The Gig Economy in Illinois

An Exploratory Analysis of Independent Contracting

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Executive Summary

Despite its pervasiveness in debates over the future of work, defining the "gig economy" in a consistent and meaningful fashion remains a challenge. This challenge hinders research to understand the prevalence and effects of nonstandard work, as well as efforts to design policy to improve opportunities for nonstandard workers.

While contending with fundamental limitations in the availability and applicability of data, this report attempts to empirically ground the discussion of "gig work" in a broad exploration of trends in independent contracting in Illinois. In order to do so, it is necessary to answer three basic questions: What do we mean when we say "gig work"? Why is it so difficult to describe "gig work" with confidence? What can we say about "gig work" as a whole in Illinois?

The answers tentatively suggest that gig work extends far beyond technology-driven, platform-based companies and crosses the spectrum of skill-levels, occupational groups, and industries. Yet, independent contractors experience risk and opportunity in very different ways. Duly noting its limitations, available evidence suggests that:

- In survey data, rates of self-employment as the primary source of income have been declining. In administrative data, the numbers of self-employed positions have been increasing. One possible explanation for the discrepancy is the increasing prevalence of independent contracting as side work.

- Independent contracting disproportionately occurs in certain industry sectors, mainly those that provide a wide range of personal and business services. Within this group, growth has been skewed toward industry sectors that generally tend to be lower paying.

- Independent contractors are less likely to have health insurance. They are also more likely to work multiple jobs while being part-time at their main job and to involuntarily work only part-time hours.

Despite its limitations, available data supports a skeptical position toward the tendency to interpret a subset of highly visible trends under the loose umbrella of the gig economy as heralding the end of employment. Policy-makers should consider innovative mechanisms for improving opportunities for tenuously attached, nonstandard workers, but not at the risk of undermining the baseline of protections linked to existing labor and employment law.

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1 Introduction

Recent debates on the future of work have reached a near fever pitch over the prospect of the so-called "gig economy" and its implications for businesses, workers, and the very nature of employment. Academics, media commentators, policy-makers, managers, entrepreneurs, and worker organizations have wrestled with the shifting opportunities and collective uncertainties of a more contingent labor market, unfettered by long-established *de facto* and *de jure* conventions that regulate the employment process and the security of workers.

To some extent, the domination of the headlines by Uber and other platform-based companies with similar business models has crowded out a more grounded narrative about how work as experienced by a much larger number of people and in a much broader variety of situations has changed (Bernhardt, 2016; Weil and Goldman, 2016). At present, the gig economy remains poorly defined, measured, and understood (Harris and Krueger, 2015; Bernhardt and Thomason, 2017; Katz and Krueger, 2016; Abraham et al., 2017; Donovan et al., 2016). These challenges hinder more pressing questions about how the gig economy shapes compensation, access to benefits and basic protections, and otherwise interacts with an increasingly bifurcated labor market.

This brief, exploratory analysis attempts to weave available data into a story about an inherently fuzzy topic, with a focus on Illinois. Doing so contends with a fundamental limitation. The most basic attempts to even quantify whether and to what extent "gig work" is growing quickly stumble over the imprecise way that these types of work are defined, first, as a consistent and meaningful category and, second, in data sets that analysts routinely use for understanding what is happening in the labor market, both nationally and locally.

The report is organized around three questions:

- What do we mean when we say "gig work"?
- Why is it so difficult to describe "gig work" with confidence?
- What can we say about "gig work" as a whole in Illinois?

The answers tentatively suggest that gig work extends far beyond technology-driven, platform-based companies and crosses the spectrum of skills and occupational statuses. Yet, independent contractors experience risk and opportunity in very different ways.

Operating from an understanding that the nebulous "gig economy" is most meaningfully consistent with the more conventional notion of independent contracting, the centerpiece of the report is an exploratory analysis of two awkward-sounding proxy indicators: nonemployer establishments and self-employed unincorporated workers. While both have significant limitations, they provide building blocks toward a basic narrative about the gig economy. The report ends with a discussion of open questions for research and policy.

2 What do we mean when we say "gig economy"?

Partly as a result of fuzzy data, the breadth of worker experiences, and the uncertain complexities of emergent technologies, commentators on the future of work have labeled a wide and inconsistent range of phenomena as "gig work" in the short time since the term has come into prominence. Gig work – or the "gig economy" more generally – can serve as a signifier of a certain novel but hyper-flexible way of participating in the labor market or as a shorthand for the deterioration of the stable, full-time, long-term employer-employee relationship and its replacement with more tenuous, short-term, and nonstandard forms of work. While presenting a challenge in its own right, the wide variation in definitions is understandable. Conventional views on how labor markets operate, prevailing laws and regulations, and the data available for analysis are based largely on something for which the gig economy is offered as contrast: the normative and numerical dominance of the stable "job" as an ongoing relationship between employer and employee.

As with the related topics of contingent and nonstandard work, commentators deploy terms like "gig economy" and "gig work" in ways that range from less restrictive to more restrictive. In the most restrictive sense, gig work functions as a synonym for task-based work mediated by apps and web-based platforms, what some have more precisely labeled with some combination of the terms "online," "on-demand," "platform," "crowd," and "app-based" (Harris and Krueger, 2015; Farrell and Grieg, 2016a). This label would certainly include Uber and Lyft drivers, as well as participants on other task-matching platforms, and may also be extended to include those who sell or rent goods and services on AirBnB, Etsy, E-Bay, or Craigslist – an emergent domain that has been linked to varying degrees with techno-optimism for the "sharing economy" of collaborative consumption (Sundararajan, 2016). Here, the "gig economy" might collectively refer to the transactions of goods and services through relatively new, technology-enabled mechanisms for mediating the product and process of work. A recent Congressional Research Service report adopted such a narrow definition for the gig economy as "the collection of markets that match providers to consumers on a gig (or job) basis in support of on-demand commerce... Prospective clients request services through an Internetbased technological platform or smartphone application that allows them to search for providers or to specify jobs" (Donovan et al., 2016).

On the other end of the spectrum, the least restrictive usages frame gig work as ranging from any form of "freelancing" to any relatively contingent or nonstandard form of work, possibly including conventional part-time employment and side work. In the extreme, the term "gig economy" may suggest a grander unraveling and remaking of the institutional basis of the labor market, with broad implications and profound impacts on the expectations of workers and consumers, the staffing strategies of businesses, and the potential obsolescence of long-established legal and regulatory structures.

Such a broad definition identifies gig work primarily by what it is not: a stable, long-term, full-time employment relationship. This phenomenon is related to – and easily confused with – other ways of defining and measuring contingent and alternative forms of work, which may include conventional employment through a temp agency or subcontracting services provider or with the expectation of on-call and flexible schedules. The variation between narrow and broad definitions of gig work can lead to striking differences in its estimated size relative to the economy as a whole.[1]

In an analysis of the "contingent" workforce, the US Government Accountability Office (2015) provides a fitting illustration of elastic definitions of nonstandard work. The report estimated the core contingent workforce, which is comprised of agency temps, on-call workers, and contract company workers, to 7.9 percent of all workers in 2010. When adding other alternative work arrangements, such as independent contractors, self-employed workers, and standard part-time workers, this portion grows to 40.4 percent, although part-time workers made up over 40 percent of the total contingent and alternative workforce.[2] Independent contractors alone accounted for 12.9 percent of the employed workforce. The report further details the lack of a consensus definition:

> No clear consensus exists among labor experts as to whether contingent workers should include independent contractors, self-employed workers, and standard part-time workers, since many of these workers may have long-term employment stability. There is more agreement that workers who lack job security and those with work schedules that are variable, unpredictable, or both—such as agency temps, direct-hire temps, on-call workers, and day laborers—should be included (US Government Accountability Office, 2015, 4).

[1] These differences are only amplified by the data issues described below.

[2] Others have arrived at different but similarly broad definitions to derive large estimates, such as the "freelance" workforce highlighted by Union and Upwork (2015).

These categories correspond with the Current Population Survey's Contingent and Alternative Work Supplement (CPS-CWS), last fielded in 2005. Using a nationally representative survey designed to generate estimates comparable to the 2005 CPS-CWS, Katz and Krueger (2016) find that the contingent workforce increased from 10.1 to 15.8 percent between 2005 and 2016. Of this total, which excludes part-time workers, independent contractors make up the largest portion and increased 6.7 to 8.4 percent. In contrast, the best estimates of the online platform work peg its size as less than one percent of the total labor market, despite recent and rapid proliferation (Farrell and Grieg, 2016a; Harris and Krueger, 2015; Jackson et al., 2017).

The definition issue is a two-edged sword. While the "gig economy" can be a useful shorthand for several concurrent labor market trends, specificity is both important and necessary for designing research and informing policy recommendations. Inevitably, the causes, outcomes, and reasons for seeking irregular work are varied (Rowan, 2016, 6). Limiting the "gig work" label to online, on-demand work would narrow the debate to an interesting and complicated, but still very small, group of workers and ignore important similarities with other forms of work, particularly independent contracting.

Independent contracting as gig work

Without a consistent definition of gig work, the analyses presented in this report defines gig work narrowly as equivalent to the status of "independent contracting," a term that is also open to interpretation. In general, an independent contractor is a worker who provides services to another entity if the payer has the right to control or direct only the result of the work and not what will be done and how it will be done. Typically, income paid to independent contractors in excess of $600 is reported on an IRS form 1099, though many workers who do not consider themselves independent contractors may also receive a 1099. Independent contracting crosses a broad range of industries, occupations, and skill and compensation levels.

The combination of flexibility, autonomy, and compensation are attractive for many independent contractors. In the 2005 CPS-CWS, 88.4 percent of independent contractors reported that they would not prefer a different type of employment. On the other hand, 1099 contractors lack many of the legal and regulatory protections available to W-2 employees, including minimum wage laws and the right to join a union. By using independent contractors rather than employees, employers can save on a number of non-wage costs: paid leave, overtime, health insurance, retirement contributions, FICA tax contributions (Social Security and Medicare), unemployment insurance, and worker's compensation insurance. Particularly in the case of health insurance and worker's compensation (for certain types of employment), these non-wage costs can add significantly to total employment costs. Of course, traditional employment can also reduce costs to employers by reducing the information and training costs and internalizing the efficiency gains of experience.

All else equal, an independent contractor's compensation should also cover the value of an employee's foregone benefits and income security; but in some cases, independent contractors earn less than a similarly tasked employee. Clearly, many shades of gray exist between independent contracting that efficiently matches employer and worker preferences and the more extreme cases of employee misclassification, whether through intent or negligence.

Independent contracting can be considered to encompass most online platform work[3] and to be a subset of contingent and alternative work, as in the CPS-CWS (see also Katz and Krueger, 2016). Employees of temporary services firms and other subcontracting firms that provide workers for client businesses also engage in contracting relationships and contingent work practices, but these workers generally fall under the legal and regulatory rules of conventional employment. In some cases, the drivers of increased independent contracting may intersect with a larger, more variegated set of processes on the forefront of contemporary employment polarization, such as workplace "fissuring" (Weil, 2014) and "domestic outsourcing" (Bernhardt et al., 2016; Appelbaum, 2017). In aggregate, these various processes through which firms contract out work have the potential to affect millions of workers by eroding labor standards, upward mobility, and investment in training (Weil and Goldman, 2016).

In a recent analysis of gig work in California, Bernhardt and Thomason (2017, 4–6) highlight three key distinctions that lie at the heart of conflicting commentaries and research reports on the gig economy. First, a worker's status as an employee or independent contractor is not only a matter of employee and employer preference but also dictates the legal and regulatory context governing the work relationship, including access to social insurance programs and a range of other benefits and rights. Unlike contingent, alternative, precarious, or "gig" work, this distinction is not fuzzy.

A second key distinction involves whether independent contracting is performed as a primary or supplementary source of income. This distinction has implications at the level of analysis, for example, if a given data set captures individual workers or jobs, this may lead to dramatically different estimates of prevalence, as discussed below. The issue of supplemental income also motivates potential explanations for why and to what effect individuals are seeking gig work, for example, as a remedy for the elusiveness of opportunities for adequate income through the conventional labor market.

[3] Most of these workers receive a 1099, although some companies operate on a similar on-demand, app-based model but engage their workers as employees.

The third distinction is the difference between good and bad jobs. Independent contracting encompasses both ends of the job quality spectrum. Certainly, analysts, policy-makers, and worker organizations should be more concerned where the gig economy has been skewed toward providing lower quality opportunities, though this is not necessarily the case in all sectors of the economy. In addition to explaining discrepancies between studies and clarifying the terms of the debate, these distinctions also emphasize core policy and research questions about how "gig work" has uneven and complex outcomes for workers with respect to work standards and compensation.

Independent contracting and online platform work

In some ways, online, on-demand, or app-based work reflects an expansion of traditional freelance work, although important differences exist (Donovan et al., 2016). Technology-driven platforms likely reduce barriers of access to workers and may improve flexibility in some advantageous ways. For example, from analyzing Uber data, Chen et al. (2017) find that flexibility in setting and adjusting work schedules constitutes a surplus for drivers (see also Hall and Krueger, 2016). On the other hand, on-demand companies use their control over the intermediation process to collect a portion of earnings, to control the brand and client interaction, and to dictate the terms of the transaction, including the price of services. In contrast with traditional freelance work, this may limit the worker's ability to build a client base and to autonomously bargain for prices. Control also lies at the heart of a legal question around app-based gig work, since the distinction between employees and independent contractors hinges on the business' financial and behavioral control over the worker, the centrality of the work to the business, the terms of the contractual agreement, and the expected duration of the relationship. For on-demand work, these legal tests blur the lines between independent contractors and misclassified employees.

While online platform employment may represent a new arena where the legal vagaries associated with independent contracting have become quite stark, most of these workers essentially belong to the same category as all other independent contractors. Moreover, despite rapid growth, estimates of platform work remain limited to a very small portion of the workforce (Harris and Krueger, 2015; Katz and Krueger, 2016; Jackson et al., 2017). Using a large data set culled from Chase bank accounts, Farrell and Grieg (2016b,a) examine the "online platform economy," including both "capital platforms" like AirBnB and "labor platforms" like Uber, to offer tentative insight on how these platforms may interact with the conventional labor market. Estimating that 0.5 percent of adults receive income from labor platforms, including 0.7 percent of non-employed individuals and 0.4 percent of employed individuals, the authors found that platform income served to offset dips in non-platform income (Farrell and Grieg, 2016a). Farrell and Grieg (2016a) also broke out their estimates for large cities, finding that 0.8 percent of Chicago adults participated on labor platforms in 2016, with a year-over-year growth rate of 83 percent. For these activities, turnover is high and the pool may have narrowed as workers have found better prospects in the traditional labor market. Since 2012, platform growth has been fast but has slowed since 2014. While on-demand, app-based employment in the mold of Uber remains a very small portion of the labor force, separate questions exist regarding whether nonstandard employment is growing as a whole, in which sectors, and to what effect for workers.

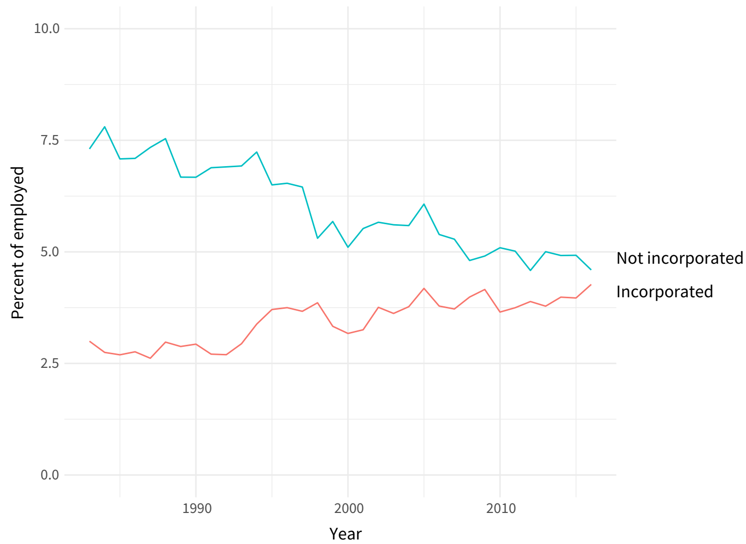
3 Why is it difficult to examine independent contracting?

Jobs versus workers

In examining different sources of employment data, an important distinction exists between "jobs" and "workers." For the purposes of this report, a "job" is an employment relationship; and "workers" are any individuals who hold a job. For example, most individual-level estimates derived from household surveys tend to describe workers, since any individual who also participates in the labor market could be considered to be a "worker." In contrast, many data sets derived from an underlying source of administrative data, such as state unemployment insurance records, tend to describe jobs, not workers *per se*. Because workers can hold more than one job, focusing on jobs tends to involve higher counts of employment with more variation in earnings levels. Although doing so makes drawing conclusions about how jobs translate to total earnings for individuals and households difficult, household and individual surveys tend to provide limited detail from which to differentiate side work from primary employment.

Clarifying the conceptual distinction between workers and jobs proves essential when evaluating and comparing data that engages obliquely with nonstandard work. Different data sources may indicate different levels of prevalence of independent contracting or any other form of nonstandard work – both in absolute numbers and relative to standard forms of work – depending on whether those sources report workers or jobs. These levels of prevalence may vary over time, but trends for nonstandard workers and nonstandard jobs need not necessarily track together. Indeed, most job-based estimates suggest that independent contracting is increasing in prevalence (see Abraham et al., 2017, Figure 1), while worker-level estimates routinely appear to show a notably flatter trend or even long-term decline (Hipple, 2010). Figure 1 illustrates this downward trajectory for Illinois,

Figure 1: Annual average rates of self-employment in Illinois, 1983–2016



Source: Author's analysis of Current Population Survey (Outgoing Rotation Groups). Percentages are of individuals who worked in the previous week.

although incorporated self-employment has been increasing. Such a discrepancy could be an artifact of fundamental differences between different data sets or from problems associated with fuzzy interpretations, as discussed below. However, discrepancies could also be a result of another important dimension of the overall gig work debate: the questions of whether, to what extent, why and to what effect workers may be taking side jobs.

Self-employed, unincorporated workers

As noted by many researchers, survey data does not adequately capture information about self-employment (Abraham et al., 2017; Jackson et al., 2017). The Current Population Survey and the American Community Survey, the two most widely used household surveys with questions about employment and earnings, do not directly ask respondents to identify themselves as "independent contractors." The exception is the Contingent Work Supplement to the CPS (CPS-CWS), which had not been fielded since 2005; although a new round of the CPS-CWS was fielded in 2017, and the data will be available in 2018. As a proxy for independent contracting, the CPS and ACS do routinely categorize respondents as "self-employed unincorporated" workers, which should include partnerships, sole proprietorships, most independent contractors, day laborers, and on-demand platform workers. Data from the 2005 Contingent Work Supplement shows that roughly 3 in 5 self-employed workers also were identified as independent contractors.

Nonemployer establishments

Another approach to examining independent contractors involves examining administratively derived sources, such as data based on tax returns, to develop measures of business or taxpaying entities that are roughly congruent with the notion of a "job." While this prospect remains murky, the most promising recent advances involve the use of confidential administrative data, including its linking with survey data records, such as in Abraham et al. (2017) and Jackson et al. (2017).[4]

Because of its consistent availability, industry-level breakdowns, and geographic detail, this report focuses on Census Bureau's Nonemployer Statistics, which are publicly available and derived from Schedule C of Form 1040, the form for self-employment income on federal tax returns. Nonemployer establishments are tax paying entities that received self-employment income over one thousand dollars for most sectors. Since independent contractors are supposed to file Schedule C, Form 1040 and, by definition, should not have employees, growth or decline in independent contracting "jobs" should be captured in the changing totals of nonemployer establishments, even if static levels alone provide poor estimates. Moreover, since the Census Bureau classifies nonemployer establishments into industry groups depending on the "principle business activity" reported on the tax form and also reports totals at the county level that are roughly comparable to the County Business Patterns data set of full W-2 jobs, it is possible to examine trends over time and geographical differences, both in relative and absolute terms.

Despite these advantages, the nonemployer statistics remain, at best, a circuitous approach to examining trends in independent contracting. In a press release detailing the increase of nonemployer businesses, the Census Bureau described the breadth of activities that could fall under this type of establishment:

> "Nonemployer businesses run the gamut from old-fashioned family-run corner stores to home-based bloggers," ... "In some cases, the business may be the owner's primary source of income, such as with real estate agents and physicians, but in other instances, they may operate the business as a side job, such as with babysitting and tutoring."[5]

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[4] Bernhardt and Thomason (2017) use sole proprietor tax filings at the state level for California.

[5] "Nation Gains More than 4 Million Nonemployer Businesses Over the Last Decade, Census Bureau Reports," Release Number: CB15–96 (May 27, 2015).

Thus, while the two concepts likely overlap significantly, nonemployer establishments do not serve as a perfect proxy for independent contractors. Nonemployer establishments include sole proprietors with no employees. These businesses are typically not legally incorporated and need only register with the government in the event of naming conflicts, specific regulatory requirements, or if the business has paid employees. However, nonemployer establishments also include partnerships and corporations, which in most cases would be mutually exclusive with independent contractors. For the most part, the nonemployer statistics should detect the tax entity of 1099 independent contractors as the business entity of sole proprietorship. The data allows only allows for differentiating sole proprietors from partnerships and corporations since 2008, although a cursory analysis of the data indicates that nearly 90 percent of nonemployer establishments in any given year are indeed sole proprietorships.

Limitations

A recent study by Abraham et al. (2017) highlights additional limitations with both survey and administrative data. Using a unique data set that links both types of data, the authors found that a majority of individuals who would be classified as self-employed in either data set alone would not be categorized as such in the other data set. This is mostly due to a combination of under-reporting of self-employment income, both in survey questionnaires and on tax forms, and the underlying heterogeneity of self-employment work relationships.

The analysis below presents both industry and occupation breakdowns. The industry breakdowns are derived from the Nonemployer Statistics; but since this source does not include demographic or socioeconomic characteristics, other breakdowns are derived from the ACS and CPS. A major advantage of the Nonemployer Statistics is that it provides useful geographic and temporal resolution and is available at a high degree of industrial detail (i.e., NAICS codes). Due to the potential for mis-coding and mis-reporting issues to vary across different industries and over time, the analysis only represents data at the aggregate sector level (two-digit NAICS) and only comments on detailed industry groups when appropriate (three- and four-digit NAICS).[6] It is important to remember the limitations: neither of these data sources are sufficient to generate absolute estimates of independent contracting. The numbers are only meaningful in

[6]Another limitation is that the data's format changes during the period under analysis. For example, the legal form of organization (i.e,. sole proprietors versus incorporated businesses) are only available from 2008 on, the NAICS codes are updated every five years in ways that may affect coding, and the entire data set underwent a methodology change in 2009. See the Nonemployer Statistics website for more details: https://www.census.gov/econ/nonemployer/.

relative terms and indicators of differences in the prevalence of independent contracting over time, across different industry or occupational classifications, or across different demographic groups.

4 Exploring Nonemployer Statistics

Though falling fall short of a direct estimate of independent contracting, data on nonemployer establishments provides a basis for comparison both across different industry sectors and over time. More specifically, exploring the data allows for comparing a given industry sector with other sectors in relation to:

- The sector's size relative to the total number of nonemployer establishments,
- The prevalence of nonemployer establishments in relation to conventional jobs within the same sector,
- The changing amount of nonemployer establishments relative to that of conventional jobs within the same sector.

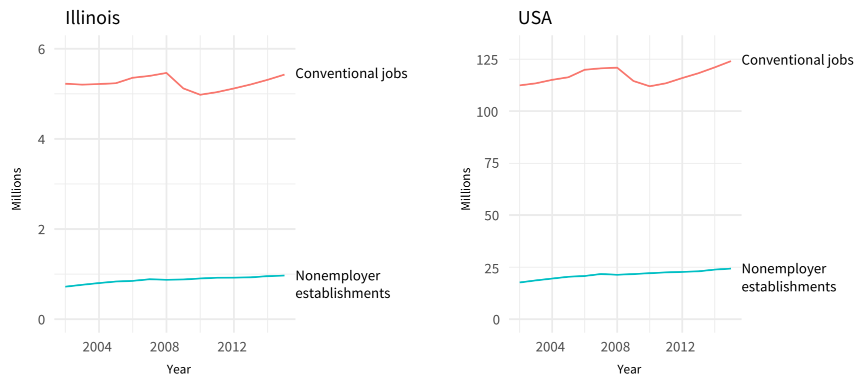
Figure 2 presents recent aggregate trends in conventional W-2 jobs and nonemployer establishments. Illinois' trend resembles that of the nation as a whole. In both cases, the conventional jobs trend line clearly illustrates a "dip" coinciding with the 2008 recession, whereas nonemployer establishments have increased consistently.

Illinois also resembles the nation as a whole with respect to its declining receipts per nonemployer establishment, as shown in figure 3.[7] On average, the income for a nonemployer business fell during the great recession. Since the number of nonemploymer establishments continued to increase, the decline through 2009 is likely owed to a combination of factors. It is reasonable to assume that nonemployers either lost income due to reduced demand during the recession or increased in numbers as workers who lost conventional jobs turned to alternate income – or a mix of both. More surprising is the absence of a rebound after the recession.[8] While this could be a result of nonemployers' simply earning less on average, or of changing rates of mis-reporting (see Abraham et al., 2017), the most likely explanation involves a changing mix in the types of jobs that make up the nonemployer universe – and the number of people who reported independent contracting activity on their tax returns.

[7] These charts use the Implicit Price Deflator for Personal Consumption Expenditures to adjust for inflation, which tends to show less decline over time than the adjustments made using the Current Price Index. As a result, these declines may be considered conservative.

[8] See Habans (2016), which uses different data sources to arrive at a similar finding in California.

Figure 2: Nonemployer establishments and Conventional Jobs in Illinois and the USA, 2002–2015



Source: US Census Bureau, Nonemployer Statistics and County Business Patterns.

Unpacking industry trends in Illinois

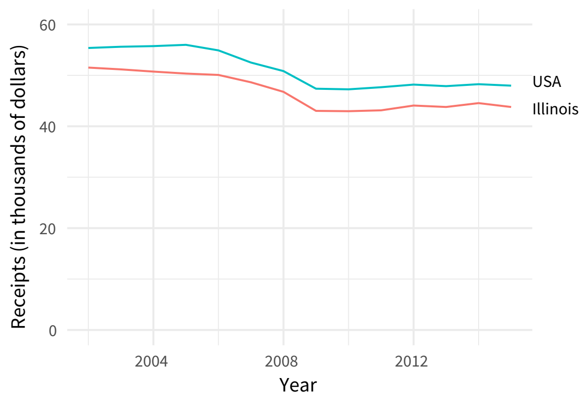
The Taxi and Limousine Service industry provides an illustrative starting point for exploring industries. Without seeing evidence of "gig work" in this sector, even a causal observer might question the analysis. As figure 4 shows, nonemployer establishments in Illinois proliferated steeply after 2010. Uber began operations in Chicago in 2011, and the pattern generally resembles the growth trajectory derived from Uber's own administrative data for Chicago.[9] The service has since spread to other urban areas across the state. While the growth has been remarkable, the industry accounts for just over one quarter of the nonemployer establishments added across other industries between 2010 and 2015. What industries account for the rest of the growth?

Industry sector prevalence

Figure 5 shows the raw number of nonemployer establishments in Illinois at the aggregated level of industry sector (two digit NAICS). These establishments are highly concentrated in certain industry sectors, which tend to encompass services activities, although the Transportation and Warehousing sector also includes high numbers of nonemployer establishments. In contrast, Health Care and Retail, the two largest service

[9]See also Hathaway and Muro (2016) for another example of the Nonemployer Statistics analysis that includes Chicago.

Figure 3: Average nonemployer establishment receipts in Illinois and the USA, 2002–2015



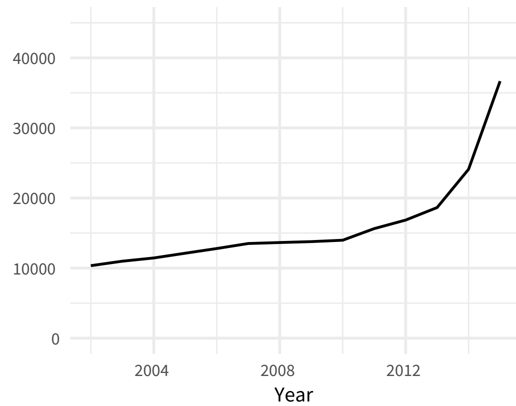
Source: US Census Bureau, Nonemployer Statistics. Dollars are constant 2016 values adjusted using the PCE deflator.

industry sector employers, have comparatively few numbers of nonemployer establishments. Manufacturing and Accommodation and Food Services are also large employers with comparatively few nonemployer establishments. In other words, nonemployer establishments are not distributed evenly across different industries, either on their own or relative to the number of conventional jobs.

Figure 6 shows variation across two key dimensions for understanding the nonemployer statistics. First, the share of nonemployer establishments that are organized as sole proprietorships, which are indistinguishable in this case from independent contractors, illustrates that the vast majority of nonemployer establishments are in fact sole proprietorships and not corporations or partnerships. In most years, this rate is about 85 to 90 percent of the total for all industries, although the data only allows for differentiating sole proprietorships from other legal forms of ownership beginning in year 2008. Notable variation exists across industry sectors, though with the exception of Real Estate and Rental and Leasing, a strong majority of each sector are sole proprietors. This may be due to the fact that many real estate agents operate as incorporated businesses with no employees and thus should not be considered independent contractors.

Second, figure 6 also illustrates the degree of prevalence of nonemployer establishments relative to employment within each sector. Some sectors, e.g., manufacturing, have a very small amount of nonemployer establishments relative to their overall employment size. Other sectors, like Construction and Arts, Entertainment, and Recreation,

Figure 4: Nonemployer establishments in the Taxi and Limousine Service industry in Illinois, 2002–2015



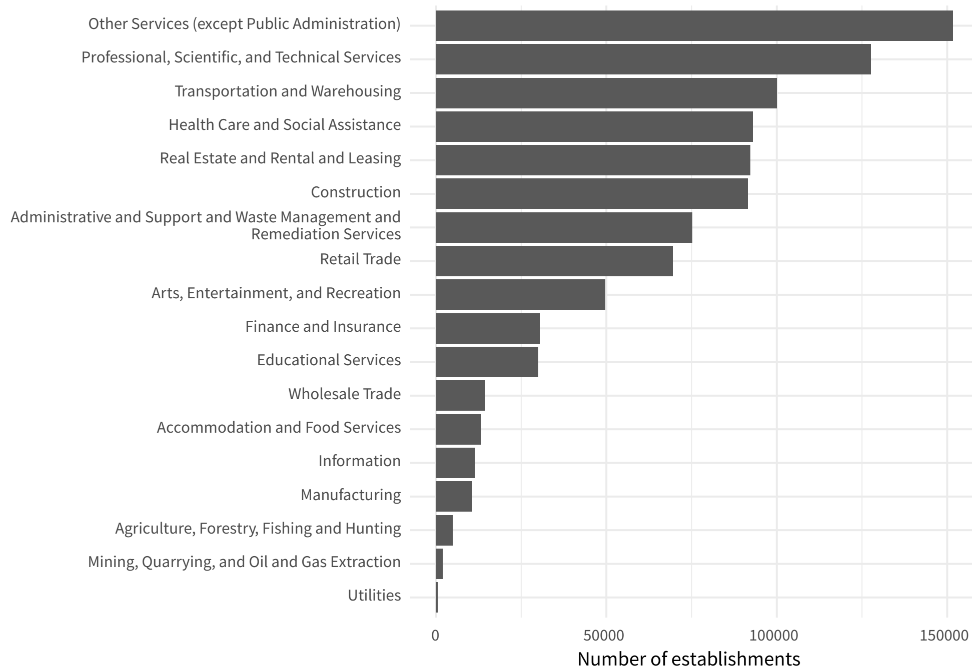
Source: US Census Bureau, Nonemployer Statistics.

have a much higher prevalence of nonemployer establishments. The obvious outlier is Agriculture, Forestry, Fishing and Hunting, the only sector where nonemployer establishments outnumber total jobs. For the most part, such variation in prevalence matches expectations associated with the different characteristics of work within each industry sector. One would expect more real estate agents, artists, and construction workers and fewer manufacturing workers to operate as individual "establishments" with no employees, while this arrangement would be less common in, for example, manufacturing or retail.

Industry sector trends

The overall size and prevalence of nonemployer establishments in major industry sectors provides a baseline for assessing trends. Due to both cyclical rhythms and secular restructuring, the size of industry sectors change over time. For example, the Great Recession had a cyclical effect of chilling construction industry employment, while trade competition, industrial reorganization, and automation have fueled the long-term decline of manufacturing. Because growth or decline in nonemployer establishments may simply reflect an underlying trend in demand for work within the sector, it is important to examine trends in nonemployer establishments alongside comparable trends in conventional employment. Where nonemployer establishments and conventional jobs rise and fall at the same rate, the trend likely signals a change in underlying demand for all

Figure 5: Nonemployer establishments in Illinois by industry sector, 2015



Source: US Census Bureau, Nonemployer Statistics.

workers. On the other hand, nonemployer establishments that rise or fall at a faster rate than conventional jobs are indicative of a shift in the underlying mix of nonemployer establishments – and likely independent contractors – that makeup a given industry sector's workforce.

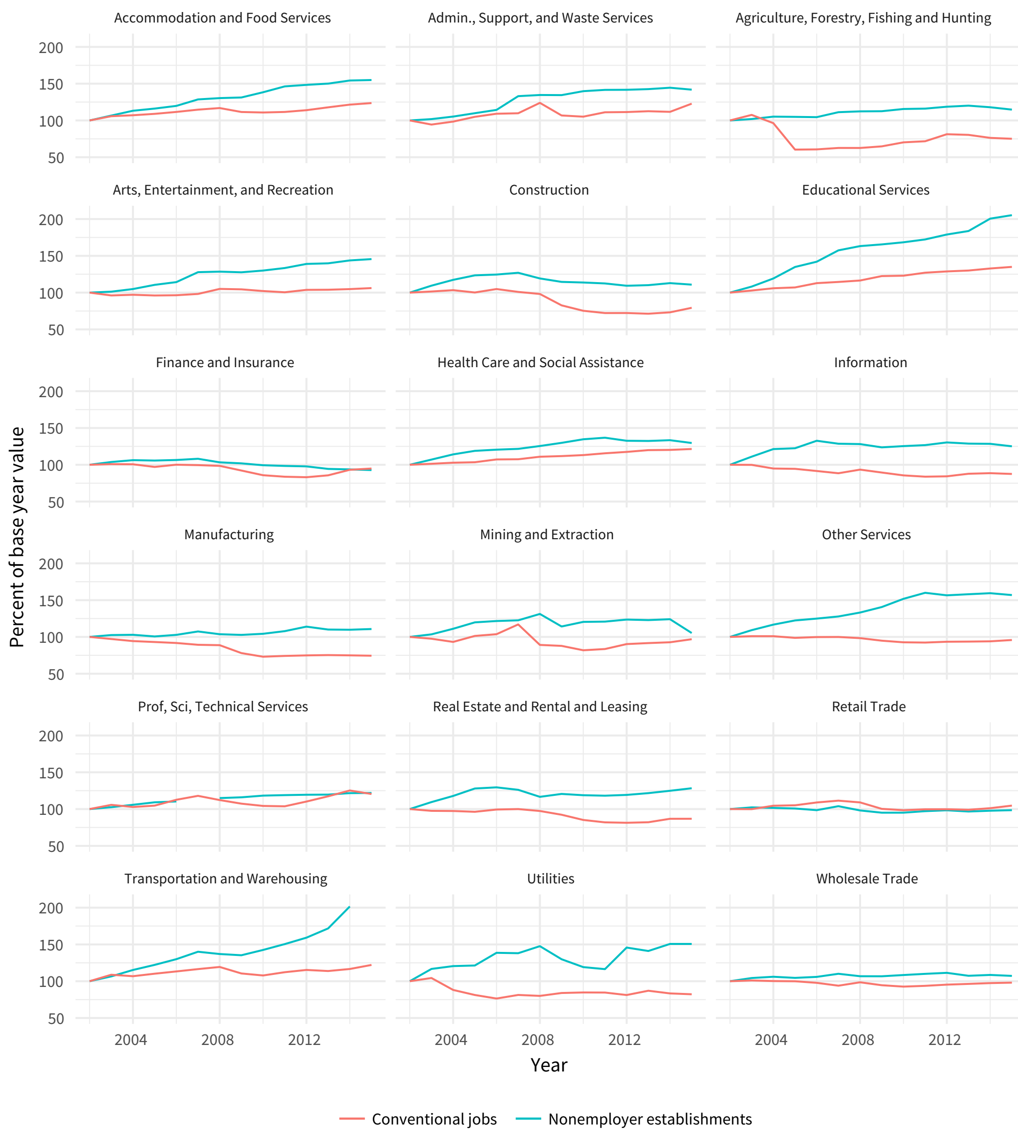
Figure 7 illustrates the growth in Illinois nonemployer establishments in comparison with that of conventional employment at the level of broad industry sectors.[10] The charts show that growth in nonemployer establishments has been widespread throughout different portions of the economy: for most sectors, nonemployer establishments have grown at a faster rate than conventional employment – some, much faster. Considered in conjunction with absolute numbers and relative rates at the industry sector level, nonemployer establishment trends may be roughly categorized as follows:

[10] These are two-digit industry sectors in the North American Industrial Classification System (NAICS).

Figure 6: Sole proprietorships as a share of nonemployer establishments and nonemployer establishments as a share of employment, Illinois, 2015

Source: US Census Bureau, Nonemployer Statistics and County Business Patterns.

Figure 7: Growth in nonemployer establishments and conventional employment by industry sector as a percentage of base year values, Illinois, 2002–2015



Source: US Census Bureau, Nonemployer Statistics and County Business Patterns.

Modest growth disproportional to employment loss. Both Construction and Real Estate, Rentals, and Leasing show comparatively steep employment dips from the recession against only moderate losses for nonemployer establishments.[11] In other words, since the early 2000s, growth in these sectors has tended to favor nonemployer establishments.

Proportional growth in higher-paying sectors. Professional, Scientific, and Technical Services and Health Care and Social Assistance have generally tended to grow in tandem with conventional employment, with gaps widening during the recession but closing somewhat within the past few years. A notable exception is within the Professional, Scientific and Technical Services sector, where the number of nonemployer establishments in Management, Scientific, and Technical Consulting and Other Professional, Scientific, and Technical Services has been large and growing quickly relative to conventional employment. Together, these sectors make up a substantial portion of total nonemployer establishments and tend to provide relatively well-paying jobs.

Disproportionally rapid growth in lower-paying sectors. Transportation and Warehousing, Educational Services, and "Other" Services also account for a large number of nonemployer establishments; however, in these sectors, growth has substantially outpaced growth in conventional employment.[12] Within the Transportation and Warehousing sector, most growth came from Transit and Ground Passenger Transportation (see figure 4) and Truck Transportation. Specific industries within the catchall Other Services sector that have relatively high absolute numbers and rates of nonemployers relative to employment and have witnessed strong growth include Personal Care Services;[13] various automotive, personal, and household goods repair industries; and Other Personal Services. The Administrative, Support, Waste Management, and Remediation sector displays a similar trend, albeit to a lesser degree.[14] These sectors tend to offer lower levels of compensation to conventional employees and, it is reasonable to assume, independent contractors.

Taken as a whole, the shifting mix of employment and nonemployer establishments at the industry sector level suggests a troubling general possibility in the recent evolu-

[11]Within the Construction sector, Residential Building Construction industry is both the largest industry for nonemployer establishments and experienced the steepest gains.

[12]The Arts, Entertainment, and Recreation sector would also fall under this category, but Independent Artists, Writers, and Performers account for most of the growth. This type of work, in many cases, may not be considered independent contracting.

[13]For example, hair, nail and skin care services.

[14]Here, Office Administrative Services and Services to Buildings and Dwellings industries account for the most new nonemployer establishments.

tion of gig work.[15] While absolute growth in nonemployer establishments has been widespread, excess growth relative to employment levels has tended to be more intensive within lower-paying sectors. These measures are consistent with the notion that trends in independent contracting, on balance, have skewed toward lower-paying work within Illinois.[16]

5 Characteristics of self-employed, unincorporated workers

Table 1 presents basic demographic breakdowns for self-employed, unincorporated workers in Illinois who are currently employed, along with similar estimates for private-sector wage and salary employees. On the whole, self-employed, unincorporated workers are more likely to be older, to identify as male, and to have greater levels of college educational attainment. They are also more likely to be identified as Non-Hispanic white. Rates of health insurance coverage, however, were lower than for conventional employees (see also Jackson et al., 2017). On one hand, this is not surprising, since such workers are by definition less likely to be attached to an employer that would provide access to insurance coverage. However, the relative lack of health insurance coverage illustrates that self-employment may limit access to benefits, even for an older, more educated group of workers on average.

Table 2 shows additional job characteristics for self-employed unincorporated workers in Illinois, again with estimates for private employees provided for comparison. Self-employed, unincorporated workers are more likely to work part-time hours. Moreover, these workers are also more likely to work part-time involuntarily and to hold multiple jobs with only part-time hours at their main job.[17] Self-employed unincorporated workers are also only half as likely to have the type of health coverage most typically associated with employment, i.e., coverage provided by an employer or union. Part of this gap is made up by higher rates of Medicare coverage (self-employed unincorporated

[15] Other sectors, such as Retail Trade, Wholesale Trade, and Utilities, employ large numbers and have experienced relative growth among nonemployer establishments, but the latter remain very small portion relative to the sector as a whole.

[16] This is also consistent with falling receipts per establishment, as depicted in figure 3.

[17] The Current Population Survey describes involuntary part-time as "part-time for economic reasons." See Golden (2016, 8–10) for more detailed explanation.

Table 1: Demographic characteristics of employed workers by employment status at main job, Illinois, 2013–2015

	Self-employed unincorporated	Private employees
Median age (years)	51	40
Female (%)	41.2	46.3
Bachelors degree (%)	33.4	28.9
Health insurance (%)	80.1	86.2
Asian (%)	4.9	5.5
Black (%)	7.5	11.8
Hispanic white (%)	5.8	10.3
Non-Hispanic white (%)	76.0	64.1
Other (%)	5.8	8.2

Source: Author's analysis of 2013–2015 American Community Survey.
Health insurance coverage could occur through a family member's employment. Percentages are of individuals who worked in the previous week.

workers tend to be older) and "other private" insurance, which would include coverage purchased through the Affordable Care Act health insurance exchange.[18]

6 Discussion

Gig work as a research problem

This report has examined the broad, ill-defined concept of the gig economy through the comparatively concrete notion of independent contracting. Just as significant as the radical new possibilities implied by online platform work, more traditional forms of independent contracting remain widespread. These work arrangements span from extremely high-paid, autonomous, and highly skilled professionals to workers who supplement their income with side work, who earn low-wages with little security, and

[18] Since exchange enrollment began in Fall 2013, the time period covered by these estimates includes a period prior to the availability of exchange participation.

Table 2: Part-time status and health insurance coverage of employed workers by employment status at main job, Illinois, 2013–2015

	Self-employed unincorporated	Private employees
Hours		
Part-time (%)	38.8	24.8
Involuntary part-time (%)	8.8	5.3
Multiple jobs, part-time at main job (%)	28.0	18.3
Health insurance coverage		
Employer or union (%)	32.3	62.7
Medicaid (%)	10.8	10.1
Medicare (%)	18.1	6.5
Other private (%)	19.3	6.7
No coverage (%)	19.0	13.8

Source: Author's analysis of 2013–2015 American Community Survey and Current Population Survey (Outgoing Rotation Groups).
Health insurance coverage could occur through a family member's employment. Percentages are of individuals who worked in the previous week.

who do not enjoy the legal or normative rights and protections available to conventional employees.

The analysis relies on less-than-optimal measures and should be interpreted with caution, as available data only engages with independent contracting in a circuitous fashion. Nonemployer establishments and self-employed, unincorporated workers overlap with, but are not equivalent to, independent contractors. Gradually, innovative uses of administrative data are clearing the haze surrounding the question of gig work on an economy-wide level. The 2017 CPS-CWS should also fuel new insights upon its slated release in Spring 2018. This line of research undoubtedly will continue to raise as many questions as it answers.

Given the limitations, this report has emphasized variation over a period of several years at high levels of aggregation (i.e., industry sector) while also paying attention to variation among more detailed industries. One lesson from this exercise is that the growth of nonemployer establishments appears to be widespread throughout different sectors of the economy. However, the degree of growth or decline *relative* to conventional employment tends to be more unevenly distributed across a smaller subset of industry sectors and specific industries. In some cases, substantial growth has occurred in industries where skilled consultants operate (e.g., Management, Scientific, and Technical Consulting) and where a nonemployer establishment should probably be considered to be a particularly poor proxy for an independent contractor (e.g., Artists, Writers, and Performers and real estate agents). For the most part, substantial growth in nonemployer establishments relative to conventional jobs have tended to fall within lower paying industries, a pattern that persists regardless of the level of industrial dis-aggregation. While data for estimating self-employment income may be suspect when compared with income from W-2 employment (Abraham et al., 2017), the trend is consistent with falling average independent contracting incomes since the early 2000s (see also Habans, 2016).

To this point, research has suggested that what may be occurring within the gig economy as a whole marks less of an upheaval in the nature of work than a gradual shift in the mix of independent contracting arrangements and their roles in the labor market. The discrepancy between administrative and survey-based estimates depicted for Illinois in this report echoes previous findings at the national level. This finding, especially in combination with the mix of industries experiencing a relative shift toward independent contracting, leaves open the possibility that much of the growth in independent contracting falls under the category of supplemental income (see Abraham et al., 2017).

A key concern of future research is to understand the complex causes behind these apparent trends and their intersections with deteriorating job quality and the issue of supplemental income. For some workers, the flexibility of self-employment may offer a better match between available opportunities and preferences. For others, flexibility may only offer a poor replacement for withering opportunities in the market for conventional employment. This also affects conventional employees and the businesses that hire them, as they are forced into competition with lower paid, less secure workers. In addition to better data, a comparative perspective is critical, since causes and effects are likely to vary both across and within different industry segments. Similarly, demographic and socioeconomic characteristics and the skill level and occupational status of workers should occupy a central role in future research as potential dimensions of inequality within nonstandard employment.

Finally, neither the seemingly inevitable possibilities for revolutionary flexibility posed by new app-based platforms nor the more holistic version of the "gig work" that occupies the focus of this report should eclipse the broader picture. Shifts in independent contracting occupy only one potential front of increasing risk, declining standards, and polarizing opportunities in an increasingly "fissured" labor market. Researchers should continue to clarify how independent contracting intersects with and diverges from the causes and effects of a broader set of phenomena that includes other forms of contingent, nonstandard, and contracted-out work (Bernhardt et al., 2016; Appelbaum, 2017; Weil and Goldman, 2016).

Gig work as a policy problem

Understanding the gig economy as chiefly driven by innovative technologies provides, at best, only partial guidance for complex policy problems. However, industries undergoing rapid change also tend to motivate new approaches to union organizing and policy-making that can have broader impacts on other segments of the workforce. Due to the distributed nature and legal gray areas of gig work, both local governments and worker organizations face structural difficulties in raising and enforcing standards, although the local level is likely to see increasing experiments with policy changes that could have uncertain, perverse effects – particularly when tailored primarily to issues surrounding online platform employment.[19]

Recently, the most prominent proposals involve extending gig workers' access to basic benefits and standards associated with conventional employment. Portable benefits, i.e., benefits tied to the worker and not to the job, have taken a central position in debates over the potential to increase access to basic forms of social insurance for nontraditional workers. In one proposal from the New America Foundation, every worker would have access to individual security accounts supported by a portion of earnings that would be paid by the employer (Hill, 2015). For example, to protect against income shocks due to loss of employment, workers' access to alternative options for social insurance or to the existing UI system requires establishing appropriate mechanisms and facilitating participation by both employers and employees (see McKay, 2017). Here, states could treat federal rules as a baseline for experimenting with innovative programs to further enhance protections. Yet, increasing portability and flexibility in access to benefits does not equate to security, particularly since workers with unstable and low-paying jobs are most likely to fall through the cracks (Berg, 2016).

In some proposals, expanding portable benefits has been tied to the creation of a third category of worker, such as "dependent contractors" or "independent workers" (see,

[19] This is well-illustrated by the possibility of public job-matching applications that exist outside of the Silicon Valley business model. Building off of pilot projects in the United Kingdom, a recent report from the Annie E. Casey Foundation (Rowan, 2016) examined the feasibility of a public job market for irregular work that would be promoted and potentially managed through the existing apparatus of state and local workforce development systems. If viable, such a model could improve local employment prospects while better serving companies in connecting with appropriate workers, increasing worker control and standards, and supporting other public service priorities. But it could just as easily lubricate and publicly sanction the further deterioration of work conditions.

e.g., Harris and Krueger, 2015). Motivated in part to accommodate the narrow version of gig work as online platform work, such proposals could alter legal and economic incentives in ways that should not be taken lightly (Eisenbrey and Mishel, 2016; Smith and Leberstein, 2015). A third category could simply replace one gray area with two (Kennedy, 2016) while opening up new avenues for employers to further undermine the stability and protections tied to conventional employee status.

Portable benefits proposals hinge on design issues that are already evident in recently proposed legislation. In one proposal for New York State by the platform company Handy, portable benefits funds would be tied to the status of independent contractor, an approach at least in part designed to head off legal challenges around misclassification with benefits fund requirements that would result in very low contributions relative to typical non-wage employee costs. In contrast, bills recently introduced in Washington State and New Jersey, would require large businesses that mediate the work of independent contractors to contribute a portion of customer revenues to a portable benefits fund but without explicitly linking the provision of benefits to the determination of independent contractor status. This approach may indirectly reduce the incentive to misclassify by raising the cost of hiring a 1099 worker. In addition, the board tasked with managing the benefits fund would have representation from workers or worker organizations. At the federal level, Virginia Democrat Senator Mark Warner has introduced legislation to set aside $20 million to fund portable benefits pilot experiments for gig and other non-traditional workers, to be administered through the Department of Labor.

The elastic definition of gig work remains at the heart of both research and policy design. Available evidence suggests the possibility that the "gig economy," in so far as it exists, amounts to less of a tectonic shift in the nature of work than a pattern of marginal change that unevenly affects particular industry sectors, business models, occupations, and groups of workers. The present report has chosen to equate gig work with independent contracting, a decision that hinges on the legal status of a particular kind of nonstandard worker as distinct from a conventional employee. To be clear, this focus leaves out questions of work time and schedule instability, contingent work, employee misclassification, and other mechanisms of temping-out and contracting-out work that rest at separate points of regulatory intervention. Despite their legal and substantive differences, each of these symptoms of the increasingly "fissured" workplace threatens to erode the quality of work, both directly by shifting risk and cost onto workers and indirectly by hindering the ability of businesses to compete on a level playing field.

Recommendation for policy

Existing labor and employment laws are not an impediment but a baseline for improving workers' access to decent wages, basic standards, and meaningful benefits (Weil and Goldman, 2016). Even as our understanding of gig work continues to improve, research is unlikely to uncover pervasive, convincing evidence that existing labor market institutions have been rendered obsolete by online platform work or by independent contracting more generally. As a result, national, state, and local policy should avoid undermining the baseline of protections hitched to the employer-employee relationship and instead focus on extending protections to nonstandard and otherwise vulnerable workers. This in no way hinders efforts to enforce standards that already exist and to experiment carefully with new programs to extend benefits to alternative and task-oriented workers where appropriate. To better evaluate such policy design challenges, the evolving debate over gig work should consider the full variety of causes, effects, and experiences in work outside of the conventional employer-employee relationship. The primary challenge for policy is to ensure that alternative staffing strategies do not merely undercut basic standards for decent work.

References

Abraham, K. G., Haltiwanger, J. C., Sandusky, K., and Spletzer, J. R. (2017). *Measuring the Gig Economy: Current Knowledge and Open Issues*. National Bureau of Economic Research.

Appelbaum, E. (2017). *Domestic Outsourcing, Rent Seeking, and Increasing Inequality*. Working Paper. Center for Economic and Policy Research.

Berg, J. (2016). *Income Security in the On-Demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers*. International Labour Office: Conditions of Work and Employment Series No. 74.

Bernhardt, A. (2016). It's Not All About Uber. *Perspectives on Work*, 20(1-2).

Bernhardt, A., Batt, R., Houseman, S. N., and Appelbaum, E. (2016). *Domestic Outsourcing in the United States: A Research Agenda to Assess Trends and Effects on Job Quality*. Working Paper 102-16. University of California, Berkeley, Institute for Research on Labor and Employment.

Bernhardt, A. and Thomason, S. (2017). *What Do We Know About Gig Work in California? An Analysis of Independent Contracting*. UC Berkeley Center for Labor Research and Education.

Chen, M. K., Chevalier, J. A., Rossi, P. E., and Oehlsen, E. (2017). *The Value of Flexible Work: Evidence from Uber Drivers*. National Bureau of Economic Research: Working Paper Series.

Donovan, S. A., Bradley, D. H., and Shimabukuro, J. O. (2016). *What Does the Gig Economy Mean for Workers?* Congressional Research Service.

Eisenbrey, R. and Mishel, L. (2016). *Uber Business Model Does Not Justify a New 'Independent Worker' category*. Economic Policy Institute.

Farrell, D. and Grieg, F. (2016a). *The Online Platform Economy: Has Growth Peaked?* JPMorgan Chase & Co. Institute.

Farrell, D. and Grieg, F. (2016b). *Paychecks, Paydays, and the Online Platform Economy*. JPMorgan Chase & Co. Institute.

Golden, L. (2016). *Still Falling Short on Hours and Pay*. Economic Policy Institute.

Habans, R. (June 2016). *Is California's Gig Economy Growing? Exploring Trends in Independent Contracting*.

Hall, J. V. and Krueger, A. B. (2016). *An analysis of the labor market for Uber's driver-partners in the United States*. National Bureau of Economic Research.

Harris, S. D. and Krueger, A. B. (2015). *A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The "Independent Worker"*. Discussion Paper 2015-10. The Hamilton Project.

Hathaway, I. and Muro, M. (2016). Tracking the Gig Economy: New Numbers. *Brookings (website)*, October 13.

Hill, S. (2015). *New Economy, New Social Contract: A Plan for a Safety Net in a Multiemployer World*. New America Foundation.

Hipple, S. F. (2010). Self-employment in the United States. *Monthly Labor Review*, 133(9):17–32.

Jackson, E., Looney, A., and Ramnath, S. (2017). *The Rise of Alternative Work Arrangements: Evidence and Implication for Tax Filing and Benefit Coverage*. Office of Tax Analysis: Working Paper 114.

Katz, L. F. and Krueger, A. B. (2016). *The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015*.

Kennedy, J. V. (2016). *Three Paths to Update Labor Law for the Gig Economy*. Information Technology and Innovation Foundation.

McKay, K. L. (2017). Reforming Unemployment Insurance to Support Income Stability and Financial Security. *The Aspen Institute: EPIC*, August.

Rowan, W. (2016). *Beyond Gig Work: Public Markets for Irregular Employment*. Annie E. Casey Foundation.

Smith, R. and Leberstein, S. (2015). *Rights on Demand: Ensuring Workplace Standards and Worker Security in the On-Demand Economy*. National Employment Law Project.

Sundararajan, A. (2016). *The Sharing Economy: The End of Employment and the Rise of Crowd-based Capitalism*. MIT Press.

Union, F. and Upwork (2015). *Freelancing in America: 2015*. Freelancers Union and Upwork.

US Government Accountability Office (2015). *Contingent Workforce: Size, Characteristics, Earnings, and Benefits*. GAO-15-168R, Report to the Committee on Health, Education, Labor, and Pensions, US Senate.

Weil, D. (2014). *The Fissured Workplace*. Harvard University Press.

Weil, D. and Goldman, T. (2016). Labor Standards, the Fissured Workplace, and the On-Demand Economy. *Perspectives on Work*, 20(1-2).