

An Experimental Measure of Malaysia's Gig Workers Using Labour Force Survey

*Nurfarahin Harun¹; Noraliza Mohamad Ali²; Nur Layali Mohd Ali Khan³

¹Malaysian Bureau of Labour Statistics, Department of Statistics Malaysia, Putrajaya, Malaysia,
farahin.harun@dsm.gov.my

²Malaysian Bureau of Labour Statistics, Department of Statistics Malaysia, Putrajaya, Malaysia,
noraliza@dsm.gov.my

³Malaysian Bureau of Labour Statistics, Department of Statistics Malaysia, Putrajaya, Malaysia,
nurlayali@dsm.gov.my

Abstract:

With the increase in the labour supply and the labour market imbalances globally, a notable increase is witnessed in the number of temporary or flexible arrangement employment. This new development coupled with technological advancement which create opportunity of flexible work through digital platform, a new term of employment has been introduced that is gig employment. Examples of gig workers are 'independent contractors', 'consultants', or 'contract professor,' which are working only to complete a particular task for specific time and specific payment, with no more connection with their employer once the contract end. Gig economy is praised by various party especially policy makers, as a response to the wishes of a more entrepreneurial generation. Report from International Labour Organization (ILO) showed that 2.0 billion people or more than 60.0 per cent of the employed population work informally worldwide, with most of them in emerging and developing countries. In the meantime, digitalization has created more opportunities for individuals to engage in gig employment whether for primary or secondary income. The rise of gig workers calls for new initiatives in social policy and play important role in employment creation, production and income generation. Thus, this study attempts to measure the gig workers in Malaysia experimentally using Labour Force Survey to gauge sociodemographic profiles of this new group of employment.

Keywords: flexible, secondary income, online, temporary

1. Introduction:

The advances in technology over the years has brought fundamental changes in the way we work and the types of locations in which we work. Standard employment contracts and engagement with employers have changed dramatically, partly due to the long-term trends of non-standard work arrangements, and the boost of the platform economy or gig economy which has become a major game-changer. Due to increased demand for flexibility and changes in work arrangement supported by the advancement in technology, a new environment of economy called gig economy has been created.

The International Labour Organisation's (ILO) 19th International Conference of Labour Statisticians (ICLS) held in 2013 defines persons in employment - as all persons above a specified age who during a specified brief period, either one week or one day, were in the paid employment or self-employment categories. In the 20th ICLS held in 2018, the International Classification of Status in Employment (ICSE) 2018 was approved for adoption to measure form of employment based on the type of authority or economic risks. The International Classification of Status in Employment according to type of authority (ICSE-18-A) classified status of employment into ten categories which provides a dichotomy between independent workers and dependent workers. Independent workers are further categorised into employers and independent workers without employees, while dependent workers are dependent contractors, employees and contributing family workers.

In line with the type of authority exercised by workers, working hours for employees are usually determined by the employers whereby employees do their assigned tasks as required by the employers.

Consequently, employees are remunerated in the form of wages & salaries, paid leave and other forms of social benefits. Usually, either the employer or the company provides labour protection- - to its employees. Own account workers or better known as self-employed are individuals who run their own business. Generally, this type of employment offers flexible working hours and a flexible workplace. However, as this group works for profits rather than for pay, they usually lack social safety nets.

Gig economy can be described as an economic activity related to short-term, project-based and outcome-defined work. Donovan, Bradley & Shimabukuru (2016) stated that the gig economy is a collection of markets that match providers to consumers on a gig (or job) in support of on demand commerce. According to Abraham et al. (2018), the term - gig economy refers to work obtained through an online platform with work doled out in bits and pieces. In Ireland and United Kingdom, gig economy generally refers to app-based services done on demand and on location. ILO (2016) perceived that forms of work in the gig economy include “crowdwork” referred to working activities that imply completing a series of tasks through online platforms, and “work-on-demand via apps” channelled through apps managed by firms.

Workers in gig economies are commonly known as gig workers. However, more recently, the term gig work has become associated with or representative of alternative, less structured work arrangements with a specific focus on non-employees. Examples of gig workers are ‘independent contractors’, ‘consultants’, or ‘contract professors,’ that work only to complete a particular task for specific a time and specific payment, with no more connection with their employer once the contract ends.

Within the global landscape, there exists a gap in which this phenomenon cannot be conceptually defined and statistically measured uniformly, so as to provide a comparable measure across countries. According to the ILO (2018) gig workers often work independently, in isolation, over expansive geographical areas, and in direct competition with one another, hence are often classified as independent contractors. Gig work is often short term or task-based; with higher presence in and online labour platforms (ILO, 2018). Statistics Canada (2019) stated that gig workers are usually not employed on a long-term basis by a single firm; instead, they enter into various contracts with firms or individuals (task requesters) to complete a specific task or to work for a specific period of time for which they are paid a negotiated sum. Meanwhile, Bureau of Labour Statistics (BLS), USA (2016) defined gig workers as those who don’t have an implicit or explicit contract for long-term employment, includes independent contractors (also called freelancers or independent consultants), on-call workers, and workers provided by temporary help agencies or contract firms.

In Malaysia, MDEC is ready and fully focused on leading Malaysia’s Digital Economy forward by accelerating (1) formulation of policies and coordination of agencies to enable success (2) development of futureproof workforce to grow the Digital Economy ecosystem and (3) creation of global champions to increase the contribution of the Digital Economy to the gross domestic product. However, the information available in the administrative record is limited to registered formal establishments that operates digital platform. There is a possibility of under-representativeness of self-employed workers who are operating informally within the digital platform.

The recent widespread of Covid-19 pandemic and the subsequent action by - Malaysia’s government to curb it through phases of Movement Control Order resulted in pay cuts and job losses. Due to this, workers have taken alternatives to gain income by working as food rider or runner. This is also a form of gig work- because of the flexibility and nature of the jobs. The rise in gig workers calls for new initiatives in social policy and play important role in employment creation, production and income generation. This new development of employment coupled with technological advancement create opportunity of flexible working arrangement. Thus, the objectives of this paper is to identify characteristics of gig employment and subsequently attempt an experimental measure of this group in Malaysia using the Labour Force Survey (LFS).

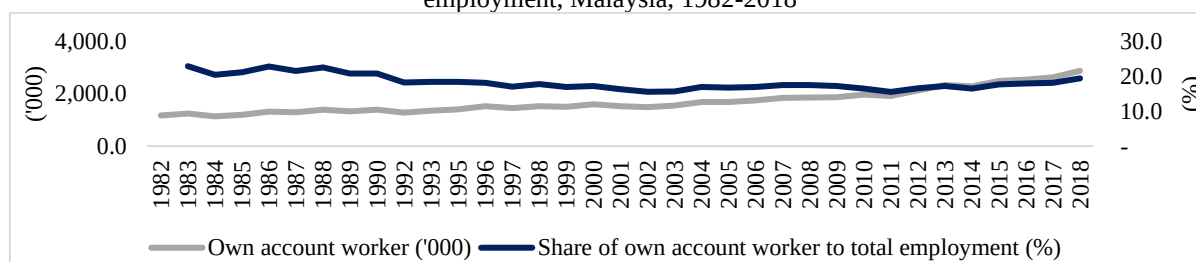
2. Methodology:

Implementing new surveys are time consuming and is a long-term solution in measuring gig workers. However, it may be possible to develop some measurement on self-employment as proxies for gig workers while recognising their limitations. Laß and Wooden (2019) stated that the variable of main job in Household Labour Force Survey (HLFS) in Australia could be used for an analysis of non-standard work using categories for employees and self-employed. However, Lynn Riggs, Isabelle Sin and Dean Hyslop (2019) believed that these measures may be too broad to adequately distinguish gig work from other works.

LFS is conducted by the Department of Statistics Malaysia (DOSM) to obtain information on the structure and distribution of the labour supply encompassing the labour force, employment and unemployment (DOSM, 2019). The survey adopted a stratified two stage sampling design. The first stage unit of sample selection is the enumeration blocks (EBs) consisting of 80 to 120 living quarters (LQs), while the second stage unit was the LQs within the EBs. All persons in the selected LQs were canvassed. The detailed methods of LFS are available in the LFS Report (DOSM, 2019). The sample units were systematically drawn with equal probability of being selected at every stage of selection. The response rates of the annual LFS were more than 85 per cent for all the years involved. Annual LFS's for the period of 1982 to 2018 were used to illustrate trends and development. Meanwhile, identification of characteristics of gig workers and the subsequent profiling were based on LFS 2018 data.

To provide for a comprehensive socioeconomic characteristic of the labour supply, the LFS also measures status of employment. However, for now the measure was based on ICSE-93, adapted to national circumstances, encompassing employers, paid employees, own account workers and unpaid family workers. DOSM (2019) defined own account workers as a person who operates his own farm, business or trade without employing any paid workers in the conduct of his farm, trade or business. According to **Figure 1**, the percentage share of own account workers to the total employment shows an increasing trend from 2011 onwards despite a slight decrease in 2014. Supported by the development of technology and preference by mostly young people for a flexible working time and flexibility in the workspace, the increase of workers in this type of employment are undeniable.

Figure 1: Number of own account workers and percentage share of own account worker to total employment, Malaysia, 1982-2018



Source: Labour Force Survey Time Series, Department of Statistics Malaysia

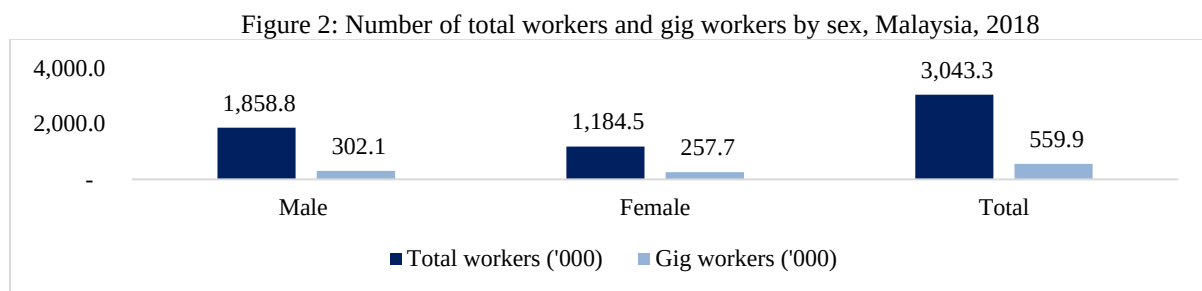
Laß and Wooden (2019) defined non-standard employment as self-employed workers, contributing family workers, fixed-term employees, casual employees, other employees, and permanent part-time employees' to measure non-standard employment in Australia. In this study, own account workers and part-time employees from LFS will be observed in identifying gig workers in Malaysia. Furthermore, hours of work will be considered for persons who were employed for more than 30 hours during the reference week to be in full employment. Gig employment can be either full-time employment or part-time employment that offers less hours of work.

In defining gig workers for Malaysia, this paper focused on employed persons in primary jobs with respect to three variables namely status in employment, hours worked and occupation. In terms of status in employment, employees and own account workers are identified. Employees are only identified among those who worked less than 30 hours per week, as a proxy for part time employees. Meanwhile,

among own account workers, gig workers are identified based on all hours worked. Occupation category considered free-lancers such as tutor, tuition teacher, photographer, videographer and tourist guide are taken into account in this study. Technology-based occupations such as web designer, software developer, driver (Grab, MyCar etc.) and rider (Grabfood, Foodpanda etc.) are also considered as gig workers. A total of 218 unique 6 digit occupations title were identified as gig related occupation in the LFS 2018 data sets based on Malaysian Standard Classification of Occupation (MASCO) 2013. After the selected occupations were considered, industries that belonged to the gig workers are reviewed to get know which ones were heavily dominated by gig workers. Industry classification used was based on the Malaysia Standard Industrial Classification (MSIC) 2008.

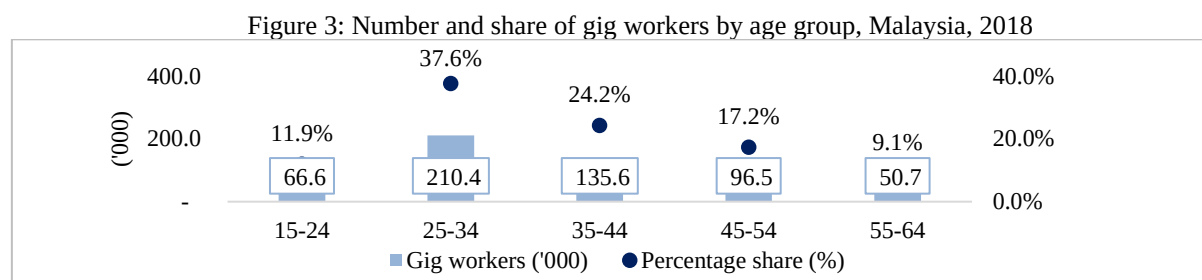
3. Result:

In 2018, it was estimated that 3,043.3 thousand persons were employed as part-time private employee and own account workers in Malaysia. Gig workers made up 18.4 per cent of this, encompassing 559.9 thousand persons. Breakdown of gig workers by sex shows that more than half of the gig workers were male with percentage share of 54.0 per cent (302.1 thousand persons) while female represented 46.0 per cent (257.7 persons). Although male dominated, it is observed that the share of female of total gig workers were higher than the share of female out of total workers which recorded 38.9 per cent (**Figure 2**).



Source: Authors' calculation based on the data of Labour Force Survey 2018, Department of Statistics Malaysia

The highest share of gig workers was between the age of 25 to 34 years old with percentage of 37.6 per cent, followed by those between the ages of 35 to 44 years old. Gig workers aged 55 to 64 years old accounted for the lowest share in gig employment which is 9.1 per cent (**Figure 3**). This pattern was in line with the overall distribution of employed persons where the peak was witnessed for the 25 to 34 years age cohort.



Source: Authors' calculation based on the data of Labour Force Survey 2018, Department of Statistics Malaysia

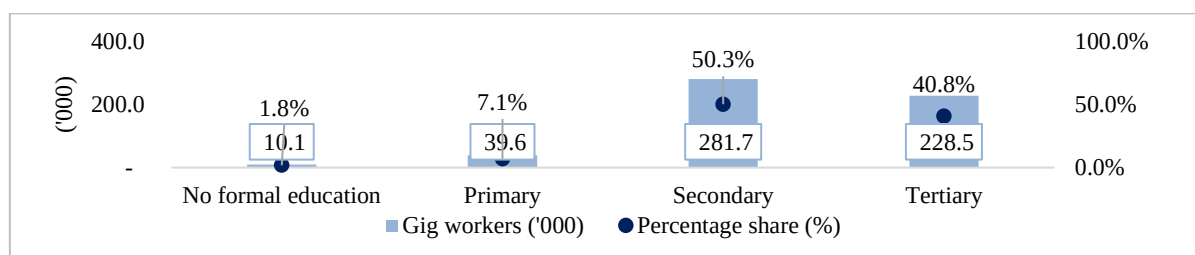
Similar to the share of employed persons as a whole, half of the gig workers attained secondary education. This group made up 281.7 thousand persons. Interestingly, 40.8 per cent of gig workers have tertiary education, recording 228.5 thousand workers (**Figure 4**).

Figure 4: Number and share of gig workers ('000) by education attainment, Malaysia, 2018

2020 Asia-Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand



Source: Authors' calculation based on the data of Labour Force Survey 2018, Department of Statistics Malaysia

Table 1 shows the composition of gig workers by three main sectors which are agriculture, industry and services. Services sector recorded the highest percentage share of gig workers which accounted for 97.0 per cent. Majority of gig workers are concentrated in wholesale and retail trade activities and transportation and storage activities with 36.8 per cent and 16.2 per cent of percentage share respectively.

Table 1: Number of gig workers and percentage share by economic activities and sex, Malaysia, 2018

Economic activities	Total ('000)	Percentage share (%)
Agriculture	1.0	0.2
Industry	15.9	2.8
Services	543.1	97.0
Wholesale and retail trade	206.0	36.8
Transportation and storage	90.9	16.2
Accommodation and food service activities	10.0	1.8
Other services	236.1	42.2
Total	559.9	100.0

Source: Authors' calculation based on the data of Labour Force Survey 2018, Department of Statistics Malaysia

4. Discussion and Conclusion:

The experimental measure of gig workers indicated that the dimension of gig workers are more or less similar to that of total employment. Nevertheless, some interesting findings indicate inclination of one gender over the other, age distribution as well as education background of gig workers. This result signalled that women tend to join the labour market as gig workers especially those who have family responsibilities such as taking care of children as gig work offers flexible working arrangements. Besides, the development of the digital retail platform also supports pathway for women's involvement in gig economy. Generally, stay at home wives and mothers prefer to do online business as they can work from home via laptop or mobile phone while taking care of other responsibilities.

Results showed that those aged 25 to 34 years were more prevalent as gig workers probably due to having just completed higher education. Gig work gave them the flexibility to work whilst allowing them to look for something more permanent that is profit oriented in the long term. The low share of those age 55 to 64 could indicate that the gig employment was a mean to gain extra income to ensure a comfortable retirement plan ahead.

People with secondary education usually earn lower pay than those who have tertiary education. In order to get extra income, most of them prefer to join gig employment as full-time or part-time workers. For people with tertiary education, some of them have difficulty in getting a job with satisfactory salaries and benefits. Some of them also cannot find a job after finishing their study. Hence, gig employment offers an alternative way for them to supplement their income with jobs that offer flexible working arrangement.

Wholesale and retail trade as well as the transportation and storage activities in gig employment are incredibly popular right now especially with the growth of technology. The increase in various online selling website are very popular among women. Platform such as Grab and MyCar make it

2020 Asia–Pacific Statistics Week

A decade of action for the 2030 Agenda: Statistics that leaves no one and nowhere behind

15-19 JUNE 2020 | Bangkok, Thailand

convenient for the customers to book a drive only through online application. Some people prefer to do this type of job as a second job in order to supplement their income. Nowadays, this services are in high demand especially for those who do not own transport and also are not willing to face the heavy traffic.

Analytically, there are many components to take into account in measuring gig economy in addition to the usage of online platforms. From this study, some improvements and way forward are identified. Surveys to supplement LFS can be created in which terms of independent contractor, independent consultant, and freelance worker are used. Questions related to work arrangements characteristics also can be asked, for example predictable work schedule, predictable earning and implicit or explicit contract for continuing relationship. Second improvement from this study is to derive estimates based on household survey and administrative data that have been integrated at the individual levels such as tax data and business data in order to compare the information from the two sources for the same people. This integration offers great potential in understanding the changing work arrangements and nature. By linking tax data with LFS for example, information on demographic characteristics of a worker and their monthly income can be gained. Third is information on secondary jobs from LFS which can be refined to give more reliable data.

According to Lynn Riggs, Isabelle Sin and Dean Hyslop (2019) measures of gig work ideally would be multi-faceted and easy to aggregate or disaggregate to address a broad array of applications. These measures should go beyond simply counting the number of people engaged in gig work and also include measures of the extent to which people engage in gig work (number of hours, income, transaction volume), and they should include multiple timeframes (current, previous month, previous 12 months).

References:

1. Abraham, K.G., Sandusky, K., Haltiwanger, J.C., & Spletzer, J.R. (2018). The Rise of the Gig Economy: Fact or Fiction?
2. Abraham, K.G., Hershbein, B., & Houseman, S. (2019). Independent Contract, Informal, and Online Intermediary Work: Preliminary Evidence on Developing Better Measures in Household Surveys*
3. Abraham, K.G., Sandusky, K., Haltiwanger, J.C., & Spletzer, J.R. (2020). Measuring the Gig Economy: Current Knowledge and Open Issues*
4. Department of Statistics Malaysia (DOSM). (2019). Labour Force Survey Report 2018
5. International Labour Organisation (ILO). (2018). Helping the gig economy work better for gig workers. Retrieved from https://www.ilo.org/washington/WCMS_642303/lang--en/index.htm
6. Jeon, S.H., Liu, H., Ostrovsky, Y. (2019). Measuring the Gig Economy in Canada Using Administrative Data. Statistics Canada
7. Riggs, L., Sin, I., & Hyslop, D. (2019). Measuring the “gig” economy: Challenges and options. Motu Working Paper 19-18
8. Schultz, L. (2020). Defining and Measuring Gig Work. Rockefeller Institute of Government
9. Stefano, V.D. (2016), The rise of the «just-in-time workforce»: On-demand work, crowdwork and labour protection in the «gig-economy». International Labour Office – Geneva
10. Torpey, E., Hogan, A. (2016). Working in a gig economy. U.S. Bureau of Labour Statistics. Retrieved from <https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm>