

NWX-US DEPT OF COMMERCE

**August 21, 2019
12:30 pm CT**

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode until the question-and-answer session of today's conference. At that time you may press Star 1 on your phone to ask a question. I would like to inform all parties that today's conference is being recorded. If you have any objections you may disconnect at this time. I would now like to turn the conference over to Ms. Earlene Dowell. Thank you, you may begin.

Earlene Dowell: Thank you (Kara) and thank you to Greg Pewett from the US Census Bureau for hosting our webinar today. On behalf of the US Census Bureau and a partnership with the Council for Community and Economic Research and the Labor Market Information Institute, welcome to our August (LED) Webinar. It is with great pleasure that I introduce my colleague Kristin Sandusky as she presents "What May Be Driving Growth in the "Gig Economy." This webinar will describe challenges to measuring the rise and significance of the Gig economy. And we'll explore what publicly available data tells us about the prototypical Gig sector, including ride sharing.

Kristin Sandusky is an Economist with the US Census Bureau's Center for Economic Studies LEHD Program. Her research focuses on alternative work arrangements such as Gig work, business ownership, contract work and other

forms of self-employment. Specifically she explores the factors that propel individual workers to make these labor market choices and the impact these choices have on their career progression. More broadly her work seeks to identify potential enhancements to federal statistics that may illuminate how growth and alternative work arrangements may impact a local state or national economy. With that, I hand it over to Kristin.

Kristin Sandusky: Thanks Earlene and thank you to all participants today for joining us. Again I am Kristin Sandusky with the Center for Economic Studies at the Census Bureau. More specifically, with the Longitudinal Employer Household Dynamics Program.

Kristin Sandusky: So before I even tell you more about my background it's a little bit difficult to even discuss my background with regard to alternative work arrangements and Gig employment without expressing an opinion.

So I would first like to point out that the standard disclaimer applies. All opinions expressed in this presentation are my own and do not necessarily represent the views of the US Census Bureau. And any results presented in this presentation have been thoroughly reviewed to ensure that no confidential information has been disclosed.

With that said one of my first assignments at the Census Bureau was to link information on wage records for wage and salary workers to traits of the businesses for which they worked. And, what became apparent to me is that these administrative data on businesses also represented self-employment jobs for people. So they were an additional source of employment opportunities for these people.

And around the time that we were performing these integrations the standard view was that the self-employed workforce was in some ways separate from the wage and salary workforce. That it was this small subgroup that stayed self-employed for the duration of their careers. And they either chose self-employment because of some sort of personal preference or because the work that they did or the sector in which they worked necessitated that they be organized in that way.

And what quickly became clear to us as we linked together information on self-employed workers and wage and salary workers was that in fact this is not necessarily the case at all. There is a very dynamic flow of people between wage and salary work and self-employment in any given year such that people may move into self-employment and then back in again, back out again and do that repeatedly over the course of their careers. And it's also the case that it's more likely than not that a person who has self-employment earnings also has some wage and salary earnings in that same year. So they're doing both things and not necessarily just one.

From my work using these data my collaborators and I found that we were very well poised to investigate some of the bigger questions surrounding the Gig economy. And, it's pretty hard to be unaware at this point that there's a lot of hype or attention surrounding the Gig economy. So I'd like to address why this question, why this phenomenon has received so much attention.

And a lot of it has to do with technology. I remember in the 90s when I got my first PC at home. I remember when I got my first cellphone, my first dial-up Internet connection and my first smartphone. And I remember how impactful these technologies were in the way that I lived my life and did my work. And this is true for all of us. And these technologies have really led to the development of online marketplaces that govern and really dominate how

we engage with the outside economy, how we buy products and services, how we travel, how we find housing, how we secure other services for ourselves.

And because we see ourselves restructuring so much our lives around these technologies it makes us aware that there's somebody out there supplying -- on the supply side - making these services available to us. And so if the way we engage with the market has changed so profoundly it makes us wonder whether the economy and the jobs that are in the economy and the way that they are organized might have changed very much as well as a result of the introduction of these technologies.

And this has led to the perception that this rapid growth in technology is really leading to a reorganization and work. Whether or not this is true is an open question. But it's a very important question from the perspective of workers. The presence of these technologies really has lowered the costs of securing some sort of outside employment for workers. It makes it much more easy to do. Specifically it's made it much more possible for someone to find work that might fit within the confines of their schedule. And so someone who, say, might have been outside of the workforce for reasons related to dependent care may now be able to find employment that fits more appropriately with their schedule.

But at the same time it then places a little bit more of the risk bearing responsibility on the job holder themselves. It's now up to them to secure their own health insurance, to save for retirement themselves and this job that they are now working in operates outside of legal protection such as unemployment insurance.

And it turns out that the way historically the majority of employment in the US economy has taken place within the confines of these traditional

employer/employee relationships. And the tools that we use then to measure these relationships or the workforce have very much taken this for granted. And do a very good job of capturing those types of relationships.

So if we now have a potentially growing group of people who are operating outside of those relationships, it makes us question whether or not the tools that we use to measure this workforce are up to the challenge. And so some big questions then surrounding the Gig economy are just how big is it. How many people and how many jobs does this sector include. How is it changing over time. Is it large enough to actually matter when we look at measurements of employment.

And does it matter how we measure that employment. Does it matter - do we get different answers if we use a household-based survey or a business survey or tax data to answer that question.

And we also have open questions about who participants in the Gig economy are. What are their ages, their education, is it confined to specific locations and sectors? And how do these people use Gig employment? Are they lured into it by available opportunity and so are they using it as some sort of secondary source of earnings or are they pushed into it out of economic necessity such as from displacement from a primary source of employment.

And these jobs are not being introduced in a vacuum. So the increase in Gig employment opportunities are taking place in sectors where people already work. And so another open question is what impact do these emerging jobs have on the people who already worked in that sector. Do we see those incumbent participants being more likely to exit or if they stay do we see some sort of impact on their earnings.

Before we can even begin to address these questions we need to come up with some sort of at least a ballpark idea of what we mean by Gig employment. And this is something that my collaborators and I have given a great deal of thought to and if you're interested here are two papers that address exactly these topics.

But to boil down to where the term came from, it's borrowed from the music industry, like, a band works a Gig. So a Gig refers to a job that has no long-term connection to any particular business. So there's no implicit or implicit contract for continued work and the person is employed for a particular period of time or for particular tasks. And if you want to formalize that, this is a subgroup of what we refer to as contingent workers.

Where we see these workers... Where might we find some information on these workers? One is we can go to the companies that are supplying these types of Gig jobs - Uber, Task Rabbit, Lyft, Upwork, any of those. What that would do is it would give us a very precise measure of yes these people are Gig workers. But in essence that's all we would know. We would know that they work for this company and how much they earn. We wouldn't know anything else about any other economic activity that they are engaged in. And we wouldn't know what led them to that work.

Another source of information could be transaction-based data. We would not, though, have any guarantee of representativeness. That is something that some people will choose to utilize and some will not. There are surveys out there that ask specifically about the contingent workforce. One in particular, the CPS - current population survey, contingent worker supplement. It was asked on-going-ly but ceased to probe for these types of work relationships in exactly the timeframe when they were really growing. Although it did show up again in 2017.

But to the extent that we think that Gig type jobs might be not necessarily a person's primary source of earnings, the contingent worker supplement would not ask about those jobs so would miss it.

And then finally we have tax data. So one way to approach measurement of the Gig workforce is to cast a little bit wider net and to recognize that these contingent workers are actually a subset of the unincorporated self-employed. And we have a couple of possibilities for how to measure levels and trends of the incorporated self-employed workforce. One is through household-based survey such as the current population survey. And the other is through tax filing such as Schedule C which we will tell a little bit more about momentarily.

So one first question is let's consider a household-based survey and tax data on unincorporated self-employment. And let's see if they are showing us comparable pictures of what's happening to this workforce over time.

For this picture I would not necessarily focus so much on the individual line, only to recognize that all of these pink lines are coming from some form of household-based survey. And they're all telling us something very similar. The share of the workforce who is operating as an unincorporated self-employed worker is relatively low between, below 7% for the most part. And it's relatively flat and unchanging over time.

Compare that to tax data. These are all different filings of taxes that an unincorporated self-employed person would file. And what you see is that they show a very different picture. They're all growing, growing, growing over time and diverging from this type series that we see from the household surveys.

So this makes us think that, we'll what's going on. What are the tax data capturing that the survey is not. The best way to answer that question is to take a sample of people who respond to a survey. In our case it was the current population survey and compare their survey responses on self-employment to what we see for the same people in tax filing.

And what we found is that not surprisingly the group of people who are reporting on their taxes that they have some self-employment earnings and are not reporting those earnings on the survey is growing over time. And if we further look at who is in that group of people, we found that it's equally composed of three different groups.

One group are people that tell us that they're wage and salary employed in a survey. We see that they have wage and salary earnings from their filings of taxes. But they also have some secondary source of earnings from self-employment that they failed to mention on a survey.

A second group are people who have a wage and salary job that they tell the survey about. But when we look in tax reports we see that they are reporting only earnings from a self-employment job. So we have some reason to suspect that this might be some sort of misclassification where the person does not necessarily think of themselves as self-employed but in fact actually has an ongoing relationship with an employer.

And finally there are people who have self-employment earnings that show up on their taxes and they never tell the survey about any form of employment. So clearly tax data are picking up types of work that are of interest to us when we think about the Gig economy. So for that reason from here on out we're

going to focus primarily on tax data. And we're going to use tax data available at Census to shed light on the Gig employment.

Specifically Census publishes non-employer statistics every year. Non-employers are businesses that have no paid employees. They are subject to federal taxes and they have receipts of 1,000 or more in each year. Most of them are self-employed individuals operating sole proprietorship. I would say about 80%. And they originate from filings of Schedule C that come in, that accompany a 1040.

All right what exactly is a Schedule C. A Schedule C profit or loss from the business is something that a person who has self-employment earnings -- any form of self-employment earnings -- that they received as a sole proprietor. They will fill out this form and send it into the IRS in addition to their regular 1040. Information from this form comes to Census to help Census form a sampling frame and mailing list from which to conduct surveys of businesses.

Specifically Census receives information on the identity of the business owner which comes to us as an anonymized form of that identifier. We receive information on the receipts of the business. And how much expenses that person deducted from that business. So receipts and expenses together can be used to form some form of earnings for that individual engaged in that self-employment activity.

Additionally each person tells the IRS some information about the principle activity that they are engaged in. And they don't do this off the cuff. They have guides provided to them by IRS. So they would select one of these codes and in that way we know who is generating the income. We know how much earnings they received. We know the industry in which they operated.

And what's more because they're filing using a particular address, we know some details about where that activity is located.

All of this and all of the time series that I'm about to show you for the next several slides can be downloaded by anyone from Census' non-employer statistics Web site. It's a publicly available site and all of these data are available.

So if you want to look at published non-employer statistics over this time period from the late 90s all the way up to 2015, what you can see is the line that's growing, growing, growing. We have growth over this period on average of about 2 1/2%. And if we compare this to growth from total non-farm employment, that growth is much, much lower of less than 1%.

What's going on here? In part think about this time period. This was the time period when home computing and the Internet were becoming a regular part of peoples' lives. And so the cost of entry to doing some sort of work on your own was going down, down, down over this time period. So this could in part account for some of this growth. That's just a conjecture.

If we further subset this on the share that our sole proprietors or people that we might think contain our Gig workers, we see that the majority of these - about 80% -- are sole proprietors. I think I want to skip to this first. We did some tabulations using these non-employer statistics that are available online. This table that I'm showing you here could be created from anyone willing to go to the Census' web site and download the data.

And what we were looking for is we made a list of industries that showed the highest growth either in level or percent over this time period. And indeed many of these appear to be types of sectors where we think Gig work might be

concentrated. But there was one sector that stood out to us very profoundly and that was ground passenger transportation. And if you delve more deeply into the microdata that can be done from the data available online, we found specifically that taxi and limousine services was the one that was taking off.

So for the remainder of the presentation that is the sector that we are going to focus on. So what you see these are from published statistics in this sector. You can see that the growth in this sector is just phenomenal especially starting around 2011, '12, especially around 2014 it just skyrockets. And I will remind you if we think of ride share services, like, Uber and Lyft, this very closely mirrors their pattern of ascendance.

As it turns out the majority of ride share workers are unincorporated sole proprietors. I'm going to skip that one. So far we've only used publicly available data. And what we show we've done this at the national level. We focused on one detailed sector and shown growth in that sector over time. This is something that anyone can do. And because Census publishes these data by detailed geography as well, this is something that a person can do for their industry and in their location.

They can look at the size and growth of these types of jobs over time. They can combine this with counts of wage and salary jobs to get a total employment in their industry and location. And then use that total to say what share of our total employment in this industry and in our location is coming from these non-employers or from unincorporated sole proprietors. This is something that all people are able to do.

From this point on though we're going to take advantage of our position at Census and our access to the underlying microdata to take a closer look and learn more about the Gig economy through data integration. And we're going

to take a special focus on the ride sharing industry. Again this is drawing very heavily from work done with my collaborators and for those who are interested the full paper here is the link to the full paper.

So what can we do or what can we learn through data integration. The first thing we can do is because we know the identity of these ride share drivers we are able to then link in demographic traits such as their age, gender, race and ethnicity, their education and whether or not they're foreign born. We can also link to their wage and salary earnings histories from the longitudinal employer household dynamics data. And that would give us information such as do they have a wage and salary job at the same time. Have they recently been displaced from an employer? What have their earnings histories and earnings growth preceding entry looked like.

Another thing we can do given access to the microdata is we can link the non-employer records to themselves across time. So for example in the year 2011 if we link 2010 and 2011 we are able to separate out 2011 non-employers into those who have newly entered the industry in 2011 and those who were incumbent or who were present in the industry in both 2010 and 2011. We're going to use these pieces of information, traits of the workers, and traits of their self-employment spell to take a closer look and to come up with some descriptive statistics characterizing transitions for this group.

So for each worker trait I want to show two sets of - two tables. The first shows the table for all workers regardless for - I'm sorry for all non-employer sole-proprietors excluding those who are ride share drivers or those in 4853. And then I'll show it again focusing only on those who are in 4853. And the black bar in each case is going to show the trait for 2011 incumbents. The red bar to the right will compare the trait for 2011 entrants. And moving further to the right will compare for 2012 entrants - 13 entrants and so on.

So we can see how each cohort of entrant looks different. So what you see if we're looking at the percent foreign born in a sector, what we see is that among all non-employer sole proprietors who excluding this industry 4853, it's a very small fraction who are foreign born about 20%. And it doesn't do anything interesting over time. And incumbents looked very similar to entrants.

This relationship, these patterns look very different for ride share drivers. Incumbents are much more likely to be foreign born than not. Entrants are still much more likely to be foreign born than not in 2011. But they are less likely to be foreign born than incumbents and this declines over time. So what we see is a large inflow of people who are not foreign born.

Similarly we see a large inflow of female workers into ride sharing. It was almost exclusively male and this is becoming less true over time. We see a large inflow of young workers. It is becoming much less non-white over time. And you can see that incumbent taxi drivers in 2011 were almost all exclusively doing self-employment type of activity. The new entrants are much more likely to combine that self-employment activity with wage and salary, some sort of wage and salary work. And by the time we reached 2016 the new entrants are more likely to have a wage and salary job than not.

Their gross receipts of the new entrants is declining, declining, declining. Meaning that the earnings that they are getting from ride sharing is probably much less likely to be their primary source of income. And that is especially true once we deduct, remove for their expenses.

So we've shown that new entrants into taxi driving services look very different from incumbents. That this sector in general looks very different

from the rest of non-employers, and that it's it's changing very rapidly over time.

Now one final thing that we might want to do with our data because we are at Census are going to fully exploit the data available to us at Census and ask the question can we say something about whether or not people are lured into ride sharing by increased opportunity or whether or not they're pushed into it out of economic necessity.

So we are going to ask the question does displacement push layoff workers into self-employment? And here we'll use the LEHD UI wage records to measure that displacement where we define it as a separation from a firm that has experienced a mass displacement event. In addition we are going to ask whether or not people are pulled in by the availability of ride share. And to do that we are going to take advantage of the fact that we know the CBSA in which the person lives. And we have information on when ride sharing actually entered that CBSA.

So for each person in each year we know how long they have lived in a CBSA or how long ride share has been present in the CBSA in which they live. Well what is a CBSA? It's a core based statistical area - just a geographic area. It's, in many cases is larger than a county. It can contain one or more counties. And it has at its center some sort of urban center of 10,000 or more and all of the counties within the CBSA are tied together by commuting pattern.

So we're bringing to this task a rich anonymized data. And we ask the question do push and pull factors increase the likelihood that someone becomes a ride share driver. So again the variable push indicates that that person experienced a mass layoff and the variable pull counts the number of

years that Uber specifically has been present in their CBSA. And we do this holding constant traits of the worker and the CBSA.

Now here's the tricky part. Up to now everything that I have shown you with the descriptive statistics we have used as our primary source of information just the set of people that are currently ride share drivers. If we want to study entry we have to define or make up our mind and find a source of information for people who might be eligible to enter ride sharing. To do that this is where we take full advantage of the data available at Census. Census is in the business of collecting counts of US residents.

And so what we use are all US residents who are old enough to drive in 2010 to 2017. They are currently not ride share drivers - any of those people. So basically if you're alive and living in the US and you're old enough to drive and you're not currently a ride share driver, we are going to estimate the probability that you enter ride sharing. And we have a large number of observations - approximately 1.5 billion.

What do we find? We find that both displacement and the number of years that Uber has been in the CBSA lead to increased likelihood that a person enters the industry. Lastly we want to use our data to take a look at the incumbents. And we want to say are these incumbents in an industry impacted by ride share's presence in their CBSA. Do we see that an incumbent is more likely to exit or if they remain in the industry are they more likely to experience a decline in earnings. And here we find that the answer in both cases is yes. So, these ride share Gig jobs are being introduced in a way that does have an impact on those already operating in that sector.

To sum up what we've done is we've explored the Gig economy and thrown out some ideas about why it's received so much attention. We've identified

traits of the Gig job and where you might want to look for them in the data. And we've said that they are a subset of the unincorporated self-employed specifically contingent workers. We've shown that both survey and administrative data will give us a very different picture of the size and growth of the self-employed population.

And we've shown how any person can use the Census non-employer statistics that are publicly available to use to characterize the full self-employed people in a particular industry and location. And we have linked the non-employer microdata over time and combined the traits of workers and other jobs that they hold and used these data to show how the introduction of online ride share platforms has led to a significant change in the taxi and limousine services industry. And we have introduced then data on all US resident population to take a closer look at what factors drive entry and how the presence of ride share drivers impacts incumbent taxi drivers.

Our findings are that both push and pull factors play a role in the decision to become a taxi driver. The introduction of ride share does impact employment and earnings of the incumbent taxi drivers. But finally and I think most importantly we've demonstrated that administrative data can at relatively low cost and without sacrificing representativeness be used to gain insight into the Gig economy.

So where do we go from here? A lot of what I've shown you relies on access to restricted use microdata. We are just in the beginning phase of designing public use statistics from these research efforts. The products that are currently produced by the local employment dynamics program such as the quarterly workforce indicators, job to job flows may serve as a model for how we might like to ultimately make some of these interesting findings available

on-going-ly to the public. But because these are so very much in the development your input is welcome and encouraged.

And with that, I will stop and we can pause for questions, thank you.

Earlene Dowell: I'd also like to make a comment, thank you. Please keep your questions pertaining to the presentation. Unfortunately we do not have any information regarding Census employment. So with that I hand it over to (Kara) regarding questions.

Coordinator: Thank you. We will now begin the question answer session. You will be permitted to ask one question and a follow up question by pressing Star 1 after which you must press Star 1 to ask an additional question. To ask a question please press Star 1, unmute your phone and record your name clearly. I do need your name in order to introduce your question. If you need to withdraw your question please press Star 2.

Again if you would like to ask a question please press Star 1. It will take a few moments for the questions to come through. Please stand by. The questions are coming in. One moment please. The first question comes from...

(Dubar Rahman): (Dubar Rahman):

Coordinator: Your line is open.

(Dubar Rahman): Yes hi. So I just wanted to know what percent of our workforce actually is involved in the Gig.

Kristin Sandusky: That's the million-dollar question. I've seen numbers range anywhere from 1% to the majority of workers are engaged in the Gig economy. And, what my presentation might have hinted at is that this disparity really comes from the fact that everyone or any two people who talk about the Gig economy may be using a different definition. Some of them are talking specifically about these online mediated type of jobs. Some are speaking much more broadly about any type of alternative work arrangement outside of a formal employer/employee relationship.

So I think that is a question that for every definition you're going to get a different answer. So it's very hard to say. What we have - I think the general consensus to date is that the fraction of the workforce that is finding work through these online mediated platforms although it's growing is still very, very small.

(Dubar Rahman): So anywhere from 1% to what would you say 3%?

Kristin Sandusky: It could be, you know, I've seen upwards of 30%, so, but again, that is not a measure of Gig work - that includes all sorts of alternative work arrangements.

(Dubar Rahman): Sure, thank you.

Coordinator: The next question comes from (Winston Fuller). Your line is open.

(Winston Fuller): I entered this solely by phone so could you provide us with the most direct URL to this information in the Census?

Kristin Sandusky: For the non-employer statistics?

(Winston Fuller): Yes.

Kristin Sandusky: Oh I would put it in Google and then just Google Census non-employer statistics and it should be the first thing that pops up.

(Winston Fuller): Great, thank you.

Coordinator: The next question comes from (Edward Sullivan). Your line is open.

(Edward Sullivan): Hi, thank you. Do the anonymized microdata include home origin or I'm sorry yes home origin and work destination. And if so, at about what geographic level?

Kristin Sandusky: So that is a special question for Gig workers because a lot of these Gig type works or type jobs are something that a person is doing in their home on their computer or they're doing in their car. So one of the wonderful features of these jobs is that it frees the employee or the worker from having work that is that is place based. So although we do have information on their place of residence, we don't have information on their place of work. And in many cases we're just assuming it's one in the same.

(Edward Sullivan): Thank you.

Coordinator: As a reminder if you would like to ask a question please press Star 1 and record your name clearly. The next question comes from (Cynthia Williams). Your line is open.

(Cynthia Williams): Can this be done for employment with regard to universities, community colleges and adjunct faculty?

Kristin Sandusky: So there is in the non-employer statistics there's a category called education services. To the extent that those show up there yes you can. One caution I would throw out there is that many universities or employees of universities are technically state employees. So that would make them not...they would have some sort of alternative work arrangement. They would actually be wage and salary employees of the state.

(Cynthia Williams): I see, thank you.

Coordinator: To ask a question please press Star 1 on your phone. The next question comes from (Patrick Callen). Your line is open.

(Patrick Callen): Do the figures have any idea how many have the Gig job as a primary job versus those who have a wage and salary job and like paint a house on the weekend or mow lawns or something, like, that?

Kristin Sandusky: That's a good question and that's another one where the answer depends on how you're going to define Gig. But I think the answer is that the vast majority of participants are doing this as some sort of supplemental source of earnings.

(Patrick Callen): Okay thank you.

Coordinator: As a reminder for those participants on the phone if you would like to ask a question please press Star 1, one moment. We show no further questions at this time.

Earlene Dowell: Okay well then I would like to thank Kristin for her informative and interesting presentation. And thank you to our audience for joining us today. A recording will be made available on the Census Academy under "Explore

Data” on census.gov. A couple upcoming announcements. Join us next month when (Sharon Arselen) presents DC’s startup scene opportunity cost. Also registration is still open for the 2019 LED Partnership Annual Workshop for September 4th through the 5th. Go to the lehd.ces.census.gov to register. Thank you so much and we hope you enjoy the rest of your day.

Coordinator: That does conclude today’s conference. Thank you for participating. You may disconnect at this time. Speakers please allow a moment of silence and standby for your post conference.