

Forms of self-employment: What do we know about the gig economy

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Self-employment takes a range of forms spanning business ownership, dependent contracting activity and freelancing. The term 'gig economy' is used increasingly to describe a range of freelancing activity in sectors such as construction, IT, transport services, and culture and media. Although definitions vary, there is general agreement that the growth in gig-working has been encouraged by the development of internet platforms such as Uber and Deliveroo, and the opportunity to adopt business models which support workforce 'flexibilization'. The small body of research on 'dependent' self-employment over a longer period provides useful insights. However, research on the drivers and impacts of gig-working specifically is sparse, and at present provides little insight beyond describing the size and recent growth of the gig economy. A number of important evidence gaps remain. These include measurement of the sector and assessment of the strength of particular drivers. They also include the impact of employment regulation on the trade-off between the benefits of autonomy and flexibility and the costs of poor earnings and security. Finally further evidence is needed on the question of whether gig-working reflects economic opportunity or is a form of necessity entrepreneurship that crowds out well-performing business start-up.

Background

The term 'gig economy' is increasingly used as a collective noun for freelance workers who obtain and undertake work through the use of a range of internet platform systems in activities such as private hire transport service (Uber) or fast food delivery (Deliveroo) or provision of domestic services and maintenance (PeoplePerHour, TaskRabbit). While the development of internet platforms has supported the matching of job supplier to customer, the defining characteristic of gig-working is the rapid definition of task and payment for the completion of that task or service, which may vary according to spatial and temporal context and reputation, rather than contracted payment for hours of work. Thus, the definition of the gig economy can be extended to include a range of professional and skilled trades service provision across IT, construction, media, creative and sports and leisure occupations.

A common (although not ubiquitous) characteristic is that gig workers typically operate as self-employed freelancers (freelancing is not a recognised legal definition but is conventionally used to characterise non-business ownership, own-account working). The gig economy therefore overlaps substantially with what is known in academic research as 'dependent' self-employment – that is non-business owning subcontractor or freelancing activity. This is potentially initiated deliberately by employers as a means to circumvent employment protection responsibilities (Williams and Horodnic, 2019). This therefore connects to the commonly asserted distinction between 'opportunity-driven' and 'involuntary' self-employment (Henley, 2017). Some may undertake gig economy activity as a secondary or informal employment activity alongside a regular main job, and the scale of this may be difficult to identify in official data.

However, in the UK, restricted employment rights for gig economy freelancers has been challenged as a result of recent legal action. The 2017 Taylor Review recommended the establishment of 'dependent contractor' as a formal employment category, along with a range of measures to provide improved employment security and wider well-being (Taylor, 2017). Furthermore, the operation of HM Revenue and Customs IR35 tax regulation has in some cases limited the extent to which some gig workers can operate as self-employed.

Any definition of the gig economy fits uneasily into standard classifications of occupation and forms of employment and therefore any analysis of the size and growth of the sector is contested. For example, if the definition is widened to include informal business activity such as eBay or Etsy trading, or letting rooms on AirBnB, then the size of the gig economy could be much larger (CIPD, 2017). Table 1 provides information on the forms of self-employment and the scale of the gig economy across the UK in 2019 compiled from official survey data. 14% of the almost 5 million self-employed in the UK are freelancers. A further 5% are sub-contractors. Taken together these two groups might be taken as an indicator of the scale of dependent self-employment. Gig economy occupations (see note to table for definition) are estimated here to account for around 1 in 11 of all employees, but for almost a third of all self-employed, estimated as over 1.5 million individuals. An estimated further 136,000 undertake secondary self-employed activity in gig economy occupations.

In terms of gender, a greater proportion of the self-employed are male; however, the proportion of the self-employed in gig economy occupations is much higher amongst males (39%) than females (17%). Graduates are more likely to be freelancers but, amongst the self-employed are less likely to be in gig economy occupations. There are estimated to be 643,000 itinerant self-employed in gig economy occupations in the UK, a large proportion of the total self-employed in the gig economy. However almost one in five self-employed in the gig economy work from home.

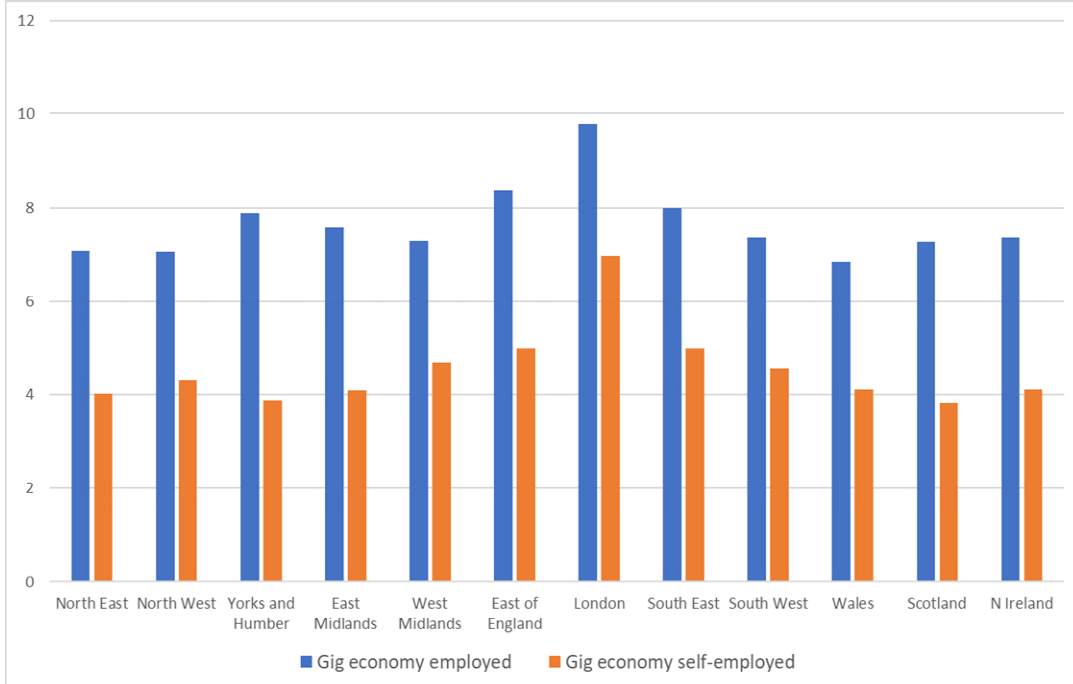
Figure 1 shows how the relative size of the gig economy varies across the UK. The employed in the gig economy account for between 7 and 10 per cent of all economically active, whereas the self-employed account for between 4 and 7 per cent. Gig economy activity is proportionately more prevalent in London in particular, and to a lesser extent in south east and eastern England, than it is in northern and western regions. Gig economy self-employment is lowest in Yorkshire and the Humber. Johnes (2019) uses a regional time-series forecasting analysis to suggest a steady-state figure of 6.5 percent for the self-employed gig economy workforce in London, and shows that any spill-over effects from London to more peripheral regions are quite weak.

Table 1: The scale of the UK gig economy

	Total	Gender		Education level		Place of work	
		Males	Females	Graduates	Non-graduates	Home working	No fixed place of work
Employed	27,553,033	13,832,098	13,720,935	10,058,990	17,443,337	837,432	1,033,176
Self-employed (%)	4,973,249 (15.3%)	3,306,506 (19.3%)	1,666,743 (10.8%)	1,673,287 (14.3%)	3,291,666 (15.9%)	1,105,565 (56.9%)	1,630,539 (61.2%)
Of which (%)							
Employer	15.0%	16.0%	13.2%	16.1%	13.5%	9.3%	7.5%
Sole-trader	65.8%	65.0%	67.4%	63.8%	67.5%	82.3%	80.2%
Sub-contractor	5.3%	7.1%	1.9%	3.3%	6.4%	1.3%	5.0%
Freelancer	13.9%	11.9%	17.5%	16.8%	12.7%	7.1%	7.4%
Gig economy occupations – main job employees (% of all employed)	2,550,224 (9.3%)	2,037,176 (14.8%)	513,048 (3.7%)	1,071,919 (10.9%)	1,474,149 (8.5%)	121,271 (14.5%)	146,292 (14.2%)
Gig economy occupations – main job self-employed (% of all self-employed)	1,552,834 (31.3%)	1,273,689 (38.6%)	279,145 (16.8%)	444,670 (26.6%)	1,106,554 (33.7%)	206,802 (18.7%)	642,949 (39.5%)
Gig economy occupations – second job self-employed (% of all secondary self-employment)	136,160 (27.2%)	83,829 (33.2%)	52,331 (21.1%)	82,489 (29.2%)	53,309 (24.5%)	10,143 (19.3%)	17,556 (24.6%)

Notes: author's own estimates from 2019 ONS Annual Population Survey (APS), gross numbers obtained from APS (2018) population weights. Gig economy occupations defined, following Kitching (2015), as 2010 Standard Occupational Classification codes 213 (IT and technical professionals), 222 (Therapy professionals), 247 (Media professionals), 341 (Artistic, library and media occupations), 344 (Sports and fitness occupations), 531 (Construction and building trades), 532 (Building finishing trades), 821 (Road transport drivers). Reference category for place of work is separate premises (not listed). Percentages may not sum consistently due to missing information in a small number of survey cases.

Figure 1: Gig economy activity as a percentage of total economically active by region



Evidence

The academic discussion relating to dependent self-employment and growth of the gig economy has sought to address a number of issues. A first is simply to document the relative size of the phenomena. A second is to investigate, both conceptually and empirically the specific impact of new technologies and employment flexibility on the nature of freelancing and self-employment, often with a focus on particular sectors. A third is to assess the consequences of dependent contracting for individuals. A fourth issue is to assess potential drivers of dependent self-employment, freelancing and gig economy activity. Regardless of differences in definition between each of these and the level of recent commentary on the gig economy in particular, the literature on all of these issues is fragmented and spans a range of research methods. Quantitative analysis of official survey data focuses on issues of description, international comparison and both personal and macro drivers. Qualitative or small-scale bespoke survey analyses focus on providing contextual nuance.

Studies over a number of years have documented the growth in freelancing (see Kitching, 2015 and earlier references therein) and this work now extends into describing gig economy growth (Coyle, 2017; Johnes, 2019). These UK studies tend to draw on analysis of official Labour Force Surveys and adopt the same or similar definitional approach as in Table 1. Freelancing almost doubled in scale between 1992 and 2015 in the UK (Kitching, 2015). Similar trends are observed in the US (McKinsey Global Institute, 2016; Katz and Krueger, 2016; Abraham et al, 2018). However, there is recent evidence that the scale of dependent self-employment has fallen in some other European countries (Williams and Horodnic, 2018), although rates may be higher in southern and eastern Europe. One novel approach to measuring the scale of the gig economy is via direct and real-time ‘scraping’ of internet platform sites (Kässi and Lehdonvirta, 2018; see also <http://ilabour.oii.ox.ac.uk/online-labour-index/>). These data confirm historic survey trends and perhaps of particular interest suggest that gig economy activity is robust in the face of the Covid-19 international health pandemic. However other emerging evidence from around the world suggests that gig workers are highly exposed to loss of work during the pandemic; see Fairwork (2020) and Moulds (2020). The main issue in terms of comparison of trends between countries relates to the strength of regulations concerning social protection and taxation, governing whether platform businesses can use freelancers or are obliged to provide standard contracts of employment.

Clearly the growth of the gig economy has been enabled by the rapid development of digital technologies and adoption by consumers, supported or mitigated depending on national context by the degree of permissiveness in employment and tax regulation. Such circumstances are a mixed blessing for participants. Gig-working may permit increased worker autonomy and choice over work intensity and provide opportunities for rapid verification of reputation and work quality from client feedback. However, the adoption of internet platforms represents a business model choice for large employers in key sectors (Coyle, 2017). Platform working can be oppressive through the manner in which it facilitates worker surveillance and regulates work process (Gandini, 2019), or creates social isolation and insecurity, and reduces wellbeing (Wood et al., 2019). One, now dated, study using data from the European Community Household Panel from 1991-2001, demonstrates that stricter employment protection legislation and higher potential future redundancy payments increases levels of dependent self-employment (Román et al., 2011). Other research-derived knowledge on the impact of dependent contracting on individuals tends to arise from case study material or

qualitative interviewing, and paints a mixed picture in terms of balancing individual satisfaction with dependent self-employment and gig economy working, with negotiating job insecurity and low earnings, and for a minority the experience of opting for gig-working out of necessity (see, for example, in the UK context CIPD, 2017).

Three extant empirical studies use microdata to investigate personal characteristics and other drivers which are associated with dependent self-employed status, one for the UK (Böheim and Muellburger, 2009), and two drawing on two different sources of pan-European microdata (Román et al., 2011; Williams and Horodnic, 2018). Table 2 summarises the key findings from these studies. Each focus on different factors although higher dependent self-employment amongst males, older workers, and those in the construction sector appear to be consistent conclusions. As noted above, the Román et al. study also pays particular attention to variation in employment regulation regimes in different countries. One further microdata study examines the impact of being engaged 'alternative work arrangements' in the US in 2005 and 2015, and finds that various forms of agency and gig working significantly depress earnings and hours worked (Katz and Krueger, 2016).

Table 2: Micro-data studies of dependent self-employment

	Böheim and Muellburger (2009)	Román et al. (2011)	Williams and Horodnic (2018)
Sample	UK (1999 to 2005)	15 EU nations (1994 to 2001)	28 EU nations (2010 and 2015)
Outcome variable	Dependent self-employed	Transition from paid employment to dependent self-employment	Dependent self-employed
Demographics:			
Gender - male	+ve	+ve	+ve
Age	+ve	not significant	+ve
Minority ethnicity	-ve		
Married/cohabiting	Inconclusive	not significant	
Children	+ve		
Household size			-ve
Education level	+ve	not significant	
Housing:			
Short housing tenure	+ve		
Housing wealth		+ve	
Occupation	+ve for professionals		
Industrial sector		-ve for all relative to construction	+ve agriculture, -ve for others relative to construction
Form of employer			-ve for public sector; +ve for not-for-profit sector
Previous employment:			
Hours of work		+ve	
Permanent contract		-ve	
Prior self-employment experience		+ve	

Overview and Evidence Gaps

As this review has demonstrated, the literature on the gig economy is limited and fragmented. There are a small number of micro-econometric studies on the form of self-employment – here the focus is on those which explicitly examine dependent self-employment. The majority of research to date on the gig-economy takes one of two forms: 1) empirical analysis to address the scale of the gig-economy or 2) discursive analysis, sometimes supported by case studies, on the drivers and consequences of gig-working. Gig-working overlaps but is not congruent with dependent self-employment – there may be sizeable numbers of gig-workers working as paid employees with insecure or ‘zero-hours’ contracts. There may also, depending on societal context, be significant levels of officially unrecorded informal gig-working in many countries. One estimate, for example, suggests, based on survey evidence in 2013 across the EU, that 4% of the working population are engaged in informal activity, each generating an average of €723 in annual earnings (Williams and Horodnic, 2015). Both of these figures are higher for those who are self-employed.

There are a number of issues for which a more robust evidence base is needed:

- 1) Measurement of the scale of the gig-economy remains an important unresolved issue, and there is a need to match definitions based on form of (self-)employment with definitions which are based on sector, as well as to reconcile estimates derived from traditional official labour market surveys with novel ‘big data’ estimates. The extent of gig-working is important because it has a bearing on the urgency of policy response. Gig-working has steadily increased over the past two decades and has grown fastest where wider economy activity is more vibrant. It is unclear if it has now peaked.
- 2) Aside from the development of internet platform-working technologies, and the opportunities that these present in allowing large employers to ‘casualize’ their workforces, further research is required on the individual-level and regional/macro drivers of the growth in gig-working.
- 3) There is a need for robust assessment of whether the growth of gig-working contributes to inequalities in incomes and well-being and therefore requires a redesign of employment protection regulation. This is the underlying premise of the influential 2017 Taylor Review for the UK, which made a series of recommendations designed to provide greater fairness and protection for the dependent self-employed. However, more research is needed on the unresolved question of the trade-offs between the opportunities that gig-working provides for sense of autonomy and working life flexibility and the risks of low or volatile earnings and economic insecurity. How might specific policy interventions shift these trade-offs?
- 4) From the perspective of enterprise research, a further unresolved issue is whether the arrival of gig economy platforms support or crowd-out wider local entrepreneurial activity. For example, Burtch et al (2018) exploit variation in the arrival of the Uber taxi-ride platform across US cities and find a negative association, perhaps indicative of a crowding-out of independent business start-up, providing an ‘easier option’ for necessity-based entrepreneurs, away from other underperforming activity. On the other hand, in the UK the regional pattern of growth in gig-working appears to mirror wider self-employment

patterns, which are generally higher where opportunity-drivers are stronger (Henley, 2017).

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