The Effect of the Gig Economy on Labor Supply and Retirement Decisions

Emilie Jackson

Although self-employment offers certain advantages, as workers shift away from traditional work arrangements many will no longer receive important benefits, labor protections, and tax benefits that operate through the employee-employer relationship. These issues are particularly important today because of the growth of the gig economy through the emergence of platforms such as Uber, Task Rabbit, Airbnb, etc.[1] Hence, understanding the implications of the changing U.S. workforce is an important step towards improving labor and tax policies.

The rise of gig platforms not only presents workers with more flexible work opportunities but also makes such positions quite accessible. This research proposal outlines my ongoing and future analysis of the implications of the growth in gig employment opportunities for workers' labor supply, retirement decisions, and skill acquisition. I will first explore how the growth affects older workers' retirement decisions and overall labor supply, as they may have higher valuations for flexible work than the overall workforce. I will also explore how this impacts workers longer-term career decisions and human capital accumulation.

In particular, I will first examine how the introduction of the gig economy has altered labor force participation (e.g. retirement decisions, number of jobs). Some workers may now work longer as they transition into flexible work, given the new availability, rather than transitioning directly into retirement. Other workers who valued flexible jobs and would have transitioned to them earlier, but did not due to availability, may now exit full-time employment earlier than they otherwise would in a world without gig opportunities. Therefore, the extent to which these effects on net increase or decrease labor supply among older workers needs to be measured empirically. The policy implications of this will depend on the extent to which these opportunities prompt individuals to work longer versus retire earlier.

Second, this is part of a larger research objective of understanding how gig work impacts a workers' long-term welfare by understanding how such work fits into the career and life cycle of an individual. I will evaluate whether and to what extent the gig economy participation changes a worker's trajectory. What are the dynamics of an individuals' earnings, education, and career, before, during, and after gig employment?

Gig jobs provide short-term, flexible work and permit workers to smooth income during what could otherwise be spells of unemployment. Yet, the availability of short-term low-skilled employment may lead workers to stop acquiring skills and to lower their search effort for high-skilled employment. This can lead to a poverty trap, where the gig economy grabs and keeps workers who might have otherwise gained additional skills. Workers may forego additional educational attainment or vocational training for easy income in the short-run. This may have important consequences for human capital investment of workers and implications for inequality.

Related Literature

My research relates to a small but emerging literature measuring the recent growth of the gig economy and alternative work arrangements. In Jackson, Looney, and Ramnath (2017), we

[1] The "gig economy", though not formally defined, is used colloquially to refer to digital platforms that are matching consumers and providers (e.g. Uber, Lyft, Airbnb, etc.). Other phrases commonly used to refer to these platforms are the "sharing economy" or the "on demand economy". In this research, I will be focusing on gig employment through such platforms and not contract work more broadly.

documented that a rising share of American workers are earning income outside of traditional employee-employer relationships and showed that most of these newly self-employed individuals appear primarily to be providing labor services as contractors or freelancers.[2] Furthermore, while health insurance coverage is improving for these groups with policies such as the Affordable Care Act (ACA), gaps in coverage for health and, especially, retirement benefits remain for this growing group of self-employed. This may reduce access to safety-net programs later in life. Thus, it is also important to think about the larger implications of an increase in gig employment for workers well-being beyond just whether or not it is employing more individuals.

In this research, I will delve into the documented growth to identify the causal impact on worker outcomes and labor supply. The effects and implications will necessarily depend on the type of workers being drawn to these positions and what their counterfactual behavior would have been. Prior studies highlight the importance of examining how the flexibility provided by gig work may attract workers, especially older workers. Though the majority of workers may not be willing to pay for schedule flexibility, there exists a long tail of workers with high willingness to pay (Mas and Pallais, 2017). In fact, many drivers cite their preference for flexibility as their reason for working for Uber (Hall and Krueger, 2016). Among older workers, willingness to work longer is higher for jobs that offer flexible schedules and demand-side factors (such as the availability of such flexible positions) may be contributing to the current labor market behavior (Ameriks et al., 2017). Thus, the job opportunities provided by the gig economy may provide flexible job options that older workers value.

This research also relates to Ramnath, Shoven, and Slavov (2017). They examine transitions into self-employment as a bridge job between career employment and retirement, and find this pathway to retirement to be less common than expected. However, this may be due to the fixed costs of entering self-employment; thus, the rise of gig platform opportunities may increase its prevalence. It will be important to zoom in on the accessible and flexible positions provided by gig platforms.

Finally, policies that weaken the link between benefit coverage and formal employment, such as the ACA, may not only affect peoples' incentives to work but may influence the types of positions in which they work. A large literature exists showing the link between retirement decisions and employer-sponsored health insurance (Gruber and Madrian, 2002). For this group of older workers, transitioning to gig positions may seem more attractive for those remaining in traditional full-time work in order to maintain health insurance coverage through their employer.

Data

For this research, I am using administrative federal tax return data for the United States, which include both income tax returns (e.g. Form 1040, Schedule C) as well as third-party information returns (e.g. W-2s, 1099s). These data contain a wealth of information on demographic and economic characteristics, all sources of earnings, detailed benefit coverage, and take-up of government assistance. I am able to track individuals over time and identify the sources and concentration of sources of an individual's earnings. Crucially, I am able to identify individuals who work for gig platforms by those who receive a 1099-K or 1099-Misc from a gig platform Employer Identification Number (EIN), and based off their self-described business professions on schedule C.

[2] Estimates indicate that roughly 0.4-0.6 percent of workers are involved in the gig economy (Katz and Krueger, 2016; Farrell and Greig, 2016; Harris and Krueger, 2015) and that the percentage of workers engaged in alternative work arrangements increased from 10.1 in February 2005 to 15.8 percent in late 2015 (Katz and Krueger, 2016).

Proposed Analysis

The objective of this research is to provide causal inference of the availability of gig platforms on workers' behavior, both in terms of retirement and labor supply. To get the exogenous variation necessary for causal inference, I will utilize variation in the date at which gig firms enter different cities to measure the availability of gig work in a given city in a given year. This can be measured both on the extensive margin, as an indicator of whether there is any firm present in a city, or on the intensive margin, as a measure incorporating the number of firms that are present in a city.

For example, Uber entered San Francisco in 2010, New York in 2011, and Los Angeles in 2012. Thus, the thought experiment would be to compare an individual living in San Francisco after 2010 to a similar individual in San Francisco before 2010 as well as to individuals in New York and Los Angeles where Uber had not yet entered. This assumes that the timing of entry of firms into a city is not correlated with worker outcomes that may also affect their retirement and labor supply decisions.

Once I have these timings, I can couple this all with the tax data to examine how this impacts workers' trajectories: their employment, earnings, education, and access to various benefits.

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WORKING PAPERS:

"The Effects of the Affordable Care Act on Health Insurance Coverage and Labor Market Outcomes" NBER Working Paper # 23607 *(with Mark Duggan and Gopi Shah Goda) – submitted*

"The Impact of the Affordable Care Act: Evidence from California's Hospital Sector" *(with Mark Duggan and Atul Gupta)*

"The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage" OTA Working Paper 114 *(with Adam Looney and Shanthi Ramnath)*

"Migration Responses to the Affordable Care Act"

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Stanford | Institute for Economic Policy Research (SIEPR)

Mark G. Duggan
The Trione Director of SIEPR and
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Professor of Economics

December 17, 2017

Dear Selection Committee,

I am delighted to write to you on behalf of Emilie Jackson, a fourth-year Ph.D. student in the Department of Economics at Stanford University, who is applying for an NBER Pre-Doctoral Economics of Aging Fellowship for the 2018-19 academic year. I have gotten to know Emilie well during the past 2+ years as she worked as my research assistant during her second year of graduate school and we now have two co-authored working papers. Both are examining the impact of the Affordable Care Act, with one looking at labor market effects (also with Gopi Shah Goda at Stanford) and the other examining the effects on the quality of care and on health outcomes (also with Atul Gupta at U-Penn). On both projects Emilie has been a truly outstanding co-author and the locomotive on many of our empirical analyses. She has also frequently highlighted limitations with the data and/or with our methodology that have caused us to revise course while simultaneously leaving no stone unturned when tracking down the relevant previous literature.

Emilie has also been making excellent progress during the past year on her sole-authored research that is using administrative tax return data housed at the U.S. Treasury Department. The data set is massive and quite complicated so it took her some significant time to master it. Using this data, she is examining the effects of the rapidly expanding "Gig Economy" on earnings and employment. At platform-based companies such as Uber and TaskRabbit, workers can now have more flexibility with respect to when and how many hours they work. However, these more flexible work arrangements can come with a cost, with for example fewer benefits such as health and disability insurance.

More flexible work arrangements may have a different effect on the employment decisions of older workers than of workers in their thirties or forties. For example, they may cause some workers to retire from full-time work sooner and serve as a bridge to retirement. Alternative, the timing of retirement from full-time work may be largely unaffected, with many working later in life through Uber and similar platforms. There has been a very substantial increase in this sort of work in recent years but very little exploration of its impact on workers and/or the implications for tax and/or benefit policy. Additionally, increases in minimum wages (which many states have implemented during the past few years) may lead more workers to shift into contract work to "get around" this constraint. Similarly, the introduction of the Affordable Care Act and the resulting increase in health insurance coverage may have made these flexible contract positions more attractive.

I am optimistic that Emilie's research will produce important insights regarding the effects of the alternative work arrangements that are increasingly available as the Gig Economy expands on the labor supply decisions of older workers. Using her longitudinal tax data, she can see both W-2 and 1099, etc. earnings at the individual-level. She also has information including the age and geographic location of the worker. These data also have employer identifiers – so that she can determine if an individual is employed by or working as a contractor for a gig economy company. To get at the causal effect, she is currently exploring the possibility of leveraging differences in the timing of specific companies' entrance into certain markets (e.g. Uber entered San Francisco before it entered Los Angeles, etc.), though she is actively investigating other promising empirical approaches for this as well.

To sum up, Emilie has what is arguably the best possible administrative data to investigate the effects of the rapidly growing "gig economy" on older workers' labor market outcomes. Based on her work with me on the two ACA projects and her rapid progress with the Treasury tax return data and in formulating an interesting set of research questions, I think that she is a truly outstanding candidate for this Economics of Aging Fellowship. I am therefore pleased to endorse her application in the strongest possible terms. Please feel free to contact me if you need additional information.

Sincerely,

Mark G Duggan

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