Has the Gig Economy Replaced Traditional Jobs Over the Last Two Decades? Evidence from Tax Returns*

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Abstract

We examine the universe of tax returns in order to reconcile seemingly contradictory facts about the rise of alternative work arrangements in the United States. Focusing on workers in the "1099 economy," we document alternative arrangements among taxpayers with earnings that have grown by 1.9 percentage points of the workforce from 2000 to 2016. More than half of this increase occurred over 2013 to 2016 and can be attributed almost entirely to dramatic growth among gigs mediated through online platforms. We find that the rise in OPE work, which dominates trends in 1099 work after 2007, is driven by earnings that are secondary and supplemental sources of income. Many of these jobs do not show up in self-employment tax records: approximately 44 percent of the overall growth in the 1099 economy comes from people who do not file self-employment taxes. Examining the relationship between 1099s and self-employment tax records more generally, we find that the previously documented increases in self-employment tax filings since 2007 are largely driven by workers without 1099s. We discuss implications of these findings for tax administration and measurement of alternative work using tax data.

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1 Introduction

New institutions and technologies have made it simpler for self-employed individuals to do work for firms and peers that could have previously only been done in an employment relationship. As a result, speculation has grown that traditional jobs in the United States will be replaced by "gig" or "freelance" work performed by self-employed workers acting as independent contractors. While a shift towards a "gig economy" could increase opportunities for flexible work, it could have major ramifications for tax administration and social programs, which are often administered through employers. Therefore, it is crucial for policymakers to understand where and why such shifts are occurring.

Despite the attention from media and from policymakers, the evidence to date on the rise of a gig economy and of alternative work arrangements more generally has been mixed. On the one hand, administrative records, some survey evidence, and abundant anecdotal evidence suggest that alternative work arrangements, particularly independent contracting relationships, are on the rise (Abraham, Haltiwanger, Sandusky, and Spletzer, 2018b; Harris and Krueger, 2015; Katz and Krueger, 2018; Farrell, Greig, and Hamoudi, 2018). Self-employment more generally has been shown to be increasing in tax returns (Jackson, Looney, and Ramnath, 2017; Abraham, Haltiwanger, Sandusky, and Spletzer, 2018b). Some recent surveys find that more than 30 percent of the workforce is engaged in some sort of freelance or "gig" work (Intelligence, 2018; Gallup, 2018; Bracha and Burke, 2018). At the same time, self-employment has not grown in the Current Population Survey (CPS), and the recent 2017 installment of Contingent Worker Supplement (CWS) to the CPS found that alternative work arrangements of all forms were no more prevalent in 2017 than they were in 2005 when the supplement was last conducted (Bureau of Labor Statistics, 2018a).

This paper analyzes the universe of U.S. tax returns in order to reconcile these seemingly contradictory findings on the growth of non-employee "gig" work. Tax data from the Internal Revenue Service (IRS) allow us to directly identify spells of contract work in which self-employed individuals do work for firms or intermediated by firms. Though just one of several alternative worker-firm arrangements, this "gig economy"—or, more precisely, "1099 economy"—of self-employed contractors is particularly important. Working with a firm as a self-employed contractor instead of an employee has significant implications for how tax and labor laws apply. Unlike traditional employees, self-employed contract workers do not receive benefits associated with employment: they do not receive employer-sponsored health insurance, are not covered by the minimum wage or other protections of the Fair Labor Standards Act, are not part of

states' unemployment insurance systems, and are on their own when it comes to training, retirement savings, and tax planning. Recent surveys suggest that independent contracting is more prevalent than other alternative work arrangements that involve an employer, such as temporary services. Moreover, since 1099 workers are self-employed, trends in this sector may drive broader trends in self-employment, including those documented in previous studies of IRS self-employment tax records (Jackson, Looney, and Ramnath, 2017; Abraham, Haltiwanger, Sandusky, and Spletzer, 2018b).

In our work, we pay special attention to a new and growing class of independent contract work mediated by online platforms, which have received a significant amount of attention in recent years. We refer to these arrangements collectively as the "online platform economy" (OPE). We measure participation in the OPE based on 1099 returns, building on work by Jackson, Looney, and Ramnath (2017). We follow other work (Farrell and Greig, 2016a,b; Farrell, Greig, and Hamoudi, 2018) and develop a broad definition of the OPE, focusing on a subset of companies that are primarily labor platforms. This allows us to measure the entire online gig economy based on information returns, rather than industry classifications listed by the self-employed.

We find that share of earners participating in the 1099 economy grew by 1.9 percentage points from 2000 to 2016, and now accounts for 11.8 percent of the workforce. Since the start of the Great Recession in 2007, the 1099 economy has grown by 1 percentage point of the workforce, while at the same time the share earning only wages has shrunk by 1.1 percentage points. Looking at the sources of this growth in more detail, we find that virtually all of the growth in the 1099 economy since 2007 is due to dramatic growth in OPE participation. Meanwhile, non-OPE contract work has plateaued. By 2016, the share of workers with OPE income was approximately 1 percentage point of the workforce constituting 8.6 percent of 1099 independent contractors.

While we see dramatic growth in the "extensive" margin of participation in the 1099 economy, we also find that these individuals are no more likely to earn a full-time living in the 1099 economy in 2016 than they were in 2005. We find that the exponential growth in OPE work is driven by individuals whose primary annual income derives from traditional jobs and who supplement that income with platform-mediated work. Moreover, a majority of participants only derive small amounts of income from OPE work—fewer than half earned more than $2,500 in 2016. This is largely consistent with recent findings from studies of individual bank account data (Koustas, 2019; Farrell and Greig, 2016b,a; Farrell, Greig, and Hamoudi, 2018). In general, for 1099 income—as well as self-employment more broadly—we find that the closer we move

to a notion of "full" time employment, the less growth we see. Thus, consistent with the 2017 CWS results, we find no evidence that "traditional" work arrangements are being supplanted by independent contract arrangements reported on 1099s.

When comparing the demographic characteristics of the 1099 workforce to other groups of workers, we find that participants in the OPE look different than other kinds of workers—including other 1099 workers. Inter alia, OPE workers in a given year are much more likely to be male, single, and to have experienced unemployment in that year. OPE participants also tend to be younger than other self-employed workers, and the youngest workers are most likely to have small amounts of earnings. Outside of the OPE, self-employed individuals with and without 1099 income are more similar. Compared to workers with wage income alone, the non-OPE 1099 workers tend to be older, are more likely to be married, and more likely to claim Social Security retirement benefits.

We find important heterogeneity in these trends across demographic groups and regions of the United States. Outside the OPE, non-employee work has become more prevalent among women since 2000, but not among men. By contrast, the rise in OPE employment is larger among men than women. In addition, non-OPE 1099 work at any level of earnings becomes more prevalent after Social Security eligibility at age 62, whereas OPE "moonlighting" for small amounts of money is much more prevalent among younger workers. Geographically, the OPE is concentrated in large city centers, while non-OPE 1099 work is much less concentrated and much more common in rural areas of the plains states and the Southern states.

These findings help reconcile competing narratives about the growth of the "gig" economy. Our results verify the explosive growth in the OPE documented in data from rideshare platforms (Hall and Krueger, 2015) and bank account data (Koustas, 2019; Farrell, Greig, and Hamoudi, 2018; Farrell and Greig, 2016a,b). Yet our findings offer an explanation as to why OPE work has not registered in surveys like the CWS. While many such surveys ask individuals about their primary source of income during a single week, we find that OPE work typically supplements traditional W2 traditional jobs over the course of the year. At the same time, we find that much of the previously documented rise in self-employment tax filings is not driven by 1099 work at all.

We also note that although we find that only 11.8 percent of the workforce participates in the 1099 economy, these findings do not necessarily contradict studies finding that many more workers than this are engaged in some kind of informal work (Bracha and Burke, 2018). Similar to the CWS, our study focuses on work that is firm-facing or firm-intermediated, and,

moreover, we only measure formal work reported to the IRS. It is likely that many individuals also engage in informal consumer- or household-facing side jobs, such as flea-market selling, driveway shoveling, babysitting, or house cleaning. We cannot identify such activity in 1099 data—in fact, such activity is likely not reported to the IRS at all in many cases. This limits our ability to speak to the prevalence of such work, to trends over time, and to whether or not new work in the OPE is substituting for or adds to other kinds of informal work.

This paper proceeds as follows: In section 2, we provide an overview of how we define and measure alternative work in tax data. Section 3 provides our first results, showing high-level trends in independent contracting in tax data since the 2000s. In Section 4, we further decompose these trends, examining in detail who participates, and focusing on trends by gender and age. In section 5, we compare trends in the independent contracting to trends in self-employment more broadly. Section 6 concludes.

2 Measuring the "Gig" Economy

2.1 What is Gig Work?

One of the challenges in measuring the rise of the "gig" (sometimes referred to as the "alternative" or "nontraditional") workforce is the wide range of terminology, which is employed in a variety of ways in different contexts. In this paper, our focus is on non-traditional work arrangements that substitute for the traditional employer-employee relationship. More specifically, we examine activities that are firm-facing or firm-mediated in nature. This is consistent with the notion of "alternative work" employed in the BLS' Contingent Worker Supplement (CWS), as well as the notion of the "gig" economy in Abraham, Haltiwanger, Sandusky, and Spletzer (2018b). By contrast, we do not focus on other types of informal or occasional work that are consumer- or household-facing, such as babysitting or flea-market selling. Although multiple surveys indicate that many Americans partake in this latter category of work, such work is by no means new and is often informal or "under-the-counter." To the extent this income is reported to the IRS, we will also examine growth in self-employment more broadly later in the paper in Section 5. Moreover, this informal work is usually not a direct alternative to firm mediated work; although a possible exception may be the peer-to-peer transactions mediated by firms in the Online Platform Economy (OPE), which we discuss below.

Non-traditional firm-facing work arrangements may take several forms (Bernhardt, Batt, Houseman, and Appelbaum, 2016). The CWS categorises alternative work arrangements into

four different classes of workers: workers who are identified as independent contractors, independent consultants, or freelance workers; on-call workers who are called to work only as needed; temporary help agency workers paid by a temporary help agency; and finally, workers provided by contract firms (See Bureau of Labor Statistics, 2018b). Our work focuses on this first group, which we will refer to as "independent contractors" for convenience. There is a policy rationale for this focus. Independent contractor relationships differ from the other categories in a crucial respect—independent contractors are not employed by the firms for which they work. Rather, they are legally self-employed, doing "gig" work with firms on a freelance basis. The evolution of these arrangements is therefore important to focus on in the context of both tax and labor law that treat employees and self-employed contractors differently in important ways. Moreover, this category is by far the largest component of the alternative workforce, comprising 68 percent of the contingent workforce as measured in the 2017 CWS.

Fortunately, independent contractor relationships are directly observable in tax records. Payments by firms to self-employed individuals are reported on a form sent to individuals in a similar way as are wages. Whereas other components of the contingent workforce are more difficult to identify, this paper trail makes it relatively easy to identify and study independent contractors in tax data. We discuss this in more detail in the next section

In our work, we pay special attention to a new and growing class of independent contract work mediated by online platforms. We refer to these arrangements—which are a subset of the broader "gig" or "1099 economy"—as the "online platform economy" (OPE). In the OPE, consumers directly interface with a digital platform technology, which matches them with contractors supplying labor and determines key parameters of the transaction. If a customer is not satisfied with the service, customer service is often handled by the corporate platform, not the worker supplying the service. Thus, although contractors typically provide services directly to consumers, OPE transactions are crucially firm-mediated—and therefore are considered independent contractors. While many transactions in the broader OPE involve selling of goods or rental of durable capital, our focus in this paper is on labor supplied on these platforms. Accordingly, we examine online platforms used to mainly trade labor services.

2.2 The 1099 Economy

In this section, we describe how we identify the 1099 workforce in IRS tax data. Our classification relies on forms issued by employers, or "information returns." By far the most common information return issued by employers is Form W-2, which is issued to wage workers. Many

firms, particularly those outside of the OPE, use traditional employees alongside nontraditional workers. Two types of information returns allow us to focus on independent contractors at these firms. One important information return for our purposes is Form 1099-MISC. More 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"). We take the presence of Box 7 income as an indicator for our primary measure of alternative work. Until 2011, all "freelance" or "gig" work done for firms or for clients through intermediaries would be reported on this form.

However, reporting rules for intermediaries have changed over time in important ways that mainly affect work in the OPE. 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. Subsequently, several important online intermediaries in the OPE began issuing the form 1099-K instead of 1099-MISC non-employee compensation.

The income paid to gig workers on OPE labor platforms is, for all practical purposes, non-employee compensation. However, one challenge in identifying OPE work is that 1099-Ks are also issued for income from selling that is not non-employee compensation. We therefore identify and track the OPE workforce over time by identifying approximately 50 important online "gig" platforms on which self-employed individuals offer labor services to firms or individual clients. We then measure the total payments individuals receive from these companies that are reported on either a 1099-K or a 1099-MISC with non-employee compensation. We also explore alternative approaches to identifying OPE work, as some companies cannot be identified by this method.[1] For example, we use mentions of platform names in taxpayer-reported descriptions of business activity (line A) on Schedule C to identify additional instances of OPE work.

A potentially important limitation to studying the 1099-K is that companies in the OPE 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 does not appear to impact our analysis through 2016, as we find most of the major platforms have issued 1099-Ks to all platform participants, regardless of the earnings level, in at least some years. However, individual firms have announced changes to their policies over time. These future changes in firms' policies may impact measurement more severely in the future.

There are a number of caveats to studying what we refer to as the "1099 economy." Some

[1]For some platforms that pay through the payment processor Paypal, the 1099 will be issued by Paypal, and cannot be separately tied to a company in the OPE.

forms of work in the OPE is clearly new economic activity, the most notable being paid ridesharing, which was largely non-existent before 2011. In other contexts, new forms of firm-mediated activity in the OPE may be supplanting informal work previously done in an informal setting, "under the table" in the sense that this income was unlikely to be reported to tax authorities via an information return. This is more likely the case for professional freelancers who now supply labor via the OPE. Thus, while important to measure activity showing up in the tax system, caution is required before interpreting growth entirely as new economic activity.

2.3 Self-Employment and the 1099 Economy

From the perspective of the tax code, 1099 independent contractors—those with either 1099-MISC non-employee compensation or an OPE 1099-K—are self-employed. Formally, this 1099 income, like all self-employment income, is considered active business income by the IRS. Accordingly, unless individuals become incorporated, this income should be reported to tax authorities as proceeds from a wholly-owned business on Schedule C.

The income reported on 1099 returns is different from W-2 employment income in a key respect. Whereas form W-2 reports the net returns to work, 1099 returns report gross revenues inclusive of any costs incurred in the course of business. Thus, individuals may claim deductible business expenses on Schedule C in order to determine their net income (i.e profit). We are able to observe both gross and net measures of income, as well as expenses, on Schedule C. However, expenses are not separately attributed to specific contracts reported on distinct 1099s.

A standard approach to measuring self employment in tax records is to examine Self-Employment Contributions Act (SECA) tax filings on Schedule SE of Form 1040. These taxes are paid in lieu of the FICA payroll taxes paid by W-2 employees. However, many SECA tax payers do not receive 1099s, and many 1099 recipients are not required to pay SECA taxes. Individuals are subject to self-employment SECA taxes on their Schedule C net profits only if they exceed a de minimus level of $400. All income subject to SECA taxes—including Schedule C income, self-employment farm income, and certain income from partnerships and corporations—is reported on an individual basis on Schedule SE. Hence, only 1099 income that exceeds $400 *after* expenses is reported on Schedule SE. Conversely, Schedule SE self-employment income is not always derived from payments reported on a 1099. Self-employed persons with directly consumer-facing activities—for examples shopkeepers, farmers, artists, and handymen who do not use online platforms—can generate SE income without receiving a 1099.

Previous work using tax data has mainly focused on tax filers who file Schedule SE taxes.

Abraham, Haltiwanger, Sandusky, and Spletzer (2018b) focus on Schedule C filers, while Jackson, Looney, and Ramnath (2017) focus on Schedule SE and Schedule C filers. Appendix Figure A.1 shows that rates of Schedule C/SE filing have declined overtime, and non-compliance appears particularly severe in the OPE, where 43 percent of 1099 recipients did not file a Schedule C or SE. There are a number of reasons why individuals receiving a 1099 may not file as self-employed. One innocent reason (albeit still running afoul of tax filing obligations) is that these individuals do not perceive themselves to be self-employed, and instead file this income as "other income" or simply add it to their main earnings. Other reasons include not understanding that receiving receipts over $400 mandates filing and paying self-employment taxes, even if total income falls below the standard deduction. In our subsequent analysis, we will show there is substantial growth in alternative work outside of Schedule SE filing.

3 Changes in the 1099 Economy

In this section, we report the size of the 1099 economy in various ways. We begin with the broadest measure of counts of 1099s, and show how different components of the broader 1099 population, such as Schedule SE filers, have evolved. To put these raw counts in perspective with trends occurring elsewhere in the workforce, we divide these counts by the total number of earners in the tax data. After establishing trends in the "extensive" margin, we turn to examining the "intensive" margin of work in the 1099 economy.

3.1 Growth in 1099 Work Since 2000

As shown in Figure 1, from 2000 to 2016, the number of individuals receiving a 1099-MISC or 1099-K for 1099 contract work grew by 6.4 million (solid black line). In general, individuals earning more than $400 in profits from such 1099s after expenses are required to file Schedule SE. Immediately apparent from the bottom-most, light-gray line in Figure 1 is that a large number of 1099 recipients do not pay these taxes. In 2016, only 51 percent of 1099 recipients paid SECA taxes on Schedule SE. Yet, although many do not file Schedule SE, most 1099 recipients do file a 1040 tax return. There are a number of possible reasons why Schedule SE is not filed. Profits from 1099 payments may fall below the $400 threshold after expenses, 1099 payments may (mistakenly) be reported as some other type of income, or households may not report this income to tax authorities.

We also find a non-trivial number of 1099 recipients do not file a 1040 tax return at all, most of whom also have no record of labor income on W2 returns. In 2016, approximately 2 million

people, or 8.6 percent, who received a 1099 for non-employee compensation did not file a 1040 or pay any payroll taxes, up from 6.1 percent in 2000. In cases where we have no evidence of income or business activity besides the firm-issued 1099, it is difficult to infer the nature of these cases, which might represent reporting errors (forms sent for non-taxable payments or incorrect social security numbers), imperfect compliance (individuals with no other employment may not know they need to pay taxes on this income), or uncertainty about filing requirements (filing might not be required if income after expenses were sufficiently low). It is is also plausible that decreasing costs of issuing 1099s have resulting in increased number of "false positive" reporting of non-taxable income on 1099s. As a result, we are hesitant to count these cases as true instances of "alternative work." We discuss how we handle these cases in the section.

3.2 The 1099 Economy and the "Tax Workforce"

To put these numbers in proper perspective with trends occurring elsewhere in the workforce, we require a definition of the workforce that is internally consistent in the tax data. To this end, we develop a simple taxonomy of earnings in the tax data to estimate the overall size of the workforce, which we use to benchmark trends in non-traditional work arrangements.

Our taxonomy considers three sources of labor income reported on tax returns: First, wage and salary income reported on Form W-2 reflects earnings from traditional labor relationships. Second, Schedule SE income reflects net profits earned through self-employment activities of all types, both firm-facing and otherwise. Although Schedule SE income is only reported at levels over $400, it is nonetheless a useful basis for measuring self-employment income as it is always reported for individuals (rather than tax units). By contrast, Schedule C income has only been on an individual basis since 2007. The third component of our tax workforce is non-employee income on 1099s—either 1099-MISC Box 7a non-employee compensation or OPE income on 1099-K.

For our analysis, we define the "tax workforce" as all individuals that have any of the following in a year: wage (W2) earnings, self-employment (Schedule SE) earnings, or 1099 nonemployee compensation so long as the individual appears on a tax return. This population corresponds to Columns 1-9 in Table 1a. We include 1099 recipients with a 1040 but no Schedule SE (Columns 6-7) and non-tax-filers with wage earnings (Columns 8-9) to account for the possibility that 1099 recipients may misreport their 1099 income as exempt from SE taxation. However, we acknowledge that the status of this income is ambiguous. We choose to explicitly exclude Column (10) in Table 1a from our calculation of the tax workforce due to concerns

about whether this reflects real economic activity or reporting trends in the broader 1099-MISC workforce.

The largest component of the workforce in all years are traditional wage earners with no self-employment or 1099 income (Cols 1, 8). It has become less common over the last 16 years to be only a wage earner. As a share of the tax workforce, these only wage-earners have declined but about 1 percentage point since 2000.

We can now more directly assess the prevalence of independent contracting accounting for trends in other components of employment. In Figure 2, we present the share of our workforce, as defined above, who receive any 1099 income in each year since 2000. We find that the 1099 economy is indeed growing as a share of the workforce. The share of workers with any 1099 earnings has increased by 2.1 percentage points over the last 15 years, from around 9.9 percent in 2000 to 11.8 percent by 2016. Notably, roughly half (1 percentage point) of this increase has occurred in just the three most recent years.

Online "gig" income plays a central role in understanding this recent growth. Table 1b examines these trends for the online platform economy (OPE). Panel B documents the number of 1099 recipients in each categories that are OPE participants. Some OPE workers also do 1099 work outside the OPE; accordingly, the numbers in italics break out the subset of the OPE population who have no other 1099 income in each year. Two important facts stand out. First, OPE work has grown dramatically in recent years compared with other components of the workforce. Virtually non-existent before 2012, the number with any OPE (only-OPE) in 2016 was around 1.9 million (1.6 million). Second, most individuals with 1099 income from the OPE are not earning 1099s from outside the OPE. Among OPE SE filers in 2016, between 66 (Col. 2) and 75 percent (Col. 1), only had 1099's from the OPE; the share with only 1099's is even higher among the non-SE filers, ranging from 80 percent among the non-tax filers with no W2 (Col. 6), to 91 percent among tax filers with wages (Col. 3).

Moreover, we find that virtually *all* expansion of the 1099 economy since 2011 comes from participation in the OPE. Fully 86 percent of the expansion of the 1099 economy as a share of the tax workforce since 2012 is due to gig participants in the OPE with no other 1099 income. In fact, we find only modest expansion of the "offline" economy over an even longer time-frame. Non-OPE 1099 work grew from 2001 to 2006, before declining in the Great Recession. The current level as a share of the workforce is similar to the share in 2005. We view this absence of growth as potentially consistent with the CWS, which finds rates of independent contracting in primary job during a reference week to be stable over the same period. In the next section,

we dig into the intensive margin to examine trends by full- and part-time earnings and primary versus secondary economic activity.

3.3 The Intensive Margin of 1099 Work

This "extensive margin" analysis of participation (whether workers participate in the 1099 economy at all) obscures potentially important information about the "intensive margin" of participation (how much of this work people do). How many individuals rely on 1099 work as their primary income source, particularly among full-time workers? Do earners earn substantial amounts from this work? These questions are of particular importance for making comparisons between trends in annual administrative data and those in BLS surveys like the CPS and the CWS, which ask about workers' *primary* activity in a given week.

To answer these questions, one needs to specify concrete notions of part-time work and supplemental work in the tax data. In our analysis, we define individuals to be primarily wage earners during a year if their wage earnings exceeds their Schedule SE net income for that year; we define workers as primarily self-employed otherwise.[2] In addition, we designate workers as employed full-time throughout the year if they have at least $15,000 (in adjusted 2016 dollars) in earnings (either wages or Schedule SE earnings). This threshold is roughly 2,000 hours at federal minimum wage. This concept offers the most direct comparison between IRS tax returns and the CPS and CWS, which asks about the primary source of earnings among those who worked in the week prior to the survey.

Building on these definitions, Figure 2 shows the decomposition of the 1099 workforce into those who are primarily self-employed (gray line) and those who are primarily wage-earners with secondary self-employment income (red line). This decomposition reveals an key feature of OPE work—the vast majority of OPE participants do so to supplement a primary job. Indeed, the *only* growth in 1099 work since 2007 has been among individuals supplementing a primary W2 job. Note that since we do not observe the hours and days worked, OPE work might supplement a primary job either contemporaneously ("moonlighting") or fill in gaps between W2 jobs during the year. Recent analysis of high-frequency bank account activity provide support for both (Farrell and Greig, 2016b; Koustas, 2019). When we focus in on trends among the full-time-equivalent workforce (Columns 7-12 of Table 2, plotted in Appendix Figure A2), our findings are very similar. Significantly, this decomposition reveals that 1099 workers are *no*

[2]For the group with 1099 earnings, no Schedule SE and no W2 income (Column (7) in Table 1a), we assume this group is primarily self-employed. The group with W2 and 1099 earnings (Column 9 in Table 1a) is treated as primarily W2, essentially assuming that 1099 earnings must be small after deductions which is why the worker does not file.

more likely to earn a full-time living primarily through self-employment now than in 2000.

An alternative approach to studying the intensive margin is to document how much workers make in the 1099 economy. Figure 3 plots how common it has been over time to earn income in the 1099 economy that exceeds specified thresholds (in adjusted 2016 constant dollars) over time. The top panel reports trends among those with no OPE earnings. Two findings stand out: First, over time, most participants in the 1099 economy have been earning modest amounts, generally less than $7,500 in gross receipts. Second, growth has been more limited at higher levels of 1099 income. This underscores a theme that runs throughout or findings—the closer we move to a notion of "full" time employment, the less growth in 1099 work we see.

These two findings are particularly pronounced in the OPE. First, we see the dramatic increase in gig economy income is driven by very small amounts—most less than $2,500 *before* taking out expenses. While there has been explosive growth in the number of people making small amounts of money in this sector, the share of OPE workers who could plausibly be earning a full-time living has declined. This is partly reflected in the large share of OPE participants who file a 1040 but have no Schedule SE income (Table 1b)—many OPE participants with no other self employment income wind up below the $400 SE tax earnings threshold.

However, payment amounts reported on 1099 reflect gross revenues (including expenses), not net income levels. These thresholds in Figure 3 are therefore not directly comparable to levels of wages and salaries reported on W2; one must first subtract from the gross receipts all expenses incurred in the course of generating those payments.[3] Although tax filers do not report expenses separately for each 1099 income source, we observe total receipts and total revenues on Schedule C. Though expenses on Schedule C are not broken out by specific 1099 or non-1099 revenue sources, Appendix Figure A3 shows that most of the receipts reported on Schedule C by 1099 recipients come from their 1099s. Accordingly, we can infer typical expensing behavior among different types of self-employed earners based on their respective Schedule C expenses.

We find that self-employed workers spend a considerable amount of their revenues on expenses, and that expensing levels are notably higher in the OPE. Figure 4 displays expensing rates by revenue source and profit deciles among the overall population; the second panel shows how the profit distribution differs for workers with different revenue sources. Outside the OPE, the median self employed individual—both with and without 1099-MISC income source—tends

[3]For example, when a driver works for a firm, the employer pays all fuel an automobile repair expenses, and those costs are not reflected in the driver's salary. By contrast, when a self-employed individuals earns money on a ride-sharing app, they are personally responsible for purchasing gas and repair services. The part of their revenues that are spent covering these costs of business are not net income, and needs to be deducted to determine that income amount.

to write off about 20-30 percent of their gross revenues as expenses. However, OPE workers at nearly all profit levels typically write off closer to 60 percent of their revenues as expenses.

Taken at face value, this suggests OPE users make significantly less than suggested by Figure 3, once one accounts for expenses like gas, platform fees, and vehicle depreciation. Yet some caution in interpreting these deductions is warranted, as self-employed taxpayers have an incentive to write-off as many expenses as possible—including some expenses that traditional employees incur but cannot write off as easily.[4]

Another important dimension of the intensive margin of 1099 work is the number of firms individuals work for. Do individuals in the 1099 economy interact with many different employers, or are they tied to a single firm? The traditional narrative of a "freelancer" is that of an individual who does work for many different firms. The tabulations in Figure 5 show that slightly over a quarter of workers in the 1099 economy got 1099 returns from more than one firm in 2016. While significant, this is actually less than the share of W-2 workers with wages or salaries from more than one firm: over 30 percent worked for more than one employer in 2016. Thus, it is no more common for wage earners to be tied to a single employer than it is for contractors to be tied to a single payer firm.[5] At the same time, 1099 workers with multiple 1099s are more likely to work for more than two firms, whereas wage earners rarely work for more than two firms during the year. In comparison, the propensity for individuals in the OPE to engage in so-called "multi-app-ing," in which workers derive income from several platforms, is similar to patterns in 1099 work more generally.[6]

4 Trends in Participation Across Demographic Groups

Our analysis of participation in the 1099 economy has so far been broad, potentially masking important heterogeneity across subgroups. In this section, we examine how the composition of the 1099 workforce differs from other segments of the workforce and document important heterogeneity underlying our baseline results. We first document how the demographics of the 1099 workforce overall, and the OPE workforce in particular, relates to those of the broader self-employed and wage workforce. We then take a closer look at how levels and trends in 1099

[4]For instance, self-employed workers have greater leeway to write of vehicle depreciation and gas expenses incurred while commuting to work. The IRS allows for a particularly generous expensing rate for vehicle usage, which is particularly important for rideshare drivers in the OPE.

[5]We note that the population of 1099 workers in this figure includes those who are primarily employed at a W2 job, and vice versa.

[6]While we find fewer cases of OPE workers with income from three or more platforms, this may in part reflect limitations to our approach to identifying the OPE based on a fixed number of platforms identifiable in the data.

economy participation differ by gender, age and geography.

4.1 Baseline Differences in Composition

Table 3 presents 2016 demographic characteristics of participants in different workforce segments. We compare the demographic composition of the overall workforce with those of wage earners, non-OPE 1099 earners, OPE participants, and non-1099 self-employed. We also separately examine characteristics of those with self-employment earnings for whom self-employment is a primary source of income.

Outside the OPE, we find that self-employed workers are largely similar whether or not they receive a 1099. Compared to workers with W2 income, alone self-employed workers tend to be older, are more likely to be married, and more likely to claim Social Security retirement benefits. This is largely consistent with prior work documenting that self-employment often provides an important bridge to retirement (Ramnath, Shoven, and Slavov, 2017). However, one important difference between self-employed individuals with 1099s and those without 1099s is that individuals with 1099s are significantly less likely to claim dependents and even less likely to claim the Earned Income Tax Credit (EITC). This finding relates to earlier studies documenting that self-employed workers are significantly more likely to have income levels that result in EITC refunds, suggesting possible manipulation of self-employment revenues or expenses to maximize refunds (Chetty, Friedman, and Saez, 2013; Mortenson and Whitten, 2018). Our finding that self-employed individuals with 1099s claim the EITC at similar rates to wage earners suggests that this type of manipulation is less common among self-employed workers with third-party income reporting on 1099 forms.

By contrast, we find that participants in the OPE look different than other kinds of self-employed workers in several respects. The OPE is more male than the traditional workforce. While wage-only workers are 50.5 percent male, self-employed individuals with no 1099s are 52.4 percent male, and the non-OPE 1099 workforce is 56.2 percent male, the OPE workforce is over 70 percent male. Rates of marriage are lower among OPE workers (approximately 35 percent) compared to other self-employed workers (53-54.3 percent) and also to wage workers. OPE workers are significantly less likely to be over 55 or claiming Social Security Retirement benefits than other workers, and OPE work is actually less common than wage work among those 25 and under. Instead, OPE work is most commong among middle-aged workers 26-55.

While 2016 OPE workers are significantly less likely to receive Social Security benefits than other self-employed workers, they are notably more likely to have received unemployment insur-

ance (UI) payments during the year. Over 7 percent receiving UI, compared with 4.5 percent of wage-only earners, 3.2 percent of individuals with non-OPE 1099, and 1.9 percent of non-1099 self-employment. This is consistent with earlier evidence that OPE and ride-share work is more likely than other self-employment work to smooth income around shocks like job loss (Abraham, Haltiwanger, Sandusky, and Spletzer, 2018a; Koustas, 2019). In addition, OPE workers are 50 percent more likely to be receiving the EITC (30.9-32.0 percent) than other 1099 workers, despite being slightly less likely to have dependents. This may simply reflect lower household earnings levels among OPE participants than other 1099 workers. Nonetheless, these differences in the rate of claiming EITC lend themselves to further investigation.

4.2 Gender

The gender differences in alternative work documented above merit further investigation. Accordingly, Tables 2b and 2c decompose the participation rates in Table 2a into those among men and women, respectively. In every year since 2000, 1099 work has been more common among men than women. Men are more likely to do 1099 work both while primarily self-employed and while supplementing primary W2 jobs.

However, we find that participation in the 1099 economy has grown significantly more since 2000 among women than among men. Figure 6 shows that while the share of men doing 1099 work grew by only about one percentage point between 2000 and 2016, the share of women grew by two and a half percentage points over the same period.

Outside of the OPE, 1099 participation rates among women have been rapidly converging to those of men. While the share of women participating in this type of work as a primary income source and as a supplement to a job has grown substantially in recent decades, the share of men outside of the OPE has actually declined slightly. Accordingly, our results showing expansion in "offline" 1099 work since 2000 documented in the prior section was due to increased participation rates among women. Meanwhile, participation in the OPE has grown among both men and women. We find that OPE work—especially OPE work supplementing a primary job—has grown faster for men.

4.3 Age Differences

Next, we examine life-cycle patterns in independent work in more depth. In Figure 7, we examine the intensive margin of participation in the 1099 economy for workers of different ages in 2016 by plotting the share in each age group with 1099 revenues above different income thresholds.

For every income threshold we examine, the share of workers earning at least that much grows consistently until age 40, plateaus until age 62, then grows dramatically as workers enter partial or full retirement. In particular, workers become much more likely to earn small amounts of income from non-OPE 1099 work in their more advanced years.

We see a vastly different picture when examining the OPE. Participation in the OPE peaks around age 30, and declines consistently beyond age 35. However, this life-cycle pattern is driven primarily by the large number of workers who earn less than $2,500 a year on online platforms. Older workers are significantly less likely to "moonlight" in small amounts of OPE work. By contrast, the life-cycle pattern is much more muted at higher earnings level. The propensity to make a full-time-equivalent income through OPE work peaks much later, at age 40, and declines more gradually afterward. Thus, the gaps in OPE extensive margin participation rates across age groups mask key differences in intensive-margin behaviors among these groups.

Though some have speculated that the rise of the OPE might increase work opportunities for retirement-age individuals seeking self-employment work with greater flexibility, we find that this has not appeared to be the case as of 2016. By contrast, OPE work has grown dramatically among younger and prime-age workers alike.

Table 4 documents how the prevalence of 1099 work within different age groups has evolved over time. We find the lowest levels of growth in 1099 participation rates among workers approaching retirement. Whereas the prevalence of 1099 work was increasing throughout the life-cycle in 2000, these arrangements are now more common among workers aged 35-45 than among those aged 56–65. Though this is in part a reflection of the rise of OPE work, which is more common among younger workers, the OPE alone does not explain this change. In fact, outside the OPE, 1099 work has become less common among workers aged 56–65. This may in part reflect the aging of the W2 workforce.

4.4 Geographic Distribution of Alternative Work

Examining the geographic breakdown of work reveals significant differences in the propensity to do 1099 contract work across regions. Figure 8 maps the propensity to do 1099 work in and outside of the OPE. As evident in Panel (b), which maps the OPE at the zip code level, online platform work is concentrated in large, dense metropolitan areas. Moreover, even within metropolitan regions, OPE participation is highest in dense urban cores. This is unsurprising, and likely reflects the importance of market thickness in platform markets. Across large metropolitan areas, we find further differences in OPE participation rates. Among the major

urban areas, we also see considerable variation, ranging from 0.7 percent of the tax workforce in St. Louis to 2.9 percent of the workforce in the San Francisco/Oakland, CA metro area, where many gig companies were founded and are headquartered.

By contrast, work in the broader 1099 economy is not predominantly an urban phenomenon, and spatial patterns are markedly different than in the OPE. Panel (a) maps the non-OPE gig economy, this time at the county level, which improves readability of the figure. Rates of non-OPE 1099 work can be quite high in rural areas, and are typically highest in the center of the country, often exceeding 20 percent or more. Contract arrangements are also particularly high in population centers in California and Southern Florida, where 1099 employment exceeds 15 percent of the tax workforce. Among major metro areas, the rate of 1099 work in major metropolitan areas varies from 7.8 percentage of the tax workforce in Milwaukee, WI to 15.8 percentage points in Miami, FL.

Full tabulations for state and major metro areas of more than 1 million people are provided in the Appendix Tables. For each geographic area for 2016, we provide the same breakdown of the tax workforce in Table 1. We also report the size of the 1099 economy and as a share of the tax workforce by year. These tables reveal interesting heterogeneity in trends across space. For instance, the 1099 economy, as a share of the workforce, has been shrinking in West Virginia and Alaska.

5 Relationship to changes in Self-Employment

Though our primary analysis examines the 1099 economy, most prior literature measuring alternative work and gig economy trends in tax data has studied self-employment reporting (on Form 1040 Schedules C and SE) more generally (Jackson, Looney, and Ramnath, 2017; Abraham, Haltiwanger, Sandusky, and Spletzer, 2018b). Conceptually, firm-facing independent contract work reported on 1099s is a subset of self-employment—overall self-employment trends may also reflect changes in entrepreneurial or consumer-facing business activity. However, in practice, 1099 work is not always reported as self-employment activity. In this section, we examine how trends in the 1099 economy relate to the overall trends in self-employment documented in prior work.

To shed light on the previously-documented rise in self-employment earnings, Figure 9 shows how the share of the workforce with Schedule SE earnings has evolved over time. Consistent with earlier work, we find that the share of workers with self-employment income grew by about 2 percentage points between 2000 and 2014. In contrast with the trends in 1099 work presented

in Figure 2, we find that there was a significant expansion in Schedule SE work between 2007 and 2014.

To account for this difference, Figure 9 decomposes the Schedule SE workforce into individuals with 1099 revenues and those with no 1099. We find that the expansion of self-employment work from 2007 to 2014 is driven entirely by workers with no 1099s. In particular, there was a sharp increase in workers with self-employment income but no 1099 in the aftermath of the 2008 recession, most of which had dissipated by 2016.

Interestingly, the right panel of Figure 9 shows that this post-2007 spike is driven entirely by individuals who claim the Earned Income Tax Credit. Rates of self-employment, both with and without a 1099, have been flat among workers without EITC earning. Appendix Figure A4 shows that the spike in Schedule SE earnings with no 1099 and with EITC claims is most pronounced primarily among women. After the recession, there was a large inflow of individuals into this category; however, this inflow does not simply reflect a decline in self-employment earnings after the recession, since the the share of the workforce with Schedule SE earnings, no 1099 income, and no EITC claims remains constant over this period. One possibility is that, after the recession, many who were previously wage earners or out of the workforce sought to bolster their incomes with small amounts of self-employment work. Another possibility is that part of the post-2007 surge in self-employment income on Schedule SE stems from individuals manipulating self-employment income to qualify for EITC refunds after the onset of the recession. This finding merits further investigation.

Meanwhile, the share of the workforce with both Schedule SE and 1099 income in Figure 9 is notably smaller than the share of the workforce in the 1099 economy documented in Figure 2. This is particularly true in the OPE, which barely registers in Figure 9. This is because 1099-MISC non-employee compensation and 1099-K OPE income often do not show up as self-employment income on tax returns. While Figure 1 showed that about 15 percent of 1099 recipients in the workforce did not file a 1040 tax return at all, a much larger number of 1099 recipients file a 1040 return but do not report income on Schedule SE. This could occur either because workers do not file a Schedule C or do not earn above the $400 threshold for filing Schedule SE after making deductions on Schedule C. In Appendix Figure 1, we show that both cases are common. In particular, only 31 percent of OPE earners pay SECA taxes, and 43 percent do not file schedule C at all. Thus, tabulations of Schedule SE or Schedule C are likely to significantly underestimate the extent of participation in the OPE.

6 Conclusion

In this paper, we have examined the universe of tax returns in order to reconcile seemingly contradictory facts about the rise of alternative work arrangements in the United States. Using different measures of alternative work that are comparable to measures seen elsewhere in the literature, we are largely able to reconcile differences across existing studies. We pay particular attention to the role played by new types of "gig" work mediated by online platforms.

We find that while the rate of participation in the "1099 economy" has grown in recent years, essentially all of the increment is due to gig work on the Online Platform Economy (OPE). However, these new forms of 1099 work tend either to represent small amounts of income to individuals with no other employment, or supplement a primary W2 job. As a result, although more 1099s have been issued, we find that individuals are no more likely to earn a full-time living from 1099-based self-employment in 2016 than they were in 2005, consistent with findings in the May 2017 Contingent Workforce Supplement. In general, for 1099 income and self-employment more broadly, we find that the closer we move to a notion of "full" time employment, the less growth we see.

Our findings also suggest that recent growth in the OPE has had little bearing on measures of self-employment based on payers of the self-employment tax. We document that approximately only one-third of OPE workers pay self-employment taxes (whereas 55% of workers in the broader 1099 workforce pay SECA taxes), so these records exclude the majority of participants in this part of the "gig" economy. At the same time, we found that the recent surge in self-employment filings was driven primarily by workers without payments reported on 1099s. Thus, trends in self-employment measured in self-employment tax records may not reflect underlying changes in alternative work.

Our findings have potentially important implications for tax policy. As supplemental OPE income has become more common, we find that a large share of tax payers have not been reporting this income in standard ways on Schedule C. As a result, many OPE participants may either not be correctly deducting their expenses or may not be correctly reporting their supplemental income at all. These findings raise concerns that as supplemental work in non-standard arrangements becomes more common, taxpayers may face increasing burdens complying with the tax code, raised previously by Bruckner (2016).

Overall, our results offer no evidence that traditional full-time jobs are being replaced by non-employer "gig" work. However, we document that taxpayers are increasingly likely to have supplemental income from independent work—especially in the OPE. Even if the amounts are

small, the ability to smooth income around critical junctures may still be highly valuable to workers, as documented in Koustas (2019). These findings raise important questions about the reasons households participate in alternative work arrangements. Do individuals shift into non-employee relationships to obtain greater flexibility (i.e., "pull factors" that impact supply decisions) or because they lost access to a stable job (i.e., a "push factor" driven by changes in firm demand)? We leave the answer to these questions to future work.

Tables

Table 1: Components of Growth in the Tax Workforce

(a) All 1099 Gig Economy, 2000-2016

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Tax Filers							Non Tax Filers		
	No 1099			Has 1099				No 1099	Has 1099	
	No SE	Has SE		Has SE		No SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
2000	123,419,643	2,745,274	4,276,678	4,206,095	4,112,352	5,079,142	1,489,674	11,680,667	732,123	1,011,852
2001	124,316,095	2,848,030	4,450,329	4,075,372	4,130,232	4,939,932	1,637,864	11,514,118	601,180	903,958
2002	123,518,165	2,716,126	4,428,613	4,179,409	4,335,830	5,100,634	1,793,859	11,724,515	667,772	1,016,479
2003	122,919,974	2,811,445	4,654,435	4,311,240	4,534,488	5,097,447	1,734,151	11,729,295	733,429	1,186,453
2004	123,655,347	2,947,512	4,834,179	4,546,345	4,688,548	5,149,209	1,679,267	12,057,290	812,738	1,295,975
2005	125,113,822	3,187,724	5,023,354	4,827,942	4,794,365	5,090,867	1,679,665	12,384,389	824,020	1,257,981
2006	127,391,493	3,234,424	5,067,287	5,061,816	4,923,540	5,243,676	1,746,961	12,488,887	849,675	1,304,209
2007	130,898,673	3,363,332	5,185,407	5,239,113	4,976,941	5,373,985	1,984,462	11,183,086	707,051	1,123,443
2008	129,981,204	3,322,245	5,203,319	5,104,718	4,814,209	5,405,482	1,879,266	12,099,444	786,953	1,268,454
2009	126,359,456	3,306,629	5,528,283	4,839,026	4,850,692	4,735,172	1,896,687	12,231,118	658,731	1,256,697
2010	126,100,472	3,426,999	5,707,941	4,825,687	4,895,241	4,893,957	1,952,974	11,948,580	662,553	1,247,160
2011	127,281,343	3,542,833	5,807,259	4,972,607	5,048,259	5,047,608	1,985,205	11,458,297	704,087	1,299,731
2012	128,260,985	3,586,270	5,828,240	5,064,147	5,145,971	5,196,550	1,942,307	12,213,645	791,588	1,397,978
2013	129,446,289	3,621,036	5,825,625	5,116,191	5,203,945	5,319,501	1,954,042	12,903,653	863,132	1,469,608
2014	130,314,642	3,707,083	5,785,643	5,428,251	5,342,041	5,477,755	1,952,899	13,737,587	976,284	1,579,241
2015	131,292,819	3,670,004	5,688,303	5,626,109	5,417,213	5,967,346	1,990,319	14,585,468	1,137,363	1,713,472
2016	131,321,676	3,612,226	5,538,117	5,847,087	5,467,799	6,336,029	1,998,963	16,331,090	1,415,418	1,961,044

Note: Table reports the number of unique individuals in each of the categories specified in the column headings. Categories are mutually exclusive. "Tax Filer" refers to filing an individual income tax return (Form 1040). "1099" refers to receiving information returns with non-employee compensation and/or a 1099K from an online gig economy platform. See text for more details on how firms in the OPE are identified. "SE" refers to filing Schedule SE. "W2" refers to receipt of a Form W-2 information return.

(b) OPE 1099's, 2012-2016

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
2012	6,000	6,393	6,798	2,301	994	1,251
	3,832	*3,899*	*5,094*	*1,618*	*634*	*760*
2013	15,160	19,736	15,939	4,670	2,151	3,036
	10,480	*12,994*	*12,492*	*3,272*	*1,428*	*2,076*
2014	73,346	64,304	120,332	18,694	14,718	15,286
	53,401	*42,216*	*105,196*	*14,329*	*11,415*	*12,005*
2015	231,119	148,445	503,657	58,812	70,041	56,950
	169,540	*94,798*	*452,276*	*46,365*	*56,538*	*44,947*
2016	429,259	248,774	944,252	105,140	178,689	125,570
	325,330	*166,021*	*858,068*	*85,710*	*147,589*	*100,932*

Note: First row is for "Any OPE" 1099, defined as individuals who receive a 1099 from the OPE, but may also receive another 1099 outside the OPE. Row in *italics* is the "Only OPE" population, who receive a 1099 only from the OPE. See text for more details on how firms in the OPE are identified. See notes for Table 1(a) for definitions of column headings.

Table 2: Components of Growth by Earnings Levels, 2000-2016

(a) All 1099 Gig Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Earnings Primarily from Self-Employment						Earnings Primarily from Wages					
	Earned Less than $15,000			Earned More than $15,000			Earned Less than $15,000			Earned More than $15,000		
	Total	OPE		Total	OPE		Total	OPE		Total	OPE	
	1099	Any	Only	1099	Any	Only	1099	Any	Only	1099	Any	Only
2000	2,297,306	-	-	2,895,316	-	-	2,411,350	-	-	6,524,911	-	-
	1.46	*0*	*0*	*1.84*	*0*	*0*	*1.53*	*0*	*0*	*4.14*	*0*	*0*
2001	2,310,105	-	-	2,850,939	-	-	2,288,074	-	-	6,296,752	-	-
	1.46	*0*	*0*	*1.80*	*0*	*0*	*1.44*	*0*	*0*	*3.97*	*0*	*0*
2002	2,468,601	-	-	2,938,827	-	-	2,447,675	-	-	6,427,622	-	-
	1.56	*0*	*0*	*1.85*	*0*	*0*	*1.54*	*0*	*0*	*4.06*	*0*	*0*
2003	2,611,337	-	-	3,034,777	-	-	2,518,811	-	-	6,510,657	-	-
	1.65	*0*	*0*	*1.91*	*0*	*0*	*1.59*	*0*	*0*	*4.11*	*0*	*0*
2004	2,696,305	-	-	3,170,149	-	-	2,593,808	-	-	6,735,576	-	-
	1.68	*0*	*0*	*1.98*	*0*	*0*	*1.62*	*0*	*0*	*4.20*	*0*	*0*
2005	2,758,339	-	-	3,267,299	-	-	2,617,103	-	-	6,893,451	-	-
	1.69	*0*	*0*	*2.01*	*0*	*0*	*1.61*	*0*	*0*	*4.23*	*0*	*0*
2006	2,879,545	-	-	3,319,579	-	-	2,691,196	-	-	7,187,214	-	-
	1.73	*0*	*0*	*2*	*0*	*0*	*1.62*	*0*	*0*	*4.33*	*0*	*0*
2007	3,020,850	-	-	3,247,173	-	-	2,698,330	-	-	7,329,609	-	-
	1.79	*0*	*0*	*1.92*	*0*	*0*	*1.60*	*0*	*0*	*4.34*	*0*	*0*
2008	3,019,481	-	-	3,031,155	-	-	2,744,712	-	-	7,314,949	-	-
	1.79	*0*	*0*	*1.80*	*0*	*0*	*1.63*	*0*	*0*	*4.34*	*0*	*0*
2009	3,119,093	-	-	2,926,108	-	-	2,466,363	-	-	6,570,921	-	-
	1.90	*0*	*0*	*1.78*	*0*	*0*	*1.50*	*0*	*0*	*4*	*0*	*0*
2010	3,194,019	-	-	2,903,352	-	-	2,571,841	-	-	6,607,119	-	-
	1.94	*0*	*0*	*1.77*	*0*	*0*	*1.56*	*0*	*0*	*4.02*	*0*	*0*
2011	3,230,712	-	-	3,055,119	-	-	2,655,260	-	-	6,830,230	-	-
	1.95	*0*	*0*	*1.84*	*0*	*0*	*1.60*	*0*	*0*	*4.12*	*0*	*0*
2012	3,256,356	4,826	3,112	3,152,603	3,207	1,568	2,723,394	4,538	3,272	7,064,688	7,612	5,505
	1.94	*0*	*0*	*1.88*	*0*	*0*	*1.62*	*0*	*0*	*4.20*	*0*	*0*
2013	3,308,679	14,095	9,693	3,159,275	9,810	5,542	2,780,860	9,869	7,298	7,252,744	19,210	14,860
	1.94	*0.01*	*0.01*	*1.86*	*0.01*	*0*	*1.63*	*0.01*	*0*	*4.26*	*0.01*	*0.01*
2014	3,394,620	49,961	34,386	3,264,579	32,567	18,893	2,880,824	54,803	43,378	7,682,982	135,362	115,565
	1.97	*0.03*	*0.02*	*1.89*	*0.02*	*0.01*	*1.67*	*0.03*	*0.03*	*4.45*	*0.08*	*0.07*
2015	3,401,478	125,162	84,301	3,354,062	75,287	41,493	3,003,340	192,817	156,873	8,387,912	559,979	490,470
	1.94	*0.07*	*0.05*	*1.91*	*0.04*	*0.02*	*1.71*	*0.11*	*0.09*	*4.78*	*0.32*	*0.28*
2016	3,462,829	220,005	154,400	3,362,119	122,385	70,610	3,219,913	391,355	324,737	9,020,171	1,067,193	947,236
	1.95	*0.12*	*0.09*	*1.89*	*0.07*	*0.04*	*1.81*	*0.22*	*0.18*	*5.07*	*0.60*	*0.53*

Note: Table reports the number of unique individuals in each of the categories specified in the column headings. Row in *italics* reports the preceding row as a share of the tax workforce. The tax workforce is defined as tax filers with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income

refers to receipt of a W2 information return. "1099" refers to receiving information returns with non-employee compensation and/or a 1099K from an online gig economy platform. See text for more details on how firms in the OPE are identified. "Earnings Primarily from Self-Employment" defined as having the majority of Form W-2 wage plus Schedule SE earnings coming from Schedule SE; "Earnings Primarily from Wages" is defined as the complement. To determine $15,000 or more in total earnings (wages plus Schedule SE), earnings are adjusted for inflation using the Personal Consumption Expenditures (PCE) Implicit Price Deflator. "Any OPE" defined as individuals who receive a 1099 from the OPE, but may also receive another 1099 outside the OPE. "Only OPE" receive a 1099 only from the OPE. Counts in the OPE before 2012 are suppressed due to small sample sizes, but amount to less than 0.00 percent of the tax force.

(b) Men

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Earnings Primarily from Self-Employment						Earnings Primarily from Wages					
	Earned Less than $15,000			Earned More than $15,000			Earned Less than $15,000			Earned More than $15,000		
	Total	OPE		Total	OPE		Total	OPE		Total	OPE	
	1099	Any	Only	1099	Any	Only	1099	Any	Only	1099	Any	Only
2000	1,330,733	-	-	2,140,054	-	-	1,319,127	-	-	4,265,298	-	-
	1.60	*0*	*0*	*2.58*	*0*	*0*	*1.59*	*0*	*0*	*5.14*	*0*	*0*
2001	1,325,725	-	-	2,079,308	-	-	1,250,063	-	-	4,039,699	-	-
	1.59	*0*	*0*	*2.49*	*0*	*0*	*1.50*	*0*	*0*	*4.85*	*0*	*0*
2002	1,418,559	-	-	2,119,142	-	-	1,351,604	-	-	4,089,761	-	-
	1.71	*0*	*0*	*2.55*	*0*	*0*	*1.63*	*0*	*0*	*4.92*	*0*	*0*
2003	1,493,089	-	-	2,176,153	-	-	1,386,144	-	-	4,117,013	-	-
	1.80	*0*	*0*	*2.62*	*0*	*0*	*1.67*	*0*	*0*	*4.96*	*0*	*0*
2004	1,533,534	-	-	2,258,730	-	-	1,421,984	-	-	4,253,691	-	-
	1.83	*0*	*0*	*2.69*	*0*	*0*	*1.70*	*0*	*0*	*5.07*	*0*	*0*
2005	1,545,226	-	-	2,308,267	-	-	1,417,106	-	-	4,318,349	-	-
	1.82	*0*	*0*	*2.72*	*0*	*0*	*1.67*	*0*	*0*	*5.08*	*0*	*0*
2006	1,596,333	-	-	2,334,458	-	-	1,442,857	-	-	4,452,973	-	-
	1.85	*0*	*0*	*2.70*	*0*	*0*	*1.67*	*0*	*0*	*5.15*	*0*	*0*
2007	1,682,068	-	-	2,275,668	-	-	1,438,090	-	-	4,494,962	-	-
	1.91	*0*	*0*	*2.59*	*0*	*0*	*1.64*	*0*	*0*	*5.12*	*0*	*0*
2008	1,665,524	-	-	2,107,363	-	-	1,447,492	-	-	4,432,623	-	-
	1.90	*0*	*0*	*2.41*	*0*	*0*	*1.65*	*0*	*0*	*5.07*	*0*	*0*
2009	1,729,018	-	-	2,007,567	-	-	1,319,703	-	-	3,937,126	-	-
	2.04	*0*	*0*	*2.37*	*0*	*0*	*1.55*	*0*	*0*	*4.64*	*0*	*0*
2010	1,769,549	-	-	1,993,845	-	-	1,372,510	-	-	3,951,848	-	-
	2.09	*0*	*0*	*2.35*	*0*	*0*	*1.62*	*0*	*0*	*4.66*	*0*	*0*
2011	1,768,140	-	-	2,093,457	-	-	1,420,956	-	-	4,094,529	-	-
	2.06	*0*	*0*	*2.44*	*0*	*0*	*1.66*	*0*	*0*	*4.77*	*0*	*0*
2012	1,764,957	3,042	1,912	2,143,769	2,626	1,321	1,437,283	2,293	1,565	4,213,677	4,151	2,914
	2.03	*0*	*0*	*2.47*	*0*	*0*	*1.65*	*0*	*0*	*4.85*	*0*	*0*
2013	1,787,636	11,238	7,719	2,133,385	8,805	5,108	1,465,627	6,126	4,453	4,305,214	13,064	10,205
	2.03	*0.01*	*0.01*	*2.42*	*0.01*	*0.01*	*1.66*	*0.01*	*0.01*	*4.88*	*0.01*	*0.01*
2014	1,822,447	40,846	28,087	2,198,953	29,274	17,174	1,514,408	38,260	30,331	4,556,407	106,139	91,255
	2.04	*0.05*	*0.03*	*2.46*	*0.03*	*0.02*	*1.69*	*0.04*	*0.03*	*5.10*	*0.12*	*0.10*
2015	1,825,947	97,584	66,153	2,226,020	63,210	35,303	1,589,739	129,463	104,536	4,955,344	412,636	361,512
	2.01	*0.11*	*0.07*	*2.45*	*0.07*	*0.04*	*1.75*	*0.14*	*0.12*	*5.46*	*0.45*	*0.40*
2016	1,858,782	166,250	116,879	2,215,783	100,735	58,623	1,727,086	255,100	209,730	5,332,912	765,074	678,484
	2.02	*0.18*	*0.13*	*2.41*	*0.11*	*0.06*	*1.88*	*0.28*	*0.23*	*5.81*	*0.83*	*0.74*

Note: Table 2(a) reports the same tabulations as Table 1(a), except restricted to men. Note that the sum of men and women may not equal the totals reported in Table 2(a) since gender is not always known.

(c) Women

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Earnings Primarily from Self-Employment						Earnings Primarily from Wages					
	Earned Less than $15,000			Earned More than $15,000			Earned Less than $15,000			Earned More than $15,000		
	Total	OPE		Total	OPE		Total	OPE		Total	OPE	
	1099	Any	Only	1099	Any	Only	1099	Any	Only	1099	Any	Only
2000	964,491	-	-	754,032	-	-	1,091,342	-	-	2,258,023	-	-
	1.29	*0*	*0*	*1.01*	*0*	*0*	*1.46*	*0*	*0*	*3.03*	*0*	*0*
2001	982,110	-	-	770,270	-	-	1,037,122	-	-	2,255,453	-	-
	1.31	*0*	*0*	*1.03*	*0*	*0*	*1.38*	*0*	*0*	*3*	*0*	*0*
2002	1,047,379	-	-	818,209	-	-	1,095,070	-	-	2,336,129	-	-
	1.39	*0*	*0*	*1.09*	*0*	*0*	*1.46*	*0*	*0*	*3.10*	*0*	*0*
2003	1,114,800	-	-	856,780	-	-	1,131,567	-	-	2,391,678	-	-
	1.48	*0*	*0*	*1.14*	*0*	*0*	*1.50*	*0*	*0*	*3.17*	*0*	*0*
2004	1,158,691	-	-	909,251	-	-	1,170,642	-	-	2,479,864	-	-
	1.52	*0*	*0*	*1.19*	*0*	*0*	*1.53*	*0*	*0*	*3.24*	*0*	*0*
2005	1,208,657	-	-	956,557	-	-	1,198,985	-	-	2,573,053	-	-
	1.55	*0*	*0*	*1.23*	*0*	*0*	*1.54*	*0*	*0*	*3.31*	*0*	*0*
2006	1,277,587	-	-	982,155	-	-	1,247,067	-	-	2,731,753	-	-
	1.61	*0*	*0*	*1.24*	*0*	*0*	*1.57*	*0*	*0*	*3.44*	*0*	*0*
2007	1,333,202	-	-	968,660	-	-	1,258,939	-	-	2,832,149	-	-
	1.65	*0*	*0*	*1.20*	*0*	*0*	*1.56*	*0*	*0*	*3.50*	*0*	*0*
2008	1,348,110	-	-	921,123	-	-	1,295,826	-	-	2,879,742	-	-
	1.66	*0*	*0*	*1.14*	*0*	*0*	*1.60*	*0*	*0*	*3.56*	*0*	*0*
2009	1,384,162	-	-	915,578	-	-	1,145,299	-	-	2,631,533	-	-
	1.74	*0*	*0*	*1.15*	*0*	*0*	*1.44*	*0*	*0*	*3.31*	*0*	*0*
2010	1,418,460	-	-	906,461	-	-	1,198,036	-	-	2,652,937	-	-
	1.78	*0*	*0*	*1.14*	*0*	*0*	*1.51*	*0*	*0*	*3.34*	*0*	*0*
2011	1,456,517	-	-	958,159	-	-	1,232,964	-	-	2,733,278	-	-
	1.82	*0*	*0*	*1.20*	*0*	*0*	*1.54*	*0*	*0*	*3.42*	*0*	*0*
2012	1,485,601	1,780	1,198	1,005,091	579	246	1,284,739	2,244	1,706	2,848,542	3,458	2,588
	1.84	*0*	*0*	*1.24*	*0*	*0*	*1.59*	*0*	*0*	*3.52*	*0*	*0*
2013	1,515,568	2,848	1,969	1,022,600	1,003	433	1,314,048	3,740	2,843	2,945,229	6,142	4,651
	1.85	*0*	*0*	*1.25*	*0*	*0*	*1.60*	*0*	*0*	*3.59*	*0.01*	*0.01*
2014	1,567,408	9,105	6,292	1,062,642	3,290	1,716	1,365,452	16,538	13,043	3,124,463	29,206	24,295
	1.88	*0.01*	*0.01*	*1.28*	*0*	*0*	*1.64*	*0.02*	*0.02*	*3.75*	*0.04*	*0.03*
2015	1,571,895	27,554	18,133	1,125,612	12,065	6,186	1,412,841	63,339	52,326	3,430,592	147,281	128,901
	1.86	*0.03*	*0.02*	*1.33*	*0.01*	*0.01*	*1.67*	*0.07*	*0.06*	*4.06*	*0.17*	*0.15*
2016	1,601,300	53,709	37,489	1,144,492	21,628	11,978	1,492,138	136,227	114,983	3,685,471	302,020	268,663
	1.86	*0.06*	*0.04*	*1.33*	*0.03*	*0.01*	*1.74*	*0.16*	*0.13*	*4.29*	*0.35*	*0.31*

Note: Table 2(a) reports the same tabulations as Table 1(a), except restricted to women. Note that the sum of men and women may not equal the totals reported in Table 2(a) since gender is not always known.

Table 3: Descriptive Statistics of Tax Workforce, 2016

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
							Earnings Primarily from Self-Employment			
	Tax Workforce	W2-Only	Non-OPE 1099	Any OPE	Only OPE	SE No 1099	Non-OPE 1099	Any OPE	Only OPE	SE No 1099
Male	51.6	50.5	56.2	71.3	70.9	54.4	58.4	77.9	78.0	53.4
Age 15-25	18.4	20.2	10.1	14.6	15.4	6.6	6.7	7.8	7.9	6.0
Age 26-55	61.1	60.5	62.7	74.8	74.5	64.9	59.9	75.5	74.9	63.7
Age 55-75	20.5	19.3	27.2	10.6	10.2	28.5	33.4	16.6	17.2	30.3
Married on 1040	44.5	42.7	54.3	35.3	34.6	56.3	59.7	46.6	46.2	54.9
% 2nd Earner | Married	38.1	38.6	35.9	35.1	34.3	37.5	45.9	45.3	46.4	41.2
Has Dependents on 1040	38.4	37.0	41.2	40.3	40.4	53.7	45.4	51.4	52.1	53.7
EITC Claiment	17.0	15.1	20.4	32.0	30.9	36.3	32.3	61.7	64.0	41.3
UI Receipt	4.2	4.5	3.2	7.1	7.3	1.9	1.1	3.1	3.3	1.2
SS Receipt	6.0	5.3	10.0	3.0	3.0	9.3	13.3	5.0	5.5	10.7
Other Income>0	5.3	4.3	11.5	7.1	6.8	8.1	8.9	6.3	5.8	7.0
Other Income≥1099s	-	-	7.0	3.7	4.2	-	3.4	1.6	2.0	-
Total Wages>W2s	14.8	15.4	12.9	15.4	15.9	9.3	6.0	7.2	7.4	6.5
Total Wages≥W2s+1099s	-	-	2.3	2.9	3.2	-	1.3	1.7	2.2	-

Addendum: Group Size (Count)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
							Earnings Primarily from Self-Employment			
	Tax Workforce	W2-Only	Non-OPE 1099	Any OPE	Only OPE	SE No 1099	Non-OPE 1099	Any OPE	Only OPE	SE No 1099
Group Size (Count)	175,764,437	146,308,328	18,630,580	1,900,576	1,578,416	8,924,953	6,269,289	341,032	224,035	6,664,088

Table reports the mean value specified in each row for the population specified in the column header. For the purposes of this table, population is restricted to workers with non-missing gender and age, aged less than 76 years. The tax workforce is defined as tax filers with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. "1099" refers to receiving information returns with non-employee compensation and/or a 1099K from an online gig economy platform. See text for more details on how firms in the OPE are identified. Columns (7)-(10) reports the same tabulations as Columns (3)-(6), restricted to the population with"Earnings Primarily from Self-Employment," defined as having the majority of Form W-2 wage plus Schedule SE earnings coming from Schedule SE.

Table 4: 1099 Gig Growth by Age, 2000-2016

(a) All 1099 Gig Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	16-25	26-35	36-45	46-55	56-65	66-75	75+
2000	1,490,260	3,179,965	4,214,789	3,584,701	1,985,121	839,794	270,399
	4.82	*9.16*	*10.84*	*11.69*	*13.03*	*17.80*	*21.02*
2001	1,463,973	3,087,319	4,102,361	3,606,745	1,981,604	826,006	269,918
	4.75	*9.01*	*10.59*	*11.32*	*12.64*	*17.57*	*21.79*
2002	1,547,080	3,204,946	4,204,739	3,780,489	2,142,104	865,475	289,870
	5.06	*9.49*	*11.01*	*11.62*	*13.02*	*18.46*	*23.48*
2003	1,607,436	3,242,368	4,191,790	3,845,635	2,290,996	890,567	301,067
	5.32	*9.69*	*11.18*	*11.68*	*13.10*	*18.62*	*23.85*
2004	1,682,349	3,292,605	4,206,347	3,948,446	2,441,807	939,943	323,594
	5.49	*9.86*	*11.34*	*11.76*	*13.23*	*18.82*	*23.94*
2005	1,740,891	3,333,095	4,220,730	4,023,016	2,553,956	967,619	335,667
	5.56	*9.96*	*11.45*	*11.70*	*13.12*	*18.63*	*23.92*
2006	1,822,387	3,427,538	4,292,659	4,153,921	2,700,016	1,027,235	356,475
	5.70	*10.16*	*11.65*	*11.80*	*13.19*	*18.87*	*24.10*
2007	1,843,516	3,443,070	4,303,014	4,250,110	2,857,793	1,126,531	411,707
	5.71	*10.09*	*11.70*	*11.82*	*13.25*	*19.56*	*26.26*
2008	1,809,329	3,364,892	4,140,038	4,215,068	2,895,559	1,139,788	384,702
	5.74	*9.82*	*11.50*	*11.66*	*12.99*	*18.88*	*24.35*
2009	1,556,970	3,107,752	3,841,256	4,061,333	2,856,168	1,147,158	373,431
	5.31	*9.22*	*11.11*	*11.36*	*12.60*	*18.52*	*23.90*
2010	1,602,374	3,165,164	3,794,622	4,093,561	2,956,551	1,197,358	386,805
	5.51	*9.33*	*11.22*	*11.48*	*12.66*	*18.68*	*24.09*
2011	1,655,720	3,289,831	3,824,103	4,147,709	3,115,538	1,276,765	413,415
	5.65	*9.52*	*11.41*	*11.66*	*12.91*	*19.40*	*24.82*
2012	1,699,591	3,398,277	3,852,675	4,153,118	3,200,997	1,371,874	430,473
	5.70	*9.64*	*11.53*	*11.72*	*12.87*	*19.49*	*25.26*
2013	1,747,801	3,502,165	3,879,927	4,119,793	3,245,571	1,477,662	451,971
	5.73	*9.74*	*11.59*	*11.74*	*12.77*	*19.59*	*25.65*
2014	1,844,573	3,729,371	4,009,044	4,178,975	3,343,494	1,566,769	474,054
	5.92	*10.12*	*11.92*	*11.96*	*12.83*	*19.98*	*27.28*
2015	2,008,726	4,052,041	4,191,186	4,266,005	3,442,644	1,652,039	494,734
	6.33	*10.74*	*12.38*	*12.24*	*12.89*	*20.12*	*27.75*
2016	2,158,199	4,360,603	4,375,125	4,368,343	3,539,555	1,724,226	510,219
	6.74	*11.31*	*12.85*	*12.53*	*12.92*	*20.03*	*27.61*

Note: Table reports the number of unique individuals in each of the age brackets specified in the column headings. Row in *italics* reports the preceding row as the share of the tax workforce. The tax workforce is defined as tax filers with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. "1099" refers to receiving information returns with non-employee compensation and/or a 1099K from an online gig economy platform. See text for more details on how firms in the OPE are identified. Note that the row sum may not equal the row totals in other tables since age is not always known.

(b) Any OPE 1099, 2012-2016

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	16-25	26-35	36-45	46-55	56-65	66-75	75+
2012	3,213	6,421	4,879	4,155	2,688	864	251
	0.01	*0.02*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
2013	6,920	17,889	14,020	10,900	5,905	1,588	416
	0.02	*0.05*	*0.04*	*0.03*	*0.02*	*0.02*	*0.02*
2014	33,921	99,618	73,953	52,374	25,332	5,399	760
	0.11	*0.27*	*0.22*	*0.15*	*0.10*	*0.07*	*0.04*
2015	138,533	341,535	247,492	175,712	85,019	21,076	2,608
	0.44	*0.91*	*0.73*	*0.50*	*0.32*	*0.26*	*0.15*
2016	277,355	637,648	456,358	327,060	160,117	42,135	5,243
	0.87	*1.65*	*1.34*	*0.94*	*0.58*	*0.49*	*0.28*

Note: Table 3(a) reports the same tabulations as Table 3(a), except restricted to "Any OPE" 1099 population, defined as individuals who receive a 1099 from the OPE, but may also receive another 1099 outside the OPE.

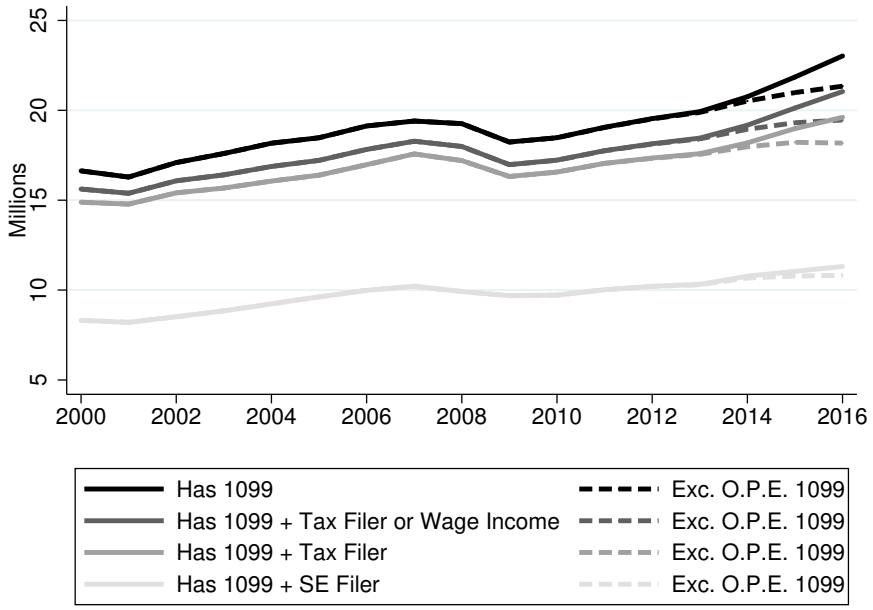
(c) Only OPE 1099, 2012-2016

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
Age	16-25	26-35	36-45	46-55	56-65	66-75	75+
2012	2,494	4,439	3,161	2,536	1,685	577	176
	0.01	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
2013	5,363	13,044	9,797	7,257	3,858	1,061	282
	0.02	*0.04*	*0.03*	*0.02*	*0.02*	*0.01*	*0.02*
2014	28,152	79,612	57,265	38,809	18,314	3,892	494
	0.09	*0.22*	*0.17*	*0.11*	*0.07*	*0.05*	*0.03*
2015	119,191	282,263	198,877	136,785	64,379	16,101	1,852
	0.38	*0.75*	*0.59*	*0.39*	*0.24*	*0.20*	*0.10*
2016	242,252	537,399	375,409	263,195	126,555	33,686	4,073
	0.76	*1.39*	*1.10*	*0.76*	*0.46*	*0.39*	*0.22*

Note: Table 3(b) reports the same tabulations as Table 3(a), except restricted to the "Only OPE" 1099 population, defined as individuals who receive a 1099 only from the OPE. See text for more details on how firms in the OPE are identified.

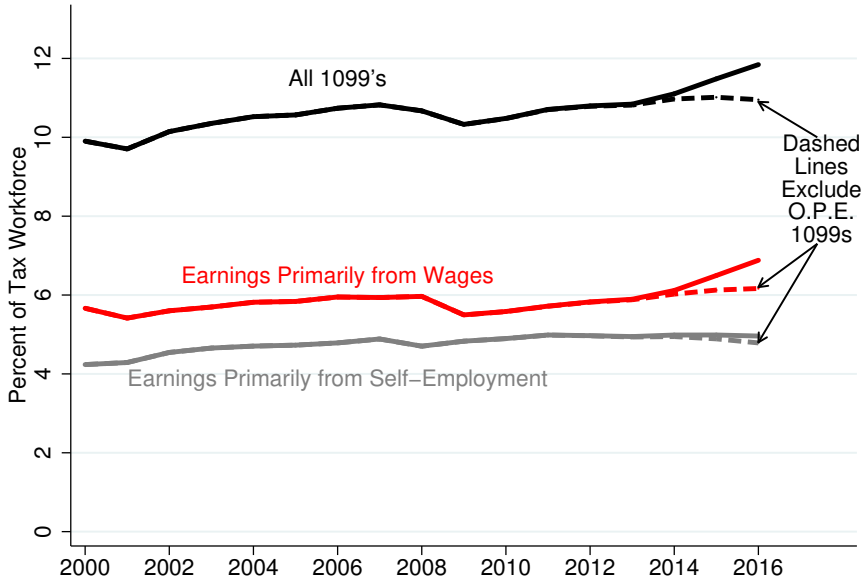
Figures

Figure 1: Individuals in the 1099 and Gig Economy (Millions), By Filing Status, 2000-2016



Note: Figure shows the number of unique individuals receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform. Dashed lines exclude 1099s from the Online Platform Economy (OPE). See text for more details on how firms in the OPE are identified. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. SE Filer refers to filing Schedule SE.

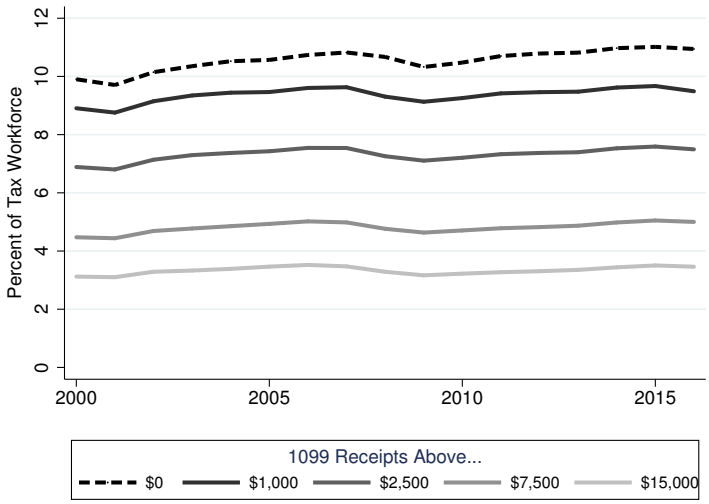
Figure 2: The 1099 Gig Economy, as a Share of the Tax Workforce, 2000-2016



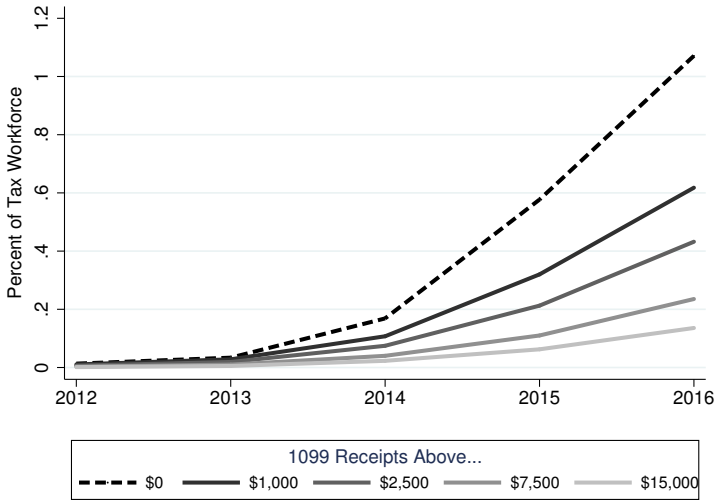
Note: Figure shows the number of unique individuals receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform, as a percentage of the tax workforce. The tax workforce is defined as filers of 1040 with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. SE Filer refers to filing Schedule SE. Dashed lines exclude 1099s from the Online Platform Economy (OPE). See text for more details on how firms in the OPE are identified. "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.

Figure 3: The 1099 Gig Economy, as a Share of the Tax Workforce, by 1099 Receipt Amounts and Year

(a) 1099 MISC Non-Employee Compensation, Excluding 1099's from the Online Platform Economy, 2000-2016



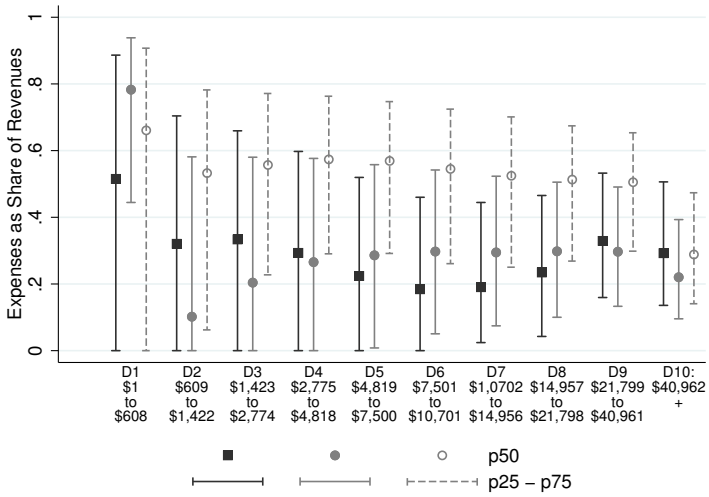
(b) Online Platform Economy Only, 2012-2016



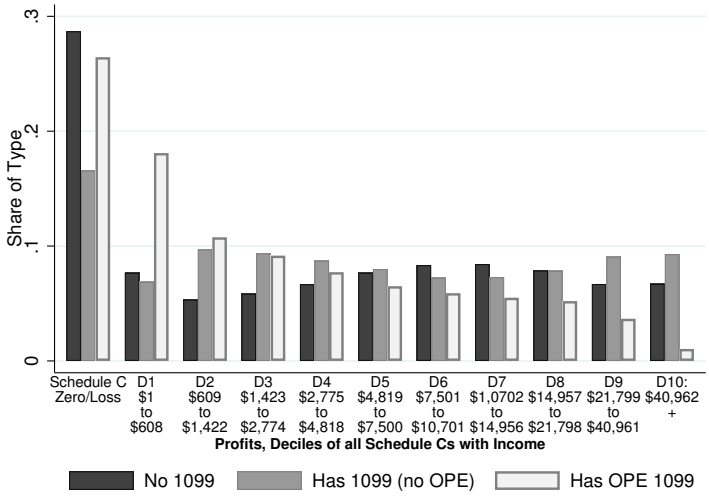
Note: Figure shows the number of unique individual receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform, as as a share of the tax workforce, for the income thresholds specified in the figure legend. The tax workforce is defined as filers of 1040 with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. SE Filer refers to filing Schedule SE. Income thresholds are adjusted for inflation using the Personal Consumption Expenditures (PCE) Implicit Price Deflator. Panel A excludes online gig platforms. Panel B is for the online platform economy only. See text for more details on how firms in the OPE are identified.

Figure 4: Expensing Behavior

(a) Median and Interquartile Range of Expense Share of Revenues, by Profit Decile (Schedule C with Positive Profits)

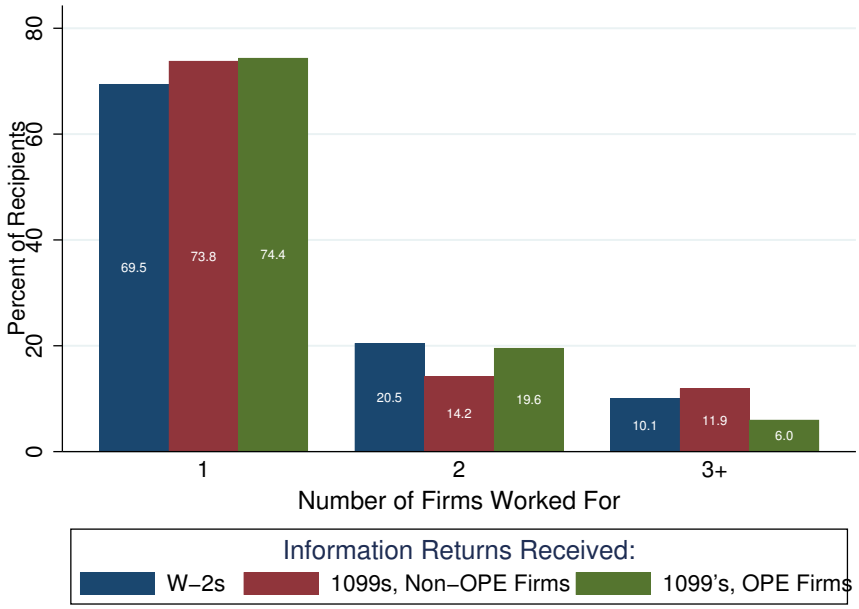


(b) Distribution of Types Across Profit Bins



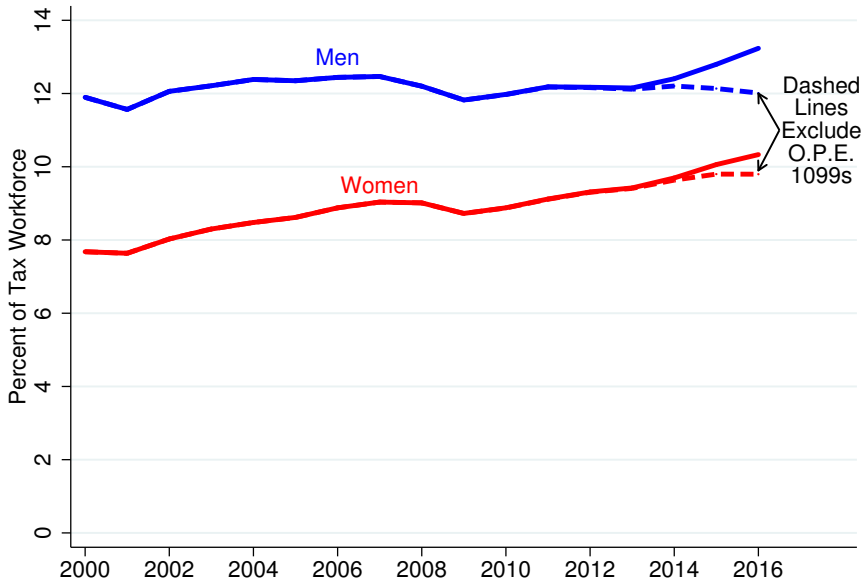
Note: Panel (a) shows the median and interquartile range of the expenses reported on Schedule C, as a share of revenues reported on Schedule C, by decile of profits (revenues - expenses), for each group specified in the figure legend. Panel (b) shows the distribution of each group across profit deciles.

Figure 5: Number of Information Returns Received, 2016



Note: The blue bar reports the distribution of the number of firms that individuals receive Form W-2 from, if they receive a Form W-2, as a percent of the total number who receive Form W-2. The red bar reports the distribution of the number of firms outside the OPE that individuals receive 1099-MISC non-employee compensation from, if they receive Form 1099-MISC non-employee compensation from a non-OPE firm, as a percent of the total number who receive Form 1099-MISC non-employee compensation from a non-OPE firm. The green bar reports the distribution of the number of firms in the OPE that individuals receives 1099-MISC non-employee compensation or 1099-K gross income, if they receive Form 1099-MISC non-employee compensation or 1099-K gross income from an OPE firm, as a percent of the total number who receive Form 1099-MISC non-employee compensation or 1099-K gross income from an OPE firm. See text for more details on how firms in the OPE are identified. Individuals can appear in the tabulations for more than one bar if they receive information returns from multiple of these groups.

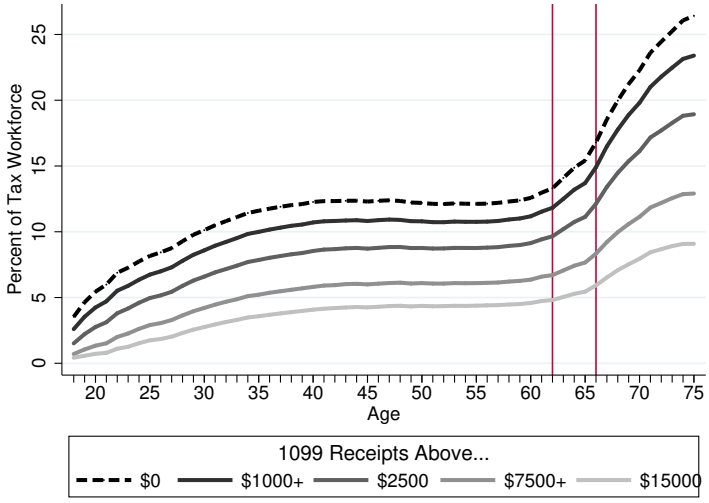
Figure 6: The 1099 Gig Economy, as a Share of the Tax Workforce, by Gender, 2000-2016



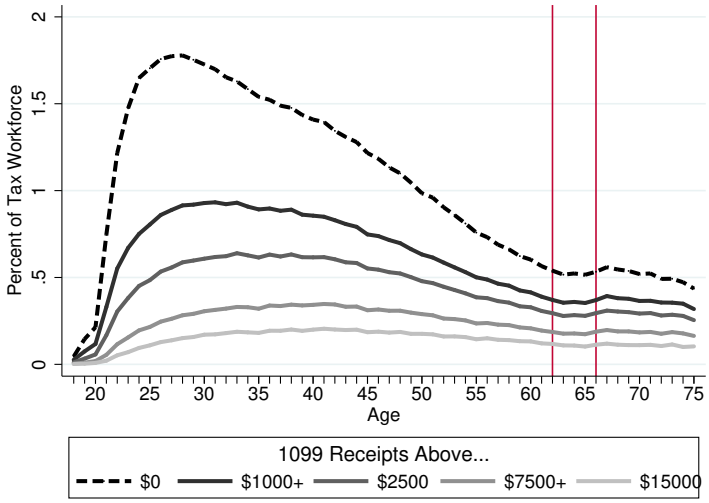
Note: See notes for Figure 2.

Figure 7: Individuals in the 1099 Gig Economy, as a Share of the Tax Workforce, by 1099 Receipt Amounts and Age, 2016

(a) 1099 MISC Non-Employee Compensation, Excluding 1099's from the Online Platform Economy



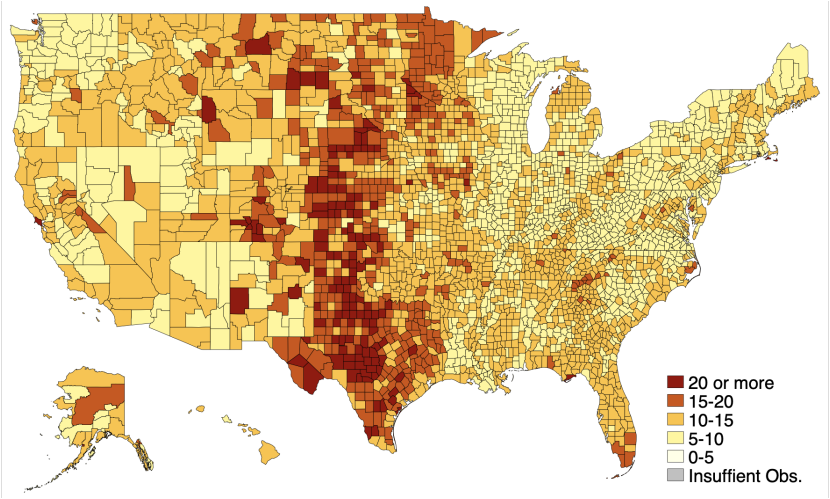
(b) Online Platform Economy Only



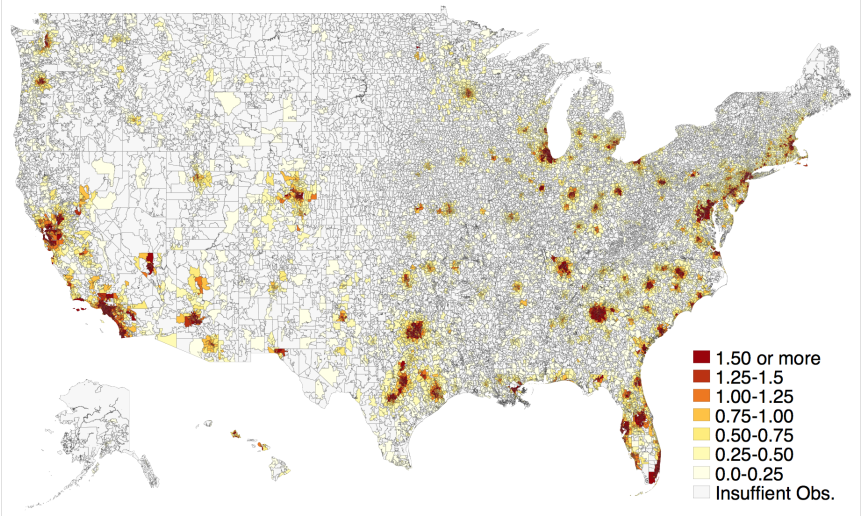
Note: Figure shows the number of unique individuals as a share of the tax workforce receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform, for income thresholds (in 2016 constant dollars) specified in the legend and age groups specified on the x-axis. Income is adjusted for inflation using the Personal Consumption Expenditures (PCE) Implicit Price Deflator. Panel A excludes online gig platforms. Panel B is for the online platform economy only. See text for more details on how firms in the OPE are identified.

Figure 8: Geographic Distribution of 1099 Independent Contracting

(a) 1099 MISC Non-Employee Compensation, Excluding 1099's from the Online Platform Economy, As a Percent of the Tax Workforce, County Level

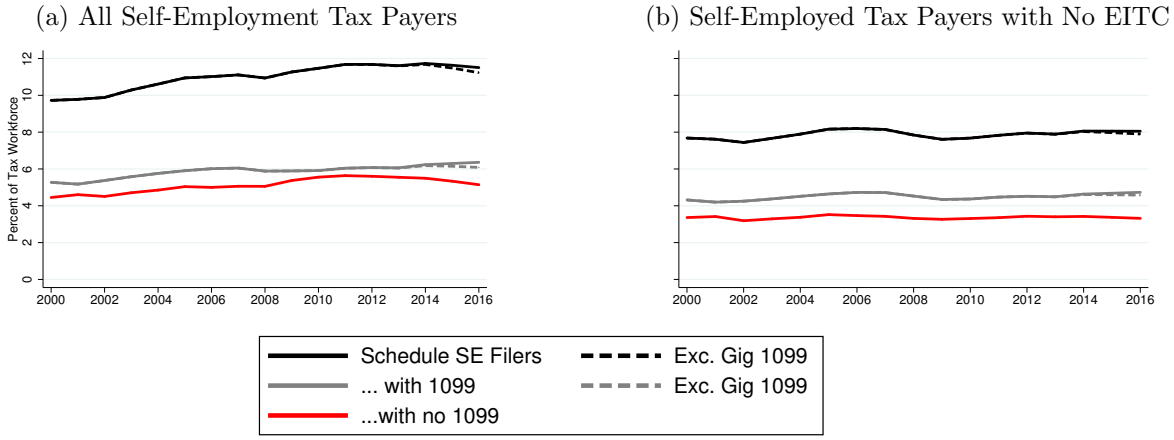


(b) Online Platform Economy Only, As a Percent of the Tax Workforce, 5 Digit Zipcode



Note: Panel (a) shows the number of unique individuals living in the county receiving 1099 MISC information returns with non-employee compensation, as a percentage of the tax workforce. Panel (b) shows the number of unique individuals living in the zipcode receiving 1099 MISC information returns with non-employee compensation from an online gig economy platform and/or a 1099K from an online gig economy platform, as a percentage of the tax workforce. See text for more details on how firms in the OPE are identified. The tax workforce is defined as filers of 1040 with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. SE Filer refers to filing Schedule SE.

Figure 9: Self-Employment Tax Payers, as a Share of the Tax Workforce, 2000-2016



Note: Figure shows the number of unique individuals filing Schedule SE, as a share of the tax workforce. The tax workforce is defined as tax filers with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. Dashed lines exclude 1099s from the Online Platform Economy (OPE). See text for more details on how firms in the OPE are identified. Panel (b) focuses on filers with no EITC receipt.

A Data Appendix

This appendix describes the technical details of our data construction. We combine data from a variety of different tax forms taken from the IRS' Compliance Data Warehouse (CDW).

The core of our analysis draws on W2, 1099-MISC, and 1099-K information returns along with 1040 individual tax returns and associated schedules. We begin with the population of individuals who appear as primary or secondary filers on a 1040 in each year. We create a record of all Taxpayer Identification Numbers (TINs) appearing on these forms, attributed to the information on the corresponding 1040 and the identity of any spouse. There are a small number of TINs that appear on more than one 1040 (we suspect this are coming from accidentally filing multiple 1040s and amended returns), which we remove.

For all years, we merge in self-employment information for individuals and their spouses from Schedule SE. On Schedule SE (a schedule of Form 1040), individuals report all self-employment income subject to SECA taxation, so long as the total exceeds $400. This includes active income from wholly-owned businesses on Schedule C, income from partnerships on Schedule K1, and farm income on Schedule F. Importantly, SECA taxes are assessed on individuals, not income tax filing units, so Schedule SE is always identified at the individual level. By contrast, Schedule C information is only identified at the tax unit level until 2007. We merge in individual-level Schedule C information after 2007, and also merge in select tax-unit totals from schedule C for all years.

We next turn to cleaning and processing the information returns. For Form W-2, we pull all W-2s with SSNs that have been validated by the IRS. We eliminate duplicate or amended returns, and we drop a small number of invalid SSNs (approximately 50,000 in 2016) and SSNs considered "unmatchable" (approximately 5.2 million). Both of these are small compared to the overall number of W-2, which exceeded 240 million in 2016. We use the recipient TINs to match W2s to our main file of individuals. Since a large number of individuals with low W2 earnings are not required to file 1040 returns, we add all cases with valid W2s but no 1040 to our population file.

We then merge on information from Form 1099-MISC. We pull everyone with non-zero non-employee compensation reported in Box 7. In our analysis, we only examine Box 7 income. We use recipient TINs to link to our core file. Many 1099-MISCs with Box 7 income do not link to a TIN with a valid W2 or 1040 in the same year. This could occur for several reasons: 1) The recipient may be an individual who has registered and Employee Identification Number (EIN) for their business activities that is distinct from their personal TIN. 2) The 1099 may have been issued to an incorporated business (this can occur in special cases). 3) The 1099 was valid but the individual did not file, either because the individuals net income was below filing thresholds or because the individuals were not in compliance with tax law. 4) The 1099 may have been issued in error or to the wrong TIN.

We find that many 1099s are issued to TINs that the IRS classifies as EINs or an invalid SSN. However, many such cases nonetheless match to SSNs on 1040s and in the Social Security DM-1 master file. In particular, 20 percent of 1099-MISCs had recipient TINs classified as EINs in 2016, but we find that about 25 percent of these match to SSNs on 1040s. We also find that 38 percent of 1099-MISCs with recipient TINs classified as "unmatchable (unknown)" merge to a 1040 TIN. One possibility is that there are mistakes on the W-9, and these are really TINs of individuals and not EINs.

Our rule is to treat these information returns as coming from individuals, so long as they match to a valid SSN on a 1040 or W2. In general, we do not retain information for individuals in years in which they have 1099-MISCs but neither a W2 or 1040 return, due to concerns that these 1099s were issued in error. We do, however, keep track of the number of such cases in Column (10) of Table 1, individuals who have no 1040 and W-2 information return—however, we only keep SSNs that are validated by the IRS. We currently do not merge in 1099-MISCs issued to valid EINs that are used by individual tax payers rather than their personal TIN, since attributing EINS to personal TINs is not possible prior to 2007 (before which point Schedule Cs with EINs could only be attributed to a couple). We are exploring this area further.

To identify the online platform economy, we begin with a list of roughly 50 large platforms based on public databases of online labor platforms, which we are able identify (along with the corresponding EIN) in business tax returns by name. We then identify all 1099-MISCs in our cleaned file coming from these platforms and classify them as OPE income. Prior to 2011 all platforms issued 1099-MISC returns, and after 2011 a large number continue to do so.

We next pull 1099-K returns issued from the EINs on our OPE list. 1099-Ks are issued by platforms that classify themselves as "third party payment processors," who act as a facilitator in a transaction determined by two distinct contracting parties. In some cases where platforms offer incentive payments or other bonuses, these payments are reported on separate 1099-MISCs since they are payments directly from the platform to the recipient. Current IRS guidelines exempt payments subject 1099-K reporting from additional 1099-MISC reporting by contracting entities. In our analysis, we use Box 1 gross receipts to measure payments. We clean these forms using the same methodology described for the 1099-MISCs. We attribute 1099-K OPE payments to individuals, and add this to OPE income. We consider this income to be a part of the "1099 economy" and include it in measures of "1099 recipients" or "1099 income."

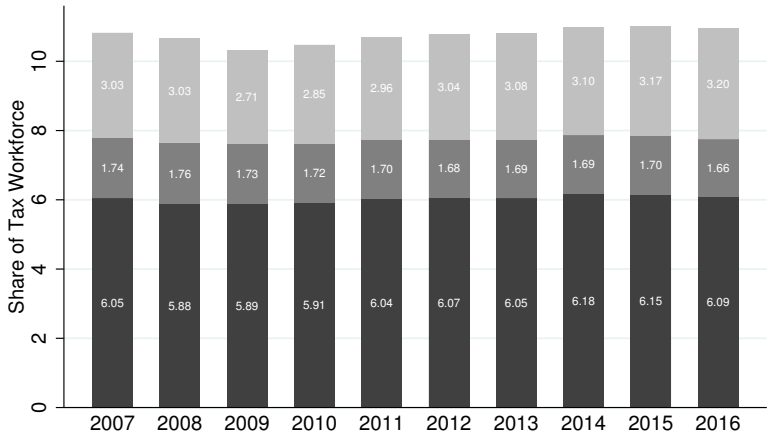
Worker characteristics Marriage, secondary earner, and dependents are defined for 1040 filers only. Marriage is determined from listing a spouse on a 1040. Dependents are determined from listing dependents (other than the spouse) on the 1040. Wages and 1099 earnings are merged in for the spouse. Being a secondary earner is defined as having fewer wage plus Schedule SE earnings than a spouse.

Other worker characteristics are merged in from other sources. Birth dates and gender are pulled from Form DM-1, populated by the Social Security Administration. Social Security receipt comes from Form SSA-1099, and unemployment insurance receipt comes from Form 1099-G.

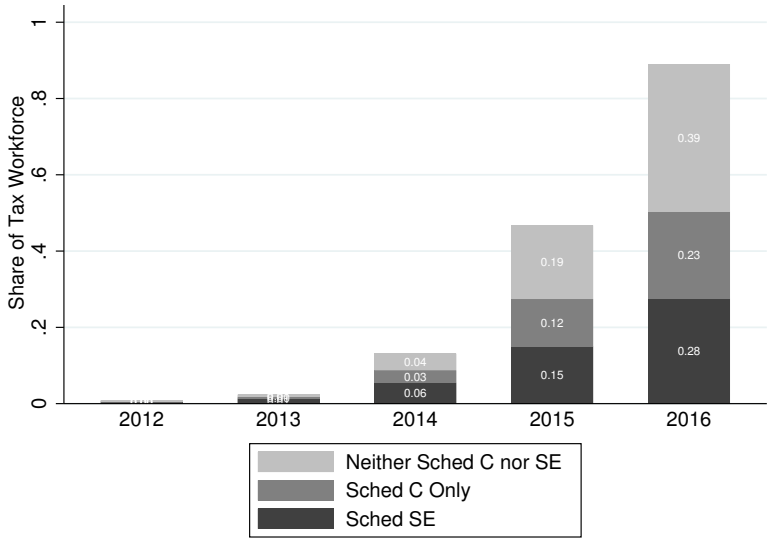
Geography Location for tables cut by geographic region is determined by examining the address on 1040 tax returns and information returns. We default to using the address listed on Form 1040. For recipients of information returns who did not file a 1040, addresses are taken first from Form W-2 and, if still missing, from the 1099 information returns. If individuals receive multiple information returns sent to different addresses, we pick the address where the largest dollar value of returns were sent.

Figure A1: How are 1099s reported on C/SE?, 2007-2016

(a) The 1099 Gig Economy, Excluding 1099's from the Online Platform Economy

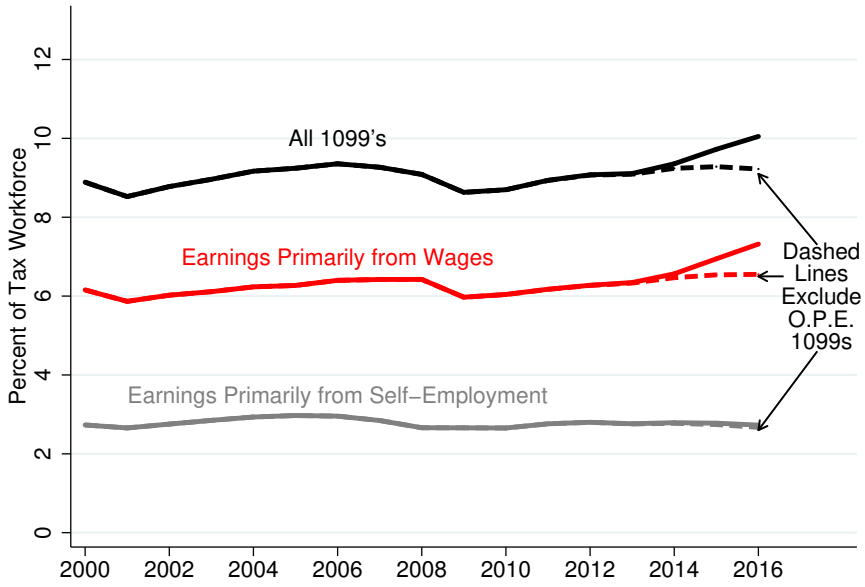


(b) OPE-Only 1099s



Note: Figure shows the number of unique individuals receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform, as a percentage of the tax workforce. The tax workforce is defined as filers of 1040 with wage, 1099 or SE income, or nontaxfilers with wage earnings. Tax Filer refers to filing an individual income tax return (Form 1040). Wage income refers to receipt of a W2 information return. "Sched SE" refers to filing Schedule SE. "Sched C" refers to filing Schedule C. Figure begins in 2007 because this is the first year Schedule C can be attributed to individuals instead of the tax unit. Panel (a) is for individuals receiving at least one 1099 outside of the OPE. Panel (b) is for individuals receiving a 1099 only from the OPE.

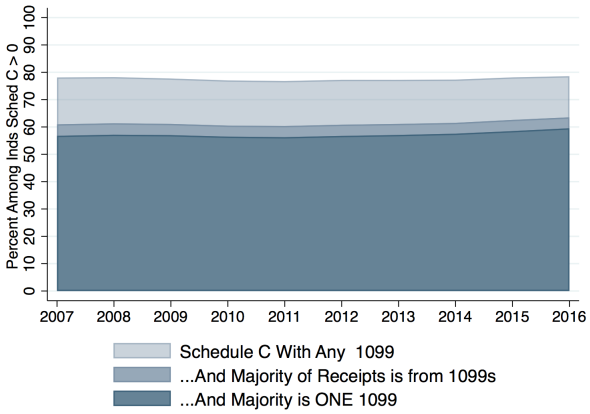
Figure A2: The 1099 Gig Economy with $15,000 or More in Earnings, as a Share of the Tax Workforce, 2000-2016



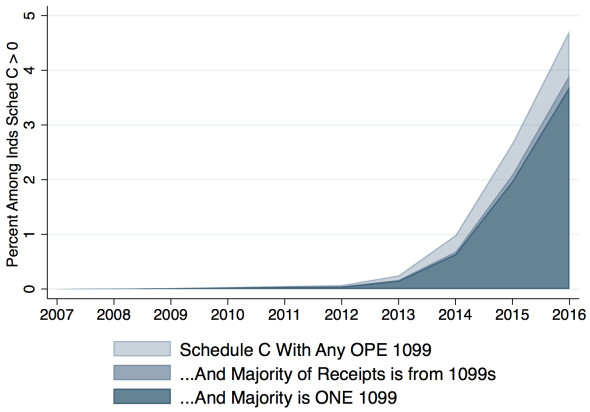
Note: Figure shows the number of unique individuals receiving 1099 MISC information returns with non-employee compensation and/or a 1099K from an online gig economy platform and who have $15,000 or more in total earnings (wages plus Schedule SE). Earnings are adjusted for inflation using the Personal Consumption Expenditures (PCE) Implicit Price Deflator. See notes for figure 2 for additional details.

Figure A3: Where Do Schedule C Receipts Come From? Self-Employment Tax Payers With Schedule C Profits 2007-2016

(a) Revenues From 1099s



(b) Revenues From OPE 1099s O1099s



Note: Figure decomposes population of individuals with Schedule C profits and Schedule SE net income over $400 based on whether individuals have 1099 revenues and how magnitude of 1099 revenues compares to total Schedule C revenues. "Majority of Receipts from 1099s" indicates that the total revenues across all 1099-MISCs or OPE 1099-Ks exceeds 50% of Schedule C gross revenues. "Majority of Receipts from 1099s" indicates that the total revenues across all 1099s exceeds 50% of Schedule C gross revenues. "Majority is one 1099" indicates that the revenues on the single 1099-MISC or OPE 1099-K with the greatest revenues received by an individual exceeds 50% of their Schedule C gross revenues. Darker-shaded areas are subsets of lighter-shaded regions. Individual-level data on Schedule C revenues is only available after 2006.

Figure A4: Self-Employment Tax Payers, as a Share of the Tax Workforce, 2000-2016, by Gender

I. Men

(a) All Self-Employment Tax Payers

(b) Self-Employed Tax Payers with No EITC

II. Women

(c) All Self-Employment Tax Payers

(d) Self-Employed Tax Payers with No EITC

Note: See notes for Figure 9.

Table A1: Components of the Tax Workforce, 2016, by State

(a) All 1099 Gig Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Tax Filers							Non Tax Filers		
	No 1099			Has 1099				No 1099	Has 1099	
	No SE	Has SE		Has SE		No SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
AK	317,775	12,215	12,867	12,426	9,569	10,981	3,830	40,042	2,912	4,135
AL	1,789,458	55,683	67,100	68,617	67,395	75,504	28,048	284,651	24,354	37,417
AR	1,095,022	31,943	40,667	47,068	46,940	54,233	20,393	161,138	14,802	22,174
AZ	2,495,670	64,302	100,189	105,311	98,999	117,810	41,442	405,407	35,190	46,774
CA	14,900,672	394,542	793,512	784,224	850,143	774,716	246,143	1,797,497	172,149	214,453
CO	2,344,995	69,220	100,119	124,764	102,511	122,320	38,299	292,076	30,762	33,864
CT	1,558,738	41,959	78,551	68,161	61,275	62,622	16,348	145,535	10,823	17,211
DC	271,597	9,151	10,759	19,544	11,250	18,242	2,985	46,041	5,905	5,613
DE	404,619	8,170	12,282	13,747	11,508	16,929	4,754	55,522	4,343	4,603
FL	7,698,727	238,561	409,153	380,707	426,183	522,757	171,319	926,465	112,242	140,892
GA	3,803,519	128,406	161,425	179,519	187,944	232,475	68,046	634,369	73,601	106,902
HI	604,889	13,006	22,965	25,065	25,702	25,888	7,919	61,001	6,209	8,435
IA	1,385,234	39,054	48,524	60,575	49,808	56,226	18,247	162,729	10,321	12,414
ID	679,078	19,087	28,483	27,042	24,737	26,729	10,618	93,584	5,426	6,805
IL	5,409,935	148,555	200,247	243,961	203,853	238,441	63,957	536,203	51,399	69,293
IN	2,871,116	71,135	78,823	108,965	82,255	102,385	32,844	309,315	22,487	28,397
KS	1,230,355	34,116	44,127	54,759	43,405	49,156	18,272	155,255	10,639	12,993
KY	1,777,902	44,769	60,726	66,515	59,231	62,160	22,038	201,369	14,737	21,923
LA	1,687,927	64,718	75,144	75,863	65,075	81,497	23,951	297,463	27,414	37,578
MA	3,109,185	71,207	116,062	160,870	121,136	126,104	27,117	270,770	23,335	31,188
MD	2,555,692	65,876	120,011	123,079	105,629	127,096	30,696	317,711	31,696	41,693
ME	595,260	16,276	27,137	24,131	25,350	19,619	6,574	59,988	3,930	6,763
MI	4,099,269	113,347	139,041	161,611	142,551	164,862	58,802	456,413	38,252	51,459
MN	2,480,640	65,909	81,411	120,301	82,533	216,788	58,848	239,651	27,060	15,197
MO	2,534,176	67,921	89,155	100,379	86,940	89,128	31,824	336,078	22,795	28,412

All 1099 Gig Economy (Con't)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Tax Filers							Non Tax Filers		
	No 1099			Has 1099				No 1099	Has 1099	
	No SE	Has SE		Has SE		No SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
MO	2,534,176	67,921	89,155	100,379	86,940	89,128	31,824	336,078	22,795	28,412
MS	1,068,203	42,265	43,649	42,061	42,445	46,194	16,023	175,820	14,756	25,519
MT	441,772	14,652	20,380	19,048	17,601	18,394	7,848	53,484	3,468	5,170
NC	3,990,566	109,159	145,606	177,348	172,057	175,695	57,921	507,229	45,690	79,277
ND	343,575	12,574	13,750	17,360	10,890	15,711	4,367	37,643	2,782	2,537
NE	864,106	23,974	29,034	39,637	29,531	35,357	10,901	92,150	6,195	7,935
NH	664,723	15,389	26,443	25,796	24,377	19,901	5,910	53,186	3,733	5,806
NJ	3,920,287	116,422	191,952	160,186	127,289	151,028	33,516	393,663	26,148	30,185
NM	764,304	16,759	28,422	28,987	28,618	32,239	13,957	112,076	8,490	11,881
NV	1,154,802	27,424	41,192	47,799	41,380	65,483	18,500	158,091	17,383	16,664
NY	8,218,426	232,105	463,793	377,053	325,841	295,469	75,255	834,072	57,193	82,113
OH	4,974,255	119,201	148,875	196,807	161,002	221,812	71,381	517,164	45,343	57,746
OK	1,441,709	38,539	54,523	62,276	60,539	72,022	29,531	234,046	20,242	30,899
OR	1,654,237	42,403	73,633	65,801	64,193	66,481	24,048	222,627	15,186	19,005
PA	5,594,433	117,944	172,064	215,479	176,554	234,274	71,802	491,964	39,275	46,230
RI	479,310	10,962	15,833	21,734	16,956	17,950	3,803	36,588	3,175	4,712
SC	1,931,056	54,686	70,381	74,478	72,940	85,546	29,356	275,586	21,667	33,800
SD	386,367	14,329	16,892	19,291	14,702	16,761	5,932	39,769	2,812	3,566
TN	2,640,171	85,349	116,902	121,777	123,782	120,271	39,772	326,835	31,171	48,234
TX	10,444,678	309,297	446,954	523,460	586,835	786,612	262,969	1,326,398	181,503	246,376
UT	1,249,651	35,084	38,905	51,346	32,044	52,353	14,969	167,009	10,334	10,075
VA	3,622,217	90,206	120,901	153,606	128,143	153,659	42,001	395,415	33,226	47,008
VT	294,139	9,079	13,786	14,110	13,055	10,079	3,530	24,444	1,480	2,104
WA	3,195,498	71,041	109,717	113,581	103,833	102,905	35,118	338,991	20,614	25,937
WI	2,711,448	65,476	83,122	84,142	64,342	85,644	26,227	266,625	12,279	13,524
WV	707,151	14,036	21,084	20,335	17,569	22,699	8,725	66,407	3,892	6,242
WY	248,499	6,768	8,537	11,849	8,769	10,937	4,329	30,917	2,218	2,537

(b) OPE

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
AK	98	-	218	-	-	-
	71	-	*196*	-	-	-
AL	1,387	556	4,325	482	831	160
	1,024	*351*	*3,938*	*403*	*706*	-
AR	790	288	2,386	258	412	87
	562	*162*	*2,143*	*195*	*333*	-
AZ	9,046	3,847	22,823	2,941	5,239	1,189
	6,710	*2,242*	*20,679*	*2,324*	*4,377*	*472*
CA	97,887	57,183	165,205	22,842	38,163	17,458
	75,083	*39,690*	*149,937*	*19,027*	*31,397*	*12,121*
CO	9,960	3,998	16,558	1,977	3,733	816
	7,676	*2,739*	*15,044*	*1,614*	*3,050*	*422*
CT	3,802	1,726	9,060	813	1,147	263
	2,983	*1,146*	*8,425*	*680*	*969*	*90*
DC	2,811	1,434	6,021	450	1,726	782
	2,222	*1,135*	*5,569*	*396*	*1,466*	*553*
DE	1,005	391	2,642	204	535	74
	811	*281*	*2,440*	*172*	*466*	-
FL	34,524	23,882	105,402	13,814	14,682	3,387
	23,542	*14,676*	*94,209*	*11,120*	*11,767*	*792*
GA	13,206	6,573	46,601	4,015	12,923	1,900
	9,526	*4,398*	*42,317*	*3,273*	*10,812*	*645*
HI	1,731	685	3,286	358	528	118
	1,395	*434*	*3,075*	*292*	*437*	-
IA	1,435	365	3,875	248	450	65
	1,064	*212*	*3,617*	*215*	*391*	-
ID	759	347	1,482	199	219	-
	559	*202*	*1,318*	*169*	*168*	-
IL	29,815	18,304	57,144	5,418	11,946	4,977
	23,945	*13,540*	*52,945*	*4,620*	*10,114*	*3,220*
IN	4,658	1,604	12,998	1,076	1,925	371
	3,463	*985*	*12,012*	*889*	*1,603*	*157*
KS	1,540	504	4,264	393	677	93
	1,163	*302*	*3,932*	*313*	*585*	-
KY	2,296	859	6,030	445	879	130
	1,717	*512*	*5,586*	*365*	*728*	-
LA	3,984	1,630	10,385	826	2,339	321
	2,941	*1,128*	*9,443*	*669*	*1,912*	*87*
MA	17,964	8,056	25,506	2,040	4,298	1,836
	14,930	*6,167*	*23,769*	*1,758*	*3,622*	*1,262*

OPE (Con't)

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
MD	13,791	7,317	32,337	3,059	7,540	2,192
	11,094	*5,362*	*29,775*	*2,571*	*6,397*	*1,362*
ME	596	219	1,401	98	204	-
	439	*134*	*1,291*	*82*	*171*	-
MI	6,229	2,960	16,249	1,995	3,020	610
	4,536	*1,897*	*14,869*	*1,650*	*2,539*	*256*
MN	5,313	2,037	10,289	1,376	1,494	242
	3,827	*1,198*	*8,581*	*1,016*	*1,168*	*120*
MO	3,394	1,302	8,350	645	1,690	208
	2,603	*849*	*7,697*	*533*	*1,448*	*63*
MS	544	214	1,925	206	303	72
	396	*125*	*1,735*	*163*	*246*	-
MT	307	110	602	75	61	-
	235	*57*	*533*	*60*	-	-
NC	8,410	3,431	27,839	2,531	4,813	681
	6,114	*2,125*	*25,625*	*2,089*	*4,106*	*194*
ND	284	-	609	-	83	-
	225	-	*557*	-	*68*	-
NE	1,025	262	2,446	184	255	-
	759	*149*	*2,239*	*155*	*210*	-
NH	825	303	1,779	160	227	60
	637	*193*	*1,667*	*134*	*187*	-
NJ	16,755	9,876	35,360	3,312	4,811	1,314
	13,479	*6,577*	*33,089*	*2,843*	*4,125*	*697*
NM	816	333	2,387	341	404	86
	618	*209*	*2,213*	*273*	*336*	-
NV	7,326	3,011	16,568	2,004	3,426	888
	5,383	*1,944*	*14,770*	*1,678*	*2,789*	*442*
NY	21,191	37,544	19,564	3,345	5,305	5,602
	15,462	*24,027*	*17,268*	*2,531*	*4,203*	*3,792*
OH	9,122	3,581	25,990	2,352	4,104	689
	6,706	*2,149*	*23,598*	*1,862*	*3,405*	*181*
OK	1,965	748	7,294	691	1,278	203
	1,356	*424*	*6,698*	*572*	*1,042*	*67*
OR	4,426	1,993	5,882	792	1,309	378
	3,586	*1,410*	*5,369*	*663*	*1,106*	*230*
PA	16,265	6,844	37,795	2,928	6,813	1,655
	12,842	*4,683*	*34,938*	*2,440*	*5,708*	*847*
RI	1,607	682	3,835	296	459	109
	1,279	*491*	*3,590*	*257*	*390*	-

OPE (Con't)

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
SC	3,369	1,358	10,380	1,161	1,866	271
	2,505	*823*	*9,481*	*939*	*1,558*	*58*
SD	66	-	166	-	-	-
	-	-	*145*	-	-	-
TN	6,834	2,725	17,463	1,562	3,014	512
	4,770	*1,513*	*15,852*	*1,258*	*2,437*	*147*
TX	30,399	14,180	92,780	10,134	16,161	3,601
	21,273	*8,438*	*81,798*	*7,731*	*12,740*	*1,385*
UT	2,193	786	5,585	615	824	135
	1,568	*463*	*5,079*	*511*	*673*	-
VA	12,749	7,524	27,140	2,598	4,070	1,207
	10,157	*5,341*	*25,186*	*2,168*	*3,408*	*656*
VT	278	73	405	-	-	-
	216	-	*382*	-	-	-
WA	10,203	5,534	13,251	1,680	2,631	911
	8,332	*3,977*	*12,197*	*1,412*	*2,195*	*534*
WI	3,710	1,179	8,272	618	1,128	145
	3,049	*834*	*7,739*	*520*	*968*	*58*
WV	351	145	888	102	110	-
	280	*98*	*813*	*80*	*86*	-
WY	60	-	131	-	-	-
	-	-	*111*	-	-	-

Note: Non-italics denotes any OPE. Italics denote OPE only. See notes for Table 1. Counts less than 50 persons are suppressed.

Table A2: Components of the Tax Workforce, 2016, by Metro Area

(a) All 1099 Gig Economy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Tax Filers							Non Tax Filers		
	No 1099			Has 1099				No 1099	Has 1099	
	No SE	Has SE		Has SE		No SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
Atlanta, GA	1,877,614	66,024	89,921	103,368	109,364	133,144	33,928	317,415	43,249	59,843
Austin, TX	652,883	19,084	26,260	44,227	36,909	50,230	12,948	80,374	13,269	14,489
Baltimore, MD	944,766	24,450	38,139	44,804	32,756	46,442	9,373	140,795	12,887	13,958
Boston, MA–NH–RI	2,013,751	47,670	75,723	114,448	78,868	85,477	16,437	172,654	16,116	20,294
Charlotte, NC–SC	599,313	17,587	21,840	30,513	28,555	32,877	8,516	81,268	8,535	13,763
Chicago, IL–IN	3,623,292	100,820	144,657	179,927	151,036	177,449	41,713	376,949	41,057	52,403
Cincinnati, OH–KY–IN	744,934	17,324	20,011	31,997	23,220	32,030	7,710	85,303	7,845	8,291
Cleveland, OH	764,528	19,617	22,477	33,717	25,571	39,472	10,151	84,326	8,393	10,209
Columbus, OH	659,238	17,463	20,154	32,948	23,237	34,504	6,949	78,021	8,018	8,837
Dallas–Fort Worth–Arlington, TX	2,226,064	64,768	91,814	111,868	125,381	165,873	47,058	295,014	40,405	49,416
Denver–Aurora, CO	1,159,873	32,738	46,131	63,175	47,989	62,309	15,923	145,189	16,244	16,627
Detroit, MI	1,510,111	49,491	54,982	62,202	54,860	64,809	20,389	201,286	18,274	22,222
Houston, TX	2,048,686	66,548	104,573	102,818	134,716	146,940	44,345	262,719	34,534	52,583
Indianapolis, IN	711,505	19,334	20,533	31,988	22,013	31,032	6,818	87,143	7,616	9,655
Jacksonville, FL	486,860	13,508	14,856	18,604	16,095	27,932	7,865	67,153	6,692	6,414
Kansas City, MO–KS	706,033	18,022	21,576	30,383	22,108	26,391	6,861	103,570	7,580	8,140
Las Vegas–Henderson, NV	791,103	19,975	28,899	34,922	28,869	50,568	12,674	112,604	14,023	12,821
Los Angeles–Long Beach–Anaheim, CA	4,559,999	139,463	298,213	292,921	314,773	289,444	80,267	554,142	68,519	83,102
Memphis, TN–MS–AR	409,051	21,353	17,828	15,572	15,192	20,051	5,080	77,651	6,484	7,697
Miami, FL	2,141,276	81,444	178,408	137,706	174,203	189,187	54,151	223,813	34,459	50,489
Milwaukee, WI	617,177	16,541	16,877	20,459	13,358	19,770	4,214	80,130	3,842	3,356

All 1099 Gig Economy (Con't)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Tax Filers							Non Tax Filers		
	No 1099			Has 1099				No 1099	Has 1099	
	No SE	Has SE		Has SE		No SE		-	-	-
	Has W2	Has W2	No W2	Has W2	No W2	Has W2	No W2	Has W2	Has W2	No W2
Minneapolis–St. Paul, MN–WI	1,303,196	32,450	37,582	67,381	39,902	109,633	25,487	129,121	15,183	7,909
New York–Newark, NY–NJ–CT	7,846,376	252,635	505,871	394,522	336,674	311,452	69,166	805,145	61,873	82,400
Orlando, FL	696,239	22,149	27,887	33,760	30,534	48,322	11,765	82,041	10,660	10,871
Philadelphia, PA–NJ–DE–MD	2,351,469	53,968	80,965	104,333	79,174	114,228	24,220	271,494	24,224	24,536
Phoenix–Mesa, AZ	1,469,208	39,016	58,487	67,477	60,334	75,072	23,434	239,975	22,713	25,288
Pittsburgh, PA	800,127	15,652	19,757	34,399	23,172	34,948	9,026	67,219	5,997	6,465
Portland, OR–WA	843,246	21,361	34,767	38,488	33,111	35,576	10,201	101,154	8,240	8,368
Providence, RI–MA	545,957	11,530	16,863	23,230	17,615	20,150	3,985	42,064	3,507	5,070
Riverside–San Bernardino, CA	758,527	18,631	33,957	25,184	32,665	32,648	10,183	103,817	7,716	10,159
Sacramento, CA	722,151	16,031	30,055	29,897	34,742	34,236	10,826	82,967	6,811	7,691
Salt Lake City–West Valley City, UT	446,488	11,848	13,826	18,613	11,473	18,543	4,455	63,940	4,273	3,943
San Antonio, TX	775,639	17,935	25,389	36,033	36,830	58,866	16,409	100,652	14,279	17,125
San Diego, CA	1,257,383	29,248	58,746	62,671	61,621	66,716	20,218	135,818	13,639	15,301
San Francisco–Oakland, CA	1,453,332	39,380	76,577	105,800	91,886	79,917	21,006	140,652	19,058	20,915
San Jose, CA	768,646	16,710	29,291	39,950	33,804	31,786	8,795	62,119	5,827	6,716
San Juan, PR	65,127	13,048	48,239	1,064	2,860	1,183	665	387,626	5,359	1,642
Seattle, WA	1,548,608	34,475	51,067	64,755	53,343	52,964	14,756	152,400	11,127	12,318
St. Louis, MO–IL	949,493	26,625	28,319	37,791	27,896	32,618	8,314	126,276	8,249	9,115
Tampa–St. Petersburg, FL	1,043,930	26,012	39,677	45,957	45,973	67,072	20,395	135,125	15,905	16,832
Virginia Beach, VA	633,896	14,202	14,396	19,498	14,864	27,360	6,591	90,867	7,143	8,163
Washington, DC–VA–MD	2,138,996	62,038	110,058	125,695	109,069	117,685	26,094	228,160	27,358	38,495

(b) OPE

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
Atlanta, GA	10,608	5,512	36,537	3,131	10,794	1,647
	7,618	*3,721*	*33,107*	*2,551*	*9,002*	*571*
Austin, TX	4,759	1,883	9,038	956	2,005	667
	3,253	*1,063*	*7,877*	*707*	*1,526*	*361*
Baltimore, MD	5,113	2,365	12,469	1,044	3,170	629
	4,097	*1,696*	*11,516*	*893*	*2,729*	*355*
Boston, MA–NH–RI	15,586	7,044	20,442	1,594	3,578	1,638
	13,068	*5,504*	*19,099*	*1,374*	*3,021*	*1,161*
Charlotte, NC–SC	2,381	1,100	8,014	650	1,675	220
	1,701	*681*	*7,336*	*518*	*1,425*	*69*
Chicago, IL–IN	27,999	17,723	52,716	5,027	11,415	4,876
	22,526	*13,146*	*48,822*	*4,285*	*9,666*	*3,171*
Cincinnati, OH–KY–IN	2,107	765	5,451	439	914	128
	1,584	*436*	*4,987*	*356*	*754*	-
Cleveland, OH	2,325	931	7,095	693	1,173	213
	1,684	*594*	*6,478*	*569*	*977*	-
Columbus, OH	2,811	1,045	6,923	471	1,165	181
	2,139	*625*	*6,284*	*370*	*972*	-
Dallas–Fort Worth–Arlington, TX	9,372	4,348	30,222	2,878	5,589	1,141
	6,626	*2,667*	*26,890*	*2,251*	*4,453*	*400*
Denver–Aurora, CO	7,369	3,013	11,751	1,324	2,761	598
	5,709	*2,098*	*10,697*	*1,081*	*2,272*	*310*
Detroit, MI	3,366	1,817	9,093	1,137	1,851	381
	2,437	*1,157*	*8,286*	*961*	*1,565*	*160*
Houston, TX	6,598	3,977	19,437	2,310	3,349	862
	4,709	*2,506*	*17,087*	*1,789*	*2,676*	*335*
Indianapolis, IN	2,349	819	6,988	537	978	161
	1,732	*509*	*6,441*	*434*	*815*	*63*
Jacksonville, FL	1,358	631	5,297	551	826	108
	1,011	*378*	*4,829*	*463*	*689*	-
Kansas City, MO–KS	1,690	608	4,114	350	888	115
	1,273	*370*	*3,795*	*276*	*767*	-
Las Vegas–Henderson, NV	6,509	2,703	14,786	1,758	3,122	821
	4,749	*1,756*	*13,152*	*1,485*	*2,542*	*421*
Los Angeles–Long Beach–Anaheim, CA	39,940	24,898	70,973	9,577	17,013	7,816
	29,287	*16,666*	*63,849*	*7,859*	*13,754*	*5,294*
Memphis, TN–MS–AR	800	344	3,261	272	591	74
	573	*197*	*2,974*	*225*	*485*	-
Miami, FL	16,766	14,176	44,318	6,417	5,501	1,718
	11,036	*8,758*	*38,630*	*5,023*	*4,253*	*401*
Milwaukee, WI	1,809	633	4,040	280	674	67
	1,512	467	3,807	249	583	-

OPE (Con't)

	(1)	(2)	(3)	(4)	(5)	(6)
	Tax Filers Has 1099				Non Tax Filers Has 1099	
	Has SE		No SE		-	-
	Has W2	No W2	Has W2	No W2	Has W2	No W2
Minneapolis–St. Paul, MN–WI	4,748	1,779	7,962	861	1,201	218
	3,460	*1,077*	*6,790*	*649*	*940*	*110*
New York–Newark, NY–NJ–CT	33,679	45,126	45,057	5,675	8,605	6,459
	25,618	*29,008*	*41,229*	*4,547*	*7,050*	*4,238*
Orlando, FL	3,745	2,139	13,341	1,283	1,863	317
	2,520	*1,318*	*12,177*	*1,044*	*1,522*	*82*
Philadelphia, PA–NJ–DE–MD	11,486	5,393	27,945	2,084	5,522	1,384
	9,109	*3,837*	*25,837*	*1,770*	*4,649*	*733*
Phoenix–Mesa, AZ	6,729	2,856	16,999	2,114	3,997	919
	4,963	*1,626*	*15,350*	*1,655*	*3,329*	*380*
Pittsburgh, PA	3,298	1,055	6,499	504	1,171	235
	2,634	*711*	*6,008*	*428*	*963*	*122*
Portland, OR–WA	4,290	1,903	5,557	735	1,267	345
	3,486	*1,358*	*5,095*	*620*	*1,076*	*208*
Providence, RI–MA	1,840	769	4,301	322	521	128
	1,473	*542*	*4,010*	*287*	*445*	*54*
Riverside–San Bernardino, CA	1,981	1,060	5,384	765	1,066	253
	1,528	*685*	*4,975*	*625*	*887*	*147*
Sacramento, CA	3,950	2,018	8,676	1,173	1,701	571
	3,144	*1,414*	*8,041*	*997*	*1,495*	*387*
Salt Lake City–West Valley City, UT	1,213	411	2,932	293	471	74
	879	*266*	*2,694*	*241*	*394*	-
San Antonio, TX	2,873	1,033	9,790	902	1,585	256
	2,036	*585*	*8,726*	*720*	*1,256*	*76*
San Diego, CA	8,436	4,423	16,202	2,195	3,316	1,296
	6,771	*3,151*	*14,914*	*1,862*	*2,811*	*876*
San Francisco–Oakland, CA	18,554	11,783	20,285	2,498	5,982	3,775
	14,645	*8,722*	*18,250*	*2,101*	*4,773*	*2,847*
San Jose, CA	7,071	3,198	7,875	976	1,724	867
	5,797	*2,364*	*7,265*	*842*	*1,471*	*693*
San Juan, PR	-	-	-	-	80	-
	-	-	-	-	*67*	-
Seattle, WA	8,043	4,502	9,374	1,088	1,959	747
	6,593	*3,294*	*8,653*	*907*	*1,637*	*449*
St. Louis, MO–IL	1,903	766	4,819	346	959	110
	1,483	*510*	*4,463*	*289*	*817*	-
Tampa–St. Petersburg, FL	4,517	2,340	16,094	1,825	2,724	466
	3,247	*1,404*	*14,646*	*1,499*	*2,238*	*106*
Virginia Beach, VA	1,846	557	7,005	574	1,130	151
	1,505	*391*	*6,620*	*495*	*986*	*51*
Washington, DC–VA–MD	17,593	11,449	33,985	3,229	6,924	2,920
	14,144	*8,468*	*31,347*	*2,724*	*5,791*	*1,933*

Note: Non-italics denotes any OPE. Italics denote OPE only. See notes for Table 1. Counts less than 50 persons are suppressed.

Table A3: Any 1099 Gig Work, by State, 2000-2016

(a) Any 1099 Gig Work, by State

	2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
AK	38,084	38,772	38,976	39,577	39,993	38,358	39,072	40,259	40,083
	10.38	*10.24*	*10.16*	*10.28*	*10.26*	*9.71*	*9.77*	*9.84*	*9.74*
AL	226,613	220,456	228,176	230,850	237,978	244,413	255,568	266,372	254,786
	9.79	*9.63*	*10.02*	*10.19*	*10.31*	*10.36*	*10.62*	*10.90*	*10.51*
AR	157,804	159,429	163,188	164,785	169,619	176,163	178,915	183,310	173,216
	11.43	*11.46*	*11.78*	*11.88*	*12.03*	*12.31*	*12.29*	*12.43*	*11.79*
AZ	245,596	247,958	263,809	272,674	290,227	303,616	317,117	324,645	313,849
	9.39	*9.22*	*9.69*	*9.90*	*10.12*	*10.15*	*10.23*	*10.26*	*9.99*
CA	2027697	2051932	2113414	2181737	2240184	2253602	2347619	2430721	2539054
	11.52	*11.49*	*11.80*	*12.31*	*12.53*	*12.43*	*12.64*	*12.89*	*13.52*
CO	307,408	312,697	323,269	324,547	332,339	334,798	349,798	361,019	350,895
	12.04	*12.13*	*12.58*	*12.69*	*12.84*	*12.63*	*12.85*	*12.93*	*12.47*
CT	209,418	205,911	211,682	210,848	211,654	214,138	216,230	219,437	211,106
	10.64	*10.44*	*10.80*	*10.79*	*10.73*	*10.80*	*10.75*	*10.78*	*10.41*
DC	34,236	33,258	34,917	34,671	36,258	36,772	37,752	39,333	39,682
	10.75	*10.62*	*11.20*	*11.62*	*11.58*	*11.68*	*11.51*	*11.69*	*11.40*
DE	42,420	41,075	43,084	44,499	45,646	46,493	48,021	48,687	45,738
	9.21	*8.87*	*9.23*	*9.45*	*9.58*	*9.55*	*9.69*	*9.70*	*9.15*
FL	987,712	975,268	1040664	1083407	1119923	1152232	1199552	1223629	1229265
	11.49	*11.19*	*11.75*	*11.98*	*12*	*11.98*	*12.20*	*12.39*	*12.65*
GA	475,969	477,331	507,502	516,370	533,573	549,808	583,757	620,041	605,297
	10.48	*10.46*	*11.11*	*11.26*	*11.41*	*11.45*	*11.80*	*12.29*	*12.10*
HI	65,200	65,585	67,208	68,683	70,587	71,546	77,420	79,133	77,484
	9.74	*9.57*	*9.71*	*9.83*	*9.89*	*9.81*	*10.43*	*10.49*	*10.32*
IA	163,518	159,841	166,820	167,026	170,894	172,257	177,060	182,806	180,835
	9.74	*9.51*	*9.99*	*9.97*	*10.12*	*10.09*	*10.24*	*10.36*	*10.21*
ID	69,308	68,201	74,220	75,919	79,031	81,146	87,289	88,845	85,540
	10	*9.61*	*10.38*	*10.45*	*10.62*	*10.52*	*10.96*	*10.86*	*10.54*
IL	661,604	636,018	667,798	674,111	689,144	697,917	711,166	726,785	694,285
	9.73	*9.33*	*9.90*	*10.09*	*10.22*	*10.27*	*10.25*	*10.35*	*9.94*
IN	309,805	297,837	307,921	303,573	308,676	311,147	316,562	323,169	312,608
	8.86	*8.60*	*8.93*	*8.84*	*8.90*	*8.89*	*8.95*	*9.02*	*8.79*
KS	144,930	141,494	150,218	151,780	155,789	159,503	161,721	166,609	163,281
	9.55	*9.27*	*9.89*	*10.03*	*10.24*	*10.35*	*10.28*	*10.40*	*10.11*
KY	196,888	197,301	201,598	200,776	203,463	210,332	211,099	216,667	207,314
	9.10	*9.19*	*9.42*	*9.40*	*9.44*	*9.60*	*9.53*	*9.63*	*9.27*
LA	216,844	212,172	224,537	226,231	225,517	228,561	236,686	245,718	241,699
	9.63	*9.38*	*9.95*	*10.03*	*10.16*	*10.33*	*10.51*	*10.62*	*10.35*
MA	387,472	379,481	397,139	405,990	412,424	411,466	408,808	415,520	404,389
	10.41	*10.20*	*10.83*	*11.14*	*11.23*	*11.21*	*10.99*	*11.01*	*10.69*

	2009	2010	2011	2012	2013	2014	2015	2016
AK	38,611	40,067	40,486	40,674	40,162	41,718	40,974	39,718
	9.35	*9.58*	*9.46*	*9.45*	*9.32*	*9.64*	*9.47*	*9.40*
AL	240,411	241,315	245,810	247,383	245,878	251,143	256,320	263,918
	10.27	*10.30*	*10.37*	*10.37*	*10.27*	*10.43*	*10.54*	*10.72*
AR	164,390	165,937	170,315	171,697	170,541	175,254	177,930	183,436
	11.44	*11.47*	*11.60*	*11.63*	*11.56*	*11.79*	*11.89*	*12.13*
AZ	297,385	301,557	315,203	322,853	329,751	346,238	368,961	398,752
	9.85	*10.02*	*10.22*	*10.25*	*10.25*	*10.57*	*10.98*	*11.51*
CA	2227067	2248554	2312913	2360488	2407408	2516209	2684908	2827375
	12.17	*12.29*	*12.39*	*12.41*	*12.38*	*12.65*	*13.20*	*13.65*
CO	331,858	334,650	348,341	358,445	365,410	380,646	399,247	418,656
	12.04	*12.08*	*12.25*	*12.28*	*12.23*	*12.39*	*12.66*	*12.98*
CT	198,420	199,271	204,701	205,639	203,707	206,406	212,532	219,229
	10.03	*10.09*	*10.28*	*10.26*	*10.10*	*10.19*	*10.43*	*10.73*
DC	39,072	40,161	40,698	42,007	44,128	48,421	54,499	57,926
	11.24	*11.36*	*11.45*	*11.67*	*11.99*	*12.69*	*13.89*	*14.65*
DE	43,024	43,674	44,443	44,609	44,854	45,320	47,712	51,281
	8.81	*8.92*	*8.97*	*8.91*	*8.84*	*8.85*	*9.14*	*9.64*
FL	1229394	1272112	1313201	1327780	1349333	1410076	1507655	1613208
	13.08	*13.39*	*13.62*	*13.55*	*13.49*	*13.77*	*14.28*	*14.82*
GA	575,932	586,073	603,606	615,024	624,189	656,709	695,946	741,585
	11.85	*12.01*	*12.17*	*12.25*	*12.24*	*12.62*	*13.04*	*13.56*
HI	72,296	73,250	76,492	79,763	81,572	83,919	85,829	90,783
	9.81	*9.89*	*10.17*	*10.45*	*10.51*	*10.68*	*10.87*	*11.45*
IA	175,178	176,200	183,070	183,863	182,073	186,407	190,465	195,177
	10.07	*10.14*	*10.25*	*10.22*	*10.08*	*10.26*	*10.43*	*10.66*
ID	79,944	79,028	82,219	84,370	85,470	87,274	90,988	94,552
	10.16	*10.06*	*10.13*	*10.17*	*10.11*	*10.15*	*10.30*	*10.34*
IL	659,630	669,402	698,446	694,602	711,144	729,935	772,730	801,611
	9.70	*9.87*	*10.17*	*10*	*10.20*	*10.36*	*10.88*	*11.30*
IN	298,002	299,179	311,931	315,711	316,863	327,180	338,897	348,936
	8.66	*8.69*	*8.92*	*8.91*	*8.87*	*9.11*	*9.32*	*9.48*
KS	157,492	158,149	163,876	167,537	167,124	168,626	171,906	176,231
	9.93	*10.04*	*10.27*	*10.40*	*10.33*	*10.32*	*10.49*	*10.75*
KY	198,594	198,599	205,168	208,596	207,490	211,633	219,024	224,681
	9.11	*9.10*	*9.28*	*9.33*	*9.25*	*9.35*	*9.57*	*9.73*
LA	230,696	239,957	244,078	250,699	254,154	259,237	264,672	273,800
	10.01	*10.40*	*10.36*	*10.56*	*10.62*	*10.73*	*10.93*	*11.41*
MA	388,307	390,396	399,419	398,207	406,208	418,032	441,017	458,562
	10.43	*10.44*	*10.55*	*10.40*	*10.49*	*10.64*	*11.08*	*11.39*

Any 1099 Gig Work, by State (Con't)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
MD	289,358	281,786	302,022	308,609	313,814	316,299	331,784	337,123	330,939
	9.40	*9.06*	*9.62*	*9.82*	*9.86*	*9.83*	*10.17*	*10.22*	*10.04*
ME	77,182	76,009	80,661	80,413	81,968	83,524	86,096	89,347	82,281
	10.29	*10.06*	*10.63*	*10.56*	*10.73*	*10.89*	*11.17*	*11.49*	*10.71*
MI	527,152	513,105	495,039	530,838	535,491	543,041	543,308	517,547	522,059
	9.35	*9.23*	*9*	*9.77*	*9.87*	*10.03*	*10.09*	*9.65*	*9.87*
MN	289,578	285,518	303,079	306,564	307,684	314,606	321,153	322,756	315,843
	9.70	*9.54*	*10.17*	*10.27*	*10.21*	*10.31*	*10.36*	*10.30*	*10.08*
MO	267,552	270,012	287,754	292,869	301,549	307,455	315,432	321,136	308,147
	8.55	*8.57*	*9.16*	*9.31*	*9.53*	*9.58*	*9.71*	*9.77*	*9.41*
MS	139,742	137,782	143,821	146,328	149,298	153,860	163,488	170,078	161,400
	9.83	*9.80*	*10.25*	*10.43*	*10.55*	*10.70*	*11.18*	*11.49*	*10.98*
MT	58,167	57,818	59,810	60,974	61,231	61,593	63,684	64,534	63,305
	11.69	*11.62*	*11.89*	*11.91*	*11.76*	*11.54*	*11.66*	*11.55*	*11.35*
NC	446,497	428,032	457,481	468,435	486,865	502,635	531,668	552,776	529,367
	9.87	*9.51*	*10.19*	*10.38*	*10.62*	*10.65*	*10.97*	*11.15*	*10.72*
ND	38,762	37,894	38,203	40,979	42,045	43,852	44,729	45,868	42,511
	10.64	*10.29*	*10.34*	*10.95*	*11.10*	*11.45*	*11.50*	*11.57*	*10.60*
NE	104,069	101,943	106,861	103,561	105,558	104,380	107,945	110,971	109,654
	10.38	*10.14*	*10.65*	*10.25*	*10.42*	*10.20*	*10.42*	*10.51*	*10.31*
NH	77,938	76,600	80,172	81,721	83,048	84,115	83,500	84,480	81,292
	10.03	*9.77*	*10.23*	*10.39*	*10.42*	*10.48*	*10.31*	*10.33*	*9.98*
NJ	400,310	383,612	402,508	408,606	421,485	422,330	426,776	433,183	419,947
	8.46	*8.07*	*8.45*	*8.55*	*8.75*	*8.71*	*8.69*	*8.74*	*8.49*
NM	96,473	99,339	103,287	103,015	105,405	111,881	110,369	113,702	115,317
	10.54	*10.49*	*10.74*	*10.73*	*10.82*	*11.23*	*10.83*	*10.98*	*11.08*
NV	103,530	108,294	114,621	121,395	130,029	136,360	144,316	145,262	140,296
	8.92	*9.06*	*9.45*	*9.63*	*9.92*	*9.91*	*10.08*	*10.01*	*9.81*
NY	893,278	895,159	913,318	943,827	979,807	991,756	1016950	1047758	1029097
	8.93	*8.89*	*9.12*	*9.61*	*9.86*	*9.92*	*10.02*	*10.15*	*9.95*
OH	560,082	555,236	567,340	564,644	576,245	584,687	580,698	595,893	580,704
	8.59	*8.62*	*8.89*	*8.89*	*9.07*	*9.16*	*9.05*	*9.25*	*9.10*
OK	196,414	192,894	202,376	202,650	209,151	214,548	220,252	226,455	222,877
	10.87	*10.60*	*11.18*	*11.27*	*11.54*	*11.57*	*11.61*	*11.67*	*11.36*
OR	203,606	202,865	204,140	201,371	211,580	213,525	221,276	226,886	219,509
	10.74	*10.68*	*10.82*	*10.75*	*11.09*	*10.91*	*11.03*	*11.07*	*10.81*
PA	562,840	538,604	569,861	581,439	612,637	653,308	699,412	747,710	713,052
	8.41	*8.03*	*8.49*	*8.65*	*9.07*	*9.55*	*10.08*	*10.64*	*10.18*
RI	54,028	53,355	54,250	54,238	54,242	54,214	55,294	56,088	55,204
	9.09	*8.94*	*9.05*	*9.08*	*9.04*	*9.11*	*9.25*	*9.38*	*9.33*

	2009	2010	2011	2012	2013	2014	2015	2016
MD	317,245	319,638	327,564	334,756	343,631	360,961	391,423	418,196
	9.77	*9.81*	*9.91*	*9.97*	*10.14*	*10.56*	*11.35*	*12.03*
ME	80,886	77,099	79,478	78,529	77,028	78,071	77,272	79,604
	10.76	*10.29*	*10.53*	*10.39*	*10.14*	*10.25*	*10.08*	*10.23*
MI	494,129	501,297	521,199	527,144	523,369	530,052	547,486	566,078
	9.72	*9.87*	*10.06*	*10.07*	*9.92*	*10.11*	*10.33*	*10.53*
MN	295,770	296,827	304,010	306,751	305,696	351,805	473,624	505,530
	9.62	*9.63*	*9.68*	*9.63*	*9.49*	*10.77*	*14.24*	*14.99*
MO	293,488	295,114	307,188	309,942	308,212	315,203	321,084	331,066
	9.19	*9.28*	*9.53*	*9.53*	*9.44*	*9.59*	*9.66*	*9.86*
MS	150,712	153,292	153,789	152,920	153,511	154,466	157,755	161,479
	10.51	*10.71*	*10.59*	*10.48*	*10.50*	*10.49*	*10.63*	*10.83*
MT	58,989	60,410	62,241	62,433	61,384	62,833	64,776	66,359
	10.81	*11.05*	*11.01*	*10.87*	*10.61*	*10.77*	*10.96*	*11.12*
NC	497,528	506,781	524,661	537,042	542,358	566,862	592,744	628,711
	10.40	*10.58*	*10.71*	*10.78*	*10.73*	*11.03*	*11.30*	*11.68*
ND	41,927	43,166	45,759	47,336	48,111	49,639	51,123	51,110
	10.38	*10.47*	*10.53*	*10.52*	*10.47*	*10.55*	*10.93*	*11.14*
NE	106,660	108,051	113,401	114,337	112,910	114,589	118,361	121,621
	10.16	*10.23*	*10.50*	*10.43*	*10.22*	*10.27*	*10.53*	*10.75*
NH	77,430	76,305	77,577	77,803	77,298	77,850	78,972	79,717
	9.72	*9.58*	*9.62*	*9.60*	*9.48*	*9.49*	*9.52*	*9.50*
NJ	399,427	404,553	414,262	415,097	423,599	430,949	461,896	498,167
	8.26	*8.37*	*8.48*	*8.46*	*8.52*	*8.61*	*9.11*	*9.73*
NM	104,875	103,881	106,453	107,341	106,820	109,428	114,109	112,291
	10.36	*10.32*	*10.47*	*10.51*	*10.48*	*10.63*	*11.07*	*10.86*
NV	130,369	131,814	143,347	144,302	148,252	154,854	165,076	190,545
	9.56	*9.76*	*10.41*	*10.25*	*10.29*	*10.51*	*10.90*	*12.12*
NY	991,876	988,983	1010111	1022354	1031460	1058341	1091952	1130811
	9.71	*9.66*	*9.75*	*9.78*	*9.76*	*9.89*	*10.09*	*10.39*
OH	565,152	622,863	668,630	672,770	666,241	669,577	680,751	696,345
	9.18	*10.15*	*10.74*	*10.69*	*10.52*	*10.53*	*10.62*	*10.79*
OK	210,294	212,609	221,484	228,888	230,846	239,455	239,318	244,610
	10.97	*11.13*	*11.31*	*11.51*	*11.52*	*11.82*	*11.80*	*12.15*
OR	206,150	203,984	207,071	207,129	210,160	211,777	223,566	235,709
	10.50	*10.41*	*10.37*	*10.23*	*10.19*	*10.05*	*10.29*	*10.58*
PA	675,362	677,643	682,510	677,462	672,833	681,885	702,868	737,384
	9.83	*9.85*	*9.84*	*9.76*	*9.68*	*9.75*	*9.98*	*10.37*
RI	52,600	53,348	54,652	54,964	55,883	57,109	60,311	63,618
	9.15	*9.25*	*9.46*	*9.43*	*9.52*	*9.62*	*10.06*	*10.49*

Any 1099 Gig Work, by State (Con't)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
SC	206,259	198,937	210,964	214,726	221,336	230,421	241,343	251,637	240,629
	9.39	*9.10*	*9.70*	*9.83*	*9.97*	*10.10*	*10.30*	*10.50*	*10.13*
SD	46,285	45,749	48,831	48,363	49,441	50,158	51,929	52,468	52,927
	10.68	*10.49*	*11.26*	*10.94*	*11.03*	*10.99*	*11.19*	*11.10*	*11.08*
TN	334,624	322,152	344,778	352,123	362,670	375,200	389,333	403,420	386,183
	10.59	*10.30*	*11.02*	*11.21*	*11.37*	*11.55*	*11.73*	*11.95*	*11.51*
TX	1279777	1259942	1351805	1371093	1413070	1458971	1559932	1612548	1590274
	11.64	*11.27*	*12.05*	*12.17*	*12.36*	*12.37*	*12.77*	*12.79*	*12.41*
UT	105,247	106,753	113,503	113,957	118,923	123,733	133,492	137,889	135,219
	8.87	*8.75*	*9.27*	*9.34*	*9.55*	*9.54*	*9.84*	*9.84*	*9.56*
VA	366,548	358,082	382,516	393,535	404,707	413,445	426,255	436,940	424,458
	8.98	*8.68*	*9.19*	*9.36*	*9.47*	*9.51*	*9.64*	*9.73*	*9.43*
VT	41,686	43,360	43,367	43,854	44,274	44,623	44,063	45,361	43,944
	11.28	*11.75*	*11.70*	*11.81*	*11.79*	*11.80*	*11.60*	*11.84*	*11.51*
WA	281,230	283,190	290,187	291,441	303,837	310,112	326,327	335,308	324,340
	8.46	*8.44*	*8.70*	*8.75*	*8.97*	*8.95*	*9.16*	*9.16*	*8.81*
WI	239,409	230,934	241,546	245,292	249,349	252,767	256,423	261,580	254,425
	7.48	*7.23*	*7.58*	*7.70*	*7.77*	*7.79*	*7.82*	*7.90*	*7.70*
WV	84,030	81,119	83,173	83,719	80,644	80,580	80,599	83,615	79,067
	9.47	*9.19*	*9.39*	*9.51*	*9.13*	*8.99*	*8.92*	*9.14*	*8.69*
WY	31,706	32,311	33,590	33,849	34,263	35,275	37,394	37,932	37,694
	11.03	*10.91*	*11.37*	*11.38*	*11.42*	*11.41*	*11.69*	*11.52*	*11.31*

Italics denotes share of tax workforce. See notes for Table 1. Counts less than 50 persons are suppressed.

	2009	2010	2011	2012	2013	2014	2015	2016
SC	226,317	231,834	234,668	240,046	243,832	253,652	264,358	283,987
	9.84	*10.05*	*9.96*	*10.02*	*10.01*	*10.22*	*10.40*	*10.86*
SD	52,093	52,711	54,792	57,156	55,446	56,738	58,286	59,498
	10.98	*11.05*	*11.05*	*11.34*	*10.97*	*11.14*	*11.35*	*11.51*
TN	363,529	366,017	378,253	383,900	385,562	397,977	414,720	436,773
	11.22	*11.26*	*11.40*	*11.38*	*11.30*	*11.50*	*11.76*	*12.11*
TX	1530911	1570389	1709996	1899401	2061638	2229039	2291803	2341379
	12.08	*12.27*	*12.96*	*13.96*	*14.68*	*15.50*	*15.65*	*15.75*
UT	126,456	126,295	132,117	136,961	141,104	146,144	150,945	161,046
	9.17	*9.13*	*9.27*	*9.35*	*9.36*	*9.44*	*9.41*	*9.75*
VA	409,595	420,612	433,053	441,780	443,979	462,589	483,956	510,635
	9.27	*9.48*	*9.58*	*9.69*	*9.67*	*9.98*	*10.32*	*10.77*
VT	41,920	42,052	42,968	42,543	42,026	42,503	42,717	42,254
	11.17	*11.20*	*11.34*	*11.19*	*11.05*	*11.14*	*11.17*	*11.01*
WA	308,221	309,228	318,408	321,495	329,508	337,566	358,194	376,051
	8.60	*8.67*	*8.71*	*8.65*	*8.69*	*8.74*	*8.99*	*9.19*
WI	240,002	238,061	243,078	248,800	248,737	253,128	264,676	272,634
	7.45	*7.40*	*7.44*	*7.55*	*7.50*	*7.58*	*7.86*	*8.02*
WV	75,680	78,015	79,083	78,219	76,799	76,097	74,650	73,220
	8.47	*8.71*	*8.72*	*8.61*	*8.54*	*8.46*	*8.36*	*8.30*
WY	35,530	36,250	38,241	38,867	37,198	38,180	38,398	38,102
	10.93	*11.10*	*11.24*	*11.28*	*10.85*	*11.05*	*11.18*	*11.45*

(b) Any O.P.E. Work, by State

	2012	2013	2014	2015	2016
AK	-	-	110	211	431
	0	*0.01*	*0.03*	*0.05*	*0.10*
AL	126	190	318	1,416	7,581
	0.01	*0.01*	*0.01*	*0.06*	*0.31*
AR	92	108	323	1,525	4,134
	0.01	*0.01*	*0.02*	*0.10*	*0.27*
AZ	499	1,032	6,209	19,642	43,896
	0.02	*0.03*	*0.19*	*0.58*	*1.27*
CA	3,454	13,946	76,160	234,200	381,280
	0.02	*0.07*	*0.38*	*1.15*	*1.84*
CO	361	978	5,251	17,962	36,226
	0.01	*0.03*	*0.17*	*0.57*	*1.12*
CT	178	300	1,359	7,791	16,548
	0.01	*0.01*	*0.07*	*0.38*	*0.81*
DC	108	579	2,761	8,574	12,442
	0.03	*0.16*	*0.72*	*2.19*	*3.15*
DE	-	65	231	1,808	4,777
	0.01	*0.01*	*0.05*	*0.35*	*0.90*
FL	1,375	1,905	17,983	90,478	192,304
	0.01	*0.02*	*0.18*	*0.86*	*1.77*
GA	908	2,042	10,328	40,071	83,318
	0.02	*0.04*	*0.20*	*0.75*	*1.52*
HI	-	-	575	2,668	6,588
	0	*0.01*	*0.07*	*0.34*	*0.83*
IA	73	95	357	2,560	6,373
	0	*0.01*	*0.02*	*0.14*	*0.35*
ID	-	58	152	1,032	3,006
	0.01	*0.01*	*0.02*	*0.12*	*0.33*
IL	1,878	6,640	25,334	76,278	122,627
	0.03	*0.10*	*0.36*	*1.07*	*1.73*
IN	248	522	2,704	11,834	22,261
	0.01	*0.01*	*0.08*	*0.33*	*0.61*
KS	98	152	739	3,247	7,378
	0.01	*0.01*	*0.05*	*0.20*	*0.45*
KY	143	178	970	5,275	10,509
	0.01	*0.01*	*0.04*	*0.23*	*0.46*
LA	139	185	546	7,132	19,164
	0.01	*0.01*	*0.02*	*0.29*	*0.80*
MA	927	2,861	16,152	37,833	57,864
	0.02	*0.07*	*0.41*	*0.95*	*1.44*

Any O.P.E. Work, by State (Con't)

	2012	2013	2014	2015	2016
MD	550	1,808	10,958	41,331	64,044
	0.02	*0.05*	*0.32*	*1.20*	*1.84*
ME	-	56	256	1,188	2,518
	0.01	*0.01*	*0.03*	*0.15*	*0.32*
MI	401	729	3,683	17,409	30,453
	0.01	*0.01*	*0.07*	*0.33*	*0.57*
MN	250	606	3,190	10,271	20,509
	0.01	*0.02*	*0.10*	*0.31*	*0.61*
MO	303	423	1,088	5,493	15,381
	0.01	*0.01*	*0.03*	*0.17*	*0.46*
MS	61	69	157	883	3,192
	0	*0*	*0.01*	*0.06*	*0.21*
MT	-	-	-	175	1,155
	0	*0.01*	*0.01*	*0.03*	*0.19*
NC	488	775	5,448	21,947	47,024
	0.01	*0.02*	*0.11*	*0.42*	*0.87*
ND	-	-	55	472	1,061
	0	*0*	*0.01*	*0.10*	*0.23*
NE	-	-	345	2,033	4,172
	0	*0*	*0.03*	*0.18*	*0.37*
NH	83	107	324	1,548	3,294
	0.01	*0.01*	*0.04*	*0.19*	*0.39*
NJ	523	1,297	8,358	35,491	70,114
	0.01	*0.03*	*0.17*	*0.70*	*1.37*
NM	70	105	452	1,634	4,281
	0.01	*0.01*	*0.04*	*0.16*	*0.41*
NV	154	219	1,276	9,160	32,335
	0.01	*0.02*	*0.09*	*0.61*	*2.06*
NY	1,254	4,964	24,065	49,773	86,949
	0.01	*0.05*	*0.22*	*0.46*	*0.80*
OH	906	1,123	4,006	20,980	45,149
	0.01	*0.02*	*0.06*	*0.33*	*0.70*
OK	110	204	1,148	5,477	11,976
	0.01	*0.01*	*0.06*	*0.27*	*0.59*
OR	202	282	842	6,430	14,402
	0.01	*0.01*	*0.04*	*0.30*	*0.65*
PA	639	1,010	4,685	31,225	70,645
	0.01	*0.01*	*0.07*	*0.44*	*0.99*
RI	55	77	828	3,895	6,879
	0.01	*0.01*	*0.14*	*0.65*	*1.13*

Any O.P.E. Work, by State (Con't)

	2012	2013	2014	2015	2016
SC	188	238	1,453	6,821	18,134
	0.01	*0.01*	*0.06*	*0.27*	*0.69*
SD	-	-	-	145	315
	0	*0*	*0.01*	*0.03*	*0.06*
TN	284	405	3,474	15,741	31,598
	0.01	*0.01*	*0.10*	*0.45*	*0.88*
TX	3,188	5,807	26,269	90,896	163,654
	0.02	*0.04*	*0.18*	*0.62*	*1.10*
UT	83	132	664	3,359	10,003
	0.01	*0.01*	*0.04*	*0.21*	*0.61*
VA	819	2,853	11,409	29,720	54,081
	0.02	*0.06*	*0.25*	*0.63*	*1.14*
VT	-	-	88	420	853
	0	*0.01*	*0.02*	*0.11*	*0.22*
WA	768	1,938	6,393	17,406	33,299
	0.02	*0.05*	*0.17*	*0.44*	*0.81*
WI	138	232	1,451	7,730	14,907
	0	*0.01*	*0.04*	*0.23*	*0.44*
WV	-	52	66	324	1,596
	0.01	*0.01*	*0.01*	*0.04*	*0.18*
WY	-	-	-	94	256
	0.01	*0.01*	*0.01*	*0.03*	*0.08*

Italics denotes share of tax workforce. See notes for Table 1. Counts less than 50 persons are suppressed.

(a) Any 1099 Gig Work, by Major Metro Area

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Atlanta, GA	232,702	236,166	254,962	261,500	270,996	281,620	300,885	315,937	309,601
	10.99	*11.05*	*11.89*	*12.10*	*12.21*	*12.23*	*12.58*	*12.96*	*12.77*
Austin, TX	68,286	67,562	73,834	76,683	80,384	84,394	91,439	95,265	96,284
	11.79	*11.61*	*12.69*	*12.99*	*13.17*	*13.17*	*13.52*	*13.51*	*13.29*
Baltimore, MD	102,342	98,775	105,290	107,932	108,222	108,639	114,984	116,505	114,628
	8.66	*8.35*	*8.86*	*9.09*	*9.05*	*9.02*	*9.40*	*9.43*	*9.28*
Boston, MA–NH–RI	237,057	233,528	245,288	253,021	260,929	263,230	263,156	268,338	262,664
	10.26	*10.11*	*10.76*	*11.17*	*11.36*	*11.42*	*11.19*	*11.19*	*10.90*
Charlotte, NC–SC	54,696	54,067	59,393	61,374	64,545	69,594	74,798	79,648	77,506
	10.15	*9.91*	*10.75*	*10.89*	*11*	*11.17*	*11.44*	*11.77*	*11.41*
Chicago, IL–IN	451,079	436,163	459,081	462,914	476,830	484,124	495,171	504,950	481,477
	10.05	*9.68*	*10.30*	*10.54*	*10.71*	*10.79*	*10.78*	*10.85*	*10.39*
Cincinnati, OH–KY–IN	77,631	77,378	80,351	80,422	81,742	83,258	83,026	85,601	87,060
	8.54	*8.57*	*8.91*	*8.93*	*9*	*9.10*	*8.98*	*9.15*	*9.34*
Cleveland, OH	91,461	91,325	92,670	91,223	92,446	93,457	94,000	96,162	93,960
	8.62	*8.74*	*9.04*	*8.97*	*9.14*	*9.23*	*9.25*	*9.44*	*9.31*
Columbus, OH	69,335	68,500	71,674	73,395	75,049	77,221	78,139	79,096	77,237
	9.46	*9.53*	*9.89*	*10.03*	*10.16*	*10.31*	*10.26*	*10.24*	*9.90*
Dallas–Fort Worth–Arlington, TX	264,357	260,107	280,111	284,883	291,109	298,490	317,736	327,840	324,372
	11.16	*10.92*	*11.85*	*12.03*	*12.13*	*12.09*	*12.40*	*12.41*	*12.11*
Denver–Aurora, CO	138,167	140,200	146,155	146,651	149,496	149,994	156,729	162,114	157,727
	11.20	*11.36*	*11.97*	*12.04*	*12.17*	*11.93*	*12.10*	*12.18*	*11.75*
Detroit, MI	199,873	193,843	185,438	197,736	199,750	202,506	200,680	190,924	193,151
	9.05	*9*	*8.72*	*9.47*	*9.62*	*9.81*	*9.81*	*9.41*	*9.65*
Houston, TX	244,553	245,098	261,657	269,802	281,083	288,424	310,143	320,240	316,450
	11.84	*11.58*	*12.23*	*12.56*	*12.90*	*12.77*	*13.17*	*13.12*	*12.69*
Indianapolis, IN	72,819	71,192	74,102	73,675	75,210	76,629	78,333	80,924	78,768
	9.48	*9.23*	*9.61*	*9.59*	*9.56*	*9.56*	*9.56*	*9.65*	*9.34*
Jacksonville, FL	46,918	47,030	50,120	51,849	51,970	54,824	56,824	58,556	60,128
	8.71	*8.62*	*9.04*	*9.21*	*8.99*	*9.21*	*9.37*	*9.58*	*9.99*
Kansas City, MO–KS	69,792	69,497	74,550	75,933	78,162	79,472	81,131	82,477	80,044
	8.41	*8.35*	*9.03*	*9.20*	*9.43*	*9.45*	*9.49*	*9.48*	*9.18*
Las Vegas–Henderson, NV	65,903	69,914	74,939	80,334	87,207	91,988	98,377	98,458	94,801
	8.74	*8.93*	*9.34*	*9.63*	*9.98*	*9.97*	*10.17*	*10.04*	*9.77*
Los Angeles–Long Beach–Anaheim, CA	700,469	713,378	738,055	766,330	784,506	784,502	812,528	840,333	873,128
	12.41	*12.42*	*12.74*	*13.26*	*13.53*	*13.42*	*13.58*	*13.85*	*14.48*
Memphis, TN–MS–AR	50,741	49,236	52,808	53,690	54,865	54,996	56,387	58,246	56,314
	9.18	*9.02*	*9.72*	*9.93*	*10.06*	*10.03*	*10.06*	*10.26*	*9.96*
Miami, FL	332,725	328,484	351,679	369,863	385,532	396,078	419,477	429,130	429,238
	13.09	*12.71*	*13.44*	*13.89*	*14.14*	*14.27*	*14.76*	*14.95*	*15.08*
Milwaukee, WI	52,923	50,925	52,930	52,816	53,921	54,312	55,219	56,594	55,284
	6.78	*6.61*	*6.95*	*7.01*	*7.16*	*7.18*	*7.20*	*7.32*	*7.16*

	2009	2010	2011	2012	2013	2014	2015	2016
Atlanta, GA	298,239	306,674	318,831	328,973	337,812	359,594	390,989	423,060
	12.60	*12.85*	*13.07*	*13.24*	*13.29*	*13.75*	*14.49*	*15.25*
Austin, TX	94,025	98,799	106,916	118,566	129,533	143,509	157,607	157,578
	12.93	*13.23*	*13.78*	*14.67*	*15.38*	*16.39*	*17.35*	*16.83*
Baltimore, MD	108,712	109,537	111,801	113,556	115,928	121,881	135,522	146,263
	8.98	*9.02*	*9.08*	*9.08*	*9.20*	*9.56*	*10.53*	*11.30*
Boston, MA–NH–RI	253,223	256,512	262,112	261,229	267,482	279,532	298,499	311,329
	10.63	*10.69*	*10.75*	*10.58*	*10.67*	*10.94*	*11.50*	*11.88*
Charlotte, NC–SC	73,618	77,448	80,872	84,519	87,408	93,376	100,430	108,992
	11.10	*11.51*	*11.59*	*11.69*	*11.72*	*12.11*	*12.55*	*13.15*
Chicago, IL–IN	457,750	466,342	477,360	485,822	494,522	520,361	562,244	591,179
	10.15	*10.35*	*10.44*	*10.49*	*10.53*	*10.91*	*11.65*	*12.22*
Cincinnati, OH–KY–IN	79,989	88,349	92,797	93,855	92,880	94,969	99,093	102,805
	8.86	*9.80*	*10.17*	*10.18*	*9.96*	*10.05*	*10.34*	*10.59*
Cleveland, OH	92,956	101,742	108,629	108,368	107,351	108,075	112,233	117,305
	9.52	*10.45*	*11.02*	*10.89*	*10.74*	*10.83*	*11.17*	*11.63*
Columbus, OH	75,941	82,831	88,930	91,151	91,456	94,317	99,072	105,651
	9.92	*10.68*	*11.21*	*11.22*	*11.03*	*11.12*	*11.43*	*12*
Dallas–Fort Worth–Arlington, TX	314,248	324,627	351,693	385,133	414,474	450,415	472,492	490,577
	11.89	*12.14*	*12.79*	*13.63*	*14.21*	*14.99*	*15.27*	*15.48*
Denver–Aurora, CO	151,189	153,752	161,027	167,054	172,697	181,330	193,270	205,646
	11.46	*11.52*	*11.74*	*11.78*	*11.81*	*12*	*12.42*	*12.94*
Detroit, MI	184,018	187,300	193,834	196,475	196,481	201,082	210,372	220,528
	9.62	*9.81*	*9.92*	*9.96*	*9.85*	*10.13*	*10.47*	*10.83*
Houston, TX	308,552	316,841	344,117	380,579	408,080	439,740	453,033	463,357
	12.45	*12.70*	*13.33*	*14.16*	*14.66*	*15.26*	*15.40*	*15.73*
Indianapolis, IN	75,301	75,984	80,305	82,439	84,171	88,399	94,322	99,468
	9.11	*9.13*	*9.44*	*9.47*	*9.52*	*9.86*	*10.27*	*10.60*
Jacksonville, FL	61,100	62,228	63,928	65,020	65,697	68,068	72,434	77,190
	10.51	*10.72*	*10.87*	*10.89*	*10.79*	*10.92*	*11.29*	*11.70*
Kansas City, MO–KS	77,401	77,999	81,082	82,318	83,279	85,850	89,244	93,324
	9.07	*9.14*	*9.37*	*9.35*	*9.33*	*9.47*	*9.64*	*9.90*
Las Vegas–Henderson, NV	88,730	90,094	100,236	101,018	105,169	110,881	120,001	141,052
	9.56	*9.79*	*10.67*	*10.49*	*10.63*	*10.87*	*11.41*	*12.90*
Los Angeles–Long Beach–Anaheim, CA	772,313	789,122	821,385	843,633	867,533	915,882	990,501	1045915
	13.16	*13.43*	*13.72*	*13.82*	*13.91*	*14.35*	*15.20*	*15.85*
Memphis, TN–MS–AR	53,517	54,934	54,868	56,159	55,493	57,433	58,883	62,376
	9.80	*9.99*	*9.79*	*9.97*	*9.79*	*10*	*10.08*	*10.60*
Miami, FL	427,660	445,036	467,096	471,857	479,806	509,468	554,113	589,703
	15.44	*15.71*	*16.20*	*16.17*	*16.10*	*16.63*	*17.56*	*18.34*
Milwaukee, WI	52,138	52,195	52,316	55,459	55,289	55,683	59,049	61,639
	6.95	*6.97*	*6.89*	*7.24*	*7.16*	*7.13*	*7.48*	*7.78*

Any 1099 Gig Work, by Major Metro Area (Con't)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Minneapolis–St. Paul, MN–WI	143,359	140,426	149,045	149,642	151,490	153,860	157,136	157,838	154,708
	9.34	*9.17*	*9.85*	*9.89*	*9.93*	*9.97*	*9.99*	*9.93*	*9.72*
New York–Newark, NY–NJ–CT	871,597	848,231	879,817	912,084	949,243	960,273	986,492	1010952	996,107
	9.40	*9.13*	*9.51*	*9.87*	*10.14*	*10.19*	*10.27*	*10.35*	*10.16*
Orlando, FL	76,430	75,476	81,269	86,031	87,772	90,974	93,817	95,580	95,577
	10.68	*10.42*	*11.05*	*11.39*	*11.23*	*11.26*	*11.33*	*11.49*	*11.62*
Philadelphia, PA–NJ–DE–MD	252,523	243,029	253,993	258,371	267,213	282,059	299,583	316,004	298,610
	8.76	*8.43*	*8.79*	*8.91*	*9.16*	*9.59*	*10.01*	*10.45*	*9.92*
Phoenix–Mesa, AZ	140,909	143,006	151,958	155,906	165,575	171,968	179,128	182,713	176,907
	9.33	*9.27*	*9.79*	*10.05*	*10.28*	*10.39*	*10.46*	*10.47*	*10.20*
Pittsburgh, PA	83,104	80,121	84,116	84,733	89,108	94,213	100,524	108,092	103,492
	8.54	*8.21*	*8.69*	*8.78*	*9.29*	*9.75*	*10.31*	*10.92*	*10.47*
Portland, OR–WA	94,642	95,597	95,634	94,458	99,374	101,664	105,976	109,215	107,196
	10.11	*10.18*	*10.33*	*10.30*	*10.63*	*10.59*	*10.66*	*10.70*	*10.50*
Providence, RI–MA	57,743	56,999	58,290	58,530	58,506	58,771	59,566	60,365	59,001
	8.69	*8.53*	*8.72*	*8.77*	*8.73*	*8.83*	*8.90*	*9.01*	*8.90*
Riverside–San Bernardino, CA	69,120	71,329	75,690	81,214	84,749	87,893	93,104	97,108	105,934
	9.74	*9.76*	*9.91*	*10.27*	*10.34*	*10.43*	*10.67*	*11.02*	*12.12*
Sacramento, CA	76,649	79,346	84,735	88,272	92,757	95,898	99,131	103,174	110,315
	9.90	*9.93*	*10.48*	*10.73*	*11.14*	*11.27*	*11.39*	*11.66*	*12.56*
Salt Lake City–West Valley City, UT	43,199	43,706	46,884	46,001	47,528	48,038	51,451	52,480	51,560
	8.71	*8.71*	*9.43*	*9.39*	*9.58*	*9.40*	*9.66*	*9.59*	*9.36*
San Antonio, TX	78,828	77,654	83,220	86,270	88,991	94,508	101,164	104,315	101,966
	10.52	*10.07*	*10.71*	*10.99*	*11.13*	*11.40*	*11.74*	*11.70*	*11.25*
San Diego, CA	154,610	155,959	161,005	169,592	169,881	168,329	176,206	181,483	193,799
	10.98	*10.73*	*10.95*	*11.68*	*11.55*	*11.34*	*11.60*	*11.77*	*12.57*
San Francisco–Oakland, CA	226,452	223,218	224,858	224,765	233,199	231,524	240,866	250,024	257,554
	12.37	*12.32*	*12.82*	*13.24*	*13.79*	*13.54*	*13.75*	*13.97*	*14.38*
San Jose, CA	86,002	84,230	87,010	89,090	93,058	93,760	97,532	100,111	104,046
	9.69	*9.60*	*10.50*	*11.16*	*11.58*	*11.44*	*11.50*	*11.52*	*11.94*
San Juan, PR	6,755	6,708	7,376	7,102	7,196	7,497	8,481	12,358	11,837
	7.69	*8.08*	*9.34*	*9.29*	*9.46*	*8.70*	*8.20*	*2.52*	*2.37*
Seattle, WA	139,922	140,087	143,584	144,597	150,453	153,327	160,336	165,123	159,895
	8.72	*8.67*	*9.03*	*9.21*	*9.42*	*9.38*	*9.51*	*9.53*	*9.15*
St. Louis, MO–IL	93,625	92,972	98,953	101,666	104,188	104,735	106,877	109,667	105,437
	7.71	*7.66*	*8.19*	*8.45*	*8.65*	*8.67*	*8.76*	*8.89*	*8.56*
Tampa–St. Petersburg, FL	119,537	117,152	124,359	128,635	133,080	135,749	141,818	144,746	146,809
	10.34	*10.05*	*10.55*	*10.70*	*10.76*	*10.69*	*10.94*	*11.12*	*11.45*
Virginia Beach, VA	55,991	53,928	57,543	58,700	60,391	62,691	64,009	65,185	61,802
	7.35	*6.98*	*7.33*	*7.38*	*7.52*	*7.74*	*7.83*	*7.91*	*7.53*
Washington, DC–VA–MD	248,431	245,961	262,505	268,172	276,796	279,893	290,037	296,327	296,734
	10.44	*10.13*	*10.75*	*10.97*	*11.07*	*11.09*	*11.25*	*11.27*	*11.12*

Italics denotes share of tax workforce. See notes for Table 1. Counts less than 50 persons are suppressed.

	2009	2010	2011	2012	2013	2014	2015	2016
Minneapolis–St. Paul, MN–WI	146,024	147,976	152,255	154,075	154,158	177,905	239,036	257,582
	9.34	*9.41*	*9.48*	*9.42*	*9.28*	*10.50*	*13.80*	*14.64*
New York–Newark, NY–NJ–CT	961,253	964,294	989,245	1003298	1020874	1053691	1111253	1173689
	9.93	*9.91*	*10.04*	*10.05*	*10.06*	*10.21*	*10.59*	*11.09*
Orlando, FL	94,905	97,919	101,947	104,520	107,374	113,935	124,109	135,043
	11.93	*12.17*	*12.32*	*12.31*	*12.28*	*12.58*	*13.24*	*14.02*
Philadelphia, PA–NJ–DE–MD	287,305	289,007	290,922	290,294	289,491	298,141	316,791	346,191
	9.74	*9.79*	*9.80*	*9.75*	*9.66*	*9.85*	*10.33*	*11.15*
Phoenix–Mesa, AZ	174,775	179,704	189,711	194,897	201,336	212,594	228,717	249,029
	10.19	*10.40*	*10.65*	*10.65*	*10.67*	*10.99*	*11.47*	*12.11*
Pittsburgh, PA	97,059	97,946	98,560	97,956	96,752	98,730	103,277	107,544
	9.92	*9.97*	*9.92*	*9.80*	*9.66*	*9.82*	*10.24*	*10.64*
Portland, OR–WA	102,078	102,411	105,225	105,932	107,432	108,776	117,030	125,616
	10.28	*10.28*	*10.33*	*10.20*	*10.11*	*10.18*	*10.60*	*11.15*
Providence, RI–MA	56,360	57,041	58,540	58,672	59,929	61,159	64,906	68,480
	8.73	*8.82*	*9.02*	*8.97*	*9.07*	*9.14*	*9.59*	*10*
Riverside–San Bernardino, CA	88,190	87,346	90,022	91,394	93,435	97,494	101,877	108,400
	10.35	*10.21*	*10.25*	*10.16*	*10.08*	*10.13*	*10.26*	*10.59*
Sacramento, CA	91,625	90,779	92,435	94,306	96,411	99,672	105,447	116,508
	10.75	*10.75*	*10.81*	*10.87*	*10.85*	*10.94*	*11.24*	*12.04*
Salt Lake City–West Valley City, UT	47,948	47,608	48,481	50,035	51,146	52,601	53,807	57,360
	8.95	*8.87*	*9.07*	*9.13*	*9.08*	*9.11*	*9.24*	*9.67*
San Antonio, TX	97,252	99,011	108,342	122,396	135,639	148,239	154,032	162,416
	10.80	*10.83*	*11.52*	*12.60*	*13.56*	*14.37*	*14.55*	*15.01*
San Diego, CA	168,710	172,314	177,511	181,983	185,799	196,479	213,107	224,867
	11.15	*11.37*	*11.46*	*11.51*	*11.53*	*11.89*	*12.64*	*13.18*
San Francisco–Oakland, CA	233,026	239,297	247,465	253,463	262,399	282,551	306,797	317,667
	13.31	*13.63*	*13.76*	*13.73*	*13.81*	*14.45*	*15.31*	*15.67*
San Jose, CA	93,563	96,233	99,213	101,458	101,791	106,757	114,945	120,162
	11	*11.23*	*11.29*	*11.25*	*10.97*	*11.15*	*11.67*	*12.05*
San Juan, PR	11,215	10,542	10,534	11,462	11,701	12,427	10,953	11,120
	2.33	*2.35*	*2.26*	*2.11*	*2.22*	*2.17*	*2.03*	*2.12*
Seattle, WA	152,785	155,287	161,246	162,934	168,647	174,506	186,757	196,943
	8.99	*9.15*	*9.24*	*9.13*	*9.21*	*9.30*	*9.63*	*9.93*
St. Louis, MO–IL	100,568	102,261	105,653	106,737	105,792	107,578	110,874	114,858
	8.36	*8.56*	*8.76*	*8.76*	*8.67*	*8.75*	*8.94*	*9.22*
Tampa–St. Petersburg, FL	148,482	156,515	156,319	156,403	158,904	165,516	177,589	195,301
	11.95	*12.41*	*12.34*	*12.17*	*12.10*	*12.28*	*12.74*	*13.56*
Virginia Beach, VA	59,223	59,735	61,903	62,925	62,809	64,681	69,645	75,457
	7.40	*7.50*	*7.67*	*7.77*	*7.72*	*7.86*	*8.40*	*9.10*
Washington, DC–VA–MD	291,395	298,486	307,231	316,142	327,621	353,015	382,065	405,895
	10.95	*11.07*	*11.18*	*11.32*	*11.57*	*12.26*	*13.07*	*13.78*

(b) Any O.P.E. Work, by Major Metro Area

	2012	2013	2014	2015	2016
Atlanta, GA	651	1,707	9,348	33,793	66,581
	0.03	*0.07*	*0.36*	*1.25*	*2.40*
Austin, TX	279	471	4,956	18,656	18,644
	0.03	*0.06*	*0.57*	*2.05*	*1.99*
Baltimore, MD	178	542	3,675	16,295	24,159
	0.01	*0.04*	*0.29*	*1.27*	*1.87*
Boston, MA–NH–RI	815	2,658	15,144	33,393	48,239
	0.03	*0.11*	*0.59*	*1.29*	*1.84*
Charlotte, NC–SC	103	267	1,873	6,817	13,822
	0.01	*0.04*	*0.24*	*0.85*	*1.67*
Chicago, IL–IN	1,763	6,451	24,960	73,081	114,865
	0.04	*0.14*	*0.52*	*1.51*	*2.37*
Cincinnati, OH–KY–IN	143	172	993	5,103	9,676
	0.02	*0.02*	*0.11*	*0.53*	*1.00*
Cleveland, OH	159	205	962	6,056	12,213
	0.02	*0.02*	*0.10*	*0.60*	*1.21*
Columbus, OH	146	193	1,292	5,925	12,414
	0.02	*0.02*	*0.15*	*0.68*	*1.41*
Dallas–Fort Worth–Arlington, TX	763	1,901	8,550	28,558	52,406
	0.03	*0.07*	*0.28*	*0.92*	*1.65*
Denver–Aurora, CO	233	742	4,280	13,550	26,211
	0.02	*0.05*	*0.28*	*0.87*	*1.65*
Detroit, MI	184	372	2,301	10,185	17,254
	0.01	*0.02*	*0.12*	*0.51*	*0.85*
Houston, TX	736	1,007	6,183	18,507	35,663
	0.03	*0.04*	*0.21*	*0.63*	*1.21*
Indianapolis, IN	120	299	1,927	6,898	11,669
	0.01	*0.03*	*0.21*	*0.75*	*1.24*
Jacksonville, FL	98	126	784	3,602	8,659
	0.02	*0.02*	*0.13*	*0.56*	*1.31*
Kansas City, MO–KS	98	156	955	3,686	7,636
	0.01	*0.02*	*0.11*	*0.40*	*0.81*
Las Vegas–Henderson, NV	121	168	1,121	8,394	28,869
	0.01	*0.02*	*0.11*	*0.80*	*2.64*
Los Angeles–Long Beach–Anaheim, CA	960	4,708	32,307	102,960	162,396
	0.02	*0.08*	*0.51*	*1.58*	*2.46*
Memphis, TN–MS–AR	53	56	448	1,925	5,266
	0.01	*0.01*	*0.08*	*0.33*	*0.90*
Miami, FL	430	572	10,109	47,592	87,169
	0.01	*0.02*	*0.33*	*1.51*	*2.71*

Any O.P.E. Work, by Major Metro Area (Con't)

	2012	*2013*	*2014*	*2015*	*2016*
Milwaukee, WI	52	87	862	4,462	7,430
	0.01	*0.01*	*0.11*	*0.57*	*0.94*
Minneapolis–St. Paul, MN–WI	190	520	2,770	8,320	16,532
	0.01	*0.03*	*0.16*	*0.48*	*0.94*
New York–Newark, NY–NJ–CT	1,440	5,650	30,656	76,662	138,114
	0.01	*0.06*	*0.30*	*0.73*	*1.30*
Orlando, FL	148	211	2,076	10,328	22,370
	0.02	*0.02*	*0.23*	*1.10*	*2.32*
Philadelphia, PA–NJ–DE–MD	391	645	3,070	22,813	52,412
	0.01	*0.02*	*0.10*	*0.74*	*1.69*
Phoenix–Mesa, AZ	359	783	4,781	15,144	32,686
	0.02	*0.04*	*0.25*	*0.76*	*1.59*
Pittsburgh, PA	102	122	1,587	6,874	12,516
	0.01	*0.01*	*0.16*	*0.68*	*1.24*
Portland, OR–WA	151	213	688	6,001	13,755
	0.01	*0.02*	*0.06*	*0.54*	*1.22*
Providence, RI–MA	65	90	952	4,323	7,746
	0.01	*0.01*	*0.14*	*0.64*	*1.13*
Riverside–San Bernardino, CA	66	135	1,211	4,896	10,251
	0.01	*0.01*	*0.13*	*0.49*	*1.00*
Sacramento, CA	105	298	1,743	7,374	17,510
	0.01	*0.03*	*0.19*	*0.79*	*1.81*
Salt Lake City–West Valley City, UT	-	71	445	1,935	5,316
	0.01	*0.01*	*0.08*	*0.33*	*0.90*
San Antonio, TX	189	338	1,571	5,042	16,186
	0.02	*0.03*	*0.15*	*0.48*	*1.50*
San Diego, CA	324	1,097	6,736	21,104	34,564
	0.02	*0.07*	*0.41*	*1.25*	*2.03*
San Francisco–Oakland, CA	1,145	5,152	18,987	44,236	59,093
	0.06	*0.27*	*0.97*	*2.21*	*2.91*
San Jose, CA	220	824	4,370	13,285	20,841
	0.02	*0.09*	*0.46*	*1.35*	*2.09*
San Juan, PR	-	-	-	80	166
	0	*0*	*0*	*0.01*	*0.03*
Seattle, WA	615	1,655	5,608	14,118	24,966
	0.03	*0.09*	*0.30*	*0.73*	*1.26*
St. Louis, MO–IL	184	247	358	2,667	8,778
	0.02	*0.02*	*0.03*	*0.22*	*0.70*
Tampa–St. Petersburg, FL	172	279	2,062	11,090	27,490
	0.01	*0.02*	*0.15*	*0.80*	*1.91*
Virginia Beach, VA	91	105	683	4,772	11,111
	0.01	*0.01*	*0.08*	*0.58*	*1.34*
Washington, DC–VA–MD	911	4,137	18,476	47,752	73,171
	0.03	0.15	0.64	1.63	2.48

Note Italics denotes share of tax workforce. See notes for Table 1. Counts less than 50 persons are suppressed.

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