Career Ladder or Trap? : Analyzing Job Transition of Young Gig Workers in South Korea

유지인(KDI국제정책대학원, 박사과정생)*
임수민(KDI국제정책대학원, 석사과정생)**
이채영(KDI국제정책대학원, 석사과정생)***

요 약

This study explores the gig economy's dynamics within South Korea, focusing on youth employment transitions between gig and non-gig sectors. First, we identify key demographics that describe distinct profiles of young gig workers in South Korea. Then we utilize the data from the Youth Panel(YP) surveys, we employed multinomial logistic regression to identify key factors influencing these transitions, such as gender, capital, and education. Our findings highlight the significant role these variables play in determining employment outcomes within the gig economy. Additional analyses of gig worker characteristics reveal a substantial presence of gig employment among young individuals, particularly those with lower educational levels and residing in urban areas. The study suggests policy interventions to mitigate risks associated with gig work and to enhance its viability as a sustainable employment option. Our results indicate that tailored educational programs and urban development policies could support gig workers effectively.

* 유지인: KDI국제정책대학원 공공관리학 박사과정 (myarina@naver.com)
** 임수민: KDI국제정책대학원 공공정책학 석사과정 (kneelyoung@naver.com)
*** 이채영: KDI국제정책대학원 공공정책학 석사과정 (cll8703@gmail.com)

Ⅰ. Introduction

In recent years, the gig economy has emerged as a significant component of the global labor market, characterized by flexible, temporary, or freelance jobs that often involve connecting with clients or customers through an online platform. This shift towards a planetary labor market is facilitated by digital platforms that enable labor arbitrage and cross-border competition, capitalizing on global disparities to maximize economic benefits (Graham, 2019). Moreover, the rapid rise in online gig work, particularly in developing countries, signifies the gig economy's role in providing flexible employment opportunities. However, it also raises concerns about the absence of social protections for workers (World Bank, 2023). South Korea is no exception to this trend, witnessing a marked increase in gig employment among the youth. Defined by Statistics Korea as including solo self-employed individuals, multi-job holders, and those in temporary work for less than one year, the gig economy presents a dual-faced nature, potentially acting as both a bridge to and a trap in career development for young workers.

Although offering flexibility and multiple job avenues, this nuanced labor market segment also poses significant risks, such as job insecurity and limited career progression. In South Korea, where youth face a highly competitive educational environment and considerable unemployment rates, these positions might not ensure stable career trajectories or economic stability. Researchers highlight that gig work can exacerbate income disparities and undermine employment protections, posing challenges to the long-term sustainability of these jobs (Nimmagadda et al., 2024; Johnston, 2018). Furthermore, while the gig economy is often lauded for its economic flexibility, its rapid growth also brings into question its long-term effects on the workforce. As Bulian and Luka (2021) discuss, although the gig economy provides immediate job opportunities, it frequently needs comprehensive benefits and job security, which are crucial for sustained employment and career development. This situation compels policymakers and stakeholders to critically evaluate the structural support and regulatory frameworks necessary to safeguard gig workers, particularly the youth, from potential economic vulnerabilities.

Given the complex dynamics at play, it is crucial to diagnose how the gig economy is shaping the labor market in South Korea, particularly for its younger demographic, and to explore strategic measures to mitigate associated risks.

The proposed longitudinal research study aims to address the transient nature of gig work and its long-term implications on youth employment trajectories. Specifically, the study will track a cohort of young gig workers over 15 years(2008 to 2022), assessing the transition to another job category, demographic characteristics of youth employment(aged 19 to 29), and individual characteristics of gig workers in Korea. This longitudinal perspective will illuminate the enduring effects of gig employment, providing a clearer picture of whether such jobs serve as a career ladder or trap in young adults' career paths. By addressing these areas, we intend to contribute to the understanding of the career trajectory of the young employees in Korea and identify the factors that influence the choices of the career paths, with a specific focus on their participation in the gig economy. Through factor analysis, we will explore the potential for transition from gig work to another job category that may imply a career ladder or stepping stone for better employment status.

Ⅱ.Literature Review

1. Literature review

Before delving into the determinants and characteristics of gig workers in Korea, it is essential to clarify the definition of gig work. While the concept of gig workers or the gig economy may vary (Wood et al., 2019), a commonly accepted definition of a gig worker is someone whose income is neither regular nor predictable and whose income-generating activities are not based on long-term employment. Broader literature has revealed that the term "gig worker" is not limited to platform workers but encompasses a broader range of worker categories. Specifically, in the Korean context, Boston Consulting Group (2022) categorizes gig workers into three main groups: 1) Platform and solo workers, 2) Part-time workers, and 3) Full-time workers who engage in gig work as a secondary job. This classification forms the foundation of our model, and subsequent analysis is discussed in the following section.

Research, such as that by Watson (2013) and Burton (2007), provides insight into these dynamics. Watson (2013) illustrates how gig and temporary jobs can either bridge workers to permanent employment or trap them in instability, influenced by factors like economic cycles and industry norms. Burton (2007) discusses how personal characteristics and previous work history play essential roles in employment outcomes, introducing the concept of "unobserved heterogeneity" within these job types. Watson (2013) investigates the impact of casual employment on workforce stability, utilizing data from an extensive, longitudinal household survey. The analysis spans several years and focuses on individuals aged 15-64, specifically excluding full-time students, to avoid skewing results with transitional work patterns typical of student employment. This study employs a multinomial logit model selected for its effectiveness in managing the non-normal distribution of employment transition outcomes across six categorized labor market states: permanent, casual, fixed-term, self-employment, unemployment, and not in the labor force (NILF). In exploring individual characteristics, Watson (2013) highlights age and duration of paid employment as significant factors affecting job stability and transitions. Older age groups generally face poorer labor market outcomes, while extended periods in paid employment correlate with more favorable conditions. Education has a modest impact, suggesting that job experience and local economic conditions are more influential. The study also notes

that individuals in disadvantaged areas are more likely to remain in casual employment or transition into unemployment or NILF states, emphasizing how regional economic disparities can influence employment stability.

Additionally, casual employment persists in industries with high casual job density, smaller organizational sizes, and limited opportunities for skill development, highlighting a complex interplay of industry and job-specific factors that affect employment stability. In a similar approach, Burton et al. (2007) 's study focus on worker transition between the job categories. As a primary approach, Burton(2007) found out that in the labor market dynamics, mainly focusing on entry-level positions, the influence of gender and age at the time of first employment emerges as crucial. Gender significantly impacts the likelihood of individuals starting their careers in temporary positions, with women being notably more prone than men to commence their working lives in such unstable roles. This gender discrepancy highlights the broader implications of societal norms and economic factors that differently shape career trajectories for men and women. Age at entry into the workforce is another pivotal factor, acting as a proxy for an individual's initial endowment of abilities such as education, experiences in the informal economy, or time spent in job search before securing the first position. These elements are foundational, influencing the type of first job secured and subsequent career development and stability. The econometric analysis, undertaken over five years, incorporates fixed effects to isolate the impact of individual characteristics from other confounding factors. This approach reveals a persistent "state dependence" in career trajectories, suggesting that initial job conditions strongly influence future employment outcomes. Despite attempts to statistically control for individual differences, the tendency for individuals to remain in or return to their initial state of employment – whether unemployment or precarious employment – remains significant.

Furthermore, extending the observation period suggests that the impact of state dependence might diminish over time. However, this effect varies by the type of contract and industry, with shorter contractual periods like those seen in quasi-subordinate positions or apprenticeships showing a quicker dissipation of initial state effects. Even after adjusting for individual fixed effects, the periodic re-estimation of transition rates consistently shows that initial employment conditions continue to exert a long-lasting influence, underscoring the entrenched nature of initial labor market experiences.

In South Korea, the rapid expansion of the gig economy has outpaced the development of legal protections for workers, underscoring the sector's precarious nature and

highlighting a policy response lag compared to international standards. Young workers, drawn to the gig economy's accessibility, often face long-term career instability and low-income and job insecurity cycles. The existing research points to the urgent need for comprehensive empirical studies to assess the long-term impacts of gig work on youth employment trajectories in South Korea. This necessity underscores the mixed outcomes of gig work and highlights the importance of developing policy measures to maximize its benefits while mitigating its risks.

2. Related Theory

From a theoretical standpoint, several frameworks help understand gig work dynamics. The Human Capital Theory suggests that the skills and experience gained from gig jobs may enhance employability (Becker, 1964). However, the Segmentation Theory argues that the labor market is divided into separate sub-markets or segments, where gig work is positioned in a less favorable segment, often leading to adverse career outcomes (Doeringer & Piore, 1971). Several theoretical frameworks can be applied to understand the dynamics and implications of gig work, particularly in how it affects young workers' career trajectories. These theories help to contextualize the mixed outcomes observed in gig employment, such as the potential for career advancement or the risk of job precarity.

Human Capital Theory, as articulated by Becker (1964), posits that investments in human capital (such as education, training, and work experience) enhance an individual's productivity and can lead to higher earnings and improved employment outcomes. This theory is relevant to the gig economy, suggesting that the skills and experiences gained in gig work can increase employability and facilitate transitions to more stable employment.

Labor Market Segmentation Theory offers another lens through which to view gig work. This theory divides the labor market into distinct segments (the primary and secondary labor markets) that are fundamentally different in terms of job security, wages, and career mobility. Gig work is often categorized within the secondary labor market, characterized by precarious jobs, low wages, and limited career progression.

David Harvey's Theory of Flexible Accumulation relates to how economies adapt and evolve to enable greater flexibility in production, labor markets, and products. This theory helps explain the rise of the gig economy as part of broader economic shifts towards flexibility and efficiency at the cost of worker security.

These theoretical frameworks provide valuable insights into understanding the gig economy's impacts on labor markets, particularly for young workers in South Korea. By applying these theories, we explore both the positive and negative aspects of gig work and their broader implications for society.

3. Research Gap

While considerable research has been conducted on the gig economy globally, the characteristics of young gig workers in South Korea remain a promising area for further study. This research aims to bridge that gap by developing and discussing models that address this group's unique attributes and challenges within the Korean socio-economic context.

Whereas existing studies, such as those by Watson (2013) and Burton (2007), have explored the transitional dynamics between temporary and permanent employment, they predominantly focus on broader employment sectors without a deep dive into the gig-specific aspects of the labor market. Furthermore, much of the current literature centers on the economic contexts of Western countries, with less attention given to the unique socio-economic and cultural factors influencing labor markets in East Asia, particularly South Korea.

In a study conducted by Galfalvi in 2021, which utilized focus group interviews with school and Further Education college students to explore whether gig work was beneficial to their careers, it found that while participants saw little point in getting advice about pursuing work within the gig economy, some recognized that engagement with the gig economy could enhance their resumes and serve as a stepping-stone to better opportunities. We aim to track the actual job transitions of young people in South Korea and identify how these findings differ from previous research.

Discussions have also been held regarding the limitations of studies on the gig economy. The research by Malik et al. (2021) mapped a broad spectrum of literature on the gig economy and highlighted that the discussions on this topic are greatly dispersed. It emphasizes the need for a more precise research agenda to streamline the discussions and enhance the exploratory and explanatory potential of the gig economy.

One significant gap in the existing literature is the need for more models that adequately capture and analyze the nuances of young gig workers in South Korea. Most models need

to be narrower or based on data from Western economies, which may not accurately reflect the Korean setting. This research will endeavor to develop models that consider factors such as cultural attitudes toward work, economic conditions, and the regulatory environment specific to South Korea.

Furthermore, there is a pressing need for more detailed analysis that can inform policymakers and business leaders. Such analysis could help craft more effective strategies to harness the potential of gig work as a stepping stone to career development rather than a stopgap solution leading to a 'career trap.'

By addressing these gaps, we will contribute to a deeper understanding of how gig work impacts youth employment in South Korea, guiding stakeholders in navigating and optimizing the gig economy's role in the future of work.

This research aims to fill that gap by utilizing longitudinal data from the Korean Employment Information Service, providing a nuanced understanding of how gig employment affects the career trajectories of young workers in South Korea. By focusing on gig workers and their transition into more stable employment forms, this study seeks to contribute valuable insights to the ongoing discussions about the structure and implications of the gig economy.

III.Data

The dataset utilized in this study is from two primary sources, the Young Panel 2007 (YP2007) and the Young Panel 2021 (YP2021), conducted by the Korea Employment Information Service.

The YP dataset was established as a longitudinal study conducted by the Korea Employment Information Service to track the transition of youth from school to the labor market and their subsequent mobility. It is a panel survey conducted annually, providing comprehensive information on the trajectories of young individuals as they navigate through educational and employment pathways (KEIS, 2022).

From the YP2007, we utilize data from the 2nd to the 14th wave of the panel, spanning 2009 to 2020. This selection was made due to the crucial variables necessary for defining gig

workers being missing in the 2007 dataset. The YP2007 dataset comprises a sample of young individuals aged 15 to 29, known as the Youth Panel 2007, surveyed until the 14th wave in 2020. However, as the panel progressed, many observations deviated from the target age group of young individuals, particularly in 2020. To address this issue, a sample design was implemented in 2015 to include youths aged 15 to 22 in the panel, and based on this, a new youth panel was established and surveyed in 2015 (KEIS, 2016). Additionally, to address the sample's aging due to long-term tracking in the original youth panel survey, the Young Panel 2021 survey was planned and conducted in 2021, expanding the age range to individuals aged 19 to 28.

The panels from 2008, 2015, and 2021 represent diverse age groups evenly, making them critical years for comparative analysis. Given our focus on understanding the gig worker characteristics within the young population, we specifically utilize data from individuals aged 19 to 29.

In this study, our initial step is to examine the distribution of the dataset. Through this distribution, we aim to identify factors influencing young individuals' participation in the gig economy and gain insights into the characteristics of these individuals. Moreover, this timeframe allows for an extended observation period of young workers' transitions and trajectories within the gig economy sector.

Figure1. 청년패널 원표본 관측수

구분	1차 '07	2차 '08	…	5차 '11	7차 '13	9차 '15	…	13차 '19	…	15차 '21
원 표본	10,206 (15-29)	8,830 (16-30)		7,191 (20-34)	7,092 (22-36)	7,035 (23-37)		6,898 (27-41)		
추가 표본						3,516 (15-22)		2,840 (19-26)		
청년 패널 2021										12천명 (19-28)
전체	10,206 (15-29)	8,830 (16-30)		7,191 (20-34)	7,092 (22-36)	10,551 (15-37)		9,738 (19-41)		12천명 (19-28)

source: Korea Employment Information Service. (2022).

IV. Empirical Strategy

For the analysis methodology, we apply logistic regression to identify determinants of employment types among the youth population and multinomial logistic regression to analyze changes in economic activity status. In the logistic regression, we first categorize employment types among the youth population into gig workers and non-gig workers, then further classify them into part-time gig workers, self-employed, and gig economy job workers. We aim to estimate the impact of independent variables on these statuses.

We intend to analyze the following aspects based on the sample specified:

1. Examine the characteristics of individuals belonging to the youth population in 2008, 2015, and 2021.

2. Analyze the characteristics of individuals categorized as gig workers among those in the first step. Specifically, we will examine the distribution of educational attainment and industry sectors.

In addition to the above analysis, for a more detailed examination of determinants specific to gig workers, we will group part-time gig workers, self-employed, and gig economy job workers, and analyze them separately from non-gig workers. In multinomial logistic regression, unemployment serves as the reference category ('0'), and we investigate whether individuals seeking employment among the youth population transition to gig jobs ('1') or non-gig jobs ('2'). We aim to identify factors influencing this employment transition.

The dependent variable in our study for logistic regression is whether a young individual is a gig worker or not, with explanatory variables including demographic factors (gender, age, education), among others. For multinomial logistic regression, the dependent variable is economic activity status, coded as unemployment ('0'), gig employment ('1'), and non-gig employment ('2'). Similarly, demographic factors and others serve as explanatory variables. Specifically, multinomial logistic regression entails selecting one category of the dependent variable as the reference category and comparing it with other categories, analyzing the probability of belonging to other categories compared to the reference category.

Ⅴ. Results

1. Descriptive Statistics

Table1. Descriptive Statistics

YP2007 2~14 wave (age of 19-29)

Variable	Obs	Mean	Std. Dev.	Min	Max
sampid	52029	4917.236	2924.831	1	10206
year	52029	2012.725	3.419	2008	2020
gender	52029	1.541	.498	1	2
age	52029	24.905	3	19	29
middleorless	52029	.01	.099	0	1
high	52029	.445	.497	0	1
univ	52029	.334	.472	0	1
college	52029	.195	.396	0	1
gradormore	52029	.016	.125	0	1
capital	52028	.517	.5	0	1
parent	51969	1.258	.438	0	2
married	52028	1.078	.291	0	5
type	52028	4.554	1.095	2	6
gigwork	52029	.034	.181	0	1
household	46478	2.366	1.034	0	5
debtyes	26462	.071	.258	0	1
indcode	26351	10.635	5.318	1	21
jobcode	26221	2.815	2.726	0	9

YP 2021 1-2 wave (age of 19-29)

Variable	Obs	Mean	Std. Dev.	Min	Max
sampid	22934	106110.97	3523.746	100001	112214
year	22934	2021.467	.499	2021	2022
gender	22934	.496	.5	0	1
age	22934	23.695	2.856	19	29
middleorless	22934	.005	.07	0	1
high	22934	.634	.482	0	1
univ	22934	.239	.427	0	1
college	22934	.116	.32	0	1
gradormore	22934	.006	.076	0	1
capital	22934	.51	.5	0	1
parent	22934	.739	.439	0	1
married	22934	1.028	.191	1	5
gigwork	22934	.112	.315	0	1
household	22934	1.85	.357	1	2
debtyes	22934	.049	.216	0	1
indcode	10593	10.338	4.935	1	21
jobcode	10617	3.392	2.678	0	9

The current Youth Panel (YP2007) sample established in 2007 started with people aged 15 to 29 in the first year (2007), but as the survey rounds gradually passed, the age of the sample increased. The additional panel was conducted in 2015, surveying 3,516 people aged 15 to 22 as of 2015, to ensure representativeness of the young people. In 2021, the Youth Panel 2021 survey was planned to expand the number of people in their 20s and expand the overall size in order to resolve age aging caused by long-term tracking of the existing youth panel survey. As of 2021, a sample of 12,000 young people aged 19 to 28 will be constructed. A follow-up investigation is currently in progress. Thus, to compare the statistics of young people in Korea in different time periods, this study uses the year 2009, 2015, and 2021 which have the most representative panels. Since from 2021, the new Youth Panel survey do not include those age under 19, we define the age from 19 to 29 when comparing the estimated parameters.

Table2 shows the Youth Panel's demographic characteristics and participation of gig-economy at the age of 19-29 in 2008, 2015, and 2021. Each cell value represent the estimated parameters using cross-sectional weights. The share of high school graduates and university graduates are increasing, but college graduates are decreasing. More young people are likely to live with their parentsand less people are getting married. The participation of gig economy increased from 8% in 2008 to 20% in 2021. This significant increase in the participation rate in gig economy activities is mainly due to the increase in the proportion of temporary workers with contracts of less than one year.

The four categories of employment consist of "part-time gig," "self-employed gig," "Njob-gig," and "non-gig work." The first category, "part-time gig," refers to individuals holding temporary positions under contracts of less than one year. The second category, "self-employed gigs," encompasses individuals who are self-employed and do not employ others. The third category, "Njob-gig," denotes workers who maintain a regular job while also engaging in gig work as a supplementary occupation. Lastly, the "non-gig work" category includes all other individuals not classified within the aforementioned groups.

Figure 2 indicates how the education level of employed young people are distributed by the type of work. There is no difference in the proportion of gig workers between 2008 and 2015, but there is a significant change in the composition of educational background. It can be seen that the participation of university graduates in the gig economy has expanded. In 2021, the gig economy participation rate more than doubled compared to 2008 and 2015, which is mainly due to the increase in the number of part-timers with high school graduates.

Table2.19-29세 청년패널 인구통계학적 특성 분포(2009, 2015, 2021년)

(단위:명)

	2008 (N=5807)	2015 (N=5059)	2021 (N=12213)
응답자 성별			
여자	3906729 (50%)	3853650 (51%)	3143070 (47%)
남자	3940751 (50%)	3763957 (49%)	3499897 (53%)
연령			
만19세이상24세미만	3001135 (38%)	3563546 (47%)	3031609 (46%)
만24세이상30세미만	4846345 (62%)	4054061 (53%)	3611358 (54%)
나이			
최소값 평균 최대값	19 24 29	19 24 29	19 24 28
최종 학력			
고졸미만	85668 (1%)	91534 (1%)	36231 (0%)
고졸	4399469 (56%)	4226893 (55%)	4159852 (63%)
전문대졸	1676089 (21%)	1192341 (16%)	769717 (12%)
대졸	1627930 (21%)	2000360 (26%)	1640178 (25%)
석사학위이상	58324 (1%)	106479 (1%)	36989 (0%)
수도권 거주 여부			
비수도권	3744547 (48%)	3626324 (48%)	3146363 (47%)
수도권	4102933 (52%)	3991283 (52%)	3496604 (53%)
부모와 동거 여부			
아니오	2993293 (38%)	1494194 (20%)	1674164 (25%)
예	4854187 (62%)	6123413 (80%)	4968803 (75%)
혼인 상태			
미혼	6988763 (89%)	7252093 (95%)	6461334 (97%)
기혼 유배우	844962 (11%)	351545 (5%)	172328 (3%)
별거			291 (0%)
이혼	13755 (0%)	13969 (0%)	7997 (0%)
사별			1018 (0%)
취업자 긱이코노미 참여 여부			
Part-time Gig Workers	169660 (4%)	112875 (4%)	449294(14%)
Self-Employed Gig Workers	148600 (4%)	81466 (3%)	147570 (5%)
Njob Gig Workers	13594 (0%)	13034 (0%)	23706 (1%)
Non-gig Workers	3633907 (92%)	2911334 (93%)	2525129 (80%)

주: 2008년은 원표본, 2015년은 원표본 및 추가표본. 2021년은 신규표본 기준. 횡단면 가중치 적용.

Figure2. 19-29세 청년패널 취업자의 유형별 학력 분포

< 2008년 >

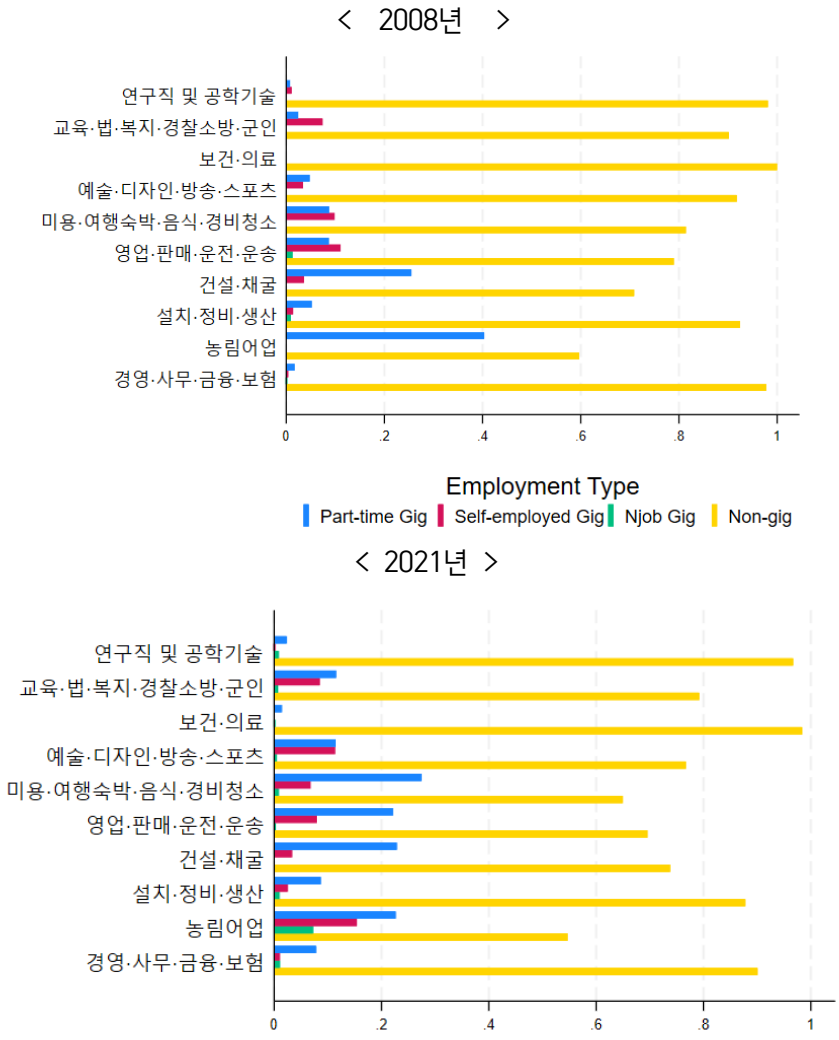
< 2015년 >

< 2021년 >

주: 2008년은 원표본, 2015년은 원표본 및 추가표본. 2021년은 신규표본 기준. 횡단면 가중치 적용.

Figure3 and Table3 shows what occupations youth(aged 19-29) employment types consist of. In 2009, gig workers were mainly distributed in 'agriculture, forestry and fishing' and 'construction and mining', but in 2021 (as much as the previous two industries), the number of gig workers has increased in 'travel, lodging and food security', 'sales, driving and transportation, and 'art, design, broadcasting and sports'. Additionally, looking at employment types, we can see that part-time jobs have been created in various occupations in 2021 compared to the previous periods.

Figure3. 19-29세 청년패널 취업자의 직업 분포 비교



주: 2008년은 원표본, 2021년은 신규표본 기준. 횡단면 가중치 적용.

Table3. 19-29세 청년패널 취업자의 직업 분포(2008, 2015, 2021년)

	경영·사무· 금융·보험직	연구직 및 공학 기술직	교육·법률·사회복지· 경찰·소방직 및 군인	보건·의료직	예술·디자인· 방송·스포츠직	미용·여행·숙박· 음식·경비·청소직	영업·판매· 운전·운송직	건설·채굴직	설치·정비· 생산직	농림어업직	Total
2008 (19-29 세 취업자)											
N	1,149,793 (29.6%)	326,353 (8.4%)	470,390 (12.1%)	289,069 (7.4%)	193,231 (5.0%)	297,352 (7.7%)	519,207 (13.4%)	36,702 (0.9%)	594,165 (15.3%)	7,383 (0.2%)	3,883,645 (100.0%)
Part-time Gig Workers	19,590 (1.7%)	2,531 (0.8%)	11,445 (2.4%)	0 (0.0%)	9,239 (4.8%)	25,955 (8.7%)	45,052 (8.7%)	9,359 (25.5%)	30,909 (5.2%)	2,978 (40.3%)	157,059 (4.0%)
Self-Employed Gig Workers	4,654 (0.4%)	3,571 (1.1%)	34,792 (7.4%)	0 (0.0%)	6,628 (3.4%)	29,286 (9.8%)	57,482 (11.1%)	1,329 (3.6%)	8,309 (1.4%)	0 (0.0%)	146,050 (3.8%)
Njob Gig Workers	1,278 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6,667 (1.3%)	0 (0.0%)	5,649 (1.0%)	0 (0.0%)	13,594 (0.4%)
Non-gig Workers	1,124,272 (97.8%)	320,251 (98.1%)	424,153 (90.2%)	289,069 (100.0%)	177,364 (91.8%)	242,111 (81.4%)	410,006 (79.0%)	26,013 (70.9%)	549,298 (92.4%)	4,405 (59.7%)	3,566,942 (91.8%)
2015(19-29 세 취업자)											
N	941,981 (30.3%)	282,058 (9.1%)	425,402 (13.7%)	318,089 (10.2%)	186,657 (6.0%)	285,170 (9.2%)	331,586 (10.7%)	9,520 (0.3%)	320,985 (10.3%)	5,379 (0.2%)	3,106,826 (100.0%)
Part-time Gig Workers	39,446 (4.2%)	9,449 (3.4%)	11,286 (2.7%)	1,911 (0.6%)	10,505 (5.6%)	22,543 (7.9%)	7,975 (2.4%)	435 (4.6%)	6,756 (2.1%)	0 (0.0%)	110,307 (3.6%)
Self-Employed Gig Workers	7,940 (0.8%)	2,885 (1.0%)	20,795 (4.9%)	0 (0.0%)	11,016 (5.9%)	7,262 (2.5%)	28,482 (8.6%)	1,689 (17.7%)	0 (0.0%)	931 (17.3%)	81,001 (2.6%)
Njob Gig Workers	5,634 (0.6%)	746 (0.3%)	1,490 (0.4%)	0 (0.0%)	0 (0.0%)	523 (0.2%)	4,019 (1.2%)	0 (0.0%)	622 (0.2%)	0 (0.0%)	13,034 (0.4%)
Non-gig Workers	888,961 (94.4%)	268,977 (95.4%)	391,831 (92.1%)	316,178 (99.4%)	165,135 (88.5%)	254,841 (89.4%)	291,110 (87.8%)	7,396 (77.7%)	313,606 (97.7%)	4,449 (82.7%)	2,902,485 (93.4%)
2021(19-28 세 취업자)											
N	815,680 (26.0%)	223,352 (7.1%)	290,348 (9.2%)	175,405 (5.6%)	157,176 (5.0%)	598,409 (19.0%)	595,795 (19.0%)	29,075 (0.9%)	249,714 (7.9%)	7,645 (0.2%)	3,142,599 (100.0%)
Part-time Gig Workers	63,819 (7.8%)	5,211 (2.3%)	33,535 (11.6%)	2,515 (1.4%)	18,025 (11.5%)	164,191 (27.4%)	131,910 (22.1%)	6,651 (22.9%)	21,704 (8.7%)	1,732 (22.7%)	449,294 (14.3%)
Self-Employed Gig Workers	8,546 (1.0%)	225 (0.1%)	24,626 (8.5%)	0 (0.0%)	17,839 (11.3%)	40,514 (6.8%)	47,394 (8.0%)	967 (3.3%)	6,281 (2.5%)	1,178 (15.4%)	147,570 (4.7%)
Njob Gig Workers	8,698 (1.1%)	1,894 (0.8%)	2,161 (0.7%)	276 (0.2%)	727 (0.5%)	5,075 (0.8%)	1,809 (0.3%)	0 (0.0%)	2,511 (1.0%)	555 (7.3%)	23,706 (0.8%)
Non-gig Workers	734,617 (90.1%)	216,022 (96.7%)	230,025 (79.2%)	172,614 (98.4%)	120,585 (76.7%)	388,629 (64.9%)	414,682 (69.6%)	21,457 (73.8%)	219,219 (87.8%)	4,180 (54.7%)	2,522,029 (80.3%)

주: 2008년은 원표본, 2015년은 원표본 및 추가표본. 2021년은 신규표본 기준. 횡단면 가중치 적용.

Previous Statistics indicate that more and more young Koreans are getting into the gig economy with various occupations. Then, we should focus on the outcome of this trend. Table 4 show the weighted average values of monthly wages by employment types. Except for the self-employed type, mean wages of gig workers are below those of Non-gig workers in 2008 and 2015. In 2021, the average wage of part-time gig workers are far below the others'.

Table4.19-29세 청년패널 취업자 유형별 평균 월임금(2009, 2015, 2021년)

(단위: 만원)

취업자 유형	2008 (N=2,268)	2015 (N= 2,127)	2021 (N= 5,342)
Part-time Gig Workers	113.68	147.76	140.02
Self-Employed Gig Workers	207.36	221.34	244.56
Njob Gig Workers	147.39	175.10	240.31
Non-gig Workers	163.68	207.78	235.10

주: 2008년은 원표본, 2015년은 원표본 및 추가표본. 2021년은 신규표본 기준. 횡단면 가중치 적용. 무응답 및 이상치 제외. Njob Gig Workers(시간제일자리 경험 상용근로자)의 경우 동시일자리 임금 미적용.

Considering that the increase in the proportion of young gig workers in recent years is mainly due to the expansion of temporary or daily workers with short-term contracts of less than one year, it can be considered as a problem that their average wages are lower than those of other types of workers. This suggests that a growing number of young individuals are entering or remaining in the labor market through low-paying, short-term employment opportunities. Also, an examination of wage distribution reveals that the earnings of part-time workers are widely dispersed at lower levels.

Figure 4. 19-29세 청년패널 취업자 유형별 로그 월평균임금(2021년)

주: kdensity는 횡단면 가중치 적용. 무응답 및 이상치 제외. Njob Gig Workers(시간제일자리 경험 상용근로자)의 경우 동시일자리 임금 미적용.

Table 5 shows the determinants of young people(aged 19-29)'s participation in the gig economy throughout the survey years (2008-2020). The coefficients in the result table represent the relationship between whether a young person participating in the gig economy and his or her demographic characteristics while industry, job, and year were controlled. The values in the parenthesis are robust standard errors.

Factors contributing to participation in the gig economy include living in the metropolitan area and having children, statistically significant with an alpha of 0.01 (see the column (1)). In other words, if young people live in the metropolitan area, the probability of participating in the gig economy is higher by 20%. The more children the young people have, the lower their chances of participation in the gig economy as a whole.

2. Factors of Participating in Gig-economy

In the following columns in Table5, the result indicates that the factors of youth's participating in the gig-economy vary by employment types. Specifically, the younger they are, the more they live in the areas near the capital city, and the more they are not the head of the household, the higher the chance of working as a temporary worker with a contract of less than one year(see the column (2)). Degrees at the level of college and university are also negatively correlated with having a part-time work. On the other hand, women and individuals without children are, more likely to pursue self-employment if they carry debt, as indicated in column (3). they are to become self-employed if they have debt(see the column (3)). In the case of young people who are employed and have various part-time jobs, the less they live with their parents, the more debt they have(see the column (4)).

The analysis of factors influencing participation in the gig economy for the years 2021 and 2022 is significant as it illustrates the determinants of gig economy engagement following COVID-19 (see the Table6). The findings suggest that older individuals, those living with parents and those with larger family sizes are more likely to participate in the gig economy and statistically significant with a p-value of less than 0.01. Conversely, the presence of children and existing debts are associated with a lower probability of gig economy participation.

The multinomial regression analysis shown in Table7 presents a multinomial regression analysis that models the transition between different types of gig work and identifies factors influencing these transitions among individuals. With the baseline category of unemployed individuals, significant predictors of employment transition were identified. For transitioning to gig work, gender, capital, and undergraduate education level were significant, with positive effects observed for gender ($p<0.01$) and capital ($p<0.01$), and a negative effect for undergraduate education ($p<0.01$). Transitioning to non-gig work was significantly influenced by age ($p<0.01$), capital ($p<0.01$), the number of family members ($p<0.01$), and homeownership ($p<0.05$). These results indicate that different factors significantly affect the likelihood of transitioning into gig versus non-gig employment categories.

Table5. 19-29세 청년패널 취업자 중 긱 이코노미 참여요인 분석(로짓)(2008-2020)

	(1) gigwork	(2) partimegig	(3) selfemployedgig	(4) njobgig
gender (male=1)	-0.119	0.0624	**-0.273****	-0.481*
	(-1.81)	(0.67)	(-2.78)	(-2.33)
age	0.00680	**-0.128*****	**0.237*****	-0.0124
	(0.53)	(-7.69)	(10.94)	(-0.28)
high school	0.0842	-0.618	2.068	0.397
	(0.27)	(-1.90)	(1.82)	(0.49)
college	-0.396	**-0.974****	1.593	-0.168
	(-1.25)	(-2.94)	(1.41)	(-0.20)
university	-0.304	**-0.934****	1.814	-0.483
	(-0.96)	(-2.79)	(1.60)	(-0.62)
grad school or more	0.386	0.211	1.855	0
	(1.08)	(0.53)	(1.59)	(.)
living in capital (yes =1)	**0.209*****	**0.399*****	0.000947	-0.145
	(3.59)	(4.94)	(0.01)	(-0.70)
living with parent (yes =1)	-0.0515	-0.189	0.394*	**-0.737****
	(-0.53)	(-1.48)	(2.54)	(-2.63)
single (yes =1)	0.0728	0.385	-0.265	1.316
	(0.48)	(1.52)	(-1.26)	(1.34)
number of family member	0.0166	0.0155	-0.0433	0.143
	(0.50)	(0.34)	(-0.85)	(1.26)
number of kid	**-0.637*****	-0.315	**-0.870*****	0.0281
	(-3.68)	(-1.06)	(-3.74)	(0.02)
debt (yes =1)	0.490***	-0.157	**0.922*****	**0.909****
	(5.05)	(-0.93)	(6.89)	(3.16)
house owner (yes =1)	-0.297*	**-0.762*****	-0.0146	0.293
	(-2.50)	(-4.05)	(-0.09)	(0.67)
_cons	-0.656	1.832	-9.748***	-6.637**
	(-0.86)	(1.80)	(-6.73)	(-2.93)
산업코드	포함	포함	포함	포함
직업코드	포함	포함	포함	포함
연도	포함	포함	포함	포함
N	22364	22364	21001	22098

주: 원표본(2008년-2020년) 및 추가표본(2015-2020) 기준. 로버스트 표준오차 사용.

3. Factors of Moving in Labor Market

Table6. 19-29세 청년패널 취업자 중 긱 이코노미 참여요인 분석(로짓)(2021-2022)

	(1) gigwork	(2) partimegig	(3) selfemployedgig	(4) njobgig
gender (male=1)	-0.0177	-0.0328	-0.192	0.599*
	(-0.30)	(-0.51)	(-1.73)	(2.32)
age	**-0.165*****	**-0.252*****	**0.162*****	0.0185
	(-14.34)	(-19.41)	(7.54)	(0.38)
high school	-0.476	-0.142	-0.490	**-2.285*****
	(-1.48)	(-0.38)	(-1.15)	**(-3.64)**
college	**-0.915****	-0.576	-0.785	**-1.963****
	(-2.78)	(-1.51)	(-1.77)	**(-2.97)**
university	**-1.032****	-0.494	**-1.396****	**-2.078****
	(-3.15)	(-1.30)	**(-3.10)**	**(-3.21)**
grad school or more	-0.489	0.306	-1.287	0
	(-0.97)	(0.53)	(-1.44)	(.)
living in capital (yes =1)	0.0903	0.113	-0.0549	0.198
	(1.67)	(1.89)	(-0.52)	(0.84)
living with parent (yes =1)	0.315***	0.248*	0.356*	0.232
	(3.55)	(2.49)	(2.15)	(0.59)
single (yes =1)	0.0901	0.558*	-0.0921	-0.196
	(0.47)	(2.08)	(-0.32)	(-0.37)
number of family member	**0.114*****	**0.192*****	-0.106	-0.250*
	(3.64)	(5.38)	(-1.76)	(-1.99)
number of kid	-0.489*	-0.298	-0.691*	-0.167
	(-2.06)	(-0.97)	(-1.97)	(-0.21)
debt (yes =1)	-0.204	0.203	**-0.789*****	0.0668
	(-1.94)	(1.59)	(-5.18)	(0.17)
house owner (yes =1)	-0.213	-0.101	-0.386*	-0.448
	(-1.91)	(-0.78)	(-2.00)	(-1.02)
_cons	**3.567****	**3.094****	-2.423*	-2.618
	(3.16)	(2.98)	(-2.02)	(-1.06)
산업코드	포함	포함	포함	포함
직업코드	포함	포함	포함	포함
연도	포함	포함	포함	포함
N	10576	10553	9010	10439

주: 신규표본(2021-2022) 기준. 로버스트 표준오차 사용.

Table7. 19-29세 청년패널 경제활동상태 이동모형 분석(2021-2022)

(Multinomial Logit Regression)

Variables	Gig Worker/Unemployed		Non-gig Worker/Unemployed	
	Coefficient	Standard Error	Coefficient	Standard Error
Constant	**5.361*** **	(1.609)	0.985	(1.563)
Gender(1=Male)	**0.557*** **	(0.0891)	**0.567*** **	(0.0817)
Age	-0.0317	(0.0197)	**0.146*** **	(0.0184)
Education -High School	-1.673	(1.025)	-1.025	(1.024)
Education -College	**-2.490** **	(1.029)	-1.048	(1.026)
Education -Undergraduate	**-2.904*** **	(1.028)	-1.275	(1.025)
Education-Graduate	**-2.615** **	(1.187)	-1.429	(1.150)
Capital	0.384***	(0.0861)	**0.322*** **	(0.0788)
Living with Parents	0.226	(0.147)	-0.0234	(0.137)
Single	-0.304	(0.407)	-0.426	(0.380)
No. of Family Member	-0.0888*	(0.0522)	**-0.212*** **	(0.0483)
Having Kid(Y/N)	-0.480	(0.554)	-0.192	(0.530)
Having Debt(Y/N)	-0.238	(0.188)	-0.0368	(0.176)
Houseowner(Y/N)	0.251	(0.201)	**0.408** **	(0.187)
N		11,322		11,322

주: Standard errors in parentheses denotes *** p<0.01, ** p<0.05, * p<0.1

VI. Conclusion

This study offers a comprehensive analysis of the factors influencing transitions within the gig economy among South Korea's youth, examining both gig and non-gig employment. Through the application of multinomial logistic regression, we identified significant predictors such as gender, capital availability, and educational attainment that substantially influence the likelihood of young individuals transitioning into and between different types of employment. These findings reveal a complex landscape where socio-demographic factors significantly dictate employment trajectories within the gig economy.

Our analysis extended beyond the regression models to examine the specific characteristics of gig workers. By leveraging data from the Youth Panel surveys, we explored the demographic distribution, educational backgrounds, and employment conditions of gig workers compared to their non-gig counterparts. Our findings indicate a significant shift towards gig employment among younger individuals with varying levels of educational attainment, highlighting a trend where higher education does not necessarily correlate with traditional employment. This shift is particularly notable among those with high school education, suggesting that the gig economy may be serving as an essential employment avenue for less educated youth. Furthermore, gig work prevalence was notably higher in urban areas, suggesting that location significantly impacts employment opportunities in the gig economy.

1. Policy Implications

The insights from our study implies the need for targeted policy interventions to address the vulnerabilities associated with gig work and enhance its potential as a viable employment option. Given the significant role of capital and educational attainment in determining gig employment opportunities, policies fostering access to capital and offering vocational training and education tailored to the gig economy are crucial. For instance, government-backed microfinance programs could provide the necessary startup capital for gig workers, while educational reforms could introduce curricula that build skills relevant to gig and freelance work.

Moreover, the urban concentration of gig work suggests that urban policy frameworks need to adapt to support an increasing number of gig workers through infrastructural adjustments

and services tailored to freelance or temporary employment models. Such policies could include the development of co-working spaces, enhanced digital connectivity, and Human Resources systems that support the flexible nature of gig work.

2. Limitations and Future Research

Our study's focus on the South Korean context may limit generalizingthe findings. Comparative studies across different cultural and economic settings would enhance the understanding of how global trends in gig employment may differ based on local conditions.

Moreover, the specific characteristics of gig workers identified in our analysis suggest a need for more nuanced research that considers the diversity within this group. Future studies should explore subcategories of gig work to identify distinct needs and challenges faced by different types of gig workers, such as those engaged in platform-based versus non-platform freelance activities.

This research significantly contributes to the understanding of the gig economy's role in shaping youth employment in South Korea, highlighting the complex interplay of demographic, economic, and educational factors. By providing detailed insights into the characteristics and determinants of gig work, this study serves as a valuable resource for policymakers, educators, and industry leaders aiming to develop strategies that optimize the benefits of gig employment while mitigating its risks. As the gig economy continues to evolve, ongoing research and policy adaptation will be essential to fully leverage its potential and ensure it offers a sustainable and equitable employment pathway for the youth.

References

Becker, G. S. (1964). Human capital: A theoretical and empirical analysis with special reference to education. National Bureau of Economic Research

Berton, F., Devicienti, F., & Pacelli, L. (2007). Temporary jobs: Port of entry, trap, or just unobserved heterogeneity? LABORatorio R. Revelli Working Papers Series, (68). Retrieved from http://www.laboratoriorevelli.it/_pdf/wp68.pdf

Boston Consulting Group. (2022). Unlocking the potential of the Gig Economy in Korea: "긱이코노미 시대, 당신의 플랫폼은 준비됐습니까?". Retrieved from https://bcgblog.kr/bookshelf/#Jul-2022-GigEconomy1

Bulian, L. (2021). The Gig is Up: Who does Gig Economy actually Benefit? Interdisciplinary Description of Complex Systems, 19, 106-119. https://doi.org/10.7906/indecs.19.1.9.

Datta, N., Rong, C., Singh, S., Stinshoff, C., Iacob, N., Nigatu, N. S., Nxumalo, M., & Klimaviciute, L. (2023). Working without borders: The promise and peril of online gig work. Washington, DC: World Bank. http://hdl.handle.net/10986/40066

Galfalvi, E., Hooley, T., & Neary, S. (2020). Are young people aged 16-19 using or expecting to use the gig economy for their careers?. Journal of the National Institute for Career Education and Counselling, 45(1), 34-40.

Graham, M., & Anwar, M. A. (2019). The global gig economy: Towards a planetary labour market?. First Monday, 24(4). https://doi.org/10.5210/fm.v24i4.9913

Johnston, H., & Land-Kazlauskas, C. (2018). Organizing on-demand: representation, voice, and collective bargaining in the gig economy. ILO.

Korea Employment Information Service. (2016). 청년패널 2007 9차(2015) 조사 기초분석보고서 [Youth Panel 2007 9th Survey Basic Analysis Report]. Korea Employment Information Service.

Korea Employment Information Service. (2022). 청년패널 2021 1차 조사 기초분석보고서 [Youth Panel 2021 First Survey Basic Analysis Report]. Korea Employment Information Service.

Malik R, Visvizi A, Skrzek-Lubasińska M. The Gig Economy: Current Issues, the Debate, and the New Avenues of Research. Sustainability. 2021; 13(9):5023. https://doi.org/10.3390/su13095023

Nimmagadda, B., Vangaveti, Y., Aaluri, S., Rao, C. M., & Singh, B. (2024). An analytical study on navigating sustainability challenges and opportunities in the era of AI and the gig economy. MATEC Web of Conferences, 392(01044), 1-10. https://doi.org/10.1051/matecconf/202439201044

Reich, M., Gordon, D. M., & Edwards, R. C. (1973). A Theory of Labor Market Segmentation. The American Economic Review, 63(2), 359-365. http://www.jstor.org/stable/1817097

Watson, I. (2013). Bridges or traps? Casualisation and labour market transitions in Australia. Journal of Industrial Relations, 55(1), 6-37.

Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: autonomy and algorithmic control in the global gig economy. Work, Employment and Society, 33(1), 56-75.