



Data on The Sharing & On-Demand Economy: What We Know and Don't Know



THE ASPEN INSTITUTE

FUTURE OF WORK

INITIATIVE

THE FUTURE OF WORK INITIATIVE is a nonpartisan effort to identify concrete ways to strengthen the social contract in the midst of sweeping changes in the 21st-century workplace and workforce. The Initiative is focused on two key challenges in particular: first, how best to advance and protect the economic interests of Americans in the rapidly growing economy of shared goods and services; and second, how best to inspire a 21st-century capitalism for a 21st-century workforce by incenting employers to help workers get ahead. The Initiative is driven by the leadership of Honorary Co-Chairs Senator Mark Warner and Purdue University President Mitch Daniels with Co-Chairs John Bridgeland and Bruce Reed. For more information visit aspn/futureofwork.

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Executive Summary

UNTIL 2015, WE KNEW VERY LITTLE about the work and workers in the sharing/on-demand economy. Indeed, the last official government survey of the broader contingent workforce was conducted in 2005¹ — long before most of these new platforms or apps even existed. However, in the last year, our understanding has advanced dramatically, thanks to the release of a few key pieces of research, including: the JPMorgan Chase Institute study, “Paychecks, Paydays and the Online Platform Economy;” Lawrence Katz and Alan Krueger’s “The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015;” work by Intuit and Emergent Research, “Dispatches from the New Economy: The On-Demand Economy Workforce;” and others. However, while these and other studies have revealed a great deal about the work and workers in the sharing/on-demand economy, there is still much we need to understand. This paper aims to lay out what we know about the sharing/on-demand economy and define questions for additional research. This paper is meant to be a resource for public and private research organizations, foundations, government agencies, and other parties interested in promoting a more thorough understanding of the sharing/on-demand economy workforce, including its relationship to the broader contingent workforce.

¹ “Contingent and Alternative Employment Arrangements, February 2005,” US Bureau of Labor Statistics, <http://www.bls.gov/news.release/pdf/conemp.pdf> (July 27, 2005)

Methodology

ONE OF THE KEY GOALS of the Future of Work Initiative is to promote a better understanding of the contingent workforce broadly and the sharing/on-demand workforce specifically. In pursuit of that goal, the Initiative has hosted public events and panels, private roundtables and convenings, engaged with numerous stakeholders from across sectors and across the political spectrum, collected and digested the most well-regarded studies on the changing workforce and this emerging economy, and has conducted its own private quantitative research. This paper is informed by our learnings across those activities over the past year, and in particular through:

Interviews with key experts and researchers who have broad experience with this issue area and research work in this space — both their own and that of the research community

Two roundtable discussions organized by the Aspen Institute Future of Work Initiative, convening a broad range of experts and stakeholders focused on data regarding the on-demand economy; the first co-hosted with New America and the JP-Morgan Chase Institute (JPMCI) in Washington, DC in March 2016, and the second co-hosted with JPMCI in San Francisco in May 2016

It should be noted that developing a comprehensive understanding of work and workers in the sharing/on-demand economy is challenging, due in part to substantial variation in language, definitions and scope used across existing research efforts. For instance, studies from various sources have presented a broad range of data points estimating something as simple as how many people work in alternative relationships broadly and sharing/on-demand work specifically. Before diving into such studies, it is important to understand methodology, populations being studied, terms used, and more. A few key notes: first, the universe of workers included is often very different across studies, so sizing efforts are not always comparable on an apples-to-apples basis; second, different data sources (i.e. worker surveys, establishment data, tax data, private company data, etc.) assess different populations and aspects of the work and workforce and do or don't overlap in important and non-obvious ways; third, there is reason to believe that many Americans engaging in alternative work arrangements of various types are doing so in addition to more traditional work rather than in place of it, such that the two categories are not mutually exclusive; and fourth, many of those who engage in alternative work likely do so intermittently, so estimates will vary significantly if measuring how many workers have ever engaged in a particular type of work, have in the past year, past month, past week, do so regularly, often, intermittently, etc.

For the purpose of this paper, we are interested in the sharing/on-demand economy workers that use online platforms to generate income. Each sharing/on-demand economy platform may have a different work relationship with its workforce; for example, Uber provides income to drivers as independent contractors, Honor's home health care aides are W-2 employees and Instacart's drivers are independent contractors but its in-store shoppers have the option to be W-2. We are also interested in the broader contingent workforce (those workers who do not have an explicit or implicit contract for long-term employment) of which the sharing/on-demand economy workforce is a small subset. This broader workforce can be considered to include not just independent contractors, but also some W-2 workers — such as those employed by temp or contracting agencies, part-time employees, and on-call workers (the universe of alternative work arrangements studied in the Bureau of Labor Statistics' Contingent Worker Supplement).

I. Context

THE AMERICAN WORKFORCE IS CHANGING. We are seeing a fundamental shift away from the single-employer career of the 1950s and toward an economy where workers expect to have more jobs over the course of their careers than the previous generation did – with many workers today earning income from multiple sources simultaneously. Recently, apps and platforms that connect people with work, such as Uber and TaskRabbit, have provided a new lens on the implications of alternative work arrangements. On one hand, many American workers have embraced this increased flexibility, crafting careers as freelancers and using on-demand work opportunities as a vital tool for supplemental income when needed. On the other hand, they have raised anew some longstanding concerns about the lack of benefits and protections for independent workers. Indeed, since well before the founding of Airbnb (2008) and Uber (2009), employees and employers have been going through a long but accelerating divorce.

Depending on the survey and its methodology, anywhere from 15 million² to 54 million³ Americans are categorized as freelancers or contingent workers broadly. According to a 2015 GAO study⁴, contingent workers (defined by the GAO broadly to include those in alternative work arrangements as well as standard part-time workers) comprised 35.3% of employed workers in 2006 and 40.4% in 2010. And there has been a significant increase in the total number of 1099-MISC forms issued by the IRS in the last 15 years (approximately 22% since 2000) according to a 2015 study by Eli Dourado and Christopher Koopman⁵. Dourado and Koopman also found that during the same period, W2 forms have stagnated, falling by around 3.5%. According to economists Alan Krueger and Lawrence Katz⁶, between 2005 and 2015, the number of workers in alternative work arrangements increased by more than half, from 10% to 16% of the workforce — that’s nearly 10 million people. Put another way, new contingent jobs accounted for all of the net new job growth during that time period.

At the same time, we have also seen the rapid growth of online platforms — both labor/services marketplaces such as Lyft, Taskrabbit and Instacart as well as capital/goods marketplaces such as Airbnb, Thumbtack and Etsy. In fact, 2016 JPMorgan Chase Institute research⁷ showed that online labor platforms were the fastest growing section of the labor market, ahead of home care and software — with cumulative

2 Lawrence Mishel, “Despite Freelancers Union/Upwork claim, freelancing is not becoming Americans’ main source of income,” <http://www.epi.org/publication/despite-freelancers-union-upwork-claim-freelancing-is-not-becoming-americans-main-source-of-income/>, (December 9, 2015)

3 “Freelancing in America: 2015,” <https://www.upwork.com/i/freelancinginamerica2015/>, (October 1, 2015)

4 GAO, “Contingent Workforce: Size, Characteristics, Earnings, and Benefits,” <http://www.gao.gov/assets/670/669899.pdf>, (April 20, 2015)

5 Eli Dourado and Christopher Koopman, “Evaluating the Growth of the 1099 Workforce,” <http://mercatus.org/publication/evaluating-growth-1099-workforce>, (December 10, 2015)

6 Lawrence Katz and Alan Krueger, “The Rise and Nature of Alternative Work Arrangements in the United States, 2005-2015,” http://krueger.princeton.edu/sites/default/files/akrueger/files/katz_krueger_cws_-_march_29_20165.pdf, (March 29, 2016)

7 JPMorgan Chase Institute, “Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility,” <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

participation growing 47-fold in the period from 2012-2015. The quick pace of business growth in the sharing/on-demand economy coupled with the dramatic growth of this area of the labor market suggest that both consumers and workers value these platforms, and they are likely here to stay.

Because of the implications of shift to contingent work broadly and sharing/on-demand work specifically, it is important that we begin to understand the size and nature of work in the sharing/on-demand economy. The growth of these platforms — and the platforms' business model decisions to provide income to workers as independent contractors — has brought a higher profile to a longstanding trend, and in some ways has provided grantmakers and policymakers alike with an easier way to understand the advantages and consequences of contingent work generally.

First, this transformation of the labor market raises questions about the future of the social safety net. Almost by definition, 1099 work arrangements come without the benefits and protections typically afforded to W2 employees, including unemployment insurance, workers compensation, health insurance, disability, tax withholding or paid leave. An increase in contingent work may come with long term economic risks in the form of reduced retirement savings and reduced employer investment in worker development and training. If workers do not have easy access to retirement savings mechanisms through an employment relationship (let alone have the benefit of employer contribution to retirement savings), such savings may be reduced over the longer term. Similarly, if workers cannot count on employers to provide on-the-job training and other development opportunities, we risk losing competitiveness in a global labor market. We may also see individuals turning to community colleges or other government-funded entities or programs to re-train or re-skill as necessary, prompting a need for greater investment in these resources. Understanding the scope and nature of these challenges is critical to address any gaps that may be opening up.

Second, a shift to non-traditional work generally, and perhaps sharing/on-demand economy work in particular, exposes an emerging set of hopes or expectations about what work can be, and how it can fit into individuals' lives, one that challenges the dominant paradigm of the 8 hour work day and 5 day work week. Working independently has a set of benefits — including flexibility, autonomy and entrepreneurial opportunity — that some workers clearly prefer. Others are pushed into contingent work by circumstance, or by companies unable, uninterested or unwilling to take on employees. Understanding the goals, benefits and drawbacks, and risk appetite of sharing/on-demand economy workers is important to define policy objectives in this area.

Third, many of the most sophisticated thinkers about the future of work believe that the shift to work accessed through apps or platforms is a signal of how more and more people will be working in the years to come. Already, we see platform-en-

abled work starting to include not just low-wage, low-skilled work (such as driving or home cleaning) but also high-wage, high-skill work, as with Doctors on Demand, Upwork or Legalzoom. In a sign that the future is already here, accounting giant PwC in Winter 2016 launched its TalentExchange⁸, which enables the firm to complement its full time workforce with specific freelance talent or expertise on a project-by-project basis. Experts believe that automation and augmentation are likely to accelerate this trend, with Intuit estimating that as many as 40% of all workers will be contingent workers by 2020. While estimates of the size of the sharing/on-demand economy are still small as a percentage of all work and as a percentage of all contingent work, it is important to develop a greater understanding of the nature and trajectory of platform-enabled work as we consider how to update our social contract.

Until 2015, we knew very little about the work and workers in the sharing/on-demand economy. Indeed, the last official government survey of the contingent workforce broadly was conducted in 2005 — long before most of these new platforms or apps even existed. However, in the last year, our understanding has advanced dramatically, thanks to the release of a few key pieces of research including: the JPMorgan Chase Institute study, “Paychecks, Paydays and the Online Platform Economy;” Lawrence Katz and Alan Krueger’s “The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015;” work by Intuit and Emergent Research, “Dispatches from the New Economy: The On-Demand Economy Workforce;” and others. This paper aims to lay out what we know about the sharing/on-demand economy and define questions for additional research.

⁸ Claire Zillman, “PwC Wants To Use ‘Gig Economy’ Workers to Staff Projects for Its Clients,” <http://fortune.com/2016/03/07/pwc-freelance-marketplace/>, (March 7, 2016)

II. Aspen Institute Future of Work Initiative Efforts

THE ASPEN INSTITUTE FUTURE OF WORK INITIATIVE is a non-partisan effort to identify concrete ways to strengthen the social contract in the midst of sweeping changes in today's workplace and workforce. As part of this work, the Initiative has sought to deepen our collective understanding about the size and nature of sharing/on-demand work, as well as its role in broader shifts in the size and nature of the contingent workforce. The Initiative has convened leading economists and thinkers in this space to catalog what we know — and what we still need to understand — about sharing/on-demand work. In partnership with New America and the JPMorgan Chase Institute, the Future of Work Initiative convened a roundtable in Washington D.C. in March to bring together economists and other experts from government, industry, worker advocacy and policy. The Initiative also partnered with JPMorgan Chase Institute to host a similar session in San Francisco. Several key themes emerged:

- *We need more and better data:* Participants vigorously agreed there is a lack of credible data available about those who earn income in the online platform economy. This type of information is critically important as we seek to understand how these emerging work platforms connect to the overall employment picture and labor market. We are interested in understanding if these new work arrangements are providing ladders of economic mobility to low-income individuals or youth who are otherwise disconnected from school and work. It's also important to have as we look at issues of financial security and income volatility, and as we explore policy concepts related to the future of the social compact.
- *Language and definitions matter:* The language used in surveys to prompt individuals to describe the work they do can have a big impact on results. This may be especially true in efforts to understand individuals with multiple jobs or income streams, as respondents may not think of some income generation as “work.” Further, more traditional approaches that ask individuals to classify themselves as working either full-time, part-time, self-employed or unemployed may be revealing only one portion of an individual's financial reality. And finally, definitions vary significantly across studies, from a narrow focus on online platform workers to a broad focus

on workers in alternative work arrangements that can include W-2 workers — such as those employed by temp or contracting agencies, part-time employees, and on-call workers.

- o *No single study will tell the whole story*: Participants expressed widespread enthusiasm for US Secretary of Labor Thomas Perez’s decision to fund the Bureau of Labor Statistics to re-run the Contingent Worker Supplement, a national survey collecting data on contingent work, in 2017 (the last time the Contingent Work Supplement was taken was in 2005)⁹. That effort will undoubtedly make a significant dent in the need for more data. However, every study has limitations, and no one research agency or data analyst will be able to provide the perfect picture of the trends we are seeing. For this reason, there would be enormous benefit to aligning efforts across the research community. Complementary research approaches by data collectors is the only way to yield a more comprehensive view of sharing/on-demand economy labor.

To support a more informed dialogue, the Future of Work Initiative also fielded and released two independent surveys. In collaboration with *TIME* and Burson Marsteller, the Future of Work Initiative produced a study to advance our understanding of the workforce and consumers that participate in the sharing/on-demand economy. [The On-Demand Economy Survey](#) provides key data points that, when married with other data, can move us toward a more complete picture of this new economy. Working with the Markle Foundation and again in partnership with *TIME* and Burson Marsteller, the Future of Work Initiative released the [Workforce of the Future Survey](#), in which we asked hiring managers about their views on key trends in contingent work to gain a greater understanding of the pressures and incentives facing employers. Additionally, the Future of Work Initiative commissioned Doug Holtz-Eakin, Ben Gitis, and Will Rinehart of the American Action Forum to produce a study based on General Social Survey (GSS) data — duplicating the methodology used by Gitis and Rinehart for a previous study of the contingent workforce — to research trends in the regional and demographic variation among contingent workers (to be published Fall 2016).

⁹ U.S. Secretary of Labor Tom Perez, “Innovation and the Contingent Workforce,” <https://blog.dol.gov/2016/01/25/innovation-and-the-contingent-workforce/>, (January 26, 2015)

III. What we know: Summary of research to date

DURING THE LAST YEAR, our shared understanding of work in the sharing/on-demand economy has deepened substantially, with research contributions from academics (such as Alan Krueger and Lawrence Katz), nonprofits (such as Pew Research Center), platforms (such as Thumbtack, Airbnb, Etsy and others) and other interested companies (such as Intuit and Stride Health). A compilation of recent research is included in the appendix.

While more research is desperately needed, data released in the last year have begun to give color and contour to the landscape of work in the sharing/on-demand economy:

USE OF THE SHARING/ON-DEMAND ECONOMY IS WIDESPREAD

- 72% of Americans have used a shared or on-demand service in last year (includes used goods purchased online or ordering with same day/expedited delivery)¹⁰
- 70% of Americans have used one or more on-demand service in the on-demand economy (includes goods sharing like eBay, Etsy, Craigslist)¹¹

HOWEVER, NOBODY KNOWS WHAT TO CALL IT

- 73% of Americans are not familiar with the term “sharing economy”¹²
- 89% of Americans are not familiar with the term “gig economy”¹³

THE NUMBER OF PEOPLE EARNING IN THE SHARING/ON-DEMAND ECONOMY IS STILL SMALL BUT GROWING QUICKLY

- Slightly less than 1% of adults in the U.S. earned income through the platform economy in a given month, but more than 4% (10.3 million) participated over a three year period from 2012-2015¹⁴; San Francisco has the highest rate of participation at 5%¹⁵

10 Aaron Smith, Pew Research Center, “Shared, Collaborative and On Demand: The New Digital Economy,” <http://www.pewinternet.org/2016/05/19/the-new-digital-economy/>, (May 19, 2016)

11 TIME, Burson Marsteller, Aspen Institute, “The On-Demand Economy Survey,” <http://www.burson-marsteller.com/what-we-do/our-thinking/on-demand/ondemand/>, (January 6, 2016)

12 Aaron Smith, Pew Research Center, “Shared, Collaborative and On Demand: The New Digital Economy,” <http://www.pewinternet.org/2016/05/19/the-new-digital-economy/>, (May 19, 2016)

13 Ibid.

14 JPMorgan Chase Institute, “Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility,” <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

15 JPMorgan Chase Institute, “Online Platform Economy: Who Earns the Most?,” <https://www.jpmorganchase.com/corporate/institute/insight-online-platform-econ-earnings.htm>, (May 5, 2016)

- Similarly, Larry Katz and Alan Krueger independently conducted a version of the Contingent Worker Supplement survey and found that workers who provide services through online intermediaries, such as Uber or Task Rabbit, accounted for 0.5 percent of all workers in 2015¹⁶
- Cumulatively, more than 4 percent of adults received income from the platform economy over the three years from 2012-2015. This cumulative participation rate increased 47-fold over the three years, making it by far the fastest growing sector of the economy (exceeding the growth of home health care and software)¹⁷

THIS EMERGING DYNAMIC IS PART OF A LARGER TREND TOWARD LESS FORMAL/ALTERNATIVE WORK ARRANGEMENTS

- All of the net employment growth in the U.S. economy from 2005 to 2015 appears to have occurred in alternative work arrangements: temporary help agency workers, on-call workers, contract workers, and independent contractors or freelancers¹⁸
- Freelancing accounts for nearly a third of all jobs added from 2010 to 2014 based on data from the General Social Survey¹⁹
- Contingent workers (using a broad definition that included those working for temp agencies, on-call workers, contract company workers, and standard part-time workers) comprised 35.3% of employed workers in 2006 and 40.4% in 2010²⁰
- There has been a significant increase in the total number of 1099-MISC forms issued by the IRS in the last 15 years (approximately 22% since 2000). During the same period, W2 forms have stagnated, falling by around 3.5%.²¹

KEY DEMOGRAPHICS OF SHARING/ON-DEMAND WORKERS

Age: Workforce skews young but older workers make up meaningful portion of workforce

- >5% of Millennials (those ages 18-34) earned income from the Online Platform Economy during the 12 months ended September 2015, compared to a national average of 3.1% across all age groups. This age gap in participation

¹⁶ Lawrence Katz and Alan Krueger, "The Rise and Nature of Alternative Work Arrangements in the United States, 2005-2015," http://krueger.princeton.edu/sites/default/files/akrueger/files/katz_krueger_cws_-_march_29_20165.pdf, (March 29, 2016)

¹⁷ JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

¹⁸ Lawrence Katz and Alan Krueger, "The Rise and Nature of Alternative Work Arrangements in the United States, 2005-2015," http://krueger.princeton.edu/sites/default/files/akrueger/files/katz_krueger_cws_-_march_29_20165.pdf, (March 29, 2016)

¹⁹ Ben Gitis and Will Rinehart, American Action Forum, "Independent Contractors And The Emerging Gig Economy," <https://www.americanactionforum.org/research/independent-contractors-and-the-emerging-gig-economy/>, (July 29, 2015)

²⁰ GAO, "Contingent Workforce: Size, Characteristics, Earnings, and Benefits," <http://www.gao.gov/assets/670/669899.pdf>, (April 20, 2015)

²¹ Eli Dourado and Christopher Koopman, "Evaluating the Growth of the 1099 Workforce," <http://mercatus.org/publication/evaluating-growth-1099-workforce>, (December 10, 2015)

existed for both types of platforms. Compared to adults ages 65 and older, 18-24 year olds were roughly 9x more likely to earn income on labor platforms and 5x more likely to earn income on capital platforms.²²

- 18% of (ODE) workers are 55 or older²³

Income: Income quintiles evenly represented

- Around 3% of adults across all income quintiles earned income from the Online Platform Economy. Participation rates, however, were slightly higher for lower-income individuals on labor platforms while the opposite was true on capital platforms.²⁴

Race/ethnicity: Below data from Emergent Research is offered alongside U.S. workforce numbers from Bureau of Labor Statistics (2014). Note that BLS data does not add to 100 due to overlap across categories, making some comparisons imperfect.

- 64% White (compared to 79% in the U.S. workforce)
- 12% African American or Black (compared to 12% in the U.S. workforce)
- 10% Hispanic or Latino (compared to 16% in the U.S. workforce)
- 7% Asian/Pacific Islander/Indian sub-continent (compared to 6% in the U.S. workforce)
- 4% Other (compared to 3% in the U.S. workforce)
- 3% Rather not say (not asked by BLS)

Sex: Overall, the sharing/on-demand workforce is more male, but for capital platforms, the numbers are more even

- 66% men, 34% women²⁵
- Labor platforms: 67% men, 33% women; Capital platforms: 51% men, 49% women²⁶

Geography: Cities in the West are the epicenter for sharing/on-demand economy work²⁷

- San Francisco tops the charts for both participation in and reliance on online labor platform work
- Top five U.S. cities by participation: San Francisco, Los Angeles, San Diego, Seattle, San Jose

Relationship to other work/sources of income: Sharing/on-demand work is primarily secondary income

- Labor platform
 - ◇ Earners participated in labor platforms in 56% of months in a

22 JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

23 Intuit and Emergent Research, "Dispatches from the New Economy: The On-Demand Workforce," <http://www.slide-share.net/IntuitInc/dispatches-from-the-new-economy-the-ondemand-workforce-57613212>, (January 28, 2016)

24 JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

25 Intuit and Emergent Research, "Dispatches from the New Economy: The On-Demand Workforce," <http://www.slide-share.net/IntuitInc/dispatches-from-the-new-economy-the-ondemand-workforce-57613212>, (January 28, 2016)

26 JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

27 JPMorgan Chase Institute, "Online Platform Economy: Who Earns the Most?," <https://www.jpmorganchase.com/corporate/institute/insight-online-platform-econ-earnings.htm>, (May 5, 2016)

three-year period from 2012-2015 and, while active, income represented 33% of income; earnings offset a dip of 14% in non-platform income.²⁸

- Capital platform
 - ◇ Earners participated in capital platforms in 32% of the months in a three-year period from 2012-2015. While active, income represented 20% of income; earnings generated a supplement of 7% of income.²⁹
- The average ODE worker works about 12 hours per week working for their ODE partner company; 57% work less than 10 hours per week with their ODE partner company.³⁰
- Only 9.6% report working more than 30 hours per week with their ODE partner company³¹
- 43% have either a traditional full-time job (29%) or part-time job (14%) in addition to their ODE work³²
- The average ODE worker has 2-3 non-ODE sources of income³³
- Most earn from one platform; only 17% from two or more platforms³⁴
- 14% of labor platform participants and just 1% of capital platform participants are earning income from more than one platform in any given month³⁵
- Although young people were more likely to participate in the Online Platform Economy, they were the least reliant on platform earnings compared to older earners. Labor platform earnings represented about 23% of total annual income for participants age 18-34 compared to more than 28% of total earnings for individuals age 45+. Similarly, capital platform earnings represented about 9% of total annual earnings for participants aged 18-34, but more than 11% for all other participants.³⁶
- Low- and moderate-income individuals were more reliant on labor platform earnings than the rest of the population. Labor platform earnings represented more than 25% of annual income for participants in the bottom three income quintiles compared to just 20% of annual income for labor platform participants in the top income quintile. Across the income spectrum, capital platform earnings represented around 11% of income

28 JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

29 Ibid.

30 Intuit and Emergent Research, "Dispatches from the New Economy: The On-Demand Workforce," <http://www.slideshare.net/IntuitInc/dispatches-from-the-new-economy-the-ondemand-workforce-57613212>, (January 28, 2016)

31 Ibid.

32 Ibid.

33 Ibid.

34 Ibid.

35 JPMorgan Chase Institute, "Paychecks, Paydays and the Online Platform Economy: Big Data on Income Volatility," <https://www.jpmorganchase.com/corporate/institute/document/jpmc-institute-volatility-2-report.pdf>, (February 2016)

36 Ibid.

among participants.³⁷

ATTITUDES AND MOTIVATIONS³⁸

- Most ODE workers are satisfied with their work; 54% highly satisfied; 16% satisfied; 22% dissatisfied
- What workers like:
 - ◇ Income: The primary reason I work independently is to earn more money — 72% agree, 17% neutral, 12% disagree
 - ◇ Flexibility: I like controlling decisions about where, how and when I work — 91% agree, 7% neutral, 3% disagree
 - ◇ Being the boss: I always wanted to be my own boss — 74% agree, 18% neutral, 8% disagree
 - ◇ What workers don't like: Not enough work/not enough pay, not integrated, hard to negotiate with algorithm

BENEFITS AND PROTECTIONS

- From some platforms' internal surveys (not released publicly) we understand that workers want higher wages, flexibility, greater transparency, voice; workers do not often place a high priority on benefits/protections such as retirement savings and unemployment insurance
 - ◇ About half (49 percent) of Uber's driver partners currently receive employer-provided health insurance from their employer at another job or from a spouse or other family member's job³⁹

³⁷ Ibid.

³⁸ Intuit and Emergent Research, "Dispatches from the New Economy: The On-Demand Workforce," <http://www.slide-share.net/intuitinc/dispatches-from-the-new-economy-the-ondemand-workforce-57613212>, (January 28, 2016)

³⁹ Jonathan Hall and Alan Krueger, "An Analysis of the Labor Market for Uber's Driver-Partners in the United States," <http://dataspace.princeton.edu/jspui/handle/88435/dsp010z708z67d>, (January 2015)

IV. What we don't know: Agenda for further research

ALTHOUGH STUDIES HAVE REVEALED a great deal about the work and workers in the sharing/on-demand economy in the last year, there is still much we need to understand. At the highest level, we would benefit from answering two key questions: What are the welfare and economics of people earning income from the sharing/on-demand economy? And how does sharing/on-demand work relate to, interact with and shape labor markets more broadly? Based on input from economists and other experts, we propose the following agenda for further research:

A. Working group on definitions: Researchers agree that our understanding of this workforce could benefit enormously from a process to build consensus around certain language and taxonomy issues. The working group could usefully build consensus on a few key issues:

- a. How to define subcategories of contingent work in a way that is consistent with respondents' understanding of the nature of their employment
- b. How to define subcategories of the sharing/on-demand economy, for example along the lines of the "labor/capital platforms" distinction outlined by JPMorgan Chase Institute or "goods/services" as outlined by Emergent/Intuit
- c. How to seek information on not just an individual's primary work arrangement, but rather all sources of income, in order to support a more nuanced understanding of the interaction between sharing/on-demand work, contingent work more broadly and the traditional labor market

B. Net income: Net income is an elusive concept in the sharing/on-demand economy. Calculation requires data on wages or income, as well as information about the cost of work to the individual. Take a rideshare driver for example: how much does she spend on gas, insurance, registration, and other vehicle maintenance, and how much of those costs are attributable to her business use of her car? What is her effective hourly rate? Does she have enough to be able to save — and does she save? A financial diaries project, modeled on the research led by Jonathan Morduch (NYU), could reveal a more complete picture of the cost of independent work. For the platform or app enabled worker, one might consider an SMS or app-based diary tool.

C. Demographics: While some recent research has shed some light on basic demographics about sharing/on-demand economy workers, it is important to continue to monitor basic demographics across the workforce. For example, an increase in the number of seniors earning income in the sharing/on-demand economy may signal financial challenges that could be addressed through policy or social service programs.

D. Access to/use of health insurance, retirement savings, training/development, unemployment insurance, disability, workers compensation, etc.: As we consider sharing/on-demand workers in the context of our conversation about the future of the social safety net, it is critical that we understand how many sharing/on-demand economy workers currently have access to and use safety net elements — both employer-sponsored (such as healthcare, paid leave, workers compensation and 401k retirement savings) and federal social safety programs (such as unemployment). What access do workers lack? What benefits/protections do workers value most? What access pathways exist today (for example, guilds or other worker organizations, or other employment relationships)?

E. Financial health: When considering the implications of the rise of sharing/on-demand work, it is important to get a picture of personal financial health measures and explore how those measures compare to individuals in the traditional workforce. For example, researchers might explore assets, retirement savings, credit scores and tax liability. Do workers have access to programs or products that meet their needs? Do they use them?

F. Relationship to traditional labor market - Substitute, complement or interstitial?: Data suggests that sharing/on-demand economy work plays a variety of roles in workers lives — for some it is a full-time pursuit, an alternative to seeking a full-time job in the traditional job market; for others it is a secondary source of income, layered on top of a primary work relationship (full- or part-time); for still others it is just a way to earn income between jobs, never intended to be a long-term relationship. What are the implications of each of these three modes? If sharing/on-demand economy work is a substitute for other formal employment, what do we need to do to ensure that participants have access to our social safety net? If sharing/on-demand economy income is a secondary source, what does labor participation in the sharing/on-demand economy say about primary income relationships in the U.S.? And if people are

using sharing/on-demand income as a sort of unemployment insurance, what does that say about programs and products already available? Finally, it would be helpful to understand how work accessed through an app compares to the same type of work accessed offline — in terms of wages, benefits/protections and other factors.

G. Sharing/on-demand economy as a ladder of opportunity: Is the sharing/on-demand economy an asset building strategy and expense/income volatility mitigation strategy that allows people to avoid costly credit, sustain their job search for longer in order to achieve a better job? Does it give workers a leg up financially? Or is the sharing/on-demand economy constraining mobility insofar as it includes no training or opportunity for advancement/career progression?

H. On-demand labor and the traditional firm: Businesses large and small are increasing their use of contingent labor in general, including on-demand labor. Some believe that companies are doing this almost exclusively to cut costs. However, anecdotally, the decision to use on-demand and/or contingent talent is much more complex and includes reasons like accessing hard to find talent, providing greater levels of business flexibility and agility and tapping into new ideas and new ways of thinking. What is the size and nature of this trend? What is driving it? What are its implications for firms, workers, and the labor market generally?

I. Current effects of public policy on contingent work. How are current laws and regulations propelling more contingent work — encouraging companies to rely on temporary or part-time workers? What specific laws and regulations are the most burdensome in this regard?

J. Size of sharing/on-demand workforce by geography: Because participation overall is still low, it is currently challenging to gauge participation at a granular geographic level nationwide. However, many cities already have participation rates high enough to merit survey work to size the local sharing/on-demand economy workforce. Assuming participation continues to increase, participation could also be measured by county or Congressional District.

K. Supply/demand issues in the sharing/on-demand economy: Because most sharing/on-demand platforms are two-sided marketplace, demand has important effects on labor/supply required and related wage economics. What is the trajectory of growth in demand for sharing/on-demand goods and ser-

vices? Are we likely to see wage/price pressure because growth in demand is outpacing growth in supply?

L. Global implications: What is the effect on workers of working for a platform with multi-national or global business operations? Do platform policies defined for one market get applied to other markets in ways that impact workers? This is especially important in the case of work that can be completed remotely (for example, Upwork or Amazon Mechanical Turk), but applies also to cases where products or services are delivered locally (for example, Lyft or Instacart).

M. Ethnographic research: In order to deeply understand the sharing/on-demand economy worker, further ethnographic research is needed. What motivates these workers? What do they enjoy about working independently? What challenges do they face? How do they think about their sharing/on-demand work? How does it fit into their lives? What forces in the workplace are driving their interest in contingent work? Does sharing/on-demand work require a certain risk appetite?

V. Conclusion

There is still much to learn about the sharing/on-demand economy as we consider how we might update policy to reflect the changing nature of work. No single organization or entity will be able to answer all of these questions, so we hope this agenda for research inspires cooperation and collaboration across stakeholders as we work toward the common goal of sizing and understanding the nature of work in the sharing/on-demand economy.

Appendix: Existing Research on the Sharing/On-Demand Economy

GOVERNMENT RESEARCH

GAO report on contingent workforce (2015)

<http://www.gao.gov/assets/670/669899.pdf>

Requested by Senators Gillibrand and Murray

BLS Contingent workforce study (2005)

<http://www.bls.gov/news.release/conemp.toc.htm>

To be completed again in 2017

Census Survey of Income and Program Participation

<http://www.census.gov/sipp/>

Digital Matching Firms: A New Definition in the “Sharing Economy” Space (2016)

U.S. Department of Commerce, Economics and Statistics Administration, Office of the Chief Economist

<http://www.esa.gov/sites/default/files/digital-matching-firms-new-definition-sharing-economy-space.pdf>

ACADEMIC RESEARCH

The New Division of Labor: How Computers Are Creating the Next Job Market, Levy and Murnane (2004)

<http://press.princeton.edu/titles/7704.html>

The Future of Employment: How Susceptible Are Jobs to Computerisation? Frey and Osborne (2013)

http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

Ongoing study of workers' experiences of on-demand economies by Mary L. Gray and Siddharth Suri (2013-present)

<http://www.inthecrowd.org/>

Evaluating the Growth of the 1099 Workforce, Mercatus Center - Dourado and Koopman (2015)

<http://mercatus.org/sites/default/files/Evaluating-Growth-1099-Dourado-MOP.pdf>

Ongoing study by Arun Sundararajan and Marios Kokkodis (2015-present)

<https://www.weforum.org/agenda/2015/09/will-the-on-demand-economy-raise-global-living-standards/>

Select papers by David Autor, including those on Inequality, Technological Change and Globalization; and Labor Market Intermediation

<http://economics.mit.edu/faculty/dautor/papers>

The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015 Katz and Krueger (2016)

http://krueger.princeton.edu/sites/default/files/akrueger/files/katz_krueger_cws_-_march_29_20165.pdf

Cappelli, P. H., and J. R. Keller, (July 2013a): "A study of the extent and potential causes of alternative employment arrangements," *Industrial & Labor Relations Review*, 66(4), 874-901.

Cappelli, P., and J. R. Keller, (October 2013b): "Classifying work in the new economy," *Academy of Management Review*, 38(4), 575-596.

<http://amr.aom.org/content/38/4/575.short>

Kenney, Martin and Zysman, John. "Choosing a Future in the Platform Economy: The Implications and Consequences of Digital Platforms" (2015 draft) <http://www.brie.berkeley.edu/wp-content/uploads/2015/02/PlatformEconomy2DistributeJune21.pdf>

PRIVATE RESEARCH

Intuit 2020 Report (2010)

http://http-download.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit_2020_report.pdf

Intuit/Emergent On-Demand Research (2015-2016)

<http://www.slideshare.net/IntuitInc/dispatches-from-the-new-economy-the-on-demand-workforce-57613212>

<http://www.intuit.com/company/press-room/press-releases/2016/How-the-On-Demand-Economy-Is-Reshaping-the-40-hour-Work-Week1/>

<http://www.intuit.com/company/press-room/press-releases/2015/New-On-Demand-Economy-Study-Casts-Worker-Classification-Debate-in-a-New-Light/>

<http://investors.intuit.com/press-releases/press-release-details/2015/Intuit-Forecast-76-Million-People-in-On-Demand-Economy-by-2020/default.aspx>

JPMorgan Chase Institute (2016)

Paychecks, Paydays and the On-Demand Economy

<https://www.jpmorganchase.com/corporate/institute/report-paychecks-pay-days-and-the-online-platform-economy.htm>

Supplementary briefs

The Online Platform Economy: What is the Growth Trajectory?

<https://www.jpmorganchase.com/corporate/institute/institute-insights.htm#growth-trajectory-online-economy>

The Online Platform Economy: Who Earns the Most?

<https://www.jpmorganchase.com/corporate/institute/institute-insights.htm#ope-most>

Request for Startups (2015)

<http://www.requestsforstartups.com/survey>

Will Rinehart and Ben Gitis, American Action Forum (2015)

Independent Contractors And The Emerging Gig Economy

<https://www.americanactionforum.org/research/independent-contractors-and-the-emerging-gig-economy/>

Freelancers Union/Upwork (2015)

<https://www.upwork.com/i/freelancinginamerica2015/>

TIME/Burson Marsteller/Aspen Institute (2016)

<http://time.com/4169532/sharing-economy-poll/>

Markle/*TIME*/Burson Marsteller/Aspen Institute (2016)

<http://www.burson-marsteller.com/what-we-do/the-future-workforce-survey/>

Pew Research Center (2016)

<http://www.pewinternet.org/2016/05/19/the-new-digital-economy/>

Stride Health: Stride Drive Report - Identity, Tenure and Taxes in the Evolving Rideshare Industry (2016)

<http://blog.stridehealth.com/post/stride-drive-report-2016>

PLATFORM RESEARCH

Uber: An Analysis of the Labor Market for Uber's Driver-Partners in the United States (2015)

https://s3.amazonaws.com/uber-static/comms/PDF/Uber_Driver-Partners_Hall_Kreuger_2015.pdf

Airbnb: The Economic Impacts of home-sharing in cities around the world

<https://www.airbnb.com/economic-impact>

Etsy: Building an Etsy Economy - The New Face of Creative Entrepreneurship (2015)

https://extfiles.etsy.com/Press/reports/Etsy_NewFaceofCreativeEntrepreneurship_2015.pdf

Thumbtack: Beyond the Gig Economy: How New Technologies Are Reshaping the Future of Work (2016)

<https://www.thumbtack.com/blog/beyond-the-gig-economy/>

Handy: New Yorkers Support the Flexible Economy (2016)

<http://blog.handy.com/nypoll-2/>

About the Author



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For the past 15 years, Libby has worked across sectors to drive progress through multi-stakeholder collaboration. Currently an independent consultant, Libby advises a range of clients on strategy, marketing/communications and partnership development with a focus on the sharing/on-demand economy. Clients have included [Peers.org](#), Crowd Companies, Institute for the Future and Yerdle.

Libby worked for eight years in leadership roles in Corporate Responsibility, Sustainability and Corporate Reputation at eBay Inc. and Visa Inc. In her first career chapter, Libby spent four years with the United States Senate Judiciary Committee, Subcommittee on Antitrust. She holds a BA in Government from Dartmouth College and an MBA from the University of California at Berkeley Haas School of Business.



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