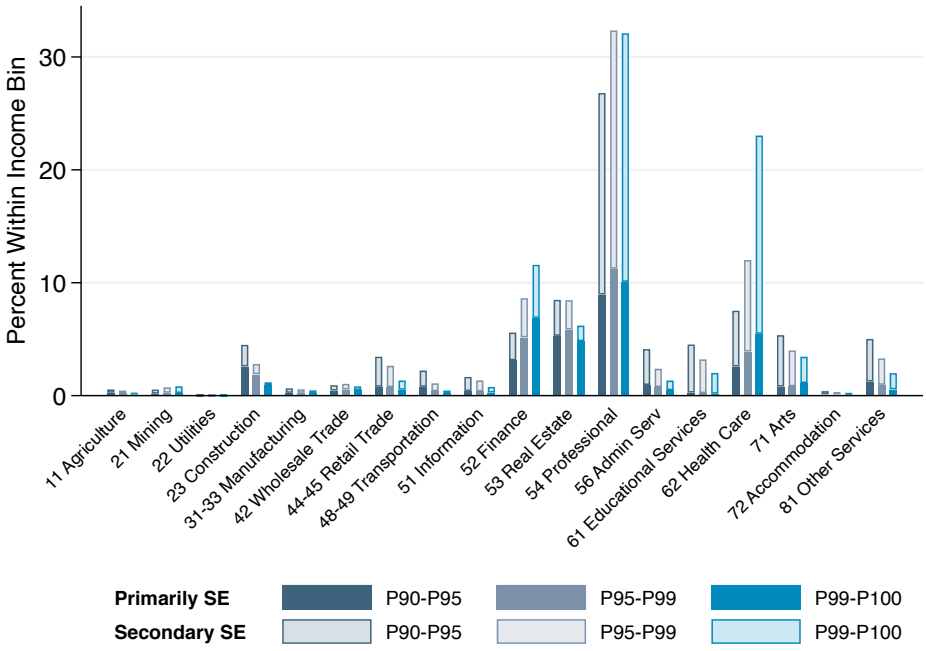
Notes: Figure displays the industry distribution of contractors within each age-by-gender group. Industry codes are self-reported at the individual level on Schedule C. The sample of contractors is restricted to individuals filing a Schedule C who have non-employee compensation reported in Box 7 of a 1099-MISC from any firm issued to their SSN, or who have payments from an online platform company as identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported on a 1099-K. Individuals are classified as primarily self employed if their Schedule C net income exceeds their wage income, and as secondarily self-employed otherwise. Percentages within each group (combining primary and secondary self-employment) add to 100 percent when including the residual group (not shown) of individuals with missing or invalid NAICS codes.

Figure 6: Distribution of Schedule C Industries of Contractors, Within Personal Earnings Groups

(a) Below 90th Percentile



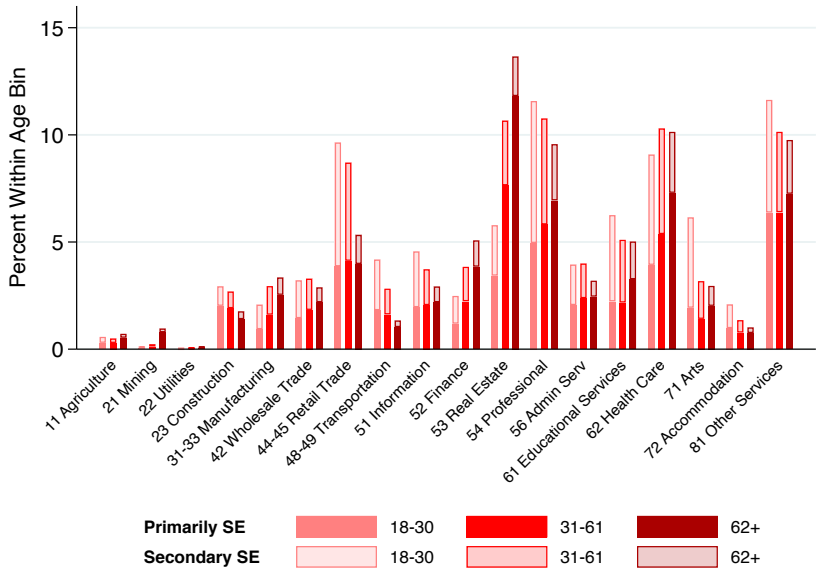
(b) Above 90th Percentile



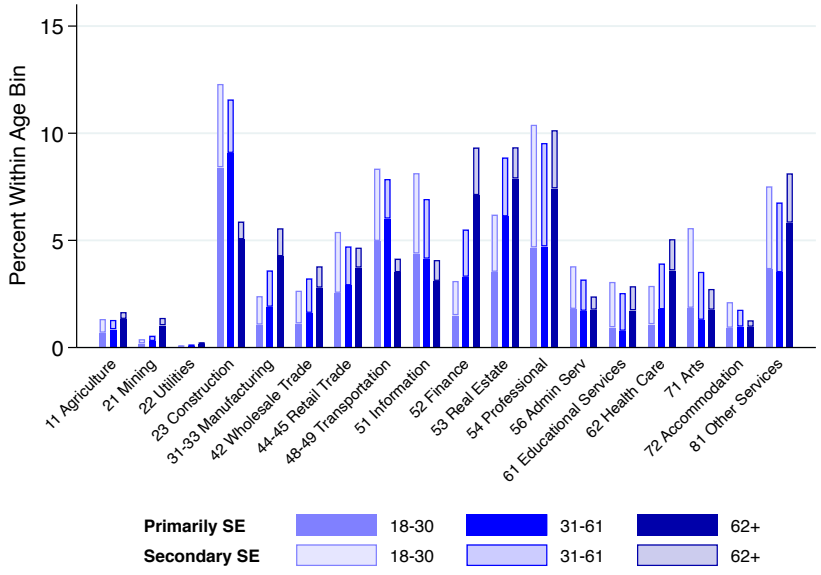
Notes: Figure displays the industry distribution of contractors within each personal income group. See Notes to Figure 5 for additional details. Personal earnings percentiles are from the full workforce distribution and correspond to the levels in Figure 1.

Figure 7: Distribution of Industries of Contractors' Largest Payers, Within Age Groups

(a) Women



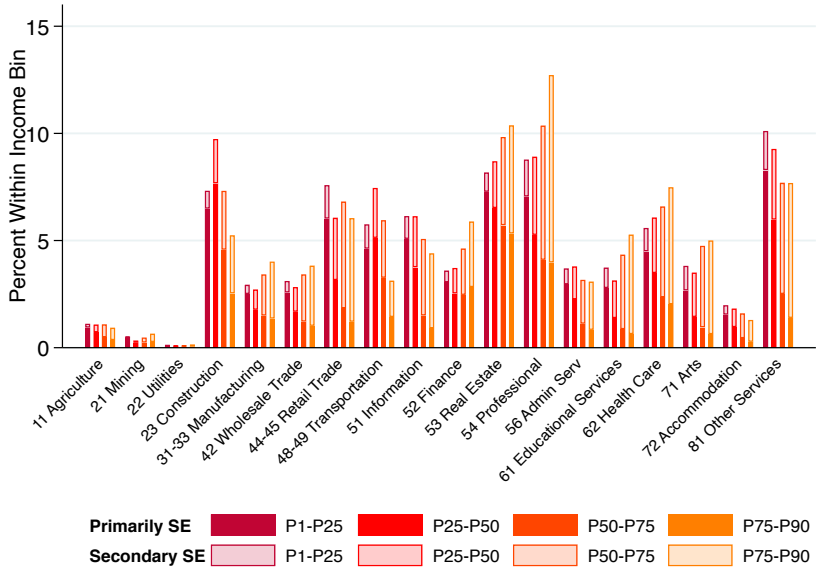
(b) Men



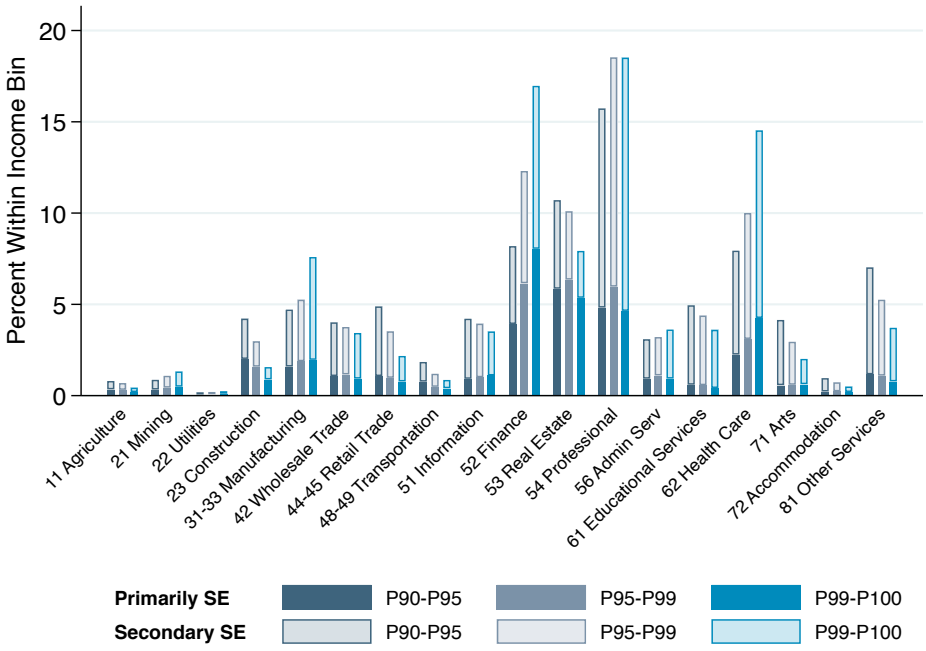
Notes: Figure displays the industry distribution of contractors' main payer firms, within each age-by-gender group. Industry codes are reported by firms on their tax returns; individuals are classified by the industry of the firm with the highest contractor payment amount on a 1099 form. The sample of contractors is restricted to individuals in the workforce (with either Schedule C profits or wages reported on a W2 and no Schedule C) who have non-employee compensation reported in Box 7 of a 1099-MISC from any firm issued to their SSN, or who have payments from an online platform company as identified in Collins, Garin, Jackson, Koustas, and Payne (2019) reported on a 1099-K. Individuals are classified as primarily self employed if their Schedule C net income exceeds their wage income, and as secondarily self-employed otherwise. Percentages within each group (combining primary and secondary self-employment) add to 100 percent when including the residual group (not shown) of individuals with primary payers with missing or invalid NAICS codes.

Figure 8: Distribution of Industries of Contractors' Largest Payers, Within Personal Earnings Groups, 2018

(a) Below 90th Percentile



(b) Above 90th Percentile



Notes: Figure displays the industry distribution of contractors' main payer firms, within each personal income group. See Notes to Figure 7 for additional details. Personal earnings percentiles are from the full workforce distribution and correspond to the levels in Figure 1.