The Evolution of Platform Gig Work, 2012-2023*

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Abstract

We document the dynamics of tax-based measures of gig work through 2023, with a special focus on gig work mediated by online platforms. We compare and contrast the demographic composition, earnings amounts, and tax-filing behavior of the gig economy over time. Updating data through 2023 allows us to provide the most comprehensive estimates of the COVID-19 pandemic on the gig economy. Between 2019 and 2023, the number of workers receiving a 1099 information return from a platform gig company tripled, increasing by nearly 4 million individuals, and there were approximately 5.6 million individuals receiving information returns from platform gig work by 2023. In contrast, the broader workforce of 1099 freelancers follows a different trend, declining during this period. Overall, the prevalence of 1099 gig work increased by over 0.5 percentage points of the workforce by 2023, with the composition shifting dramatically towards platform gig work. When examining individual tax filings, rather than third-party reported 1099 information returns, we find that the number of individuals reporting self-employment earnings who also had corresponding 1099 returns remained constant over this period, while the number of individuals with self-employment earnings but no 1099 increased.

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1 Introduction

Work mediated by online platforms has emerged as a widespread phenomenon over the last decade. An expansion of work that is mediated by platforms rather than by employers has important implications for both tax administration and policy more broadly: As self-employed independent contractors, platform workers are not subject to tax withholding, are responsible for determining their tax liability, are not subject to labor laws mandating minimum wages, overtime, or sick leave, and do not pay into state unemployment insurance systems. The COVID-19 pandemic has only further increased the amount of policy and popular attention directed towards the vulnerability of platform workers who fall outside of much of the social safety net.

The first step in understanding the platform economy is having an ability to measure it. Earlier work by Collins, Garin, Jackson, Koustas, and Payne (2019) and Garin, Jackson, and Koustas (2022) documented trends in freelance work reported on 1099 returns from 2000 to 2018 with particular focus on the role of "gig" work mediated by online platforms.[1] That work found that the prevalence of income from platform-based driving work—typically small annual amounts supplementing other employment—expanded dramatically between 2012 and 2018, with no increase in the prevalence of other types of freelance work. This earlier work focused on the nascent platform economy, and platform gig work has continued to evolve since. More recently, the COVID-19 crisis and subsequent changes in the policy and economic landscape may have led to sweeping changes in the extent and nature of gig work. It is therefore important to update these earlier measures of platform work and gig work more broadly.

This paper extends previous analyses of the prevalence of gig work in tax data. In doing so, we build on previous approaches to deal with issues in the reporting of gig workers in tax data. One such issue is the switch by some platforms from reporting

[1] Other recent empirical research drawing on tax return data and other survey or administrative data sources has made strides in measurement of gig and platform work (Jackson, Looney, and Ramnath, 2017; Farrell and Greig, 2016, 2018; Bracha and Burke, 2021; Lim, Miller, Risch, and Wilking, 2019; Greig and Sullivan, 2020), and we now have more research examining how and why workers use the platform economy (Koustas, 2018, 2019; Garin, Jackson, Koustas, and McPherson, 2020; Jackson, 2022).

payments on Form 1099-MISC, which was subject to a $600 reporting threshold, to Form 1099-K, which was subject to a higher $20,000 threshold, resulting in a "1099-K gap" in which nearly 1 million platform workers were no longer covered by 1099 reporting annually after 2016. We also discuss another recent issue with 1099 coverage for the broader freelance workforce: Due to pandemic related disruptions, paper 1099 returns for tax year 2019 that were filed in early 2020 were never fully processed by the IRS.

We find that the number of workers with platform-based gig work payments grew dramatically around the pandemic, while the composition of platform workers shifted significantly. We document both widespread exit from and entry into platform-mediated work, with a net increase of nearly 4 million workers (approximately 200% growth). While a central challenge in measuring platform work after 2016 is the emergence of the 1099-K gap, we find that the surge in platform work among new entrants after the onset of the pandemic is driven almost entirely by nonemployee compensation payments from platforms on 1099-MISC and its successor, the 1099-NEC—both of which are subject to a $600 threshold—rather than payments reported on 1099-K. This sudden rise in platform payments reported on 1099-MISC/NEC is consistent with a shift from ride-hailing work to delivery work observed in other data sources.

Platform gig work is only one component of the larger 1099 freelance workforce, and self-employment more broadly. When we examine 1099 freelancing outside of platform gig work, we find a starkly different pattern, with 1099 work *falling* by over 11 percent compared to pre-COVID levels. This decline is seen across industries, rather than being concentrated in any one particular industry, but is driven by workers with lower profits. Overall, after initially declining in 2020, the prevalence of freelance work reported to the IRS has grown by over 0.5 percentage point of the workforce since then, though the composition shifts dramatically towards platform work. Much of this growth is not captured in self-employment tax filings. Thus, aggregate analyses of overall freelancing or self-employment rates around the COVID pandemic would fail to capture the significant expansion in platform-mediated work.

This paper is organized as follows: Section 2 discusses the IRS data used in this paper, highlighting opportunities and challenges of these data. Section 3 discusses raw trends in platform gig work over time. Section 3.2 provides a deep dive on platform work during the COVID pandemic. Section 4 places trends in platform gig work in line with trends in components of the workforce including other 1099-reported contract work broadly defined and other self-employment reported on tax filings. This section also presents trends in the overall prevalence of gig and other contract-based work, adjusted for reporting anomalies. Section 5 concludes with a discussion of future research directions.

2 Measuring Gig Work in Tax Data: Opportunities and Challenges

2.1 Identifying Gig Work in IRS Tax

Our goal is to draw on the universe of tax return data to create measures of the prevalence of gig and platform work. The phrase "gig economy" is now widely used to describe contract and freelance work performed outside of traditional employment relationships. Accordingly, in our work we define gig and contract/freelance arrangements as those where payment comes from a firm or platform, but the worker is treated as a self-employed independent contractor. To identify such work arrangements, we leverage third-party firm reports of economic activity sent to the IRS and workers, known as "information returns" in combination with income tax filings reported by tax payers. The key tax forms used in our analysis are summarized in Appendix Figure A.1.

Payments by *firms* to self-employed contractors are reported directly to the IRS by those firms on 1099 information returns. Collins, Garin, Jackson, Koustas, and Payne (2019) provide an in-depth discussion of these forms and how they can be used to measure activity in the gig economy, and we only briefly repeat the landscape here. In tax data, we observe payments to gig workers on three different types of 1099 in-

formation returns. First, 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") through 2019 and on its successor, Form 1099-NEC, beginning in 2020. Prior to 2011, all contract and freelance "gig" work done for firms or for clients through online intermediaries was reported as nonemployee compensation on 1099-MISC. In 2011, a new law went into effect requiring companies that processed credit cards, electronic payments, or other transactions to report each recipient's payments on Form 1099-K. Much or all of this activity would not previously have been reported on a 1099-MISC. Subsequently, several large online platforms switched from reporting Form 1099-MISC non-employee compensation to issuing Form 1099-K instead. We track the total payments individuals receive from these companies that are reported on either a 1099-MISC/NEC as non-employee compensation, or on a 1099-K.

We pay special attention to 1099 workers mediated by online platforms, who we refer to as "platform gig economy" workers. In particular, we focus on individuals who supply labor on platforms that primarily mediate labor activity, as opposed to selling or leasing platforms. We measure participation in platform work based on the receipt of an information return from a payer known to be an online platform. Updating Collins, Garin, Jackson, Koustas, and Payne (2019) to include platforms operating at any point through 2023, we focus on a list of more than 90 different labor platforms that account for the overwhelming majority of payments to gig workers over the period studied.

2.2 Incomplete Processing of 1099s in 2019

One issue that arises measuring non-employee compensation during this period is that that, due to administrative complications related to the pandemic in 2020, paper 1099 MISC returns for tax year 2019 (filed in 2020) were not fully processed.[2] As a result, the number of 1099-MISC returns in 2019 drops precipitously because of the incomplete

[2]See "IRS Statement – Information Returns," May 13, 2022. https://www.irs.gov/newsroom/irs-statement-information-returns

processing of paper returns. This is readily apparent in Appendix Figure A.2, which shows that although there was a sharp drop in 1099-MISC returns filed, there was no drop whatsoever in electronically-filed returns and thus the drop was entirely due to paper returns (the residual category). This is *not* an issue for measuring platform gig work: As all platform gig firms and nearly all large employers file electronically, this mainly affects smaller non-platform 1099 firms that issue 100 or fewer 1099s. However, this is an issue when comparing trends in platform gig work with broader 1099 trends before/after the COVID crisis.

We make progress in two ways. One simple solution is to ignore 2019 and compare broader trends in contract work from 2020 onward relative to 2018 and before. A second approach is to estimate the under-count in 2019 directly. As shown in Appendix Figure A.2, the share of 1099 returns with non-employee compensation that were filed electronically was growing in time before 2019. Specifically, we observe that the ratio of all returns (paper and electronic) to electronically filed returns declined linearly from 2014 to 2018, with 2020 returning exactly to the 2014–2018 trend line. If all electronic returns were processed but not all paper returns, and the true ratio if all returns were processed remained on the trend line, then the true total number of 1099 returns should be given by the observed count of electronic returns in 2019 times the predicted ratio of all returns to electronic returns. This gives a total number of 1099 returns with nonemployee compensation that is approximately 1.3 times the observed total. We therefore estimate 2019 levels by inflating the number of individuals with 1099 nonemployee compensation by a factor of 1.3. This fix allows us to adjust the overall trend.

2.3 Higher Reporting Thresholds on Form 1099-K

A potentially important limitation to studying gig work using Form 1099-K is that platform companies classifying themselves as third party networks are only required to file this form if the total amount of such transactions exceeds $20,000 and the aggregate number of such transactions exceeds 200. In practice, this did not impact previous

analysis through 2016, as most of the major platforms voluntarily issued 1099-Ks to all platform participants, regardless of the earnings level, prior to 2016 if not reporting on a 1099-MISC. Beginning in 2017, however, some large platforms announced changes in their reporting policies and have moved to only report income on the 1099-K if it met the higher $20,000 reporting threshold legally required for the 1099-K.[3] This problem of certain work arrangements no longer being measured due to earnings falling being below the reporting threshold we refer to as the "1099-K gap."

For the period through 2018, we are able to shed light on the potential number of individuals affected by higher 1099-K thresholds based on trends observed in states with lower state 1099-K filing thresholds. Several states have passed laws requiring state-level 1099-K reporting subject to lower thresholds. Garin, Jackson, Koustas, and Miller (2025) examine state-level 1099-K data from Massachusetts and Vermont, states that have entered into data-sharing agreements with the IRS. Starting in 2017, both states require platforms to file state-level 1099-Ks to all payees with $600 or more in revenues. Garin, Jackson, Koustas, and Miller (2025) use these state-level returns to examine how rates of gig platform work changed in those states over time. The resulting "counterfactual" national series is interpreted as what federal 1099-based counts would have looked like if the effective 1099-K threshold had remained $600, and the gap between this imputed series and the observed federal series in 2017–2018 is the estimated number of "missing" platform workers due to high reporting thresholds.[4]

[3] In theory, the 1099-K was intended for use by payment card processors and third-party payment settlement organizations, including payment apps and online market payments that processed payments between buyers and sellers. Ride-hailing companies and several other types of gig platforms took the stance that they were third-party intermediaries between buyers and sellers of labor services, allowing them to report on 1099-K. Meanwhile, in cases where workers do gig work on a platform but are compensated by the platform rather than the individual consumer, use of 1099-MISC and its successor, 1099-NEC, was still required. Even in cases where platforms used 1099-K to report payments for tasks, additional bonus, incentive, or other payments from platforms themselves continued to be reported separately on 1099-MISC/NEC. The switch to 1099-K was publicly reported on platform's websites. Our review of company websites finds that the ride-hailing companies typically use the 1099-K (except for incentive and bonus pay, which are separately reported on 1099-MISC/NEC), whereas most delivery companies use the 1099-MISC (prior to 2019) or 1099-NEC (since 2020).

[4] More specifically, the imputation approach proceeds in two steps. First, in each year, we calculate the ratio of all 1099 workers (including Ks) to the subset of 1099 workers (excluding Ks), separately for the MA/VT data (which is complete in all years) and for the national IRS data (which is impacted by thresholds in 2017 and 2018). We impute the number of 1099 workers under the assumption that the national ratio

The key identifying assumption is that, absent the reporting change, trends in platform participation in Massachusetts and Vermont would have evolved in parallel with trends elsewhere (at least in proportional terms). The trends for Massachusetts and Vermont using the state-level 1099Ks are shown in Appendix Figure A.3(a), which show steady, continued growth as a share of the workforce, in contrast to the flat national series. Panel (b) shows how national platform work rates would have changed from 2016 onward if the rates grew at the same pace as in Massachusetts and Vermont).

While we are only able to implement this approach through 2018 due to state data availability, we note that 1099-K gap is likely to be less of a first-order issue when examining trends around the COVID crisis, since delivery firms driving growth primarily report on the 1099-NEC and not the 1099-K. Figure 1(a) shows raw trends in the number of platform gig workers from 2012 through 2023 reported on 1099 forms over time. Prior to 2017, there was considerable voluntary reporting of gig work, even under the $600 reporting threshold. From 2017, the time series appears to flatten out. There are two reasons for this: First, as discussed above, the adoption of the 1099-K, which has higher reporting thresholds, and changes in firm reporting, resulted in missing activity, particularly in the period since 2017. In Panel (b) we show the number of platform gig workers receiving different forms. (The total number of unique individuals is the sum of 1099-MISC/NEC and 1099-K, minus the number receiving both.) The 1099-K was the most common form prior to 2017. However, a second reason for the flattening of the series is that real gig activity is also slowing over this period.

The time series in Figure 1(a) then shows a massive structural break beginning in 2020 and extending through 2021, the two years when the COVID crisis was most

would have increased from 2016 to 2017 and 2018 in the same proportion that the MA/VT ratios increased over that same time period. Second, we do a similar calculation to impute how much the *overall* national workforce would have grown in 2017 and 2018 if 1099-K limits had not changed (which only matters to the extent that some workers in the national workforce only do 1099-K-reported gig work). We then compute the share of imputed 1099 workers relative to the overall imputed workforce in each year. For both parts, we assume the groups grew nationally at the same rates in 2017 and 2018 as we observed in MA and VT (but allow for differences in base rates across states). We also impute growth "backwards" from 2016 to 2014 and 2015 to highlight the imputations fit relative to the actual national trend; the results are displayed in Appendix Figure A.3(b) in Garin, Jackson, Koustas, and Miller (2025).

severe. As shown in panel (b), the massive growth observed in 2020 and 2021 is coming from activity reported on the 1099-NEC. This sharp rise in 1099-NEC returns issued by platform companies is driven by a pronounced shift of gig workers from ride-hailing towards the dramatically expanding delivery sector around the onset of the COVID crisis. Given the nature of the COVID crisis, ride-hailing gig workers saw demand for their services contract sharply, while food and grocery delivery work boomed. While it is difficult to directly separate out delivery from ride-hailing activities in the federal tax data because some large ride-hailing platforms are also delivery platforms, we can gain insight from other data. Appendix Figure A.4 compares ride-hailing activity from publicly available data for the city of Chicago to IRS data on the number of platform gig workers in Illinois. The two series map each closely, including a decline between 2016 and 2017.[5] This is not a surprise given that most platform gig work was ride-hailing work in this period. From 2017 through 2019, the Chicago data show noticeably higher levels of ride-hailing drivers than the tax data, likely due to the 1099-K gap. From 2020, the number of ride-hailing drivers declines dramatically. The number of drivers relative to 2019 was approximately 60% lower in 2020, 55 percent lower in 2021, 40 percent lower in 2022 and still about 20 percent lower as of 2024. Over this same period, we see the IRS series increase dramatically. Unfortunately, there are few consistently-reported sources of data specifically for delivery workers at this time, so we cannot directly examine a similar time-series for that sector. However, the surge in platform work among new entrants is driven almost entirely by nonemployee compensation payments from platforms on 1099-NEC rather than payments on 1099-K. Since several delivery-only platforms report exclusively on 1099-NEC, this pattern is consistent with an increase in delivery work.[6]

[5] In 2016, the City of Chicago imposed stricter licensing requirements for ride-hailing companies. These rules, inter alia, required drivers to obtain a chauffeur's license, have their vehicles inspected and undergo training. While this particular ordinance is specific to Chicago, regulations on the ride-hailing industry began to increase across many major cities around this time that was another force reducing the number of casual drivers.

[6] We note that it is not possible to discern whether or not the surge in 1099s beginning in Figure 1(a) 2020 was driven by a net increase in the number of individuals involved in platform work, as opposed to a shift among a largely fixed population of platform workers from ride-hailing work with no 1099-K due to threshold issues into delivery work covered by 1099 reporting. Suppose many ride-hailing drivers who

Despite the limitations noted above, our take is that the 1099s provide the best estimates of gig work over time. Gig work is difficult to capture in survey data and is sensitive to the precise wording of questions (Katz and Krueger, 2019; Abraham, Haltiwanger, Sandusky, and Spletzer, 2020; Abraham, Hershbein, and Houseman, 2020; Bureau of Labor Statistics, 2018). Previous research has examined the increase in the number of Schedule C filers self-reporting their industry as "Taxi and Limousine Service" (NAICS code 4853) (Abraham, Haltiwanger, Sandusky, and Spletzer, 2018). This approach relies on tax compliance. Moreover, there is no straightforward way to identify gig workers who might self-report with a different industry code, which is almost certainly the case with delivery tasks. An alternative to tax data, bank account data, such as that used by JPMC (Farrell and Greig, 2016, 2018), also has new challenges for measuring gig work in recent years, as up to 70 percent of drivers may now use debit cards provided by the platforms, and thus their income would not appear in banking data (Chen, Feinerman, and Haggag, 2024). This income earned on debit cards would still show up in tax reporting, provided it exceeds the reporting threshold.

2.4 Other Tax Data Elements

For tax purposes, 1099 workers are technically self-employed independent contractors. As discussed above, a key advantage of 1099 returns is that they are issued by firms, and therefore do not depend on tax compliance by workers. We also study self-employment reported by tax payers on their individual income tax returns, specifically on Form 1040 Schedule C, where individuals report their gross and net proceeds from business activities for which they are a sole proprietor (which includes most self-employment income), and Schedule SE, where individuals report their total self-employment proceeds

previously had no 1099 coverage switched to delivery, which is covered by 1099 reporting. In that case, examining the unadjusted data in Figure 1(a) would understate the growth between 2016 and 2020 growth but overstate the growth afterwards. Alternatively, it is possible (consistent with the Chicago data) that ride-hailing contracted significantly after 2020, driven by ride-hailing with earnings below 1099-K thresholds exiting the gig economy, rather than switching to delivery work. In that case, the post-2020 increase in the raw series in Figure 1(a) 2020 would *understate* the overall growth in the platform sector.

subject to social security taxes. We further examine whether or not such reporting on tax returns is accompanied by a corresponding 1099 return.

To determine whether a gig worker is primarily self-employed, we examine whether workers received a W-2 for a wage/salary job in the current year or previous years. Following Collins, Garin, Jackson, Koustas, and Payne (2019), we will define the workforce as all individuals appearing on a 1040 return in a year who have labor income reported on a W-2 return, a 1099 return, or on Schedule SE as well as individuals with positive W-2 earnings who do not file Form 1040. In this paper, we report data through tax year 2023.[7] We will classify gig workers as having "Earnings Primarily from Self-Employment" when they have the majority of wage plus Schedule SE earnings coming from Schedule SE, and "Earnings Primarily from Wages" as the complement. W-2 industry can be extracted as the industry from the tax-filings of the firm issuing the information return. Self-employed workers also self-report a NAICS industry when filing Schedule C. While demographics are limited in the tax data, age and gender are available based on a link to records from the Social Security Administration (SSA).

3 Trends in Platform Gig Work Over Time

3.1 Trends Prior to COVID

In this subsection, we briefly summarize trends prior to 2020. Much of this was previously documented in Garin, Jackson, and Koustas (2022), but we discuss key results from that work to put the later trends into context.

Outside of new, platform-mediated gig work, fewer than 10 percent of workers had non-employee compensation reported on a 1099 in each year from 2000 to the start of the COVID pandemic. More broadly, the share of the workforce with 1099 income from non-employee arrangements grew by approximately 2 percentage points from 2000 to 2018. Most of this growth occurred from 2013 to 2018, and was nearly entirely driven by the rise of platform-mediated gig work.

[7] The tax data used in this paper were last pulled in September 2025.

Many gig workers have other W-2 work and use gig earnings as secondary or supplemental income sources over the course of the year. There has been no significant increase in the likelihood of individuals earning a full-time living solely from 1099-based self-employment. Instead this work often augments other primary W-2 employment over the course of the year. Around 85 percent of platform gig workers do that work to supplement their primary earnings from W-2 work; this share is significantly higher for platform workers than for other freelancers with 1099-reported payments outside of platform gig work.

Although platform-based work rose dramatically after 2013, the vast majority—around 90 percent—have been engaged in transportation tasks. Younger men were the dominant demographic in the platform gig economy workforce (though women's participation rates in platform gig work, which was dominated by ride-hailing work during this period, were higher than in the traditional taxi industry).

However, the share of workers who self-report self-employment income on their income tax return has evolved differently than the share with 1099-reported payments for freelance work. On one hand, many 1099 workers do not appear in self-employment tax filings, which may in part be because workers fall below reporting thresholds after accounting for expenses.[8] Also important are changes in the propensity of individuals to self-report self-employment over time in response to the Earned Income Tax Credit (EITC) and Child Tax Credits (CTC), as documented by Garin, Jackson, and Koustas (2025).

3.2 Platform Work during COVID-19

To study the evolution of the gig economy during COVID, we proceed by examining raw data from the period since 2017. As discussed above, the raw data will likely under-count total platform gig employment due to the 1099-K gap and may miss some

[8]Not all taxpayers are required to file tax returns. Filing requirements vary by filing status and age. For tax year 2020, a taxpayer under the age of 65 filing as "single" must file a return if gross income is at least $12,400. However, the filing requirement for independent contractors is $400 for anyone with net earnings from self-employment of at least $400.

churn in ridesharing. However, the data series should at least be comparable over time in this period, allowing us to examine changes in the composition of recipients of 1099s from platform gig payers.

Figure 2(a) reports overall counts of gig platform work, with separate breakdowns by major gig industry: transporation and delivery; "creater/influencer," defined as platforms where people are paid for posting original content; and all other platforms, which includes platforms providing online tutoring, tele-health and other professional services. We combine transportation and delivery platforms because some transportation platforms are also delivery platforms, and we cannot separately identify the two.

As discussed above, we follow over 90 platforms through 2023. Prior to 2020, the largest component of platform gig work by far was transportation and delivery. While there are many other platforms, they all have comparatively small numbers of workers. After 2020, transportation and delivery work remained the largest components of gig work, with other platforms continuing to represent only a small share of the overall gig economy. In 2020, we see a jump in gig work by around 1.2 million workers. Over 1 million comes from transportation and delivery, and an additional 150,000 comes from creator/influencer platforms. Platform gig work again expands dramatically by 1.9 million between 2020 and 2021, with 1.8 million having an information return from a transportation or delivery platform. After 2021, there is no pullback in the number of platform gig workers as the economy recovered from COVID. Instead, platform gig work appears to return to the slower growth seen between 2017-2019. Thus, COVID appears to have been a large, permanent structural break increasing the number of platform gig workers. By 2023, there were approximately 5.8 million platform gig workers, up from 1.9 in 2019.

A second takeaway is that this period of dramatic entry into gig work was also a period of significant churn. Figure 2(b) examines entry and exit flows from platform work, showing that nearly 2.1 million new workers entered the gig economy in 2020 who did not do have an information return from the platform gig economy in 2019, a 100% increase over 2019. An additional 3.1 million entered in 2021 who were not

participating in 2020. At the same time, exits also jumped. 1.2 million who had a platform gig 1099 in 2020 left by 2021.

Figure 3 examines gross earnings by transportation and delivery (Panel a), versus all other platforms (Panel b). In light of the 1099-K gap, we divide those with payments from transportation and delivery apps into those with less than $20,000 and those with $20,000 and above. Since most activity on all other platforms is reported on the 1099-NEC, we include more earnings detail for these platforms. Most workers are earning small amounts on these platforms. Nearly all of the massive growth is for gross receipts less than $20,000. Among all other platforms, most gross less than $5,000. Net earnings, after expenses, will typically be lower.

The age and gender distribution pre-COVID (2019), during COVID (2021), and post-COVID (2023) is shown in Figure 4. We can see the platform economy is disproportionately comprised of prime-age workers ages 30-55. More women have participated in platform work over time. First, looking at platform and delivery work, the distribution became much younger during COVID, possibly reflecting lower perceived COVID risk among younger workers compared to older workers. The transportation and delivery workforce also became more female, with women going from 36 percent to 44 percent of this work by 2021. This held stable in 2023. Among all other platforms, this workforce was already majority female in 2019 (55 percent) and became even more female in 2021 (66 percent), mainly shifting to women in their early 20s and 30s, before coming down somewhat to 62 percent by 2023.

Did the shift in the age of the platform workers during COVID and the reversion afterwards occur due to turnover among younger workers, older workers, or both? Figure A.6 shows the underlying data by age and year in levels. We can see that there is net entry of workers at all ages during COVID, including older workers, but the surge of entry is largest among the youngest workers, which is what leads to the leftward shift in the age distribution. By 2023, there are fewer young workers in transportation and delivery platforms, while there is a continued expansion for older, particularly middle-aged, workers.

Previous research has shown that many workers enter gig platform work after an economic shock, such as unemployment (see, for instance, Koustas (2018, 2019); Jackson (2022)). We provide suggestive evidence on the economic shock channel in Figure 5(a), for wage-only workers in 2019. By the nature of the COVID shock, different industries were differentially affected: in some industries, like grocery stores, very few workers had slack demand, whereas demand fell dramatically for hospitality and restaurant industries. One proxy for COVID's impact is the share with UI receipt among the W-2 workforce in 2020.[9] In Figure 5(a), we plot the W-2 industry share with UI against new entry into platform gig work in 2020 and 2021. We find a positive relationship between rates of UI receipt in the industry and new entry into platform gig work, which is suggestive that entry was related to the size of the shock.[10]

Figure 5(b) plots rates of entry into platform gig work by age alongside the share receiving UI in each age group. We find that COVID had significant impacts on younger workers, who received unemployment insurance at the highest rates. Simultaneously, they were also the most likely to enter gig work. Similarly to the industry patterns, these age patterns suggest that the group with the biggest shocks—in this case young workers—were the most likely to seek alternative forms of employment. Thus the much discussed channel of gig work providing extra income to workers facing income shocks appears to have been operating, even with generous expansions in UI benefits.

One potential contributing factor to increased exits was the Pandemic Unemployment Assistance program (PUA), which extended unemployment insurance (UI) benefits to platform workers excluded from regular UI systems. This channel is explored in more detail in Jackson, Koustas, Garin, and Miller (2025), which finds that the availability of new PUA benefits resulted in many individuals who were platform workers in 2019 not reporting any self-employment income in 2020 and 2021. The estimates imply exits from gig work due to PUA of about 26,000 primary platform workers, or 1 percent. However, this disincentive effect was swamped by the millions of new entrants

[9] UI receipt is measured by receipt of a 1099-G indicating income from unemployment insurance.

[10] Because our data are annual, we cannot determine whether individuals participated in gig work while simultaneously receiving UI.

into gig platform work in 2020 and 2021.

We also examine the geographic distribution of gig work.[11] Figure 6(a) plots the percentage point growth in platform gig work between 2019-2023, panel (b) plots the percentage growth in platform gig work between 2019-2023, and panel (c) plots levels of platform gig work as of 2023. Platform gig work grew most in states with the lowest levels of such work, mainly rural areas. Delivery work grew even in places that did not have a significant ride-hailing demand or presence pre-period. Because of the low base level, this results in higher percentage growth for those states. In contrast, the early growth in platform gig work largely came from ride-hailing and had the most penetration in large, urban states with considerable density. The higher sustained levels of platform gig work through 2023 is in part driven by this geographic spread.

To summarize: the COVID period was characterized by massive new entry and exit. In particular, the platform economy became younger and female, both inside and outside of transportation and delivery. Platform gig work saw a large upward structural break in 2020-2021. These trends in new entry and demographic changes suggest that many new entrants were doing self-employment for the first time, which may have implications for tax administration. Although growth has slowed, the number of workers in platform gig work remained permanently higher through 2023.

4 Comparison to Other Components of the Workforce During COVID

How does the experience of platform work compare to other measures of self-employment in tax data, in particular, the broader 1099 contract workforce and self-employed tax filers? We explore such trends in this section.

To compare trends in platform gig work to contract activity in other industries, we first take a simple approach of comparing to 2018, which bypasses the problem of

[11] Raw counts by state back to 2012 and Metropolitan Statistical Area (MSA) back to 2014 are provided in Appendix Tables C.6-C.8. Appendix Tables C.1-C.5 also show counts and tax filing by state for 2019-2022.

incomplete processing in 2019. Table 1a reports counts by NAICS 2 industries as self-reported on Schedule C. As discussed above, platform gig work grew dramatically. The number of Schedule C filers with platform gig earnings tripled by 2023. Interestingly, we see that other 1099 contract work declined, by 11.2 percent between 2018 and 2020 and was still 11.5 percent lower as of 2023. This decline is not concentrated in a particular industry, but occurred broadly across most NAICS 2 industries. In Panels (b) and (c), we examine workers with above and below $15,000 in profits (approximately full-time/full-year at the federal minimum wage), and find that the decline between 2018-2020 was similar for low and high earners. However, the number individuals with Schedule C profits above $15,000 had largely bounced back by 2023, with large expansion in some industries, such as accommodation/food services (+34.6 percent), admin support (+22.5 percent, education (+20.1 percent), health care (+20.8 percent). Among higher earners, other industries remain substantially lower even in 2023, such as retail trade (-36.9 percent) and transportation (-15.2 percent). In addition, among those with earnings less than $15,000, the gig economy has persistently contracted across every NAICS2 industry.

4.1 A New Harmonized Series of the 1099 Economy, 2000-2023

Our next exercise is to construct an updated, consistent and harmonized series of trends in the 1099 "gig" workforce from 2000-2023, as a share of the tax workforce. We build off a similar exercise in Garin, Jackson, and Koustas (2022), which adjusted for the K-gap through 2018. We also apply our fix for missing paper returns in 2019.

We follow Collins, Garin, Jackson, Koustas, and Payne (2019) and Garin, Jackson, and Koustas (2022) in defining the tax workforce as comprising workers that receive a W2, file Schedule C/SE, or who receive a 1099 but do not file C/SE but otherwise file a 1040. Note, this definition excludes 1099 with no other tax footprint (1040 or W2).[12]

[12]One concern is about these being due in part to bad linkages. This is less of a problem in platform work, but more severe when looking at 1099s more broadly. This figure can easily be recalculated to include this

The resulting harmonized time series of gig work as a share of the tax workforce is shown in Figure 7.[13]

Outside of platform gig work, 1099-reported contract work was very stable between 2000 and 2019. During 2020 and 2021, platform gig work grew dramatically, both as a share of the tax workforce and as a share of contract gig work. As of 2021, platform gig work comprised 3.2 percent of the workforce, and nearly 30 percent of all 1099 contract work. However, other 1099 contract work declined, resulting in only a modest increase in the broader gig economy. Putting our trends together, the entire 1099-gig economy, inclusive of platform gig work and other contract work, went from 10.8 percent of the workforce in 2018 (11.2 percent including our imputation), to 10.4 percent in 2020, rising to 11.3 percent by 2023.

Figure 7 also breaks out the share of the workforce whose main job is wage/salary versus primarily self-employed. When classifying gig workers as primary or secondarily self-employed, we make the assumption that non-Schedule C/SE filers had few profits after expenses, and this was the reason they did not file Schedule C. Thus, 1099 recipients with no Schedule C/SE but who have a W2 are classified as primarily wage/salary. We classify those with a 1040 who do not file SE/C and who have no W2 as primarily self-employed. We find there is a modest decrease in the share who are primarily self-employed: In 2018, the share was 45 percent, in 2021 it was 43 percent and by 2023 it was 40 percent.

4.2 Comparison to SE Filing

Finally, we examine trends in broader self-employment earnings reported by individuals on their income tax returns. Figure 8 examines the overall number of self-employment tax filers (defined as filing a Schedule C/SE with their 1040 income tax return) since

group using the raw counts provided in Appendix Table B.1. Including 1099s with no other tax footprint in the denominator does not qualitatively change the findings.

[13] Appendix Table B.1 provides raw counts including 2019, and Appendix Figure A.5 shows raw trends as a share of the workforce.

2012.[14] As shown in the maroon line, the number of tax filers reporting self-employment remained constant between 2019 and 2020, despite the large disruption in the economy (The number with W-2s declined by 1.5 percent between 2019 and 2020, for instance). We next break down self-employment tax filing into those that received a 1099 (dotted navy line) and those that did not (dotted maroon line). The number of taxfilers jointly receiving a 1099 and reporting self-employment on an income tax return declines slightly between 2018 and 2020 is largely unchanged throughout the period through 2023, despite the overall increase in 1099 activity by 2023 due to platform gig work. At the same time, there is a substantial increase in individuals reporting self-employment on income tax returns despite not receiving a 1099. While it is beyond the scope of this paper to examine this divergence further, one reason may have to do with changes in reporting to become eligible for other benefits administered through the tax system that were contingent on income. For instance, the Earned Income Tax Credit and Child and Dependent Car Tax Credit were temporarily expanded in 2021. This could also reflect real growth in consumer facing self-employment that is not mediated by firms. We leave further examination of these trends in self-employed tax filing with no 1099 for future work.

Why does the prevalence of individuals who report having self-employment on their income tax returns and also have corresponding 1099 returns remain relatively constant, despite the previously-reported increase in workers receiving 1099s, driven by platform gig work? This is in part because Schedule C filing rates among platform gig workers with 1099-reported earnings are low and the rate is falling over time, even among those who file a 1040 return. Panel (b) presents the rate of self-employment tax filings conditional on receiving a 1099 from a gig platform since 2017. In 2018, around 70 percent of workers with OPE 1099s filed a Schedule C or Schedule SE. This fell to

[14]The prevalence of self-employment earnings reported on income tax filings grew more dramatically in the 2000s, in part due to changes in reporting documented in Garin, Jackson, and Koustas (2025). We focus on the period from 2012 partly to avoid trends driven by changes in reporting, and to incorporate Schedule C filing. Prior to 2012, it is not possible to distinguish whether a primary filer or a spouse had Schedule C income in the data archive.

approximately 63 percent by 2020 and 55 percent by 2023.[15] One plausible explanation for this decline may have to do with the influx of new entrants, many of whom are engaging in self-employment for the first time. These trends suggest that tax compliance issues among platform gig workers were further exacerbated in the aftermath of the COVID crisis.

5 Conclusion

This paper examines the evolution of gig work through the COVID-19 pandemic. Platform gig work was the primary driver of growth in the size of 1099 workforce from 2012 through 2018. COVID saw another dramatic increase in platform work, increasing the size of the 1099 workforce by around 4 million new workers. We presented evidence that these post-2020 increases are driven primarily by delivery platforms. We also saw growth to a lesser extent among creator and influencer platforms. The pandemic accelerated a shift in platform workers towards young workers and especially women, who have become more represented among platform workers over time. However, it remains the case that most workers platform workers only work intermittently on platforms as a supplement to earnings from a traditional job, and fewer than 60 percent of individuals with 1099-reported platform earnings report positive net self-employment earnings on an income tax return in recent years.

Whether COVID-19 represents a permanent change in platform work beyond 2023 or we will return to previous trends remains to be seen, but trends observed so far have persisted through 2023, long after the economy recovered from COVID and most people returned to workplaces, grocery stores and restaurants. At the same time, looking at 1099-reported freelance work more broadly, the picture is mixed on whether COVID was a watershed moment. While platform gig work increased, COVID does not appear to have fundamentally shifted the overall prevalence and nature of contract/SE

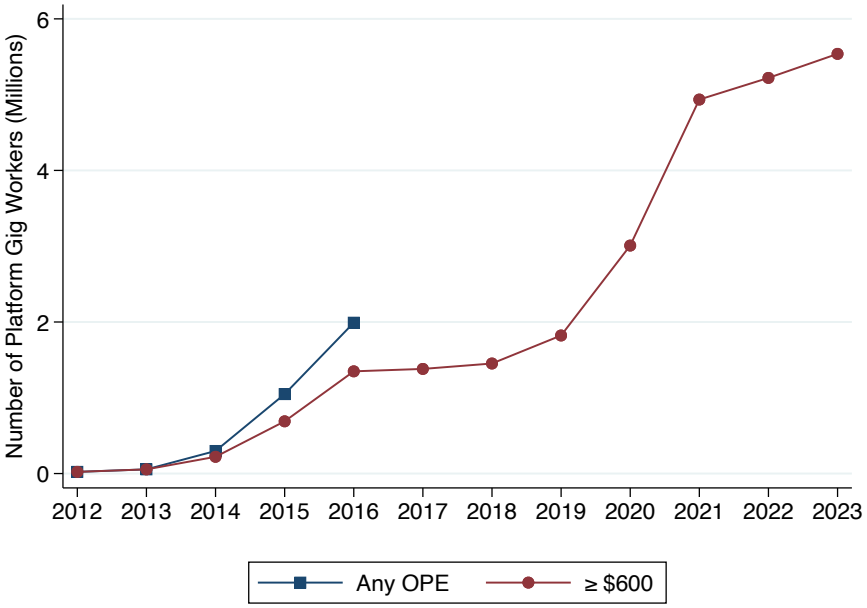
[15] The low rates of filing Schedule C or SE are not driven by individuals who have 1099s but no other taxed income. The total decline is comparable when focusing on our definition of the tax workforce (i.e. restricting to individuals with a 1040 or W-2 return): the Schedule C/SE filing rate falls from approximately 76 percent in 2018 to 61 percent by 2023.

work—and may have decreased it in some industries.

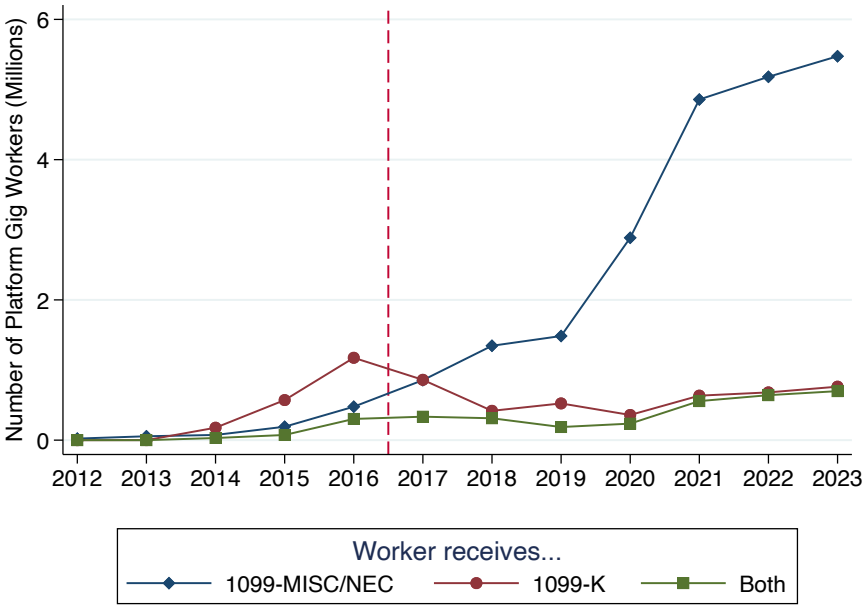
Figures

Figure 1: Raw Trends, Platform Gig Work, 2012-2023

(a) Individuals with Any Payments for Platform Work



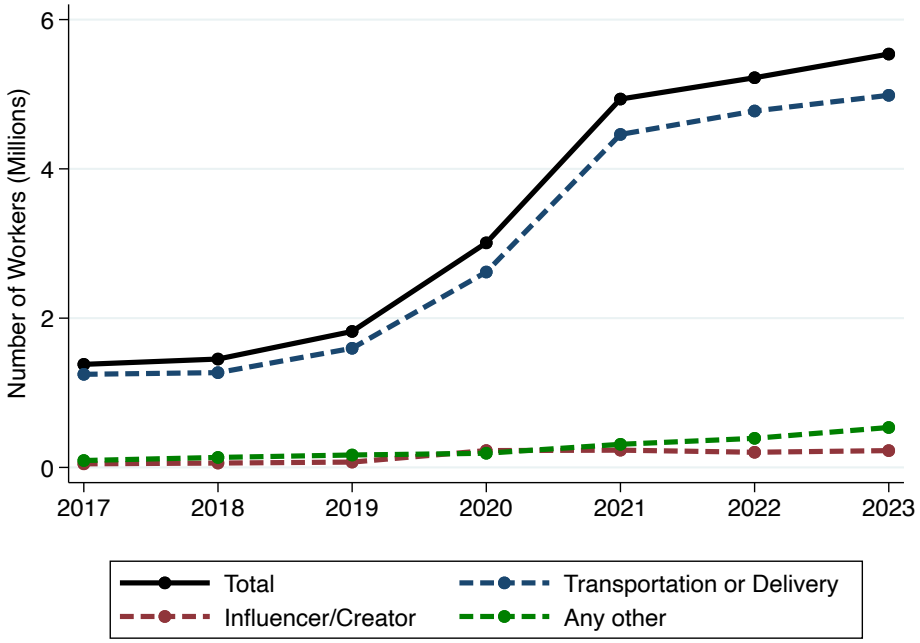
(b) Number of Individuals by Information Return Received



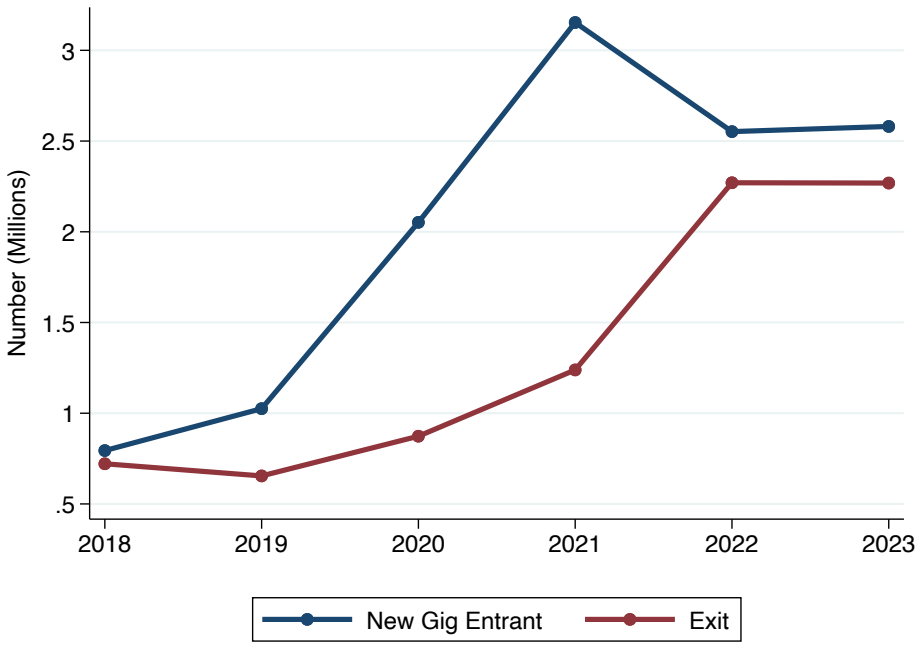
Note: Panel (b) restricts to $\geq$ \$600 in gross receipts.

Figure 2: Platform Gig Work, 2017-2023

(a) Raw Totals



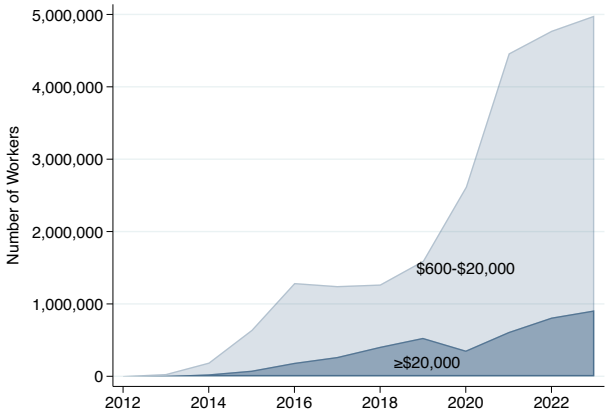
(b) Entry and Exit



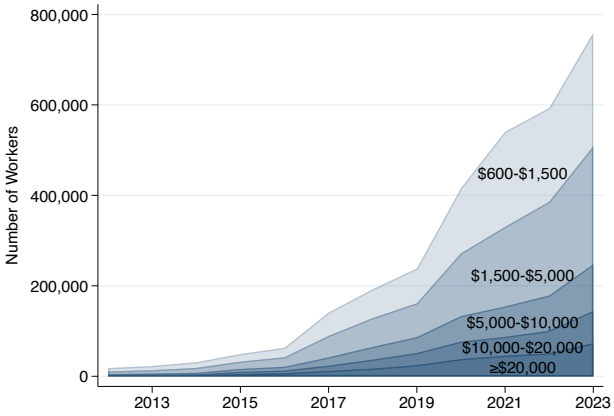
Notes: Panel (a) shows total number of workers, in millions, active at some point in the year indicated on the x-axis. Panel (b) shows flows, in millions, of new entry and exit. "New Entrant" is defined as someone with a 1099 from a platform gig company who had no 1099 from a platform gig company in the previous year in the previous year. "Exit" is defined as having a 1099 from a platform gig company in the prior year, but no 1099 in the current year.

Figure 3: Gross Earnings in Platform Gig Work

(a) Transportation & Delivery Platforms



(b) All Other Platforms



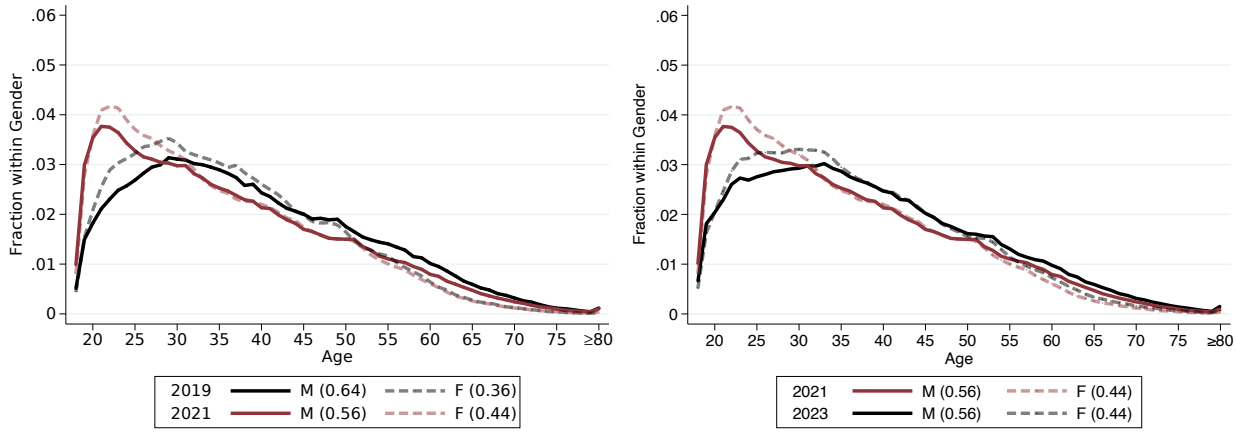
Restricts to $\geq$ \$600 in gross receipts. Not additive. People in both are in each of the other series.

Figure 4: Age Distribution of Platform Gig Work, by Year and Gender

(a) Transportation & Delivery Platforms

(a) 2019 v 2021

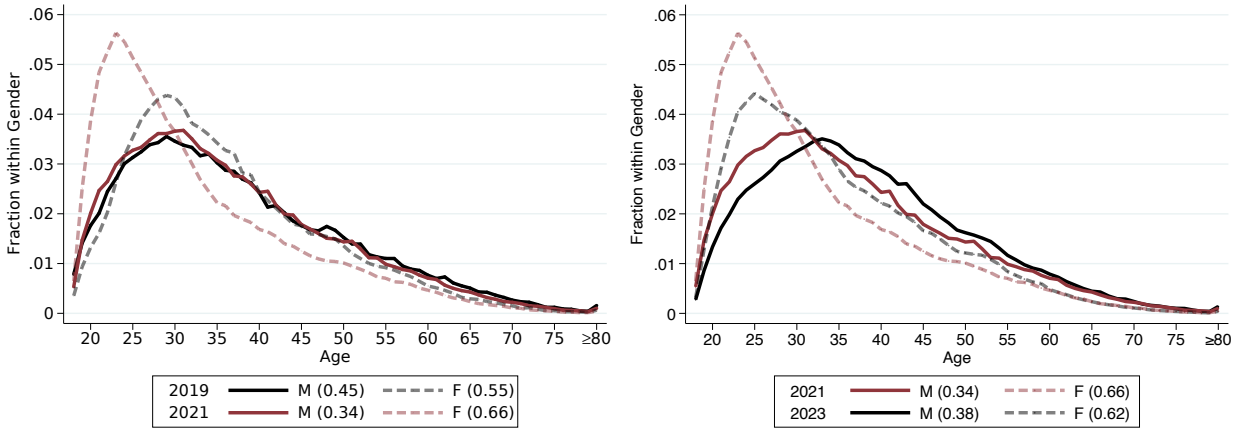
(b) 2021 v 2023



(b) All Other Platforms

(c) 2019 v 2021

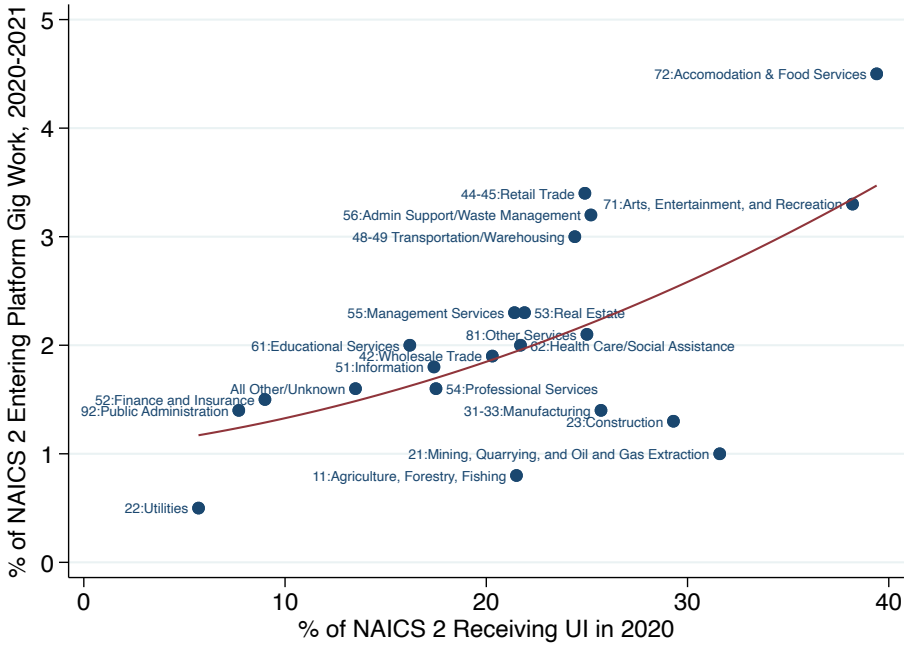
(d) 2021 v 2023



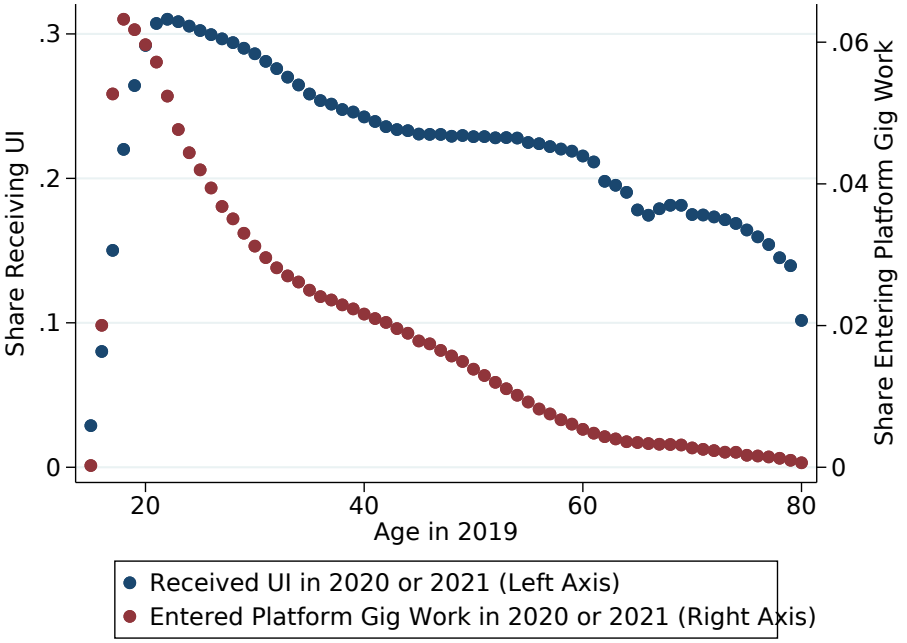
Notes: Figure shows the age distribution of platform gig workers separately by year and gender as recorded in SSA data. The share of the gender share of platform gig workers in each year is reported in parentheses in the legend.

Figure 5: Entry into Platform Gig Work

(a) Entry from W2 Work, by NAICS of W2 work



(b) Entry and UI receipt by age

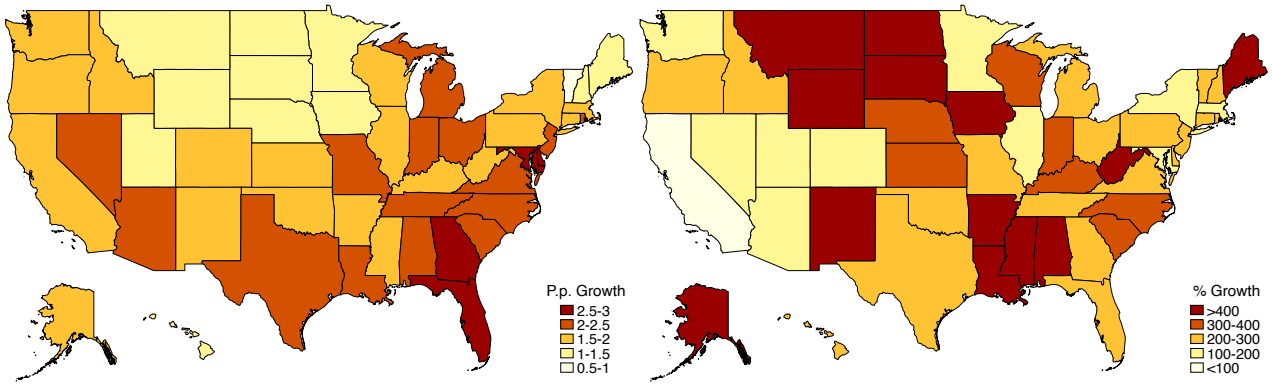


Notes: Panel (a) is restricted to individuals who were W2-only in 2019. X-axis shows the percent of the two-digit NAICS receiving UI in 2020. Y-axis shows the percent of the industry entering platform gig work in 2020 or 2021. Panel (b) includes all workers and shows entry into platform gig work by age and receipt of a 1099-G indicating income from unemployment insurance.

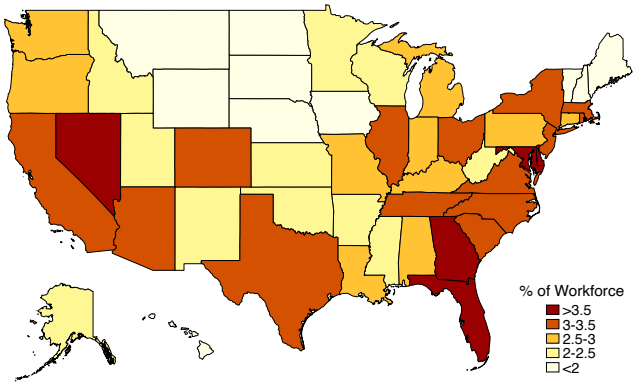
Figure 6: Geographic Distribution of Platform Gig Work

(a) Percentage Point Growth between 2019-2023

(b) Percent Growth between 2019-2023

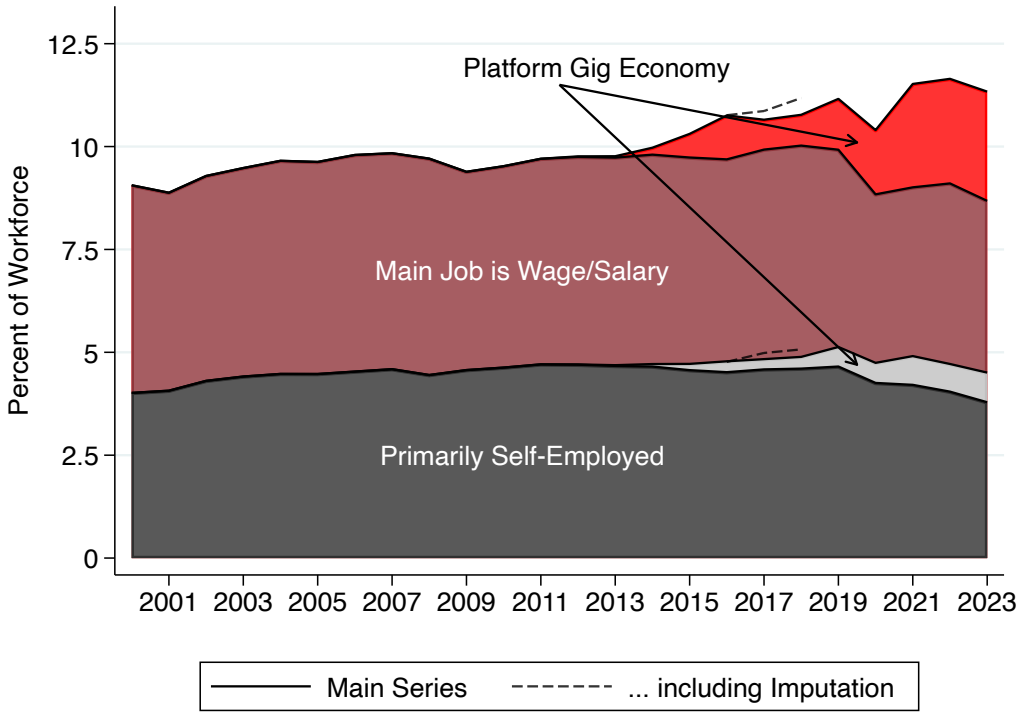


(c) Levels as of 2023



Notes: Figure plots the geographic distribution of platform gig work, as a percentage of the tax workforce.

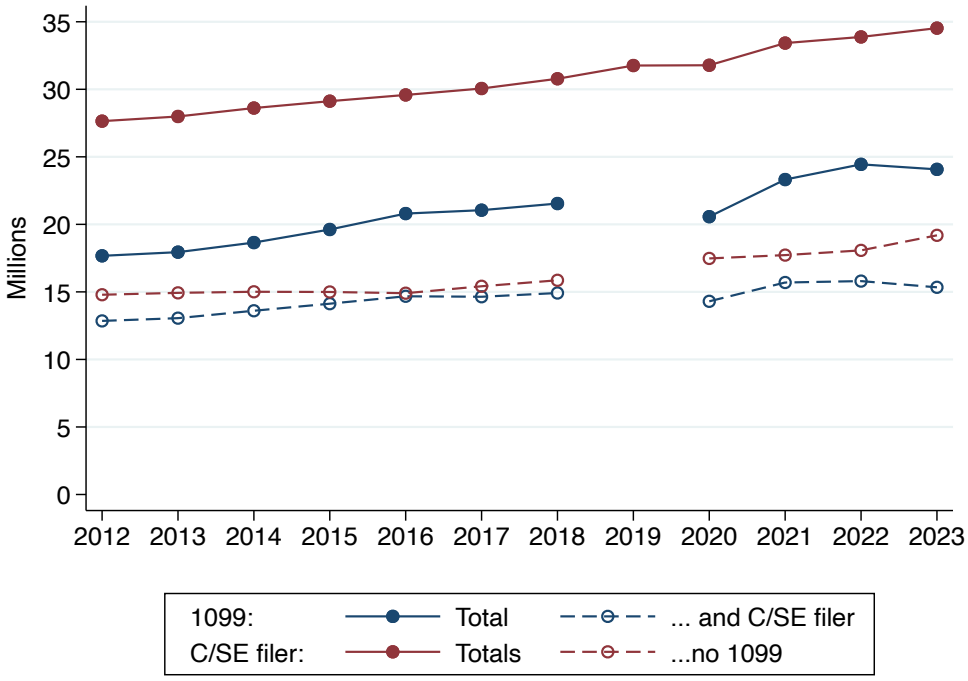
Figure 7: Overall Prevalence of 1099 Contract Work, 2000-2023



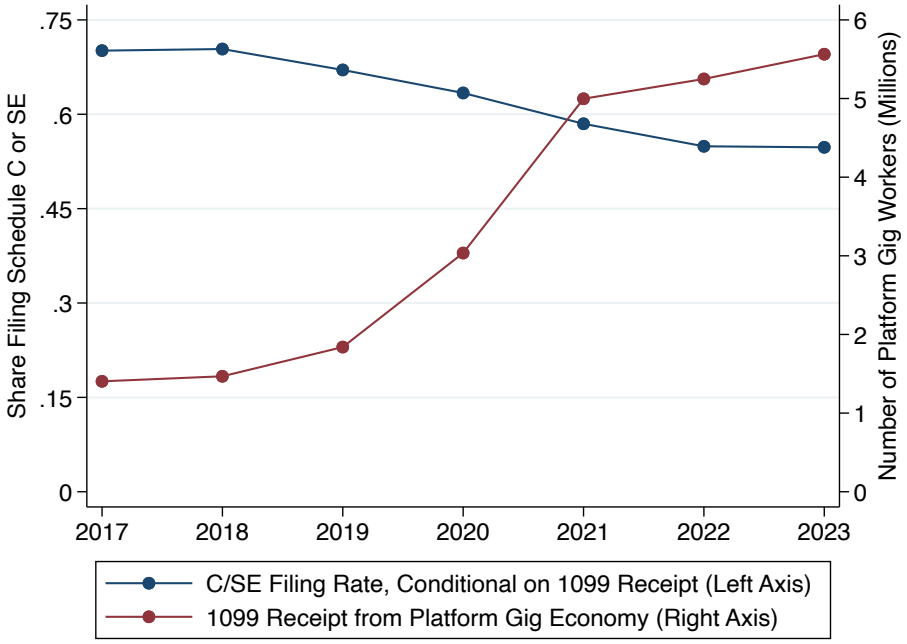
Notes: Figure shows the share of individuals in the workforce with firm-reported payments for contract labor are reported on a 1099 Information Return. The workforce is defined as all individuals appearing on a 1040 return in a year who have labor income reported on a W-2 return, a 1099 return, or on Schedule SE as well as individuals with positive earnings on a W-2 who do not file Form 1040. Following the method in Collins, Garin, Jackson, Koustas, and Payne (2019), we separately break out the subset of independent contractors with 1099-reported payments from online platform economy firms. "Earnings Primarily from Self-Employment" defined as having the majority of wage plus Schedule SE earnings coming from Schedule SE; "Earnings Primarily from Wages" is defined as the complement. 2017-2018 values for platform gig work are imputed following the methodology from Garin, Jackson, Koustas, and Miller (2025) are shown in the dashed black line on top of the raw levels in the main series. 2019 values for contract work outside of platform gig work are imputed following the methodology described in Section 4. Raw trends without imputations are reported in figure A.5. Tax filings as of September 2025.

Figure 8: Trends in Self-Employment Tax Filing

(a) All Workers



(b) Platform Gig Workers, 2017-2023



Notes: 1099 Totals include all recipients, not just tax filers, unless otherwise indicated.

Tables

Table 1: Trends in Platform Gig v. Other Contract Work, 2018, 2020, 2021, 2023

(a) Counts (Thousands) of 1099 Contract Workers who File Schedule C

	(1) 2018	(2) 2020	(3) 2021	(4) 2023	(5) % Change, 2018-2020	(6) % Change, 2018-2021	(7) % Change, 2018-2023
1. Platform Gig	954.7	1,809.2	2,831.5	2,975.3	89.5	196.6	211.6
2. Other (Non-Platform Gig) Contractors	13,678.7	12,143.5	12,527.4	12,100.4	-11.2	-8.4	-11.5
11: Agriculture	119.8	112.7	113.3	105.1	-5.9	-5.4	-12.3
21: Mining	52.4	40.2	39.3	37.7	-23.3	-25.0	-28.1
23: Construction	1,205.1	1,136.9	1,123.1	1,061.2	-5.7	-6.8	-11.9
31-33: Manufacturing	102.4	90.0	90.8	91.3	-12.1	-11.3	-10.8
42: Wholesale Trade	112.4	98.6	93.4	101.6	-12.3	-16.9	-9.6
44-45: Retail Trade	677.6	654.2	627.6	355.1	-3.5	-7.4	-47.6
48-49: Transportation/Warehousing	621.0	570.8	568.8	514.1	-8.1	-8.4	-17.2
51: Information	177.3	154.2	166.1	161.5	-13.0	-6.3	-8.9
52: Finance/Insurance	465.3	457.3	452.7	437.4	-1.7	-2.7	-6.0
53: Real Estate	846.4	837.4	871.4	751.0	-1.1	3.0	-11.3
54: Professional Services	1,858.3	1,702.0	1,743.7	1,756.8	-8.4	-6.2	-5.5
56: Admin Support/Waste Mgmt	941.3	881.4	905.8	947.4	-6.4	-3.8	0.6
61: Education	426.0	319.4	345.7	400.9	-25.0	-18.8	-5.9
62: Health Care/Social Assist.	813.8	752.8	782.4	851.6	-7.5	-3.9	4.6
71: Arts/Entertainment/Recreation	806.2	599.4	677.8	779.0	-25.7	-15.9	-3.4
72: Accommodation/Food Services	110.9	84.3	100.8	118.3	-24.0	-9.1	6.7
81: Other Services	1,378.8	1,196.6	1,205.0	1,209.5	-13.2	-12.6	-12.3
All other, excluding platform gig	2,963.8	2,455.2	2,619.7	2,420.8	-17.2	-11.6	-18.3

(b) Counts (Thousands) of 1099 Contract Workers with Schedule C Profits < $15,000

	(1) 2018	(2) 2020	(3) 2021	(4) 2023	(5) % Change, 2018-2020	(6) % Change, 2018-2021	(7) % Change, 2018-2023
1. Platform Gig	846.2	1,580.3	2,425.0	2445.4	86.8	186.6	189.0
2. Other (Non-Platform Gig) Contractors	8,741.9	7,694.7	7,636.9	7,234.6	-12.0	-12.6	-17.2
11: Agriculture	76.8	71.8	70.9	64.3	-6.5	-7.7	-16.3
21: Mining	30.7	25.4	22.8	20.6	-17.3	-25.7	-32.9
23: Construction	563.4	529.5	489.5	433.7	-6.0	-13.1	-23.0
31-33: Manufacturing	64.0	56.8	54.9	53.4	-11.3	-14.2	-16.6
42: Wholesale Trade	66.8	59.8	54.3	60.0	-10.5	-18.7	-10.2
44-45: Retail Trade	551.8	534.7	500.5	275.7	-3.1	-9.3	-50.0
48-49: Transportation/Warehousing	233.1	217.9	197.0	185.3	-6.5	-15.5	-20.5
51: Information	120.8	107.7	111.4	106.4	-10.8	-7.8	-11.9
52: Finance/Insurance	196.2	194.1	187.5	178.4	-1.1	-4.4	-9.1
53: Real Estate	339.1	321.9	307.4	289.7	-5.1	-9.3	-14.6
54: Professional Services	1,114.6	1,027.0	1,019.2	1000.7	-7.9	-8.6	-10.2
56: Admin Support/Waste Mgmt	676.1	632.5	627.0	622.5	-6.4	-7.3	-7.9
61: Education	366.9	271.8	288.7	329.9	-25.9	-21.3	-10.1
62: Health Care/Social Assist.	501.7	459.1	459.0	474.7	-8.5	-8.5	-5.4
71: Arts/Entertainment/Recreation	652.0	498.8	545.2	613.5	-23.5	-16.4	-5.9
72: Accomodation/Food Services	86.9	66.0	76.1	86.0	-24.1	-12.4	-1.0
81: Other Services	944.7	852.9	790.0	759.0	-9.7	-16.4	-19.7
All other, excluding platform gig	2,156.4	1,766.9	1,835.6	1,680.7	-18.1	-14.9	-22.1

(c) Counts (Thousands) of 1099 Contract Workers with Schedule C Profits $\geq$ \$15,000

	(1) 2018	(2) 2020	(3) 2021	(4) 2023	(5) % Change, 2018-2020	(6) % Change, 2018-2021	(7) % Change, 2018-2023
1. Platform Gig	108.5	229.0	406.4	529.9	111.1	274.6	388.4
2. Other (Non-Platform Gig) Contractors	4,936.9	4,448.8	4,890.4	4,865.8	-9.9	-0.9	-1.4
11: Agriculture	42.9	40.9	42.4	40.9	-4.7	-1.2	-4.7
21: Mining	21.7	14.7	16.6	17.1	-32.3	-23.5	-21.2
23: Construction	641.7	607.5	633.6	627.4	-5.3	-1.3	-2.2
31-33: Manufacturing	38.5	33.2	36.0	37.9	-13.8	-6.5	-1.6
42: Wholesale Trade	45.7	38.8	39.1	41.6	-15.1	-14.4	-9.0
44-45: Retail Trade	125.8	119.5	127.0	79.4	-5.0	1.0	-36.9
48-49: Transportation/Warehousing	387.9	352.9	371.7	328.8	-9.0	-4.2	-15.2
51: Information	56.5	46.5	54.6	55.1	-17.7	-3.4	-2.5
52: Finance/Insurance	269.1	263.2	265.2	258.9	-2.2	-1.4	-3.8
53: Real Estate	507.3	515.5	564.0	461.3	1.6	11.2	-9.1
54: Professional Services	743.7	674.9	724.5	756.2	-9.3	-2.6	1.7
56: Admin Support/Waste Mgmt	265.2	248.9	278.8	324.9	-6.1	5.1	22.5
61: Education	59.1	47.6	57.0	71.0	-19.5	-3.6	20.1
62: Health Care/Social Assist.	312.1	293.7	323.5	376.9	-5.9	3.7	20.8
71: Arts/Entertainment/Recreation	154.1	100.6	132.6	165.5	-34.7	-14.0	7.4
72: Accomodation/Food Services	24.0	18.3	24.8	32.3	-23.8	3.3	34.6
81: Other Services	434.2	343.7	415.0	450.5	-20.8	-4.4	3.8
All other, excluding platform gig	807.5	688.3	784.1	740.1	-14.8	-2.9	-8.3

Notes: Table reports raw counts (in thousands) of Schedule C filers with non-employee compensation reported on 1099 MISC Box 7 (2018), 1099 NEC (2020-2023), or a 1099-K issued by a gig economy platform. Individuals are assigned the NAICS industry self-reported on Schedule C, with the exception of platform gig workers, who are identified by having at least one 1099 issued by a gig platform. Tax filings as of September 2025.

References

Abraham, K., J. Haltiwanger, K. Sandusky, and J. Spletzer (2018): "Driving the Gig Economy," .

——— (2020): *Measuring the Gig Economy: Current Knowledge and Open Issues,*University of Chicago Press.

Abraham, K. G., B. J. Hershbein, and S. N. Houseman (2020): "Most Self-Employed Workers Are Independent Contractors," *Policy Brief, W.E. Upjohn Institute for Employment Research*.

Bracha, A., and M. A. Burke (2021): "How Big is the Gig? The Extensive Margin, The Intensive Margin, and The Hidden Margin," *Labour Economics*, 69, 101974.

Bureau of Labor Statistics (2018): "Electronically mediated work: New questions in the contingent worker supplement," Accessed: 2023-04-05.

Chen, M. K., K. Feinerman, and K. Haggag (2024): "Flexible Pay and Labor Supply: Evidence from Uber's Instant Pay," *Working Paper*.

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*.

Farrell, D., and F. Greig (2016): "The Online Platform Economy: Has Growth Peaked?," *JPMorgan Chase Institute*.

——— (2018): "The Online Platform Economy in 2018: Drivers, Workers, Sellers, and Lessors," *JPMorgan Chase Institute*.

Garin, A., E. Jackson, and D. Koustas (2022): "Is Gig Work Changing the Labor Market? Key Lessons from Tax Data," *National Tax Journal*, 75(4), 791–816.

——— (2025): "New Gig Work or Changes in Reporting? Understanding Self-Employment Trends in Tax Data," *American Economic Journal: Applied Economics*, Forthcoming.

Garin, A., E. Jackson, D. Koustas, and C. McPherson (2020): "Is New Platform Work Different than Other Freelancing?," *AEA Papers and Proceedings*, 110, 157–161.

Garin, A., E. Jackson, D. Koustas, and A. Miller (2024): "The Evolution of Platform Gig Work, 2012-2023," *SOI Working Paper*.

——— (2025): "The Impact of Third-Party Reporting on Tax Compliance: Evidence from Gig Workers," *Mimeo*.

Greig, F., and D. Sullivan (2020): "The Online Platform Economy through the Pandemic," *J.P. Morgan Chase Institute*.

Jackson, E. (2022): "Availability of the Gig Economy and Long Run Labor Supply Effects for the Unemployed," *SOI Working Paper*.

Jackson, E., D. Koustas, A. Garin, and A. Miller (2025): "The Effects of Unemployment Insurance for Self-Employed and Marginally Attached Workers," *BFI 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*.

Katz, L., and A. Krueger (2019): "The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015," *ILR Review*, 72(2), 382–416.

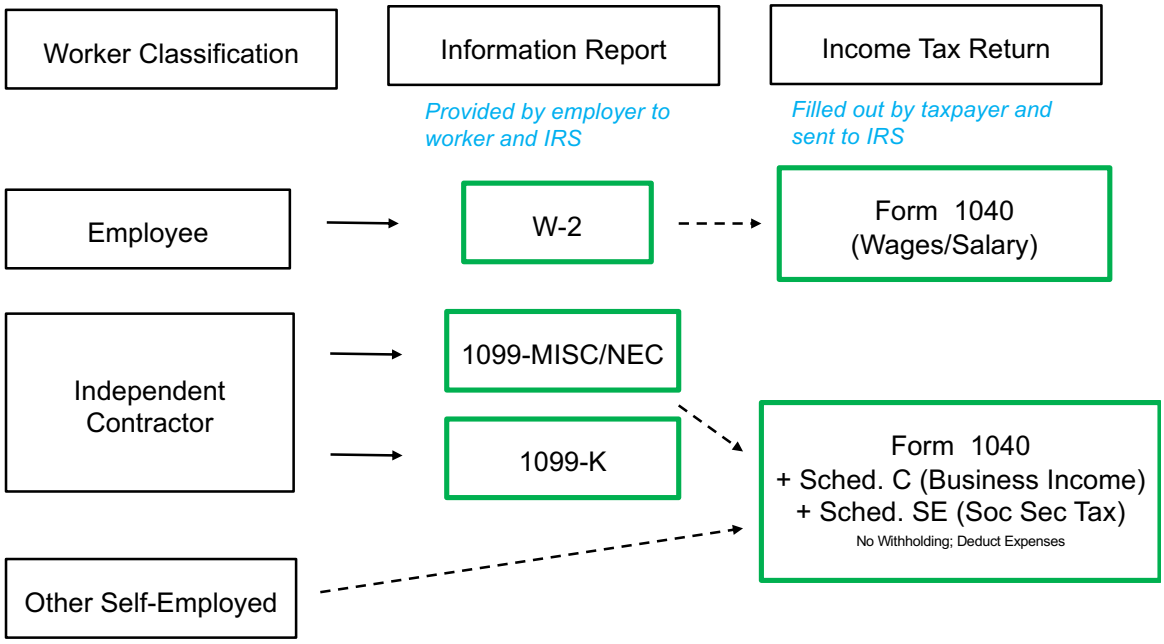
Koustas, D. (2018): "Consumption Insurance and Multiple Jobs: Evidence from Rideshare Drivers," *Working Paper*.

——— (2019): "What Do Big Data Tell Us About Why People Take Gig Economy Jobs?," *AEA Papers and Proceedings*, 109.

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*.

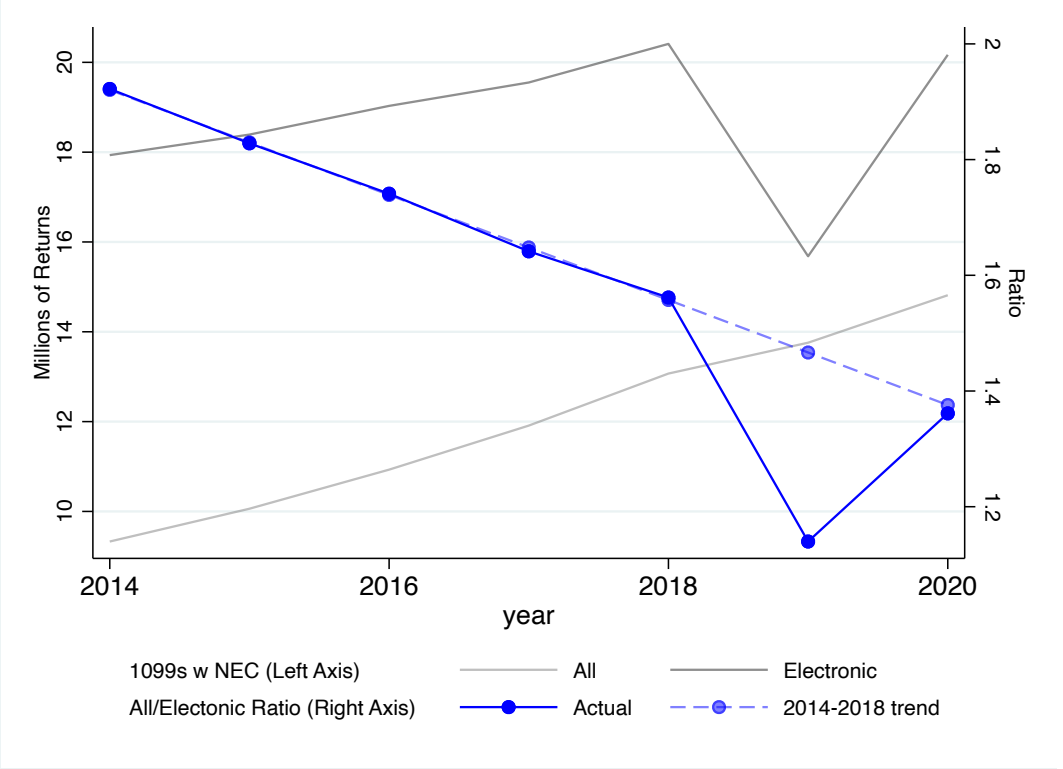
A Appendix Figures

Figure A.1: Schematic of Key Tax Forms



1099-MISC, Box 7, Non-Employee Compensation, is filed for each person to whom there was cash paid from a notional contract, etc. The threshold is set at $600. This income switched to being reported on **1099-NEC** beginning in 2020. **1099-K**, Payment Card and Third Party Network Transactions, is used to report payments from merchants or credit card companies as well as third party networks. The threshold is set at $20,000 with 200 transactions, but often did not bind for gig platforms prior to 2017.

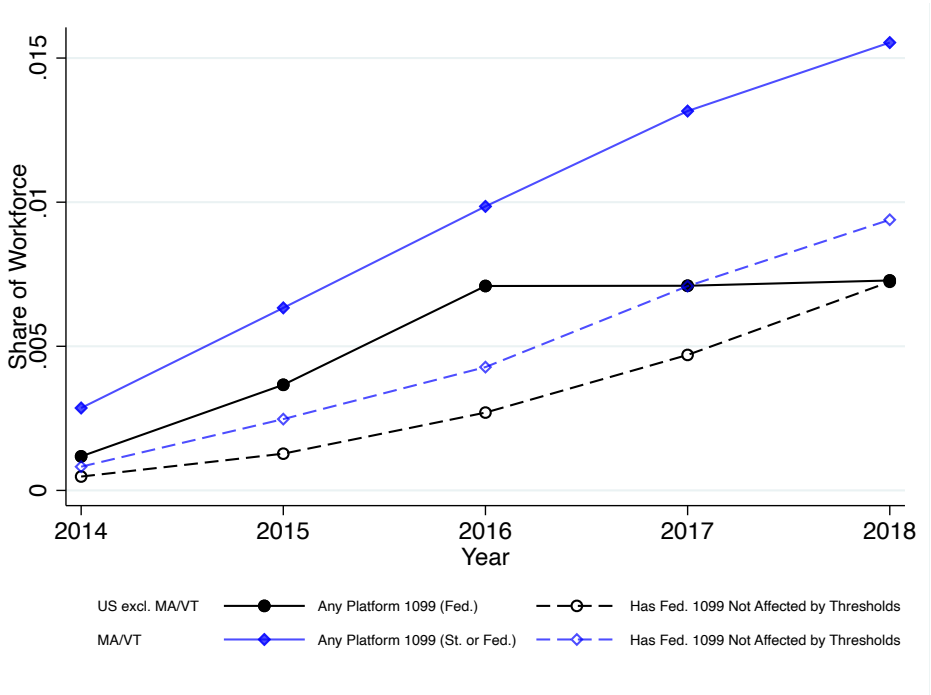
Figure A.2: 1099 Returns with Nonemployee Compensation, Electronically Filed Versus All



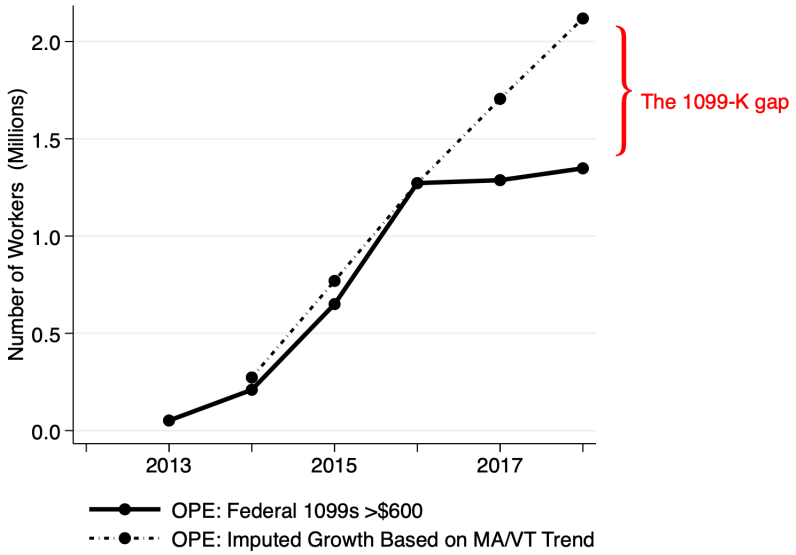
Note: Plot displays counts of all 1099 returns with nonemployee compensation greater than $600 filed in each year (1099-MISC through 2019 and 1099-NEC in 2020) with count of electronically filed returns broken out. Plot also displays ratio of all returns to electronically filed returns, along with 2014-2018 trend line. The predicted ratio in 2019 is 1.3 times the observed ratio; thus, if all electronic returns were processed but not all paper returns, and true ratio if all returns were processed remained on the trend line, the true total count of returns should be 1.3 times the observed count.

Figure A.3: The 1099-K "Gap"

(a) Share of Workforce with Platform 1099 MA and VT Versus Rest of US

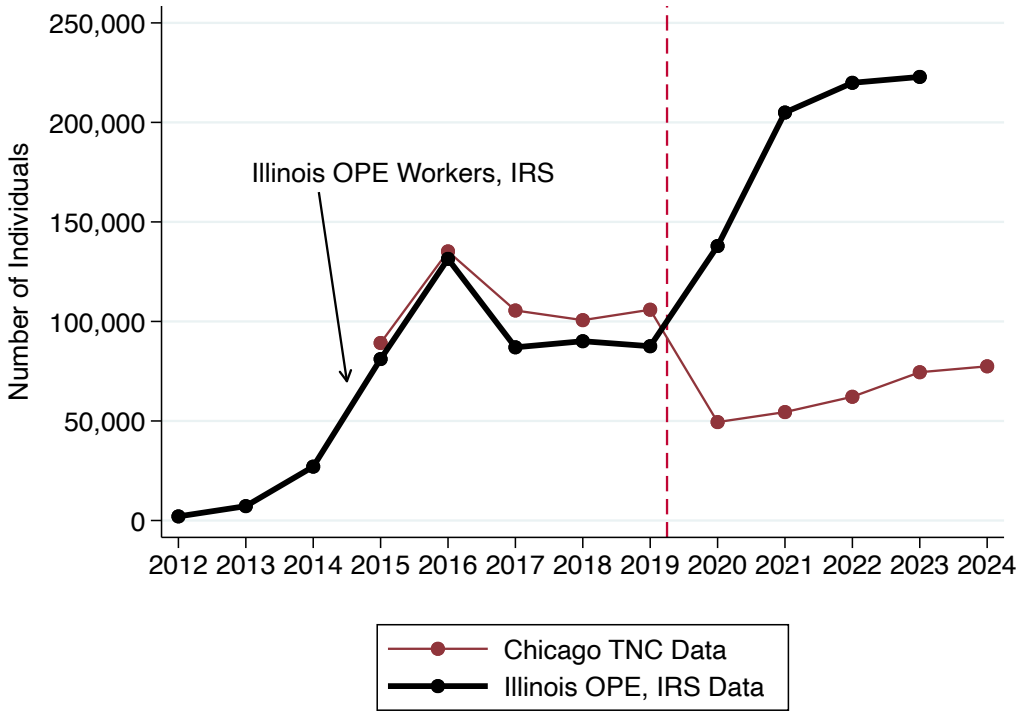


(b) Baseline Imputation from Garin, Jackson, Koustas, and Miller (2025)



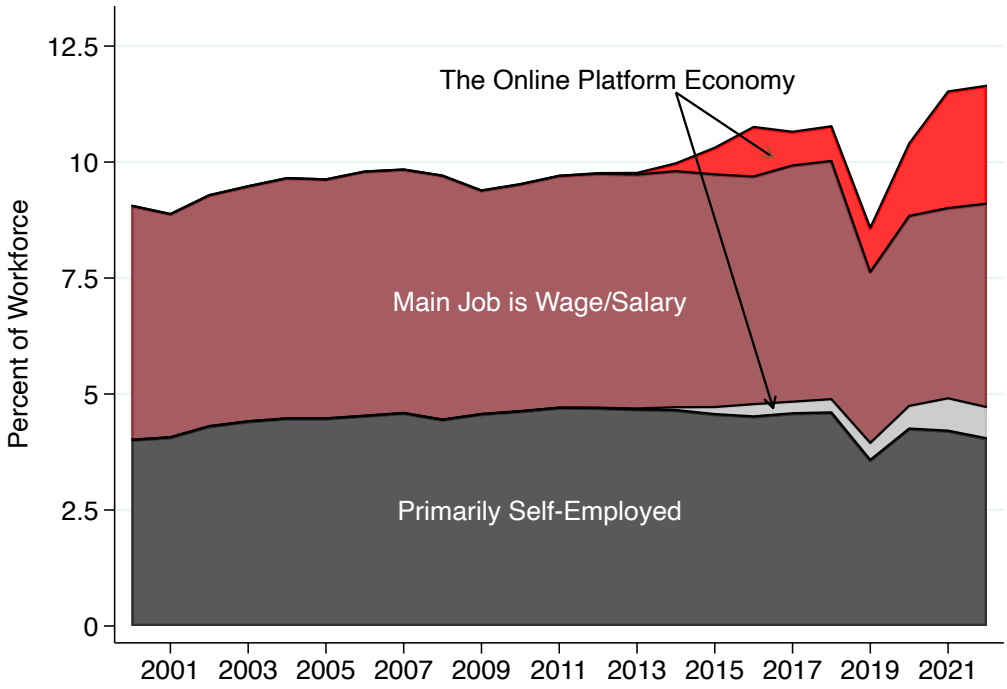
Notes: Panel (a) incorporates state-level 1099-K data for MA and VT. Panel (b) shows the baseline imputation from Garin, Jackson, Koustas, and Miller (2025).

Figure A.4: Comparison of IRS Data to Chicago TNC Data



Note: Chicago data from the Chicago Data Portal https://data.cityofchicago.org/Transportation/Transportation-Network-Providers-Drivers/j6wf-834c/about_data. These data include all drivers eligible for trips in Chicago in that month for at least one day, regardless of whether they actually provided any rides. Figure reports the value from December of the indicated year. We restrict to drivers listing an IL address, and compare to OPE 1099s sent to IL addresses.

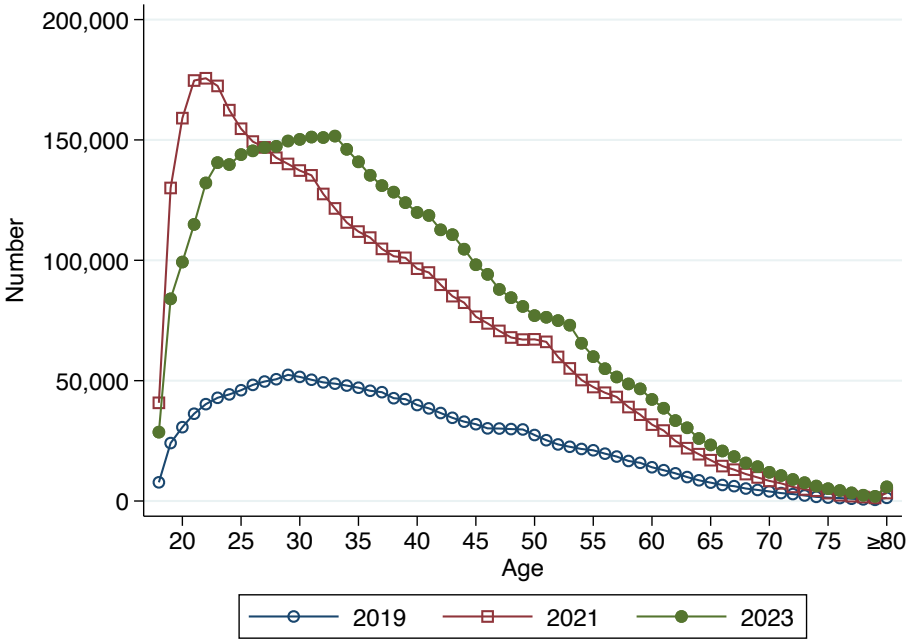
Figure A.5: Raw Trends, 1099 Contract Work, as a Share of Tax Workforce, 2000-2022



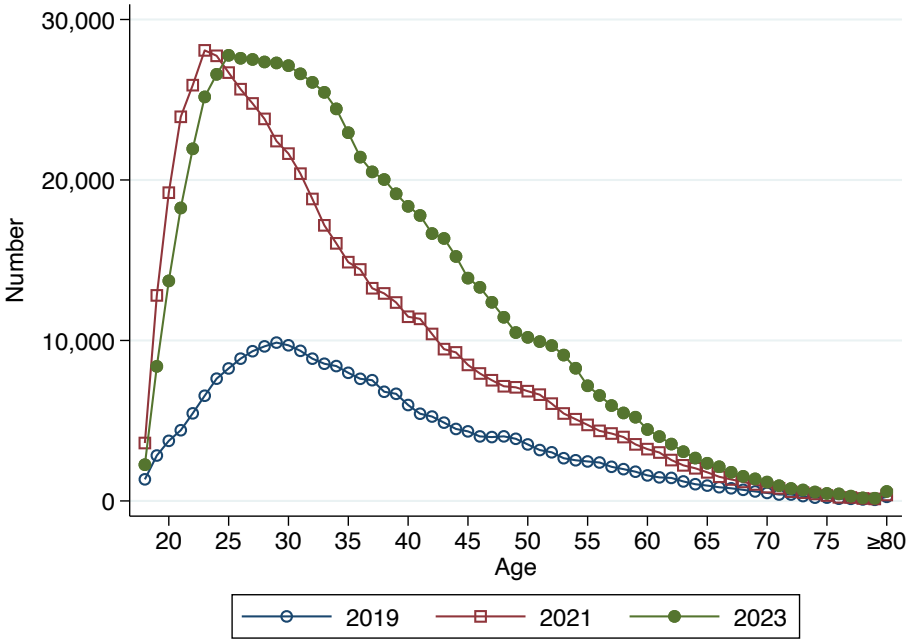
Notes: Figure shows the raw share of individuals in the workforce with firm-reported payments for contract labor are reported on a 1099 Information Return. This presents the raw data behind Figure 7, prior to imputations.

Figure A.6: Age Distribution of Platform Gig Work – Levels

(a) Transportation and Delivery Platforms



(b) All Other Platforms



Notes: Figure shows the levels of platform gig work by age underlying the distributions shown in Figure 4.

B Appendix Tables

Table B.1: Components of the Tax Workforce, 2012-2022 (Thousands)

(a) Platform Gig 1099s

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	1040 Filers								Non-Filers	
	Has SE and C		Has SE, No C		Has C, No SE		No C or SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	No W2
2012	6,314	6,533	327	125	2,208	814	2,074	534	742	1,263
2013	15,406	20,013	574	253	7,496	2,293	4,474	997	1,704	3,007
2014	73,996	65,813	1,769	743	58,946	11,522	56,232	6,241	13,522	15,131
2015	232,175	151,859	5,150	1,972	232,238	36,581	258,700	21,110	64,308	55,812
2016	431,005	257,608	6,645	3,173	422,853	68,335	498,220	39,612	157,990	120,801
2017	386,703	268,013	5,131	2,551	262,727	59,628	176,449	18,926	118,695	105,682
2018	412,821	321,434	5,432	2,643	229,224	61,545	176,764	19,583	123,427	115,245
2019	486,210	389,893	6,682	3,064	270,249	77,503	346,438	71,053	98,649	90,139
2020	832,646	491,138	13,377	5,335	458,001	123,568	594,629	79,758	239,707	197,339
2021	1,320,830	737,439	18,951	7,261	691,806	146,463	1,069,999	111,090	521,319	372,051
2022	1,198,493	762,140	14,837	7,145	758,039	141,433	1,094,847	80,619	711,071	480,046
2023	1,186,070	838,740	13,103	6,652	832,963	168,538	1,133,378	88,752	757,375	538,098

(b) All 1099 MISC/K/NEC Contract Work and Other Components of Tax Workforce

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Tax Filers											Non Tax Filers		
	No 1099					Has 1099						No 1099	Has 1099	
	No SE or C	Has SE		Has C, No SE		Has SE		Has C, No SE		No C or SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
2012	125,185	3,654	5,973	3,453	1,710	4,970	5,054	1,909	920	2,122	632	12,250	676	1,389
2013	126,336	3,689	5,978	3,537	1,727	5,025	5,125	1,974	932	2,098	614	12,881	726	1,447
2014	127,477	3,783	5,949	3,581	1,697	5,343	5,268	2,061	932	2,102	587	13,670	815	1,545
2015	128,643	3,759	5,876	3,666	1,694	5,548	5,360	2,266	952	2,317	585	14,349	934	1,658
2016	128,318	3,703	5,793	3,697	1,712	5,776	5,485	2,436	981	2,535	599	15,686	1,133	1,855
2017	129,989	3,790	5,813	4,078	1,736	5,756	5,505	2,382	997	2,468	796	16,373	1,171	1,974
2018	130,504	3,827	5,812	4,460	1,763	5,869	5,623	2,412	1,014	2,549	813	17,091	1,224	2,037
2019	136,082	5,226	7,530	5,142	2,083	4,595	4,343	2,008	832	2,331	947	13,514	672	1,200
2020	132,181	3,753	6,403	4,971	2,350	5,424	5,438	2,371	1,070	2,713	736	14,592	1,042	1,777
2021	128,823	4,005	6,733	4,914	2,073	6,307	5,852	2,568	970	3,135	691	17,516	1,572	2,224
2022	127,370	4,103	6,605	5,415	1,953	6,293	5,778	2,752	977	3,241	592	21,603	2,129	2,683
2023	127,484	4,227	6,867	6,028	2,067	5,980	5,568	2,799	994	3,317	580	22,612	2,142	2,692

Notes: Tables report individual counts in thousands. 1099 refers to individuals who have any of the following: Non-employee compensation reported on 1099-MISC Box 7 (2012-2019), 1099 NEC (2020-2022), or 1099-K from a gig economy platform. Panel (a) is restricted to individuals receiving at least one 1099 return from the platform gig economy, while panel (b) includes all 1099s. The sum of columns (1)-(13) in Panel (b) corresponds to the "tax workforce" as defined in Collins, Garin, Jackson, Koustas, and Payne (2019). Tax filings as of September 2025.

C State and Metro Area Tabulations

Notes: Tables reflects tax filing status as of November 2025. Counts less than 50 are suppressed.

Table C.1: Platform Gig 1099's, 2019, By State and Tax Filing (Thousands)

	Tax Filers				Non-Filers	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	0.6	0.3	0.7	0.1	0.1	0.1
AL	3.1	1.6	4.9	1	0.8	0.5
AR	1.6	0.8	1.9	0.4	0.3	0.2
AZ	10.5	6.4	17.8	4.4	3.4	2.5
CA	89.4	79.2	107.3	30.3	19.6	20.1
CO	13.5	7.9	15	3.3	2.8	2
CT	3.7	2.8	4.9	1.1	0.6	0.7
DC	1.8	1.5	2.9	0.6	0.7	0.6
DE	1.9	0.8	3.4	0.5	0.6	0.3
FL	29.5	28.8	43.3	14.3	4.9	5.8
GA	13	9.3	24.3	5.7	4.5	3.1
HI	1.4	1.2	1.1	0.4	0.2	0.2
IA	1.8	0.7	2	0.3	0.3	0.2
ID	1.6	1	1.7	0.4	0.2	0.2
IL	22.9	21.2	26.6	6.7	4.8	5.4
IN	7.2	3.2	9.9	1.6	1.4	0.9
KS	2.7	1.1	3.3	0.6	0.5	0.3
KY	4.3	1.9	6.1	1	0.9	0.6
LA	3.3	2.4	4.7	1.2	0.9	0.8
MA	21.4	14.1	20	3.4	2.8	3
MD	13	10.7	19.5	4.1	3.3	3.3
ME	0.7	0.4	0.7	0.2	0.1	0.1
MI	13.9	7.1	17.1	3.4	2.6	1.8
MN	10	4	9.3	1.2	1.3	0.7
MO	7.3	3.2	10.9	1.7	1.8	1
MS	1.1	0.5	1.7	0.4	0.2	0.2
MT	0.6	0.3	0.6	0.1	0.1	0.1
NC	10.4	5.9	17.2	3.5	2.5	1.6
ND	0.4	0.1	0.4	0	0.1	0
NE	1.7	0.7	1.9	0.3	0.3	0.2
NH	1.2	0.7	1.3	0.3	0.2	0.1
NJ	15.7	14.3	17.1	3.9	2.6	2.5
NM	1.3	0.7	1.7	0.5	0.3	0.3
NV	6.4	6.6	8.8	3.3	1.5	1.7
NY	35.9	65.2	32.3	9.5	5.2	7.4
OH	15.4	7	23.8	3.9	3.4	2.3
OK	3.5	1.6	5.8	1.2	1	0.7
OR	6.1	3.9	6.5	1.6	1.3	1
PA	16.1	11.3	18.8	3.9	3.2	2.8
RI	1.8	1.2	2	0.4	0.2	0.3
SC	4.5	2.5	6.8	1.4	1	0.8
SD	0.4	0.1	0.4	0.1	0	0
TN	8.3	4.6	11.4	2.1	1.8	1.2
TX	34.7	22.8	53.3	12.8	7.4	6
UT	4.8	2.8	5.7	1.3	0.7	0.5
VA	14.8	11.5	17.4	3.6	2.5	2.2
VT	0.5	0.2	0.4	0.1	0	0
WA	14.4	10.2	14.3	3.3	2.3	2.2
WI	4.8	2.1	5.5	0.8	0.7	0.5
WV	0.9	0.4	1	0.2	0.2	0.1
WY	0.4	0.1	0.4	0.1	0.1	0

Table C.2: Platform Gig 1099's, 2020, By State and Tax Filing (Thousands)

	Tax Filers				Non-Filers	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	1.5	0.6	1.7	0.3	0.4	0.2
AL	7.4	3	11.8	1.6	3.2	1.8
AR	3.9	1.5	5.6	0.8	1.4	0.8
AZ	21	9.7	30.8	5.4	8.9	6.1
CA	121.8	84.7	141.6	35.5	33.4	34.1
CO	21.2	9.9	21.7	4.1	5.7	4.3
CT	7.8	4	9.9	1.7	1.7	1.6
DC	2.2	1.6	3.5	0.7	1.1	1.2
DE	3.7	1.4	6.5	0.7	1.5	0.8
FL	53.6	42	75.8	18	13.5	13.1
GA	23.7	14	44.8	7.9	12.8	8.2
HI	2.3	1.3	2.5	0.6	0.7	0.6
IA	4.7	1.3	4.9	0.5	1.1	0.6
ID	3.6	1.6	3.5	0.6	0.8	0.5
IL	36.8	26.5	43	9.4	11.2	11
IN	15.8	5.4	19.2	2.5	3.9	2.3
KS	5.3	1.8	6.2	0.8	1.5	0.9
KY	8.3	3.1	11.4	1.5	2.3	1.4
LA	7.4	3.4	12.9	2	3.2	2.2
MA	21.4	13.4	22.1	4.9	4.2	4.4
MD	21.8	14.4	34.3	6.3	8.1	6.8
ME	1.6	0.6	1.8	0.3	0.4	0.2
MI	30.8	11.9	32.2	5.2	7.6	4.5
MN	17.7	5.6	15.6	2	3.1	1.8
MO	14.1	4.9	18.4	2.3	4.9	2.5
MS	2.9	1.2	5.4	0.7	1.3	0.7
MT	1.7	0.6	1.5	0.2	0.4	0.2
NC	21.3	10	32.4	5.1	7.9	5
ND	1.2	0.3	1.2	0.1	0.2	0.1
NE	3.6	1.1	3.9	0.5	0.7	0.4
NH	2.2	0.9	2.4	0.4	0.5	0.3
NJ	26.8	16.8	29.9	5.7	6.3	5.7
NM	3.1	1.5	4	0.8	1	0.7
NV	9.1	6.7	13.3	3.5	3.3	3.5
NY	56.5	62	58.8	14.5	11.9	15.3
OH	32.8	12.1	43.6	5.8	9	5.7
OK	7.3	3.1	10.5	1.9	2.7	1.9
OR	12.3	5.8	11.9	2.2	3.3	2.8
PA	32.2	16.6	36.9	6.2	8.5	6.8
RI	2.9	1.5	3.2	0.6	0.5	0.5
SC	9.9	4.6	14.9	2.4	3.4	2.2
SD	1	0.3	1	0.1	0.2	0.1
TN	15.2	7	21.4	3.2	4.7	2.9
TX	59.8	33.6	93.2	17.7	18.7	14.6
UT	8.1	3.5	8.7	1.6	1.7	1.1
VA	26.8	15.9	34.6	6.6	7.7	5.7
VT	0.7	0.3	0.7	0.1	0.2	0.1
WA	22.5	12.7	23.3	4.9	5.1	4.8
WI	9.7	3.2	10.4	1.2	2	1.2
WV	2.4	0.9	2.7	0.4	0.6	0.5
WY	0.8	0.3	0.8	0.1	0.2	0.1

Table C.3: Platform Gig 1099's, 2021, By State and Tax Filing (Thousands)

	Tax Filers				Non-Filers	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	2.7	1	3	0.4	0.9	0.5
AL	11.7	4.5	21.6	2.3	7.2	3.5
AR	5.9	2.4	9.4	1.2	2.9	1.6
AZ	29.8	14.3	44.8	6.2	17.4	10.3
CA	193.4	124.2	204.6	38.7	70.2	57.3
CO	29.1	14	31.6	4.8	9.4	6.6
CT	12.9	6.5	19.1	2.5	4.1	3.2
DC	2.9	2	4.9	0.7	1.8	1.5
DE	5.5	2.1	10	0.9	3.1	1.7
FL	97.2	76.4	149.4	25.4	34.4	26.6
GA	49.5	23.5	100.6	10.4	31.8	15.5
HI	4	2.4	4.2	0.8	1.2	1.1
IA	7.7	2.1	8.8	0.8	2.6	1.1
ID	6	2.3	6.5	1	2.1	1
IL	54.7	34.3	67.8	10.5	21.2	16.4
IN	26.2	9	36.9	4	9.6	4.8
KS	8.2	2.9	10.4	1.2	3.4	1.6
KY	13.6	4.9	19.8	2.2	5.5	2.9
LA	10.4	5.6	19.5	2.6	6.3	4
MA	32.3	17.5	32.1	5.1	8.1	7
MD	32.6	19.3	48.9	5.8	15.3	10.4
ME	3	1.1	3.7	0.5	0.8	0.5
MI	42.1	17.3	52.1	7.3	16.8	9
MN	24.8	8.1	22.6	2.5	6.3	3
MO	22.6	8.3	31.6	3.3	11.1	4.9
MS	5	1.9	10.6	1.1	2.9	1.6
MT	2.7	0.9	2.5	0.3	0.9	0.5
NC	35.9	15.7	58.6	7	18.5	9.6
ND	2	0.5	2.2	0.2	0.6	0.2
NE	5.5	1.7	6.7	0.6	1.6	0.8
NH	4.1	1.4	4.4	0.5	1.3	0.8
NJ	44.6	26.9	55	8.4	14.6	11.1
NM	5.6	2.3	7.8	1.3	2.1	1.5
NV	15	11.1	20.6	4.2	7	5.3
NY	83	85.3	93.1	19.5	24	25.5
OH	51.4	18.7	72	8.2	19.2	10.7
OK	10.4	4.6	15.9	2.4	5.4	3.5
OR	18.3	8.3	17.7	2.8	6.5	4.7
PA	48.2	23.8	63.3	9.5	17.6	12.3
RI	5	2.4	5.9	0.8	1.2	0.9
SC	16.8	7.2	28.8	3.3	8	4.4
SD	1.9	0.5	2	0.2	0.5	0.2
TN	25.8	11.2	38.3	4.2	11.2	5.9
TX	100.2	55.1	165.4	23.7	44.9	27.1
UT	12	4.7	13.3	1.8	3.7	2.1
VA	39.5	20.5	50.1	6.6	14.9	8.9
VT	1.3	0.4	1.2	0.1	0.4	0.2
WA	33.9	17.8	35.2	5.9	11.3	8.1
WI	17.4	5.3	19.3	2	5.2	2.6
WV	4.2	1.5	5.4	0.7	1.4	0.9
WY	1.4	0.5	1.5	0.2	0.4	0.2

Table C.4: Platform Gig 1099's, 2022, By State and Tax Filing (Thousands)

	Tax Filers				Non-Filers	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	2.6	1.1	3.2	0.3	1.4	0.8
AL	11	4.4	24.3	2.3	10.4	5.2
AR	6.1	2.6	11	1.2	4.2	2.4
AZ	26.3	13.6	44.4	5.6	22.9	13.4
CA	169	125.8	189.6	29	90.9	74
CO	26.6	14.3	34	4.7	12.8	9
CT	11.9	6.7	19.7	1.9	5.6	4.4
DC	3	2.1	5.7	0.4	2.4	2
DE	4.8	2.1	10	0.8	4.1	2.1
FL	86.6	77.4	163.9	28	48	38.9
GA	37.7	21.4	86.2	8.9	39.8	20.7
HI	3.7	2.8	4.2	0.7	1.6	1.5
IA	7.3	2.1	9.9	0.8	3.6	1.7
ID	5.4	2.4	7.1	1.1	3	1.6
IL	51.1	35.6	74.1	7.9	29.9	21.3
IN	23.8	8.9	41.2	3.7	13.9	7.2
KS	7.7	2.8	11.2	1.2	4.7	2.2
KY	12.4	5	22	2.1	7.4	4.5
LA	10.2	5.9	21.9	2.6	8.7	5.7
MA	34.8	20.7	38	3.7	12.3	10.7
MD	30.2	20	51.3	4.9	19.9	13.1
ME	2.9	1.2	4.3	0.5	1.3	1
MI	35.3	16.6	54.7	5.6	21.9	11.9
MN	22.5	8.7	24.7	1.9	8.6	4.2
MO	20.5	8.3	33.4	3	15.8	7
MS	5.1	2	12	1	4.4	2.3
MT	2.4	0.9	2.8	0.3	1.3	0.7
NC	34.4	16.6	65.9	7	27.1	13.6
ND	2	0.5	2.6	0.2	0.9	0.4
NE	5.2	1.8	7.6	0.6	2.4	1.2
NH	3.5	1.5	4.9	0.5	1.8	1.1
NJ	41.9	29.1	58.6	6.4	18.3	14.2
NM	5.1	2.3	8.7	1.2	2.9	2.2
NV	13.9	11.7	21.2	3.6	9.5	7.9
NY	78.8	93.8	92.6	11	31.4	34.1
OH	44.7	18.9	77.4	6.9	26.3	15.4
OK	9.6	4.5	16.5	2.3	7.2	4.6
OR	15.6	8	18	2.3	8.7	6.5
PA	40.9	23.9	65.2	6.2	24.1	16.6
RI	5.1	2.9	6.7	0.6	1.7	1.5
SC	15.8	7.3	31.9	3.2	11.1	6.2
SD	1.9	0.6	2.5	0.2	0.8	0.3
TN	24.3	11.5	43.6	4.4	16.5	8.4
TX	91.2	56.4	183.6	25.3	63.9	39.4
UT	11.8	4.9	15.3	2	5.2	3
VA	35.7	21.5	53.2	5.7	19.7	11.9
VT	1.2	0.4	1.4	0.1	0.5	0.3
WA	30.8	18.9	37.4	4.9	15.4	11.3
WI	17.5	6	24.4	2	8.1	3.9
WV	3.7	1.5	5.8	0.7	1.9	1.5
WY	1.4	0.5	1.7	0.2	0.7	0.4

Table C.5: Platform Gig 1099's, 2023, By State and Tax Filing (Thousands)

	Tax Filers				Non-Filers	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	2.7	1.1	3.3	0.4	1.5	0.9
AL	12.3	5.3	29.1	2.9	13.3	6.1
AR	7.1	3.1	13.5	1.5	5.5	2.9
AZ	25.9	14.7	48	6.4	25.3	14.4
CA	151.5	137.9	174.8	32.9	83.7	76.3
CO	26.6	15.7	36.3	5.4	11.1	8.3
CT	12	7.1	20.8	2.2	6	4.7
DC	2.6	2.1	5.3	0.4	2.4	1.9
DE	4.7	2.3	10.8	0.9	4.5	2.2
FL	83.6	85.9	165.2	33.1	48.5	42.9
GA	37.1	23.5	90.5	9.8	44.5	22.4
HI	3.6	2.9	4.3	0.8	1.7	1.6
IA	7.9	2.5	11.7	1	4.3	2
ID	5.6	2.7	7.5	1.2	3.1	1.8
IL	48.2	38.5	74.2	9.4	29.9	23
IN	23.4	9.8	43.9	4	15.2	8.1
KS	8.2	3.2	13.6	1.5	5.8	2.5
KY	13.2	6	25.2	2.6	8.5	5
LA	11.2	6.7	27.5	3.8	10.8	6.9
MA	36.6	23.3	43.4	4.3	13.6	11.6
MD	29.7	21.6	54.9	5.6	20.9	13.9
ME	3	1.4	4.9	0.5	1.6	1.1
MI	34.6	18.2	59.1	6.3	24.5	13.4
MN	22.8	9.9	28.1	2.3	9.3	4.3
MO	22.1	9.4	39.3	3.8	18.9	8.1
MS	6	2.4	15	1.2	5.9	2.9
MT	2.8	1.1	3.4	0.4	1.6	0.9
NC	36.3	19.3	75.9	8.3	32.2	15.6
ND	2.4	0.6	3.1	0.2	1.2	0.4
NE	5.9	2	9.4	0.7	2.9	1.4
NH	3.8	1.6	5.4	0.6	2	1.3
NJ	40	31.6	60.2	7.6	18.5	15.8
NM	5.5	2.6	9.6	1.4	3.5	2.5
NV	14.1	12.9	23.1	4.2	10.6	9
NY	75.4	98.6	88.7	11.6	28.8	33.9
OH	44.4	20.6	81.6	7.9	28.6	17.4
OK	10.4	5.2	19.5	2.7	8.9	5.1
OR	16.3	8.8	19.5	2.7	8.6	7.1
PA	40.4	26.9	68.3	7.2	24.8	17.4
RI	5.5	3.3	8	0.8	1.9	1.7
SC	17.1	8.5	37.4	4	13.7	7.5
SD	2.3	0.7	3	0.2	1.1	0.4
TN	25.4	13.1	47.7	5.1	18.2	9.6
TX	92.9	63.5	198.8	28.7	70.4	44
UT	11.5	5.4	16.2	2.3	4.9	3.3
VA	36.1	23.8	60.3	6.8	23	13.3
VT	1.2	0.5	1.6	0.1	0.6	0.4
WA	28.6	20.5	37	5.4	15.5	11.9
WI	18.7	6.8	28.3	2.5	9.2	4.6
WV	4.2	1.7	6.7	0.8	2.4	1.7
WY	1.6	0.6	2	0.3	0.9	0.5

Table C.6: Platform Gig 1099's, By State and Year (Thousands)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AK	0.0	0.0	0.1	0.2	0.4	0.8	0.6	1.9	4.6	8.5	9.4	9.9
AL	0.2	0.2	0.3	1.4	7.9	4.1	5.7	11.9	28.9	51.0	57.7	69.1
AR	0.1	0.1	0.3	1.5	4.2	1.5	2.4	5.2	14.0	23.4	27.5	33.6
AZ	0.6	1.2	6.6	20.7	46.5	36.4	32.6	45.1	82.0	122.9	126.3	134.7
CA	3.7	14.7	80.7	248.5	408.4	343.5	328.7	346.0	451.2	688.6	678.5	657.2
CO	0.4	1.0	5.5	18.7	37.9	31.2	33.9	44.6	66.9	95.5	101.3	103.4
CT	0.2	0.3	1.4	8.1	17.4	8.3	9.5	13.8	26.7	48.2	50.1	52.8
DC	0.1	0.6	2.9	9.3	13.7	9.9	8.8	8.2	10.1	13.9	15.5	14.8
DE	0.1	0.1	0.2	1.9	5.0	2.5	2.6	7.3	14.6	23.2	23.9	25.4
FL	1.8	2.2	18.6	94.6	202.7	101.9	92.2	126.7	216.1	409.4	443.0	459.3
GA	1.5	2.8	11.1	42.6	89.2	50.1	45.1	60.1	111.4	231.4	214.9	227.9
HI	0.0	0.0	0.6	2.8	6.8	4.2	3.5	4.5	8.0	13.7	14.6	14.9
IA	0.1	0.1	0.4	2.6	6.4	2.4	2.5	5.3	13.1	23.0	25.4	29.4
ID	0.0	0.1	0.2	1.1	3.1	2.3	3.0	5.1	10.7	19.0	20.6	21.9
IL	2.1	7.2	27.1	81.1	131.4	87.0	90.1	87.6	137.9	205.0	219.9	223.1
IN	0.3	0.6	2.8	12.3	23.1	13.2	14.8	24.2	49.1	90.6	98.8	104.4
KS	0.1	0.2	0.8	3.3	7.5	3.0	4.7	8.5	16.5	27.6	29.9	34.8
KY	0.2	0.2	1.0	5.5	10.8	6.9	8.3	14.7	28.0	49.0	53.5	60.5
LA	0.2	0.2	0.6	7.5	20.3	9.3	10.3	13.3	31.2	48.6	55.1	67.0
MA	1.0	3.0	16.9	39.7	61.0	44.7	57.9	64.8	70.4	102.1	120.2	132.9
MD	0.7	2.1	11.6	43.4	68.0	51.2	47.0	54.0	91.7	132.3	139.4	146.6
ME	0.0	0.1	0.3	1.2	2.6	1.1	1.2	2.1	4.9	9.6	11.2	12.4
MI	0.5	0.8	3.9	18.2	31.9	22.5	29.9	46.0	92.4	144.7	146.2	156.2
MN	0.3	0.7	2.9	8.1	16.9	15.6	18.0	26.5	45.8	67.4	70.6	76.7
MO	0.4	0.5	1.1	5.7	15.9	8.9	14.6	26.0	47.1	81.9	88.0	101.7
MS	0.1	0.1	0.2	0.9	3.3	1.6	1.9	4.1	12.3	23.0	26.7	33.4
MT	0.0	0.0	0.0	0.2	1.1	0.6	0.9	1.8	4.7	7.8	8.4	10.2
NC	0.7	1.0	5.7	22.8	48.9	22.5	25.4	41.3	81.8	145.2	164.5	187.6
ND	0.0	0.0	0.0	0.4	1.0	0.6	0.5	1.1	3.1	5.6	6.6	7.9
NE	0.0	0.1	0.3	2.1	4.2	2.3	2.6	5.1	10.2	17.0	18.9	22.2
NH	0.1	0.1	0.3	1.6	3.4	1.8	2.1	3.7	6.6	12.6	13.2	14.6
NJ	0.6	1.5	8.9	37.5	74.0	50.2	47.4	56.1	91.2	160.8	168.6	173.7
NM	0.1	0.1	0.5	1.7	4.5	2.4	2.8	4.7	11.2	20.6	22.3	25.1
NV	0.2	0.2	1.4	9.5	34.2	25.7	25.0	28.3	39.4	63.1	67.8	73.9
NY	1.4	5.4	25.6	53.3	93.9	115.8	137.8	155.5	219.1	330.5	341.6	337.0
OH	0.6	0.8	3.8	21.2	46.2	25.3	34.4	55.8	109.1	180.2	189.7	200.5
OK	0.1	0.2	1.2	5.6	12.4	5.5	8.1	13.9	27.5	42.2	44.6	51.8
OR	0.2	0.3	0.9	6.6	14.9	15.0	14.7	20.5	38.3	58.4	59.1	62.9
PA	0.6	1.0	4.8	32.6	74.5	44.5	43.2	56.2	107.4	174.8	176.9	185.1
RI	0.1	0.1	0.9	4.0	7.2	3.5	4.3	5.9	9.2	16.1	18.5	21.2
SC	0.2	0.3	1.5	7.1	19.0	7.1	9.0	17.0	37.4	68.5	75.5	88.2
SD	0.0	0.0	0.0	0.1	0.2	0.5	0.5	1.1	2.8	5.3	6.4	7.8
TN	0.3	0.4	3.6	16.3	32.7	18.3	20.1	29.5	54.4	96.7	108.7	119.1
TX	1.9	3.4	24.4	89.7	164.9	99.9	100.5	137.1	237.7	416.6	459.9	498.5
UT	0.1	0.1	0.7	3.5	10.3	9.0	11.1	15.7	24.6	37.6	42.3	43.6
VA	1.0	3.1	11.9	30.9	56.5	42.2	41.8	52.0	97.2	140.4	147.8	163.3
VT	0.0	0.0	0.1	0.4	0.9	0.4	0.7	1.2	2.0	3.7	3.9	4.3
WA	0.8	2.0	6.6	18.2	34.9	35.5	41.0	46.6	73.2	112.1	118.8	119.1
WI	0.2	0.3	1.5	7.9	15.2	8.4	8.9	14.4	27.7	51.6	61.9	70.1
WV	0.1	0.1	0.1	0.3	1.6	1.0	1.1	2.9	7.4	14.2	15.1	17.6
WY	0.0	0.0	0.0	0.1	0.2	0.3	0.4	1.1	2.3	4.3	4.9	5.8

Table C.7: Platform Gig 1099's, By State and Year (Percent of Tax Workforce)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
AK	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.5	1.2	2.1	2.3	2.4
AL	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.5	1.1	2.0	2.2	2.6
AR	0.0	0.0	0.0	0.1	0.3	0.1	0.2	0.3	0.9	1.5	1.7	2.1
AZ	0.0	0.0	0.2	0.6	1.4	1.0	0.9	1.2	2.2	3.2	3.2	3.4
CA	0.0	0.1	0.4	1.2	2.0	1.6	1.6	1.6	2.2	3.3	3.2	3.1
CO	0.0	0.0	0.2	0.6	1.2	1.0	1.0	1.3	2.0	2.8	2.9	3.0
CT	0.0	0.0	0.1	0.4	0.9	0.4	0.5	0.7	1.3	2.4	2.4	2.5
DC	0.0	0.2	0.8	2.4	3.5	2.5	2.2	2.1	2.7	3.6	3.9	3.7
DE	0.0	0.0	0.0	0.4	0.9	0.5	0.5	1.3	2.6	4.1	4.1	4.4
FL	0.0	0.0	0.2	0.9	1.9	0.9	0.8	1.1	1.9	3.4	3.6	3.6
GA	0.0	0.1	0.2	0.8	1.6	0.9	0.8	1.0	1.9	3.9	3.5	3.7
HI	0.0	0.0	0.1	0.4	0.9	0.5	0.4	0.6	1.1	1.8	1.9	1.9
IA	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.3	0.7	1.3	1.4	1.6
ID	0.0	0.0	0.0	0.1	0.3	0.2	0.3	0.5	1.1	1.8	1.9	2.0
IL	0.0	0.1	0.4	1.1	1.9	1.2	1.3	1.2	2.0	2.9	3.1	3.1
IN	0.0	0.0	0.1	0.3	0.6	0.4	0.4	0.6	1.3	2.4	2.6	2.7
KS	0.0	0.0	0.0	0.2	0.5	0.2	0.3	0.5	1.0	1.7	1.8	2.1
KY	0.0	0.0	0.0	0.2	0.5	0.3	0.4	0.6	1.2	2.1	2.3	2.5
LA	0.0	0.0	0.0	0.3	0.9	0.4	0.4	0.6	1.3	2.1	2.3	2.8
MA	0.0	0.1	0.4	1.0	1.5	1.1	1.4	1.6	1.8	2.6	2.9	3.2
MD	0.0	0.1	0.3	1.3	2.0	1.5	1.3	1.5	2.7	3.8	3.9	4.1
ME	0.0	0.0	0.0	0.2	0.3	0.1	0.2	0.3	0.6	1.2	1.4	1.5
MI	0.0	0.0	0.1	0.3	0.6	0.4	0.5	0.8	1.7	2.7	2.7	2.9
MN	0.0	0.0	0.1	0.2	0.5	0.5	0.5	0.8	1.4	2.0	2.1	2.2
MO	0.0	0.0	0.0	0.2	0.5	0.3	0.4	0.8	1.4	2.4	2.6	2.9
MS	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.3	0.8	1.5	1.7	2.2
MT	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.8	1.2	1.3	1.6
NC	0.0	0.0	0.1	0.4	0.9	0.4	0.5	0.7	1.4	2.5	2.8	3.1
ND	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.7	1.2	1.4	1.7
NE	0.0	0.0	0.0	0.2	0.4	0.2	0.2	0.5	0.9	1.5	1.6	1.9
NH	0.0	0.0	0.0	0.2	0.4	0.2	0.2	0.4	0.8	1.5	1.5	1.7
NJ	0.0	0.0	0.2	0.7	1.5	1.0	0.9	1.1	1.8	3.1	3.2	3.2
NM	0.0	0.0	0.0	0.2	0.4	0.2	0.3	0.4	1.1	2.0	2.1	2.3
NV	0.0	0.0	0.1	0.6	2.2	1.6	1.5	1.7	2.3	3.6	3.8	4.1
NY	0.0	0.1	0.2	0.5	0.9	1.0	1.2	1.4	2.1	3.1	3.1	3.1
OH	0.0	0.0	0.1	0.3	0.7	0.4	0.5	0.9	1.7	2.8	2.9	3.1
OK	0.0	0.0	0.1	0.3	0.6	0.3	0.4	0.7	1.3	2.0	2.1	2.4
OR	0.0	0.0	0.0	0.3	0.7	0.7	0.6	0.9	1.7	2.6	2.6	2.7
PA	0.0	0.0	0.1	0.5	1.1	0.6	0.6	0.8	1.5	2.5	2.5	2.6
RI	0.0	0.0	0.1	0.7	1.2	0.6	0.7	1.0	1.5	2.6	2.9	3.3
SC	0.0	0.0	0.1	0.3	0.7	0.3	0.3	0.6	1.4	2.4	2.6	3.0
SD	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	1.0	1.2	1.4
TN	0.0	0.0	0.1	0.5	0.9	0.5	0.5	0.8	1.4	2.5	2.8	3.0
TX	0.0	0.0	0.2	0.6	1.1	0.7	0.7	0.9	1.5	2.6	2.8	2.9
UT	0.0	0.0	0.0	0.2	0.6	0.5	0.6	0.9	1.4	2.0	2.2	2.2
VA	0.0	0.1	0.3	0.7	1.2	0.9	0.9	1.1	2.0	2.9	3.0	3.3
VT	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.3	0.5	1.0	1.0	1.1
WA	0.0	0.1	0.2	0.5	0.9	0.9	1.0	1.1	1.7	2.6	2.7	2.7
WI	0.0	0.0	0.0	0.2	0.4	0.2	0.3	0.4	0.8	1.5	1.8	2.0
WV	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.3	0.9	1.7	1.7	2.0
WY	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.7	1.3	1.5	1.7

Table C.8: Platform Gig 1099's, By MSA and Year (Percent of Tax Workforce)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Atlanta, GA	0.4	1.3	2.4	1.4	1.2	1.5	2.5	4.8	4.4	4.5
Austin, TX	0.5	1.9	1.9	1.4	1.3	1.5	2.0	3.2	3.6	3.6
Baltimore, MD	0.3	1.1	1.7	1.2	1.0	1.4	2.6	3.8	4.0	4.2
Boston, MA	0.7	1.4	2.0	1.5	1.8	1.8	2.0	2.6	3.0	3.2
Charlotte, NC	0.2	0.7	1.4	0.7	0.9	1.2	2.1	3.4	3.8	4.1
Chicago, IL	0.6	1.6	2.6	1.7	1.7	1.6	2.5	3.5	3.7	3.6
Cincinnati, OH	0.1	0.5	0.9	0.6	0.9	1.2	1.9	3.0	3.2	3.2
Cleveland, OH	0.1	0.5	1.1	0.6	0.6	1.0	2.0	3.3	3.5	3.7
Columbus, OH	0.1	0.6	1.3	0.6	0.8	1.2	2.2	3.4	3.7	3.7
Dallas-Fort Worth, TX	0.3	0.9	1.6	1.0	0.9	1.1	1.9	3.2	3.2	3.3
Denver-Boulder, CO	0.3	0.9	1.7	1.4	1.5	1.8	2.5	3.4	3.6	3.6
Detroit, MI	0.1	0.5	0.8	0.6	0.7	1.2	2.2	3.6	3.7	3.9
Houston, TX	0.2	0.6	1.2	0.7	0.8	1.0	1.6	2.7	3.1	3.4
Indianapolis, IN	0.2	0.7	1.2	0.7	0.7	1.0	1.9	3.3	3.6	3.7
Jacksonville, FL	0.1	0.5	1.3	0.6	0.7	1.0	1.9	3.4	3.6	3.6
Kansas City, MO/KS	0.1	0.4	0.7	0.3	0.6	1.0	1.8	2.8	2.9	3.5
Las Vegas, NV	0.1	0.8	2.6	1.9	1.8	1.9	2.5	3.9	4.1	4.4
Los Angeles, CA	0.6	1.8	2.9	2.4	2.3	2.2	2.7	3.9	3.8	3.8
Memphis, TN	0.1	0.3	0.9	0.4	0.5	0.7	1.7	3.1	3.4	3.9
Miami, FL	0.4	2.1	3.8	2.0	1.6	1.9	2.5	4.6	4.8	5.0
Milwaukee, WI	0.1	0.5	0.9	0.5	0.6	0.8	1.4	2.5	3.0	3.3
Minneapolis-St. Paul, MN	0.1	0.4	0.7	0.7	0.8	1.1	1.9	2.6	2.7	2.8
New York, NY	0.3	0.7	1.3	1.4	1.6	1.7	2.3	3.5	3.4	3.3
Orlando, FL	0.2	1.1	2.4	1.1	1.0	1.3	2.2	3.8	3.8	3.9
Philadelphia, PA	0.1	0.8	1.8	1.2	1.1	1.2	2.1	3.5	3.5	3.4
Phoenix-Mesa, AZ	0.3	0.8	1.7	1.3	1.1	1.4	2.5	3.7	3.7	3.8
Pittsburgh, PA	0.1	0.6	1.1	0.6	0.6	0.8	1.5	2.3	2.4	2.5
Portland, OR	0.1	0.5	1.2	1.1	1.0	1.3	2.3	3.3	3.2	3.4
Providence, RI	0.1	0.6	1.2	0.6	0.7	1.0	1.5	2.6	3.0	3.4
Riverside, CA	0.1	0.6	1.1	1.0	0.9	1.2	2.0	3.4	3.3	3.2
Sacramento, CA	0.2	0.7	1.8	1.6	1.4	1.8	2.6	4.2	3.9	3.6
Salt Lake City, UT	0.1	0.3	0.8	0.6	0.7	1.0	1.5	2.3	2.6	2.5
San Antonio, TX	0.1	0.4	1.4	0.8	0.7	1.0	1.8	2.9	3.3	3.4
San Diego, CA	0.4	1.3	2.2	1.6	1.5	1.6	2.2	3.4	3.3	3.3
San Francisco, CA	1.1	2.3	3.0	2.6	2.4	2.1	2.1	3.1	3.0	2.7
San Jose, CA	0.5	1.4	2.2	2.0	2.0	1.9	2.0	2.9	2.7	2.5
Seattle, WA	0.3	0.8	1.4	1.4	1.6	1.6	2.2	3.1	3.2	3.1
St. Louis, MO	0.0	0.2	0.6	0.4	0.6	0.9	1.7	3.0	3.3	3.6
Tampa-St. Petersburg, FL	0.2	0.8	1.9	0.9	0.8	1.0	1.9	3.5	3.9	3.8
Virginia Beach, VA	0.1	0.5	1.3	0.8	0.8	1.1	2.7	3.8	3.6	4.2
Washington, DC	0.6	1.5	2.3	1.8	1.7	1.8	2.7	3.6	3.7	3.8