

The Rise of the Gig Economy and its Impact on the Australian Workforce

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Contents

1	Executive Summary	4
1.1	Background and purpose	4
1.2	The gig economy's rise brings both opportunity and risks to the broader economy and its workers	5
1.3	A call for more data and research on the gig economy in Australia	6
2	Quantifying the gig economy's rise	9
2.1	A global phenomenon in need of deeper understanding	9
2.2	What defines the gig economy?	9
2.3	The gig workforce is growing, yet remains difficult to quantify	10
2.4	Using 'Transaction Data' to gain new insights into the gig economy's impact	12
2.5	Consumer spend in the gig economy is growing rapidly	13
3	The impact of the gig economy on the traditional workforce	16
3.1	New employment opportunities, or unwelcomed competition?	16
3.2	Growth in the private transport sector has been stimulated by the gig economy	17
3.3	The meal delivery sector is a high growth sector, benefiting both gig and traditional providers	19
4	The impact of the gig economy on its workers	22
4.1	What are the benefits and risks to workers of the gig economy?	22
4.2	The nature of gig economy employment	23
4.3	Vulnerable populations look to the gig economy for work	23
4.4	25% of gig workers experience short-term gains in Affluence after joining the gig economy	25
4.5	Are gig workers set up for longer-term financial success?	27
5	COVID-19 and the gig economy	31
5.1	The COVID-19 pandemic has forced consumers and businesses to change the way they interact	31
5.2	Economic activity in the meal delivery sector surged to October 2020, up more than 100% compared to pre COVID-19 period	31
6	Conclusion	33
7	Methods	34
	References	37

1

Executive Summary

1.1 Background and purpose

The gig economy, as mediated by digital platforms in Australia, has increased rapidly in size over the past decade, increasing over nine times in market size from 2015 to capture more than \$6bn in consumer spend in 2019.

It is comprised of digital platforms that connect individuals or businesses looking to obtain services on demand. Among the best-known digital platforms are Uber (private transport), Deliveroo (meal delivery) and Airtasker (task-based services).

Due to the rapid rise of the gig economy and the nature of contracting between digital platforms and their workers, the gig economy has attracted attention for its impact on the Australian workforce. Notably, the following concerns have been raised:

- ▶ Displacement impacts to workers in traditional sectors that are now competing with the gig economy.
- ▶ The risks associated with lower income security and lower entitlements for gig economy workers.
- ▶ The impact of the COVID-19 pandemic on the future size of the gig economy workforce, and elevated risks to gig economy workers during this period due to lack of entitlements.

Therefore, understanding the rise, impact and displacement effects of the of the gig economy is an important public policy topic.

However, due to challenges in obtaining robust measures of consumer spend on these digital platforms and a lack of data collected on gig economy employment, the size and growth of the gig economy in Australia, as well as impacts on other sectors of the economy, is not well understood. Furthermore, because the gig economy is relatively nascent, there is scope for research on the gig economy's longer-term impact on the financial security of its workers.

In this paper we aim to address this knowledge gap by providing answers to the following questions:

1. What is the size of the gig economy, and how fast is it growing?
2. How is the gig economy impacting the workforce in traditional sectors?
3. What are the economic impacts of the gig economy on its workers?
4. How has the COVID-19 pandemic impacted the gig economy?



By addressing these questions with evidence-based insights from public data sets and Quantum data sets ('Transaction Data'), this paper contributes to a greater understanding of the gig economy's scale and impact in Australia. Importantly, this paper also shows the value of the non-traditional approach of Transaction Data analysis to provide new insights into emerging issues.

The paper was finalised through consultation with industry and policy experts to validate insights and refine conclusions.

1.2 The gig economy's rise brings both opportunity and risks to the broader economy and its workers

The gig economy's economic footprint in Australia is growing rapidly.

- ▶ For the empirical analysis in this paper, we establish a definition of the gig economy as economic activity characterised by all of the following features: the worker provides on-demand services, the worker is classified as an independent contractor and a digital platform mediates the transaction.
- ▶ Since 2015, the gig economy according to this empirical definition has grown 9-fold to capture \$6.3bn in consumer spend in 2019.
- ▶ Rapid growth has been fuelled by new customers, and increased frequency of usage by existing customers in a gig economy whose offering has steadily expanded in the past five years.
- ▶ The gig economy workforce has grown substantially and may be as large as 250,000 workers. Although the exact magnitude of the workforce remains difficult to measure due to limitations of existing workforce data collections.

Since 2015, the gig economy has grown 9-fold to capture \$6.3bn in consumer spend, and to involve as many as 250,000 workers.

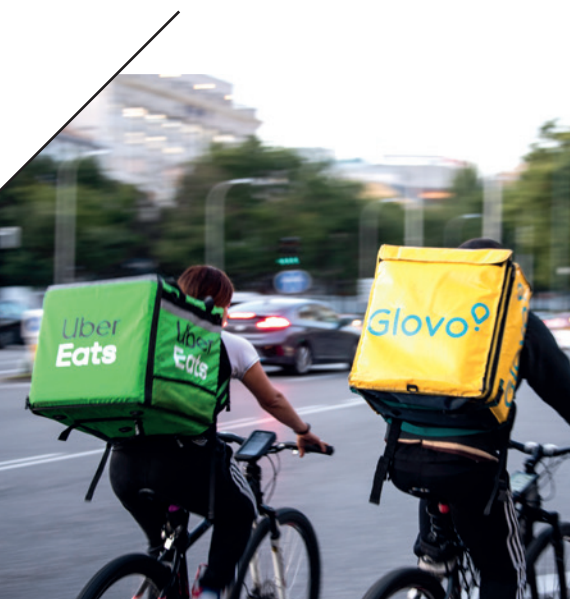
The gig economy has driven growth in Private Transport and Meal Delivery sectors.

- ▶ Two of the most impacted sectors by the gig economy's rise are 'Private Transport' and 'Meal Delivery', with a large proportion of the gig economy workforce concentrated in these sectors.
- ▶ The overall private transport sector has grown by 39% between 2015 and 2019. This growth is driven by increased customer usage of gig economy private transport providers (e.g. Uber, Didi, Ola).
- ▶ There is evidence of cannibalisation of traditional private transport providers (e.g. Taxi drivers), with consumer spend on traditional providers declining by 6% between 2015 and 2019. However, the larger impact of gig economy provider entry remains stimulation of new demand.
- ▶ Meal delivery is a high growth sector, growing over six-fold since 2015 to capture \$3.8bn of consumer spend in 2019. This growth has been largely driven by rapid growth of gig economy entrants.

Workers experience short-term economic benefits upon joining the gig economy, but longer-term concerns over financial security remain.

- ▶ Under current labour force regulations, most gig economy workers are likely to be classified as 'independent contractors'. They have more flexibility than employees do, but lack many basic entitlements that traditional employees receive.
- ▶ Traditional employee entitlements that gig economy workers generally do not receive include minimum wage, employer-paid superannuation,

Without employer contributions to superannuation and minimal personal contributions, many gig economy workers risk accruing low retirement savings.



sick leave, annual paid leave, paid parental leave, long service leave and (in some jurisdictions) workers compensation insurance.

- ▶ Gig economy workers are over-represented in the following financially vulnerable population segments: younger age groups, students and formerly unemployed.
- ▶ There are short-term economic benefits for gig workers joining the workforce. 25% of workers have a material increase in short-term levels of Affluent Expenditure (hereafter referred to as 'Affluence'¹) after joining the gig economy. 77% of the workers that materially increased their short-term Affluence are from population segments with the lowest Affluence levels.
- ▶ However, longer-term risks to gig economy workers' financial security remain, particularly with respect to income protection and retirement savings.
- ▶ Gig economy workers have low levels of life insurance and private health insurance cover, with coverage levels 30% and 14% lower relative to comparable population segments respectively.
- ▶ Less than 1.5% of gig economy workers make personal superannuation contributions. Even when workers do make contributions, the contributions are minimal compared to the employer-paid superannuation contributions of minimum wage workers.
- ▶ With no employer contributions to superannuation for a period of their working life and minimal personal contributions, many gig economy workers risk accruing low retirement savings. These gig economy workers are more likely to be reliant on the government-funded Age Pension scheme to fund their retirement income.

The COVID-19 period to October 2020 has led to a surge in economic activity in the Meal Delivery sector of the gig economy.

- ▶ Overall consumer demand in the gig economy was negatively impacted during the initial COVID-19 lockdown period in late March and April 2020. This was largely driven by a sharp decline in private transport, where the overall sector was down by 70% in early April 2020.
- ▶ The gig economy has recovered since the beginning of May 2020, capturing over 40% more consumer spend in October 2020 compared to the pre-lockdown period in February 2020.
- ▶ Sectors within the gig economy are having different impacts. Consumer spend on private transport remains lower, while meal delivery has surged since late March 2020. Weekly consumer spend on meal delivery was 70% higher than pre COVID-19 lockdown levels in June 2020.
- ▶ The second round of lockdown in Victoria has caused spend in the gig economy to surge to even higher levels, with meal delivery spend over 100% higher in October 2020 than the pre COVID-19 lockdown period.

1.3 A call for more data and research on the gig economy in Australia

The gig economy in Australia, especially under the influence of the COVID-19 pandemic in 2020, is evolving rapidly. Consequently, there is an ongoing need to understand:

1. The impact of the gig economy on sectors of the Australian economy.
2. The Australian workers participating in the gig economy, the needs of these workers and their associated financial risks.

¹ Proxy for an individual's purchasing power based on the extent and nature of discretionary spending. Refer to 'Methods' in section 7 for 'Affluence' specifications

Traditional labour data sets are limited in their ability to identify gig economy workers. As a result, it is not possible to identify a granular characterisation of population segments in the gig economy and understand their needs or specific financial risks.

Using a non-traditional approach, 'Transaction Data' has provided valuable insights into the impact of the gig economy on traditional sectors as well as the benefits and risks that gig economy workers face.

However, important questions remain that the 'Transaction Data' cannot currently answer. These questions include:

1. What are the important workforce segments within the gig economy based on level of participation? These include:
 - a. Workers for whom gig economy work is their primary income source vs. supplementary income source.
 - b. Workers participating in the gig economy for shorter term vs. longer-term periods.
 - c. The gig economy sector the worker participates in (e.g. private transport, meal delivery and task-based services).
2. What are the demographic characteristics, financial risks and future employment pathways specific to the granular set of gig economy worker segments?
3. How is the size of the gig economy workforce, and the population segments within the workforce, changing over time?

These questions are important to address as, for example, the longer-term needs and financial risks specific to a middle-age Uber driver who has another primary income source will be different to a younger Deliveroo rider who has no other income sources and has participated in the gig economy for over five years.

To address these questions requires a comprehensive and granular characterisation of the gig worker cohort. It also requires data sets that can be refreshed over time as the gig economy evolves.

A potential avenue for this research would be to analyse integrated public data sets that enable granular characterisation and sizing of these gig economy worker segments. The Business Longitudinal Analysis Data Environment (BLADE) (Department of Industry, 2017) and Multi-Agency Data Integration Project (MADIP) (Australian Bureau of Statistics) are publicly managed statistical resources that may be used for this purpose and cover important data sets such as ATO and ABS. Alternatively, augmenting design of traditional labour market and household-based surveys, such as HILDA, may address some of these questions.

By addressing these questions, and monitoring the gig economy's evolution, we believe policy implications can be surfaced that address the needs of specific workers segments, whilst not unnecessarily impacting economic activity in the gig economy. Specific areas where implications for policy should be considered include compulsory superannuation coverage and the flow on impacts to future age pension costs, as well as the potential for under-insurance and the financial risks this imposes on gig economy workers.



We need to understand the impact of the gig economy on the broader Australian economy, including the needs and associated financial risks for gig workers.

A woman with blonde hair tied back, wearing a dark green t-shirt and a black baseball cap, is holding a large cardboard box. She is looking slightly off-camera with a gentle smile. The box has a green sticker that reads 'Local Organic Delivered.' and a yellow woven strap. The background is a blurred outdoor market or festival setting with other people and structures visible.

After the initial COVID-19 lockdown period, the gig economy has recovered since the beginning of May 2020, capturing over 40% more consumer spend in October 2020 compared to the pre-lockdown period.

Quantifying the gig economy's rise

2.1 A global phenomenon in need of deeper understanding

The rise of the gig economy is a well-known phenomenon being experienced around the world. Giants of the global gig economy, including Uber, Didi and Deliveroo, have entered the Australian market in the past decade and have quickly grown in popularity. The result has been growth in both the gig economy workforce and consumer spend in the gig economy.

Despite the rise of the gig economy being widely reported, its size and growth has been challenging to measure. This is largely due to:

1. no clear or consistent definition of what the gig economy is comprised of; and
2. no regular data collection or standardised measurement of gig economy activity (Mills & Jan, 2017).

Existing research available to inform the gig economy's size is largely based on estimates from survey sample research (Minifie, 2016) (McDonald, Williams, Stewart, Oliver, & Mayes, 2019). While this research provides a valuable view of the gig economy's workforce size and an indication of its growth, the precise measurement of the size and growth of the gig economy and its economic impact remains relatively unknown.

This paper aims to fill this knowledge gap using a non-traditional approach. We use Transaction Data to measure spend in the gig economy, as well as understand the characteristics and broader behaviours of gig economy workers. The ultimate aim is to gain a better understanding of the gig economy and its impact on the Australian workforce.

2.2 What defines the gig economy?

The 'gig economy' is a term used widely but lacks a clear and consistent definition. A sample of Australian and international research papers describe the gig economy as follows:

- ▶ *a recent term, describing economy activity related to short-term, project-based, outcome-defined work* (Mills & Jan, 2017);
- ▶ *the collection of markets that match providers to consumers on a gig (or job) in support of on-demand commerce* (Donovan, Bradley, & Shimabukuru, 2016);
- ▶ *workers or capital owners contract over a digital intermediary to do small tasks or short-term rentals known as 'gigs'* (Productivity Commission, 2016); and
- ▶ *start-ups that connect and mediate between buyers and sellers in a range of markets, but particularly markets for in-person services* (Healy, Nicholson, & Pekarek, 2017).

A broad definition of the gig economy might cover all economic activity related to on-demand work by individuals, where these individuals are classified as independent contractors.

By this definition, the gig economy has been around for a very long time. Economic activity captured by this definition will include on-demand work delivered by plumbers, handymen, freelancers and many other types of work conducted throughout past centuries.

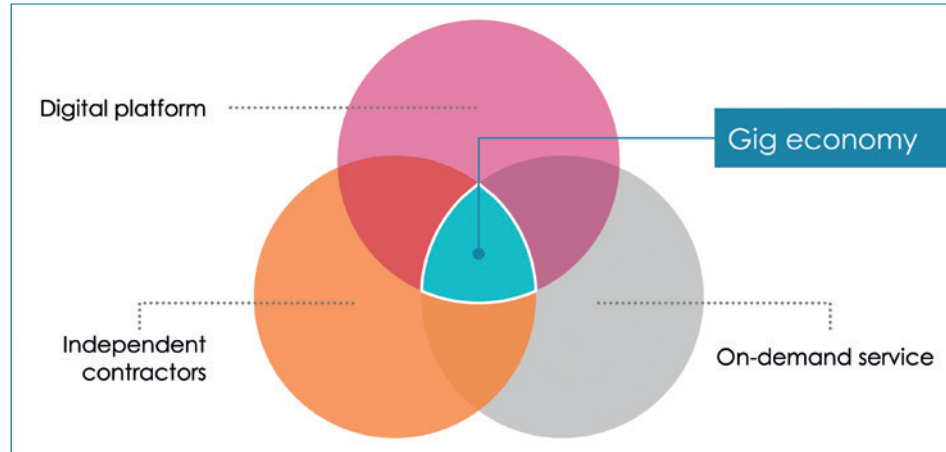
However, due to the historically fragmented nature of such economic activity, comprehensive empirical study has been difficult. Modern digital platforms which aggregate transactions for many types of on-demand work now present the opportunity to study a significant portion of economic activity in the gig economy.

For the empirical analysis in this paper, and building on the broad definition stated, the gig economy is defined as economic activity characterised by all of the following features:

1. **On-demand services:** the worker provides on-demand services.
2. **Independent contractor:** the worker is classified as an independent contractor.
3. **Digital platforms:** mediate the transaction and compensate the worker.

Therefore, the key feature of the empirical gig economy definition over the broad definition is the existence of the digital platform as the intermediary between consumer and worker.

Figure 2.1: Defining the gig economy



This is the definition of the gig economy we will be using for the purpose of this paper and is visualised as the overlapping segments in figure 2.1. The well-known digital platforms of the gig economy in Australia, Uber (private transport), Deliveroo (meal delivery) and Airtasker (various task-based services), clearly meet the definition of the gig economy as providers of on-demand services where consumers and workers interact through the digital platform.

The following are types of work and digital platforms that do not meet the gig economy definition and are therefore considered out-of-scope for this paper:

- ▶ Airbnb and other accommodation-sharing digital platforms. These platforms do not offer services provided by a worker, instead providing short-term accommodation rentals. Similarly, eBay and other online marketplaces generally do not offer services.
- ▶ Digital platforms that do not involve peer-to-peer transactions for services. Notable examples are online grocery delivery through major supermarkets and pizza delivery through the company's own digital platform (e.g. Domino's Pizza).
- ▶ Self-employed contractors where work is not mediated through a digital platform. This can include a significant portion of work performed by tradespersons and other self-employed contractors.

2.3 The gig workforce is growing, yet remains difficult to quantify

2.3.1 *The gig economy has grown to be a large part of the Australian workforce*

Research by the Grattan Institute in 2016 (Minifie, 2016) and national survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) gives valuable insight into the size and growth the gig economy workforce in Australia.



Using this research, we have obtained estimates of the gig economy workforce in 2015 and 2019. These workforce estimates are detailed below.

- ▶ in 2015, an estimated 80,000 Australians (0.5% of the Australian workforce) worked on peer-to-peer digital platforms more than once a month (Minifie, 2016); and
- ▶ by 2019, Uber's workforce alone was made up of more than 60,000 drivers in Australia (AlphaBeta, 2019). The national survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) found that of approximately 1,000 gig economy workers surveyed, 22.7% were Uber drivers. These results suggest that the Australian gig economy workforce in 2019 could be as high as 250,000 workers.

Together these gig economy workforce estimates highlight significant workforce growth between 2015 and 2019, with the workforce more than tripling during this period. In the context of the Australian workforce, a gig economy workforce of 250,000 would be larger than many major Australian sectors (refer to table 2.2).

Table 2.2: 2019 Australian industry statistics – workforce size

Sector	Workforce size
Art's and Recreation	216,000
Mining	179,000
Information media and telecommunications	167,000
Electricity, gas, water and waste services	113,000

Source: (Australian Bureau of Statistics (ABS), 2020)

Whilst the gig economy workforce does appear large relative to other major sectors, it is important to understand the unique working patterns of gig workers. A large proportion of gig workers consider their work in the gig economy to be supplementary to another primary form of employment (McDonald, Williams, Stewart, Oliver, & Mayes, 2019). This makes measuring the gig economy workforce and comparing the gig economy workforce to other sectors challenging. This is discussed in more detail in section 2.3.2.

2.3.2 Measuring the size of the gig workforce remains difficult due to the predominantly secondary nature of gig work

To this point, the size of the gig economy workforce has proven difficult to measure through the collection of traditional labour force statistics.

A key reason behind this difficulty is due to the largely secondary nature of gig work. The national survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) revealed that almost half of the current gig workforce reported spending less than five hours per week on gig economy work, and only 5.4% reported spending more than 26 hours per week. This is in stark contrast to the weekly hours associated with full-time roles common to many other sectors. Furthermore, only 15.4% of gig workers indicated that income from gig work was essential for meeting basic needs².



Many gig workers consider their work in the gig economy to be supplementary to another primary form of income.

² (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) For interpretation of national survey research, note that the sample has a high proportion of respondents that performed gig work for Airtasker (34.8%) and Freelancer (11.8%). The paper reports that Private Transport and Meal Delivery gig workers were much more likely to indicate that their gig work generated 100% of their income

The gig economy workforce has proved difficult to quantify using traditional labour force statistics.

Labour market statistics to understand the size of Australian sectors are largely based on survey research, with the ABS Labour Force survey and the HILDA survey being two headline sources used for labour market reporting. Labour market statistics reported from this survey research segment the workforce by industry and occupation, as well employment classification (e.g. permanent contract vs. independent contractors).

Notably, the results of a 2018 HILDA survey further highlight the difficulty in measuring the gig economy workforce size in traditional survey reports. The survey findings report flat rates of self-employment³ between 2010 to 2016 (Wilkins & Lass, 2018). This led to reports that the rise of the gig economy workforce may be exaggerated, as a larger gig economy workforce would be expected to show up as more self-employed workers (Bagshaw, 2018).

However, the interpretation of these findings in the 2018 HILDA report was that increases in the gig economy workforce is unlikely due to more workers turning to gig work from traditional full-time employment (Wilkins & Lass, 2018). Rather workers have substituted one type of self-employment for gig work (e.g. Taxi drivers), or gig work has been taken up as a secondary source of income. In these cases, increases in the gig economy workforce will not be observable in the headline number of self-employed workers in Australia.

It is for these reasons that the gig economy workforce has proved difficult to quantify using traditional labour force statistics.

2.4 Using 'Transaction Data' to gain new insights into the gig economy's impact

2.4.1 A non-traditional approach to studying the gig economy's impact

In this paper, we take a non-traditional approach to generate deeper insights into the rise and impact of the gig economy. The approach uses Quantum's transactional data set ('Transaction Data') to measure spend in the gig economy and understand the characteristics and behaviours of its workers. The Transaction Data contains a fully de-identified and privacy compliant sample of electronic bank transactions for more than three million individuals in Australia over five years. The transactions are weighted to remove skews relative to total population and generate nationally representative insights.

Using Transaction Data enables us to answer key questions regarding the gig economy's impact through the identification and analysis of two cohorts: 'gig economy consumers' and 'gig workers'. Figure 2.2 below maps the cohort analysed in Transaction Data to the key questions the analyses enables us to address in this paper.

The Transaction Data analysis is based on a sample of approximately 1,000,000 gig economy consumers and 8,008 gig workers, making it the largest ever study of gig economy activity in Australia.

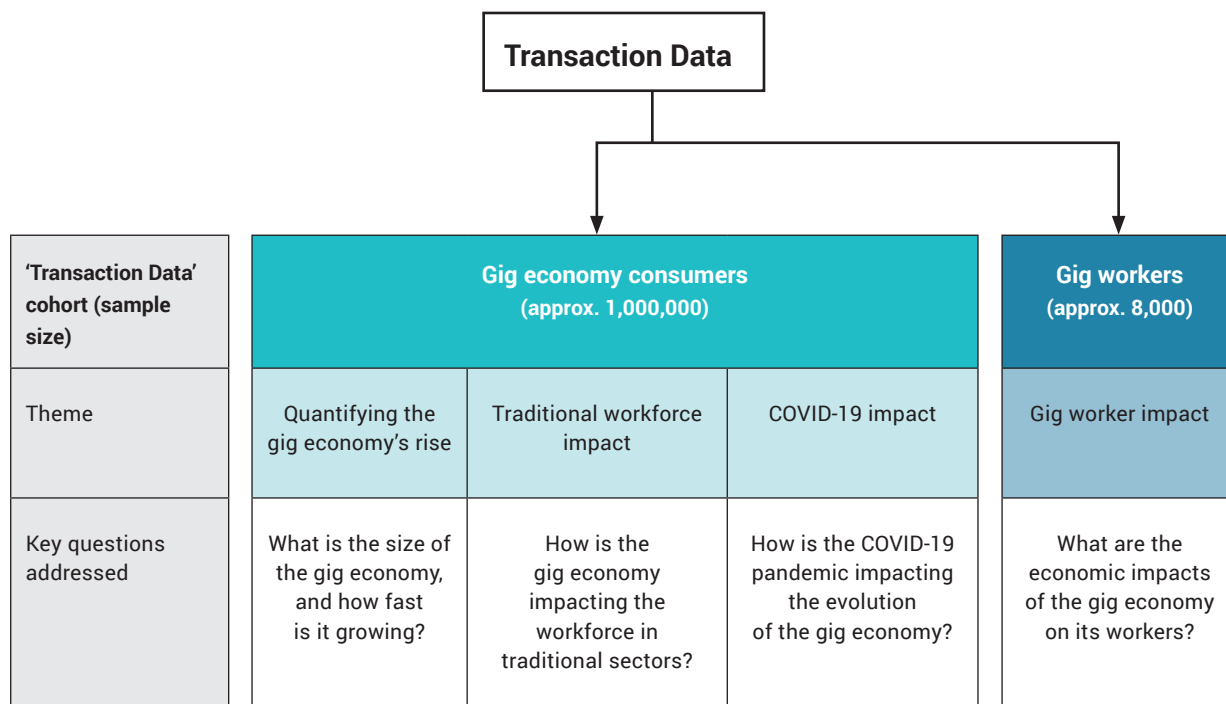
The sample of 'gig workers' is limited to gig economy workers from five digital platform owners (Didi, Freelancer.com, Ola, Uber, UberEats) as these were the set of digital platforms where workers could be identified in the Transaction Data⁴. The implication is that insights from the analysis of the gig worker sample in 'Transaction Data' is based on the aggregated workforce of these five digital platforms.

³ Gig economy workers are generally classified as 'independent contractors' and are therefore self-employed

⁴ Refer to 'Methods' in section 7 for gig worker sample specifications



Figure 2.2: Using 'Transaction Data' analysis to uncover gig economy insights



2.4.2 Gig economy definition in 'Transaction Data'

The definition of the gig economy used for our Transaction Data analysis is consistent with the definition outlined in section 2.2. Using this analytical definition, digital platforms in three key sectors of the gig economy are included and summarised in table 2.3.

Table 2.3: Sectors and digital platform in 'Transaction Data' analysis

Gig economy sector	Example digital platforms included in definition ⁵
Private transport	Didi, Ola, Uber
Meal delivery	Deliveroo, Menulog, UberEats
Task-based services	Airtasker, Freelander, hipages

In section 2.5 that follows, we use Transaction Data to quantify the gig economy's size as well as the gig economy's rise in terms of growth in consumer spend. Through these insights, we provide a deeper understanding of the gig economy's scale and growth trajectory in Australia.

2.5 Consumer spend in the gig economy is growing rapidly

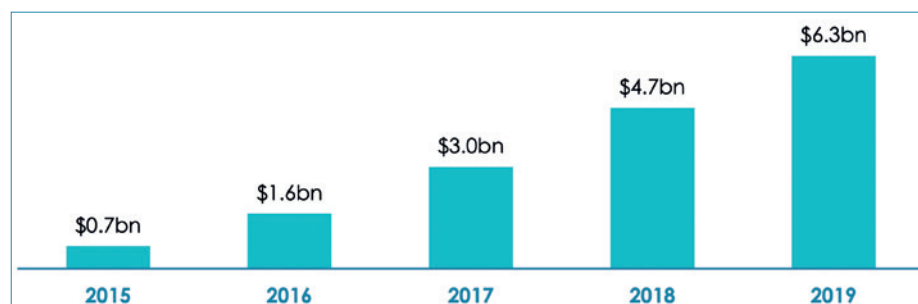
The gig economy in Australia has grown rapidly to over nine times its size from 2015 to 2019 (figure 2.3). In 2019, the gig economy captured \$6.3bn of consumer spend.

⁵ Refer to 'Methods' in section 7 for a complete list of digital platforms included in 'Transaction Data' analysis

Despite the gig economy's rapid rise, its size in terms of total consumer spend is still relatively small.

Figure 2.3: Gig economy market size*

Source: Quantum transactional data
* Market size is total consumer spend on domestic gig economy services



Although the gig economy's rise has certainly been rapid, its size in terms of consumer spend is small relative to major Australian sectors. At \$6.3bn in 2019, the gig economy is an order of magnitude smaller than the major sectors we previously compared to in terms of workforce size (refer to table 2.4).

Table 2.4: 2019 Australian industry statistics – total income

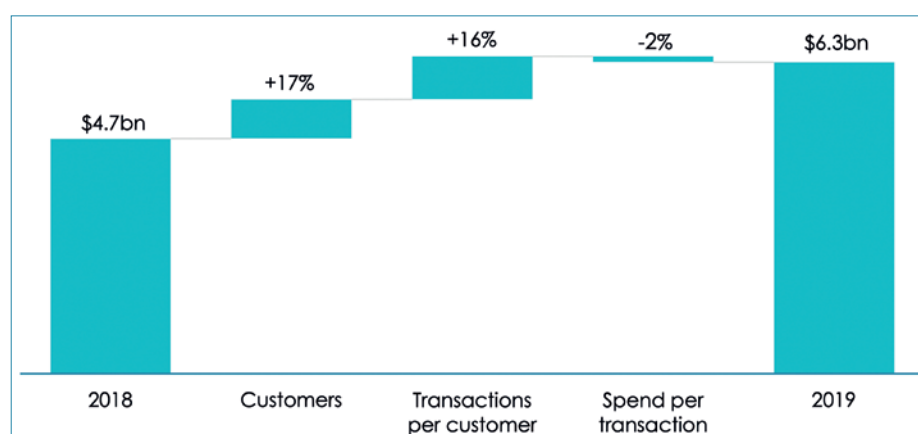
Sector	Total income
Art's and Recreation	\$42bn
Mining	\$317bn
Information media and telecommunications	\$88bn
Electricity, gas, water and waste services	\$144bn

Source: (Australian Bureau of Statistics (ABS), 2020)

The rate of growth of the gig economy, while still high, has been slowing in recent years. The average growth rate between 2015 and 2019 was 75% per annum, while the growth rate between 2018 and 2019 was 32%. The key drivers of the growth between 2018 and 2019 were both new customer growth and increased transaction frequency of existing customers (figure 2.4).

Figure 2.4: 2018-2019 gig economy growth drivers*

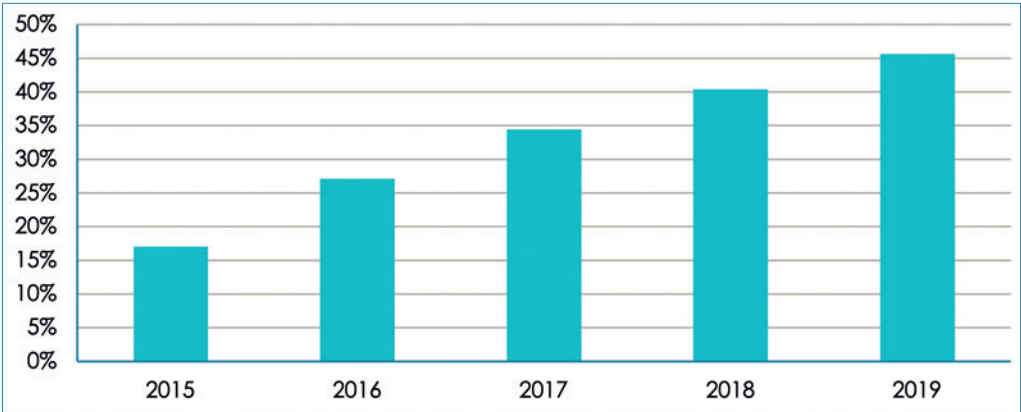
Source: Quantum transactional data
* Market size is total consumer spend on domestic gig economy services



However, growth in customer usage⁶ has been slowing each year between 2015 and 2019 (figure 2.5). In 2016 compared to the prior year, an additional 10% of Australians transacted on digital platforms of the gig economy (from 17% in 2015 to 27% in 2016). While in 2019, the increase was 6% in customer usage from the prior year. If growth in customer usage continues to slow, this would put downward pressure on gig economy growth in the coming years.

⁶ Customer usage is defined as the proportion of population that transact with digital platforms of the gig economy

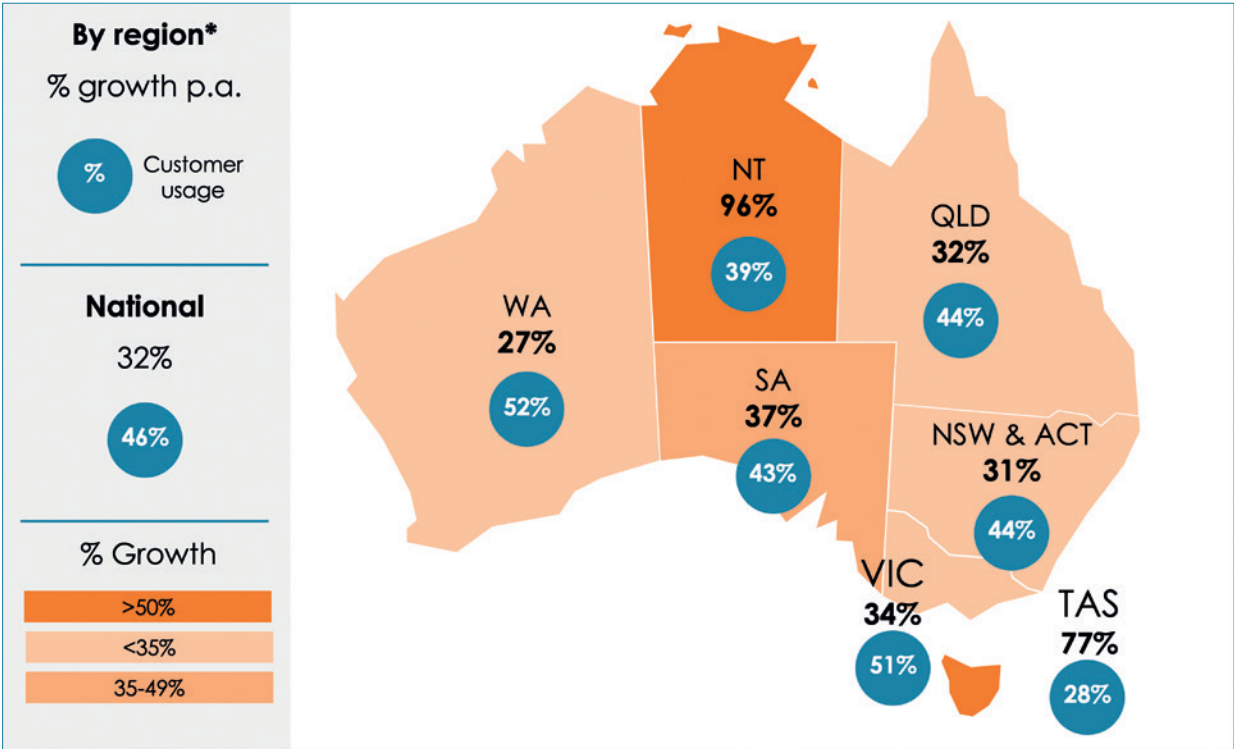
Figure 2.5: Gig economy customer usage



Source: Quantum transactional data
* Market size is total consumer spend on domestic gig economy services

Across Australia, gig economy customer usage is highest in Western Australia and Victoria where 52% and 51% of residents transacted with gig economy digital platforms respectively (figure 2.6). The geographical results may indicate potential for higher gig economy growth through new customers in the states outside of Western Australia and Victoria.

Figure 2.6: 2019 gig economy growth and customer usage by state



Source: Quantum transactional data
* 'Growth p.a.' is 2019 vs. 2018 consumer spend on gig economy services; Customer usage is defined as the proportion of population that transact with digital platforms of the gig economy

3

The impact of the gig economy on the traditional workforce

There is currently a lack of hard evidence on the effects of the gig economy on traditional sectors.

3.1 New employment opportunities, or unwelcomed competition?

As the rise of the gig economy continues, it is important to understand its overall impact on the Australian economy and employment. Important questions to consider include:

- ▶ Do digital platforms generate additional demand and employment for existing sectors?
OR
- ▶ Are they cannibalising existing demand? That is, does the rise of the gig economy simply represent a transfer of economic activity from existing sectors to new workers and digital platform owners?

Attempts to answer these questions are limited by a lack of hard evidence. Sector impacts that have been reported in existing research include:

- ▶ Income and displacement impacts to workers in the taxi industry caused by gig economy entrants, largely based on anecdotal evidence (Chau, 2018).
- ▶ Benefits to consumers from utilisation of gig economy sector entrants, often citing lower cost services and superior customer experience compared to traditional sector providers (Deloitte Access Economics, 2016) (Minifie, 2016).
- ▶ Total sector analyses identifying gig economy entrants as drivers of high sector growth (Roy Morgan, 2020).

However, the extent to which the gig economy has cannibalised specific sectors or generated additional economic activity remains unclear from existing research.

We will tackle these important questions using Transaction Data. We have focused on two sectors: 'private transport' and 'meal delivery'. Specifically, analysis of Transaction Data will address the following questions:

1. Has the gig economy stimulated additional consumer demand in the sector?
2. How has gig economy entry to the sector impacted consumer demand for existing providers?
3. Have existing sector workers been adversely impacted?

3.2 Growth in the private transport sector has been stimulated by the gig economy

3.2.1 Private transport sector definition for 'Transaction Data' analysis

The private transport sector has traditionally been dominated by Taxi companies. The first digital platform of the gig economy to enter the Australian private transport sector was Uber in 2012. In the years since, more digital platforms have entered the sector in Australia including Ola in 2017 and Didi in 2018.

Table 3.1 defines the private transport sector as comprised of gig economy providers (digital platforms) and traditional providers. Splitting the private transport sector between gig economy and traditional providers allows us to analyse the impacts of gig economy entrants on traditional providers using Transaction Data.



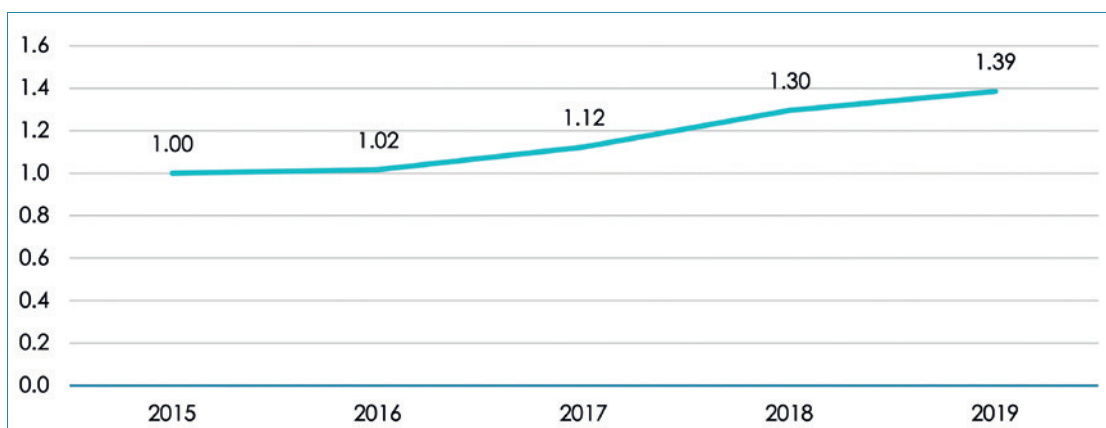
Table 3.1: Sector definitions for 'Transaction Data' analysis and example providers⁷

Sector	Gig economy providers	Traditional providers
Private transport	Uber, Didi, Ola and other digital platforms	Taxi companies

3.2.2 The gig economy has stimulated greater consumer demand in the private transport sector

The total private transport sector has grown significantly since 2015. Consumer spend growth in the private transport sector increased by 39% (1.39 indexed growth value) between 2015 and 2019 (figure 3.1).

Figure 3.1: Overall 'private transport' sector - indexed consumer spend growth



Source: Quantum transactional data
Spend growth is indexed to 1 in 2015

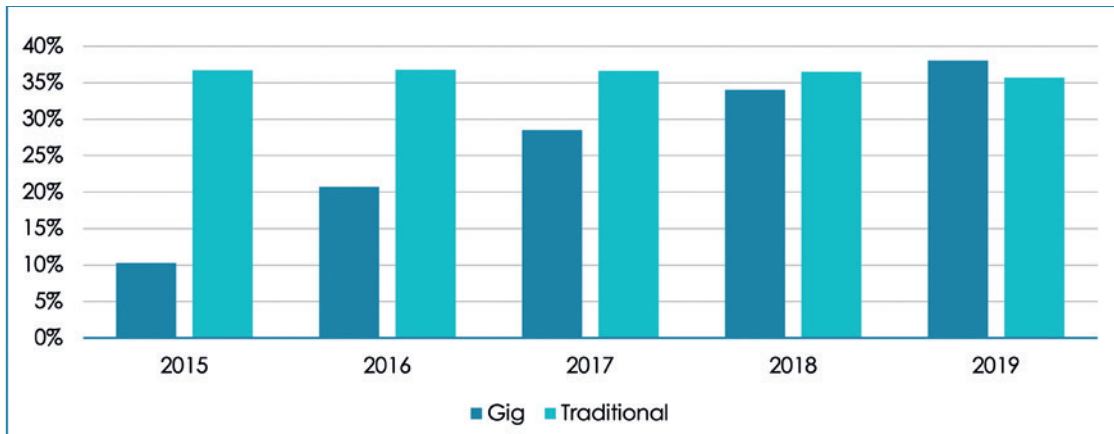
Customer usage of gig economy providers has grown rapidly since 2015. The proportion of the Australian population that used gig economy providers in 2015 was 10%. By 2019, 38% of the population was using gig economy providers (figure 3.2). In contrast, customer usage of traditional providers has

⁷ For a detailed description of gig economy and traditional providers in the private transport sector, refer to 'Methods' in section 7

been relatively flat at approximately 36% between 2015 and 2019 (figure 3.2).

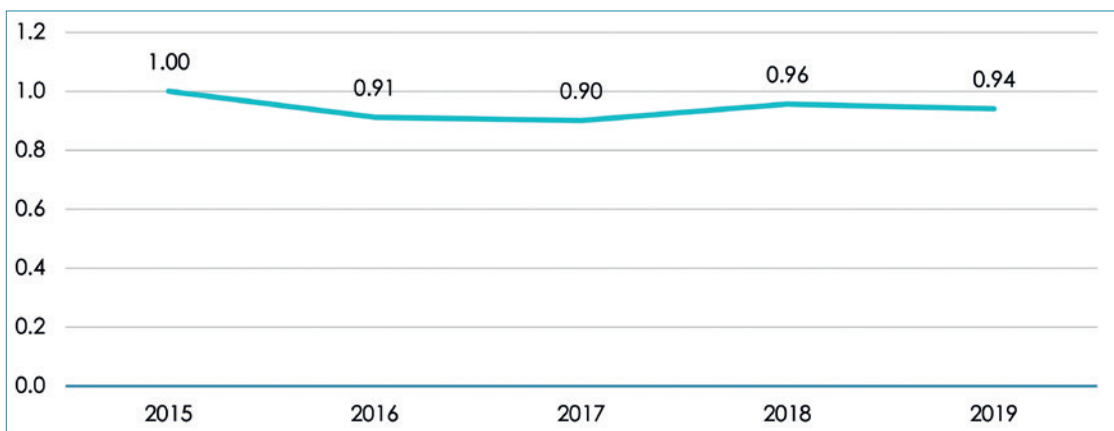
Furthermore, in the traditional 'private transport' sector, consumer spend growth decreased by 6% (0.94 indexed growth value) between 2015 and 2019 (figure 3.3). These results indicate that entry of gig economy providers has stimulated increased consumer demand in the private transport sector, fuelling the sectors growth since 2015.

Figure 3.2: 'Private transport' sector – customer usage⁸



Source: Quantum transactional data

Figure 3.3: Traditional 'private transport' sector – indexed consumer spend growth



Source: Quantum transactional data
Spend growth is indexed to 1 in 2015

3.2.3 Consumer spend on traditional providers has declined with the gig economy's rise

Despite the growth in consumer spend for the overall sector, there is evidence that traditional private transport providers have been cannibalised by the entry of gig economy providers. Total consumer spend on traditional private transport providers decreased by 6% (0.94 indexed growth value) between 2015 and 2019 (figure 3.3). A 6% decline in consumer spend for traditional providers, while total sector grew by 39% over the same period, indicates that traditional providers were cannibalised by the gig economy entrants.

As discussed in section 3.2.2, the total sector's growth of 39% was driven by gig economy providers. Therefore, the total sector's growth is not wholly

⁸ Includes electronic consumer spend only

contestable for traditional providers to claim as cannibalisation if it represents new demand driven by new offerings from the gig economy.

Unfortunately, a robust estimate of traditional sector growth before the gig economy providers entered the sector is not available. Additional historical sector growth data would enable us to strengthen conclusions regarding the degree of traditional sector cannibalisation while the gig economy entrants have been competing in the sector.

3.2.4 *Despite additional employment opportunities and benefits to consumers, the gig economy has had an adverse impact on traditional workers*

Gig economy providers entered the sector to a background of widespread dissatisfaction with the taxi industry performance, as outlined in the 2012 Taxi Industry inquiry (Final Report: Customers First: Service, Safety, Choice, 2012). A primary recommendation of the Inquiry was to increase competition. Greater competition from gig economy providers has certainly benefited consumers. Widely reported consumer benefits associated with entry of gig economy providers include (Minifie, 2016):

- ▶ lower fares;
- ▶ improved reliability and lower wait-times; and
- ▶ improved safety for both drivers and passengers.

This background may suggest that the gig economy has stimulated new demand and employment opportunities by addressing consumer needs that were largely unmet by traditional providers.

However, improving overall sector performance through the entry of gig economy providers has come at a financial cost to traditional sector workers. We have shown that total income generated by traditional providers has declined since the entry of gig economy providers (figure 3.3). It is also widely acknowledged that many taxi drivers have been adversely impacted (Chau, 2018) by way of:

- ▶ loss of income;
- ▶ decline in license value; and
- ▶ displacement from the taxi industry.

3.3 The meal delivery sector is a high growth sector, benefiting both gig and traditional providers

3.3.1 *Meal delivery sector definition for 'Transaction Data' analysis*

Before the gig economy entrants, the meal delivery sector was mostly comprised of fast food and pizza delivery companies. Large international gig economy providers, Deliveroo and Uber Eats, entered the Australian market in 2014 and 2016 respectively. While the large domestic gig economy provider, Menulog has operated in Australia since 2006.

Similarly, to section 3.2, the gig economy and traditional providers of the meal delivery sector are defined to allow us to analyse the impact of gig economy entrants on traditional providers using Transaction Data (refer to table 3.2).



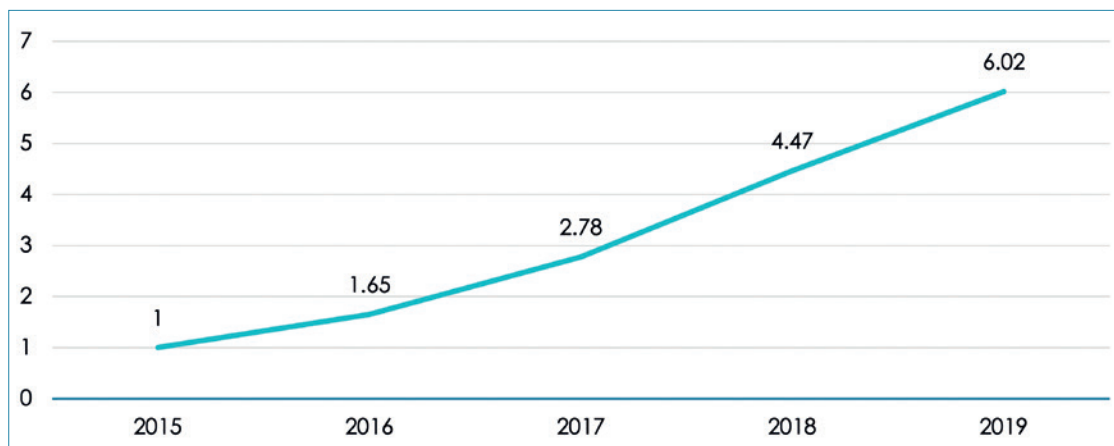
Table 3.2: Sector definitions for ‘Transaction Data’ analysis and example providers⁹

Sector	Gig economy providers	Traditional providers
Meal delivery	Uber Eats, Deliveroo, Menulog and other digital platforms	Online food orders from fast food chains and restaurants such as Dominos, Pizza Hut, Red Rooster and others

3.3.2 The meal delivery has grown rapidly in recent years, largely driven by the gig economy

Consumer spend in the meal delivery market has increased 6-fold (indexed growth value 6.02) between 2015 and 2019 (figure 3.4 and table 3.3). This rapid growth was largely driven by gig economy providers, who contributed 78% of total meal delivery sector growth over this period (table 3.3).

Figure 3.4: Overall ‘meal delivery’ sector - indexed consumer spend growth



Source: Quantum transactional data. Market growth is indexed to 1 in 2015

Table 3.3: ‘Meal delivery’ sector - consumer spend between 2015-2019

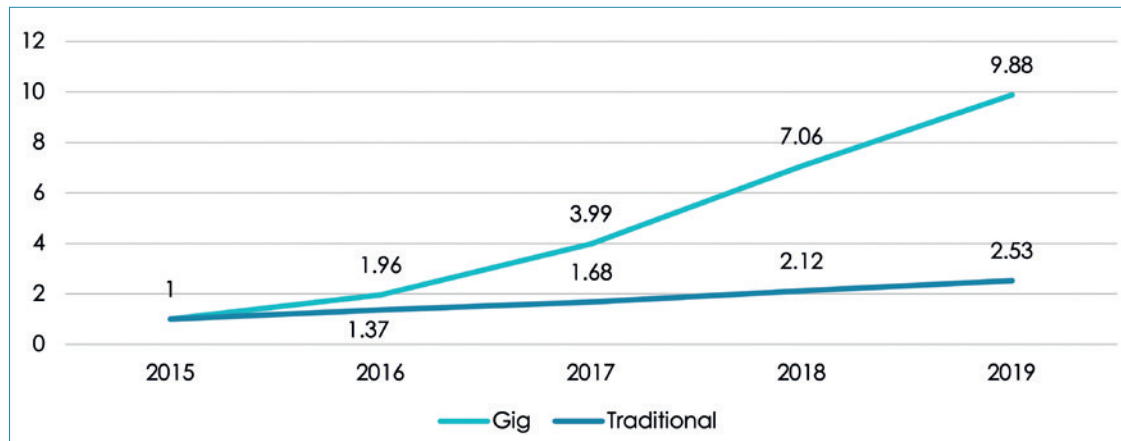
	Gig economy	Traditional	Total sector
Indexed consumer spend growth	9.88	2.53	6.02
Contribution to total sector consumer spend growth	78%	22%	100%

Source: Quantum transactional data. Spend growth is indexed to 1 in 2015

Consumer spend with gig providers has grown nearly 10-fold (indexed growth value 9.88), while consumer spend with traditional providers grew by 2.5-fold between 2015 and 2019 (figure 3.5 and table 3.3). The growth in traditional providers indicates that meal delivery is a high growth sector independent of gig economy entry. However, the significantly higher growth in gig providers suggests that the gig economy may be better meeting consumer needs than traditional providers and therefore stimulating sector demand to an even greater extent.

⁹ For a detailed description of gig economy and traditional providers in the meal delivery sector, refer to ‘Methods’ in section 7

Figure 3.5: Gig and traditional 'meal delivery' sectors – indexed consumer spend growth¹⁰



Source: Quantum transactional data. Market growth is indexed to 1 in 2015

3.3.3 Meal delivery is generating employment opportunities for both traditional and gig economy providers

Since 2015, consumer spend on traditional providers has grown strongly, more than doubling in size over the period of 2015 to 2019 (figure 3.5 and table 3.3). Thus, traditional providers have been able to grow despite increased competition from gig economy entrants over this period.

It is plausible that despite strong growth from traditional providers, gig providers have cannibalised the potential growth of the traditional meal delivery market. However, and as discussed in section 3.3.2, the gig economy has likely stimulated additional sector demand that would not have existed without their entry.

High consumer demand growth of traditional providers indicates limited evidence of negative impacts on the existing sector workforce in terms of job displacement. Indeed, high growth across both traditional and gig economy providers indicate employment opportunities are being generated across both traditional and gig economy providers.

Negative aspects of the gig growth may be offset by newly generated opportunities.



¹⁰ Includes electronic consumer spend only

4

The impact of the gig economy on its workers

For many workers in Australia, the gig economy is a new and valued source of flexible work.

4.1 What are the benefits and risks to workers of the gig economy?

For many workers in Australia, the gig economy is a new and valued source of flexible work. This work brings many benefits for its workers:

- ▶ Greater flexibility and autonomy to choose when and where to work (AlphaBeta, 2019).
- ▶ Relatively low barriers to entry to commence work (Industrial Relations Victoria, 2020).
- ▶ Ability to reduce worker's income variability by quickly ramping up gig economy work when primary income sources temporarily fall, or during periods of frictional unemployment (Minifie, 2016).

Yet despite these benefits, there are widely acknowledged worker frustrations and risks associated with work in the gig economy:

- ▶ The lack of basic worker entitlements such as minimum wage, employer-paid superannuation, sick leave, paid annual leave, paid parental leave, long service leave and (in some jurisdictions) workers compensation insurance due to 'independent contractor' classification (The Senate - Parliament of Australia).
- ▶ Low awareness among workers of the implications of their 'independent contractor' classification for entitlements (McDonald, Williams, Stewart, Oliver, & Mayes, 2019).
- ▶ Cases of worker misclassification where digital platforms have been prosecuted or are currently under-investigation (Dosen & Graham, 2018).
- ▶ Weak or non-existent income security due to the demand-driven nature of work (Kennedy, et al., 2017).

As the gig economy continues to grow, it is increasingly important for government and digital platform owners to better understand the benefits and risks faced by gig workers. Previous research has contributed to this understanding, but there has been limited work that measures the extent to which these benefits are being accrued, or these risks are manifesting, in the gig worker population.

In this section, we aim to provide a deeper understanding of the benefits and risks faced by gig workers using Transaction Data. Our analysis is based on a

sample of approximately 8,000 gig workers identified through Transaction Data¹¹.

Specifically, through this Transaction Data analysis we provide answers to the following questions:

1. What segments of the Australian population are engaging in gig economy work?
2. Why do workers join the gig economy? And what is the short-term economic impact on these workers?
3. To what extent are gig workers financially at-risk due to lower worker entitlements?

4.2 The nature of gig economy employment

The rapid rise of the gig economy has brought forth many challenges to government and labour market system operators.

Under the traditional labour market paradigm, employees receive a minimum standard of entitlements from their employers. However, in the gig economy, workers are regularly classified as ‘independent contractors’ (The Senate – Parliament of Australia). Under this classification, digital platforms are not required to provide many of the entitlements enjoyed by employees, including:

- ▶ employer-paid superannuation;
- ▶ minimum wage;
- ▶ sick / annual leave, and
- ▶ workers compensation insurance (in some jurisdictions).

Whilst currently forgoing these traditional worker entitlements, gig workers retain autonomy over when and where to work under ‘independent contracting’. This feature of gig economy work is not generally associated with traditional employment (AlphaBeta, 2019).

However, the minimum standard of entitlements that workers should receive is an active topic of discussion, attracting many audiences with different viewpoints. These differing viewpoints have manifested in a number of ways, including:

- ▶ So-called ‘sham-contracting’ claims by workers, whereby some digital platforms have stood accused of misclassifying their workers to minimise worker entitlements (Fair Work Ombudsman, Fair Work Ombudsman commences legal action against Foodora, 2018) (Dosen & Graham, 2018).
- ▶ Reports identifying the gig economy as a contributor to the risk of “workforce casualisation”, whereby an increasing proportion of the Australian workforce are subject to greater income variability and weaker income security (Kennedy, et al., 2017).

- ▶ Concerns over financing the social protections associated with minimum standard employee entitlements if they are extended to more casualised forms of work (The Senate - Parliament of Australia).
- ▶ Digital platforms stating their aversion to providing additional entitlements (such as employer-paid superannuation) due to the risk of workers being reclassified as employees, putting at-risk the autonomy and flexibility their workers value (AlphaBeta, 2019).

Given the ongoing uncertainty caused by these different viewpoints, workers, their representatives, government and digital platforms need to collaborate, and have a joint role to play in ensuring that gig workers are adequately supported.

The aim of the remainder of this section to provide an evidence-base to support decision-makers in evolving the worker support structure as the landscape of the labour market continues to change.

4.3 Vulnerable populations look to the gig economy for work

A key topic of discussion in gig economy research is whether labour force regulations need to be amended to protect worker rights. To understand specific needs of gig workers, it is important to have a good understanding of the demographic and behavioural characteristics of the gig economy workforce.

By analysing our sample of gig workers using Transaction Data¹², we can understand and summarise key demographics and attributes of these gig workers, such as age groups and workforce background. This analysis indicates that the gig economy workforce is over-represented in the following populations segments¹³ (figure 4.1):

- ▶ Younger age groups.
- ▶ Lower levels of Affluence¹⁴ (proxy for an individual’s purchasing power).
- ▶ Students.
- ▶ Formerly unemployed.

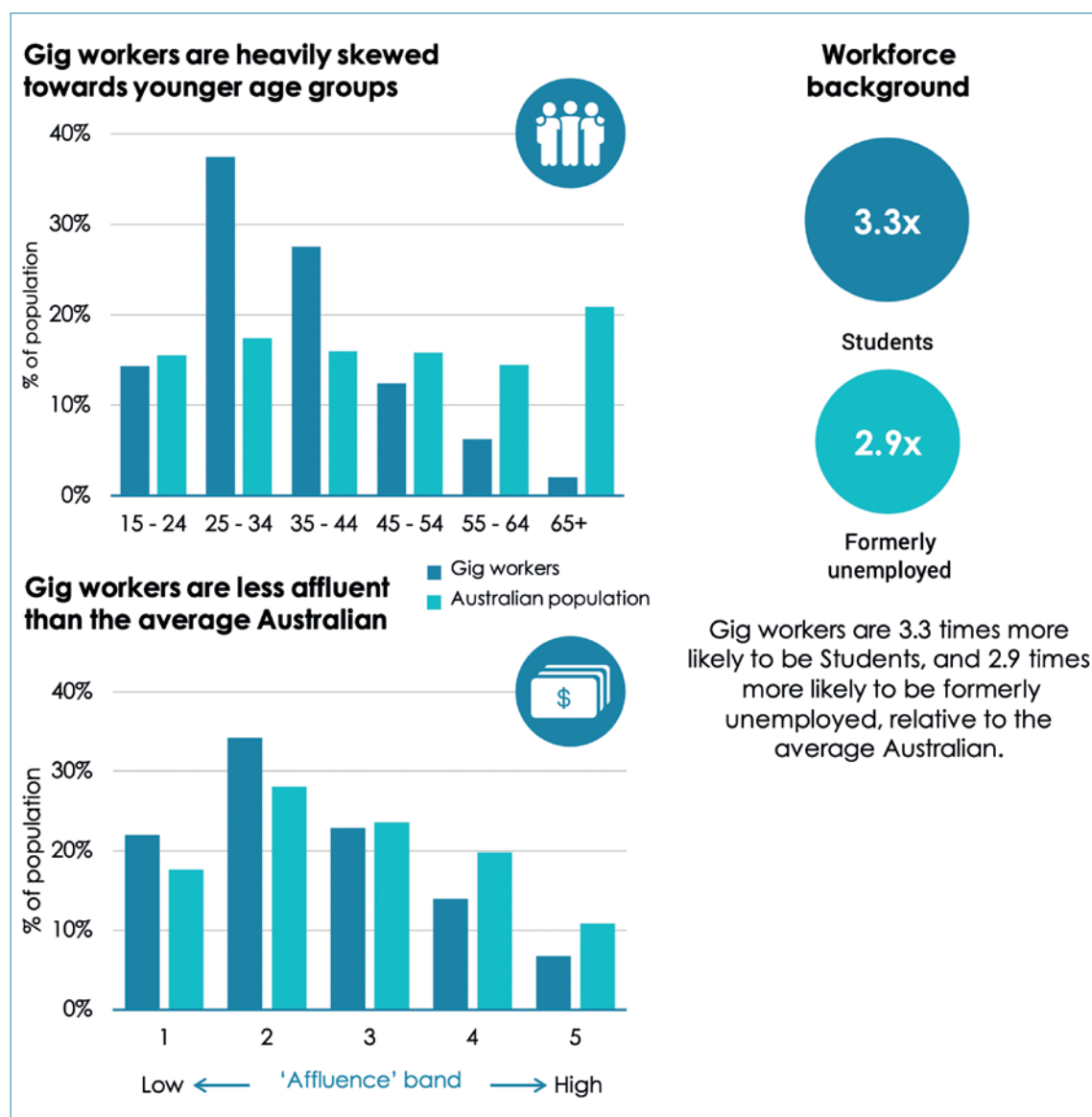
11 Refer to ‘Methods’ in section 7 for further specifications of the gig worker sample identified in ‘Transaction Data’

12 Refer to ‘Methods’ in section 7 for gig worker sample specifications

13 These results align with findings from the 2019 national survey research (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) which, based on a survey of 988 current gig workers, found that younger age-groups, students and formerly unemployed residents were over-represented in the gig workforce

14 Refer to ‘Methods’ in section 7 for ‘Affluence’ specifications

Figure 4.1: Demographic and behavioural profile of the gig economy workforce¹¹



Source: Quantum transactional data

This profile of the gig workers over-represents more vulnerable segments of the Australian workforce for the following reasons:

1. Young workers and students are new to the Australian workforce. Therefore, they may not understand or fully consider the risks and lower entitlements associated with their contracting arrangement with digital platforms.
2. Formerly unemployed and workers with low Affluence have higher dependence on government income protection schemes and the age pension upon retirement.

Furthermore, there is evidence that gig economy work does not address the specific vulnerabilities of these populations:

1. National survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) showed that gig workers lacked awareness of the risks and lower worker entitlements associated with their contractual status.
2. Gig economy work is associated with greater variability in income and there is no obligation for digital platforms to provide superannuation or workers compensation insurance (in some jurisdictions) to their gig workers (The Senate - Parliament of Australia).

Despite the risks, the gig workforce has been growing substantially. This suggests that there are economic and other benefits attracting many workers to join the gig workforce.

4.4 25% of gig workers experience short-term gains in Affluence after joining the gig economy

For many workers, participation in the gig economy is a matter of choice and lifestyle (McDonald, Williams, Stewart, Oliver, & Mayes, 2019). For other workers, an alternative to gig economy work may be under-employment or unemployment.

Therefore, when weighing up the impact of the gig economy on the Australian workforce, it is important to understand why these groups of workers are joining the gig economy and what the short-term economic impact is on these workers.

Using the gig worker sample from Transaction Data¹¹, we can proxy longitudinal changes in individual's 'Affluence' based on spending behaviour. Affluence¹⁴ is a proxy for an individual's purchasing power measured by analysing the purchasing mix between discretionary and non-discretionary purchases, as well as analysing the relative price-point of brands they transact with. An individual with a lower Affluence score would have purchasing behaviour skewed towards non-discretionary purchases, budget brands and small and more frequent transactions within a category. While an individual with a high Affluence score would have more discretionary purchases and prefer premium brands within categories. We have measured this Affluence score for individuals over time to perform longitudinal analysis.

Using this approach, we find significant movements in the Affluence of gig workers before and after joining the gig workforce. Two key gig worker groups emerge from this longitudinal analysis (figure 4.2):

1. **Improved 'Affluence' group:** 25% of workers experienced a material increase in Affluence after joining the gig workforce. These workers were more likely to be from lower Affluence bands, with 77% of all workers that increased Affluence coming from Affluence bands one and two.

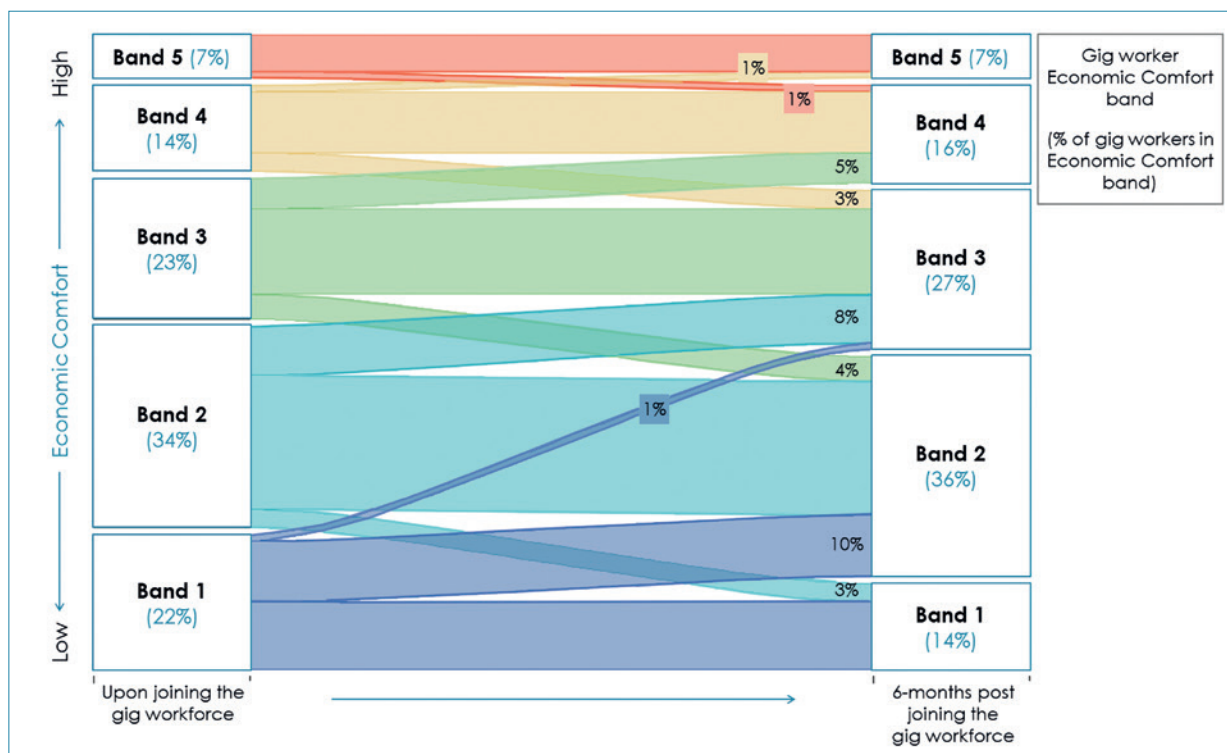
Furthermore, for workers that were in the lowest bands when joining the gig economy, 50% of these workers experienced a material increase in Affluence.

2. **Reduced 'Affluence' group:** The reduced Affluence group is smaller than the improved Affluence group. 12% of workers experience a material decrease in Affluence after joining the gig workforce. The workers experiencing a decrease in Affluence were distributed relatively evenly across the bands.



For many workers, an alternative to gig economy work may be under-employment or unemployment.

Figure 4.2: Movements in worker Affluence before and after joining the gig economy workforce



Source: Quantum transactional data

From the perspective of Affluence, the overall gig economy workforce appears to be better-off six months after joining the gig economy. The distribution of Affluence becomes more skewed towards higher bands six months after joining the gig economy, and more workers experience a material increase in Affluence compared to workers that experience a decrease (figure 4.2).

These findings corroborate hypotheses and survey results discussed in prior research on the gig economy workforce:

1. Gig economy work creates employment opportunities for many workers where traditional types of employment are a poor fit (Minifie, 2016). In addition, there are relatively low barriers to entry to commence work in the gig economy (Industrial Relations Victoria, 2020). Therefore, for workers that may have been resigned to long-term (structural) unemployment, the gig economy provides accessible employment opportunities and a means of raising their Affluence. These are the workers more likely to join the gig economy with a low Affluence level and experience a material uplift after commencing gig work.
2. Gig economy work is used by many to reduce income variability by ramping up gig economy work when primary income sources temporarily fall, or during periods of frictional unemployment (Minifie, 2016). So, the reduced Affluence group may have experienced a loss or reduction in primary income sources, for which joining the gig economy workforce is used (perhaps temporarily) to buffer the associated income shock.

Clearly, there are short-term economic benefits for many gig economy participants. However, the scope of thinking needs to extend to the longer term as it is ultimately important for workers to be financially secure now and into the future.

For workers that may have been resigned to long-term (structural) unemployment, the gig economy provides welcome opportunities.

4.5 Are gig workers set up for longer-term financial success?

4.5.1 What are the key financial risks to gig workers?

Although there are short-term economic benefits of gig economy work, workers are often challenged with a number of risks regarding financial security:

- ▶ Greater income variability from less predictable income patterns.
- ▶ Digital platforms are not required to pay superannuation contributions for workers.
- ▶ In some jurisdictions, digital platforms are not required to provide workers compensation insurance.

In addition, there are broader financial implications for gig workers, including:

- ▶ low insurance and income security levels for vulnerable population segments (The Senate - Parliament of Australia); and
- ▶ restricted access to credit due to lenders viewing gig workers as riskier loan applicants than more traditional borrowers (Onselen, 2017).

National survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) indicated that 25.6% of gig workers consider their gig work earnings as an essential or important part of their overall income. These workers are fully exposed to the financial risks of gig economy work.

Other gig workers consider their gig work supplementary to their primary income (refer to section 2.3.1). Therefore, many of the financial risks will be (at least) partially covered by their engagement with a primary form of employment.

Nevertheless, as the gig economy continues to grow and evolve, it is important to have a system in place that covers all gig workers, ensuring the benefits of gig economy work do not come at the cost of financial security. To that end, in section 4.5.2 and 4.5.3, we analyse and discuss 'insurance coverage' and 'superannuation' as financial risks directly associated with the key gig worker vulnerabilities of:

1. Greater risk of income variability through lack of income security and insurance.
2. Dependence on government income protection schemes and the age pension upon retirement.

4.5.2 Gig workers are under-insured and therefore exposed to greater financial risk

Work in the gig economy is associated with greater income variability. The associated financial risks of greater income variability are enhanced by low levels of insurance that protect against income shocks from unexpected events (e.g. adverse health or injuries).



To understand the extent of this financial risk, we analysed the insurance coverage of gig workers by identifying insurance premium payments in Transaction Data¹⁵. Insurance types included in this analysis are:

- ▶ Home and Motor insurance
- ▶ Private Health insurance
- ▶ Life insurance

As a benchmark, we compare gig worker insurance coverage levels to an age-adjusted cohort, whereby the benchmark cohort has an equivalent age profile as the gig worker sample.

From the analysis, we find that gig workers have lower insurance coverage relative to the age-adjusted cohort for health insurance and life insurance (figure 4.3). Specifically, the results show:

- ▶ **Home and motor insurance:** overall, gig workers have higher levels of home and motor insurance, a result reflecting the presence of private transport drivers (such as Uber workers) who are required to have a minimum level of car insurance to qualify as a driver (Uber, 2020).
- ▶ **Private health insurance:** gig workers are 14% less likely to be covered.
- ▶ **Life insurance:** gig workers are 30% less likely to be covered.

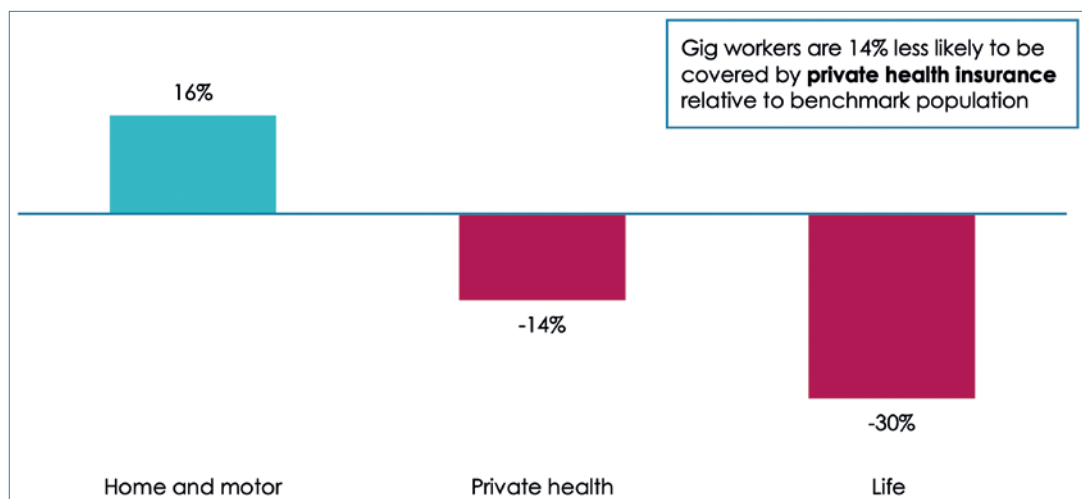
For private health and life insurance, these findings indicate that gig workers are under-insured relative to a comparable age-adjusted cohort and may therefore expose them to greater financial risk.

Despite having higher levels of home and motor insurance coverage, many private transport drivers of the gig economy may remain under-insured if they only have the minimum required CTP and third party property insurance (Uber, 2020). Unfortunately, we cannot identify an individual's level of insurance within the home and motor insurance category using the Transaction Data.

¹⁵ Insurance coverage is defined as the proportion of the gig worker sample that is covered by a particular insurance type; Refer to 'Methods' in section 7 for gig worker sample specifications

¹⁶ Insurance coverage relative to benchmark calculated as: 'proportion of gig workers transacting with insurance type' divided by 'proportion of benchmark population transacting with insurance type'

Figure 4.3: Gig worker insurance coverage relative to age-adjusted cohort (benchmark)¹⁶



Source: Quantum transactional data

An important caveat to the life insurance coverage finding is that life insurance is linked to superannuation for many. Therefore, workers who have a primary income source outside of gig work may have life insurance paid through the

employer-paid superannuation arrangements. In any event, life insurance coverage via direct premium payments to life insurers is lower in the gig worker cohort which may still suggest lower engagement with life insurance.

4.5.3 *Gig workers are not proactively saving for their retirement*

Digital platforms are not required to provide employer-paid superannuation contributions to gig workers. Consequently, a widely acknowledged risk is that gig workers will not independently contribute sufficiently to their retirement savings.

The ongoing concern is if the prevalence of gig economy work continues to rise under existing labour force regulations, there will be an increase in the proportion of persons with little to no superannuation savings on retirement. This would put further strain on the government-funded age pension scheme.

If gig workers were proactively saving a proportion of their gig economy earnings for their retirement, they would make personal contributions to their superannuation fund.

Using Transaction Data¹¹, we can measure the extent to which gig workers make personal superannuation contributions. We find that very few gig workers proactively contribute to their superannuation, with less than 1.5% of workers making personal superannuation contributions.

Furthermore, we find that when gig workers do make personal superannuation contributions, the amount contributed is minimal. The average personal contribution by a gig worker was between \$500-\$900 per annum, while a minimum wage employee would accumulate approximately \$3,700 in employer-contributed superannuation per annum¹⁴.

However, it is important to acknowledge the secondary nature of gig work to many. For those whose gig work is supplementary to another income source, they are likely earning employer-paid superannuation through another channel. Unfortunately, a limitation of the Transaction Data is that we cannot segment gig workers between those solely employed in the gig economy and workers who have another (primary) form of employment. Nevertheless, our results show that workers' time spent engaged in the gig economy is not being accompanied by a commensurate (if any) contribution to their retirement savings.

To understand potential disparities in longer term personal superannuation savings caused by a period of gig economy participation, we have run a simulation to estimate and compare the superannuation balance of three worker types:

1. Minimum wage employee from workforce entry until retirement.
2. Gig worker for five years at workforce entry, then minimum wage employee.
3. Gig worker for 10 years at workforce entry, then minimum wage employee.

In the simulation we have assumed that during the period where the worker participates in the gig economy, there are no personal contributions to superannuation or employer-paid contributions from other employment.



If gig economy work continues to rise under existing labour force regulations, there will be more workers with little to no superannuation savings on retirement.

This assumption is reasonable for a gig worker who does not participate in other forms of employment since the Transaction Data analysis found that less than 1.5% of gig workers make personal superannuation contributions.

The results of the simulation are reported in Table 4.1 and visualised in Figure 4.4.

Table 4.1: Superannuation balance at retirement simulation

	Minimum wage employee	Gig worker – five years	Gig worker – 10 years
Simulated superannuation balance at retirement¹⁷	\$320,000	\$272,000	\$228,000
Difference relative to minimum wage employee	-	- \$48,000	- \$92,000

The simulation gives an indication of the potential longer-term disparity in personal superannuation savings at retirement caused by a period in the gig economy. Specifically, the simulation shows that workers who spend five to 10 years of their productive labour years participating in the gig economy may be between \$48,000 or \$92,000 worse-off in superannuation savings at retirement (table 4.1). Thus, gig workers who are not supplementing their retirement savings through employer-paid contributions from another job are likely to have greater dependence on the government-funded age pension to top-up their retirement income.

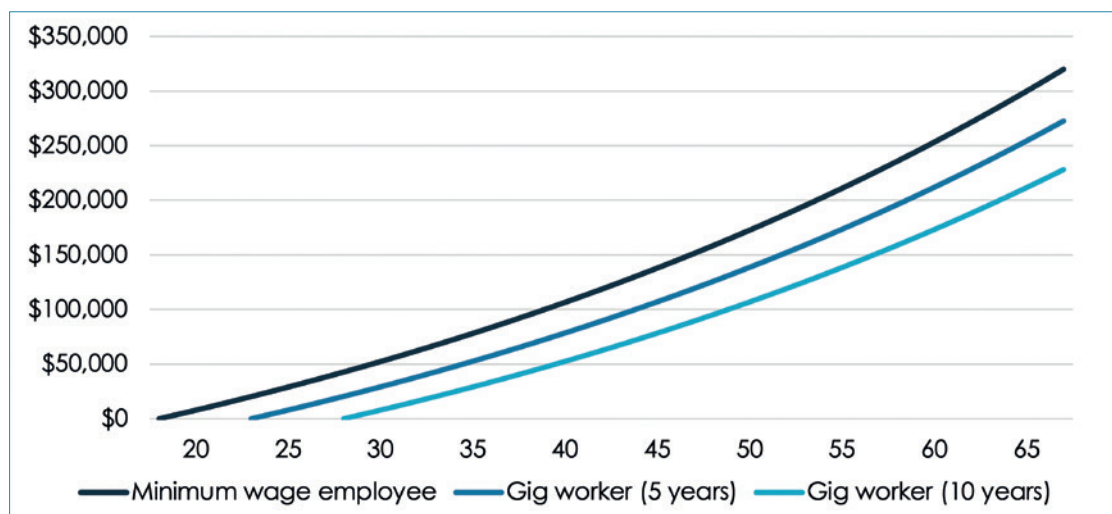
¹⁷ Estimated using [Australian government superannuation calculator](#) with assumptions:

- 'Minimum wage employee' annual contribution is 9.5% of annualised \$753.80 weekly minimum wage (Fair Work Ombudsman, Minimum wages, 2020)
- Contributions made annually between ages of 18-67,
- Other base assumptions left on default setting (e.g. investment return and fees)

National Survey research in 2019 (McDonald, Williams, Stewart, Oliver, & Mayes, 2019) identified specific worker cohorts - private transport and meal delivery gig workers - who are more likely to be solely engaged in gig work, making these workers a key superannuation risk.

However, the counterfactual is important to acknowledge here. For some gig workers, the alternative to gig economy work may be under-employment or unemployment, in which case their gig economy time is not replaced with a job that will earn them employer-paid superannuation.

Figure 4.4: Superannuation balance simulation for gig workers¹⁴



COVID-19 and the gig economy

5

5.1 The COVID-19 pandemic has forced consumers and businesses to change the way they interact

The COVID-19 pandemic and associated lockdowns across Australia fundamentally changed the way consumers and businesses could safely interact. As a result, there was widespread disruption to economic activity.

During that period, the gig economy has proved valuable to many businesses, particularly restaurants and cafes, to quickly pivot their offerings onto digital platforms (Gillezeau, 2020). This has given businesses the opportunity to continue trading through the digital platforms and soften the impact on revenue and employment during the pandemic.

Given the recency of the pandemic at the time of writing, there was little understanding of how the gig economy and associated sectors have been impacted since the onset of the COVID-19 pandemic. In this section, we answer the following important questions:

1. How has economic activity in the gig economy been impacted by the COVID-19 pandemic to October 2020?
2. How have sectors within the gig economy been impacted?

We have used Transaction Data to measure the impact of the COVID-19 period on economic activity in the gig economy, as well as the overall 'Private Transport' and 'Meal Delivery' sectors. The definition of the gig economy is as specified in section 2.4.1. The definition of the 'Private Transport' and 'Meal Delivery' sectors are as specified in section 3.2.1 and 3.3.1 respectively¹⁸.

5.2 Economic activity in the meal delivery sector surged to October 2020, up more than 100% compared to pre COVID-19 period

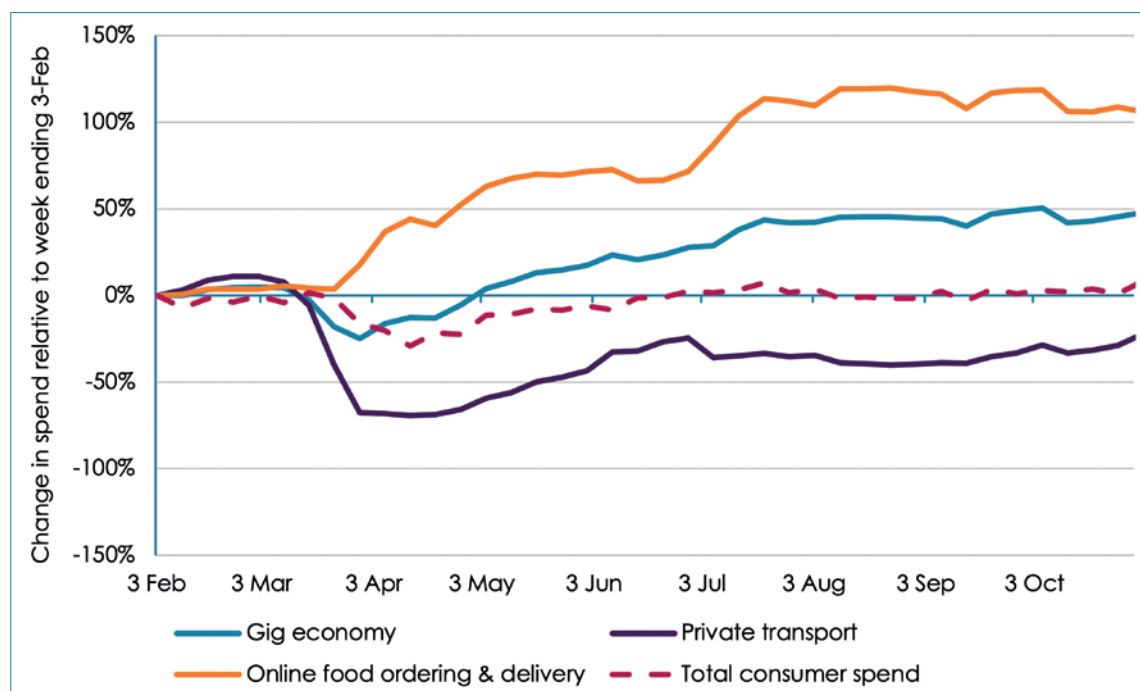
At time of writing, the COVID-19 pandemic was still very much underway, and any observations here should thus be interpreted accordingly. Nevertheless, the pandemic appears to have brought about significant shifts in the shape of the gig economy. Overall consumer demand in the gig economy was negatively impacted during the initial COVID-19 lockdown period between March and April 2020 (figure 5.1). This was largely driven by a sharp decline in private transport, where the overall sector was down by 70% in early April 2020.



¹⁸ The 'Transaction Data' analysis for 'Private Transport' and 'Meal Delivery' sectors includes consumer spend from both gig economy providers and traditional (non-gig) providers

The gig economy has since recovered, attracting higher levels of weekly spend since the beginning of May 2020. Furthermore, by the end of October 2020 weekly spend growth in the gig economy comfortably outstripped growth in total consumer spend by approximately 40%.

Figure 5.1: Consumer spend growth during the 2020 COVID-19 period to October 2020¹⁹



Source: Quantum transactional data. Weekly spend growth is indexed to week ending 3-Feb-2020

However, sectors within the gig economy had very different growth experiences, including during the period when Victoria entered the second round of lockdowns in July 2020:

- ▶ **Private transport** recovered slowly after a steep decline in consumer spend. Weekly consumer spend was more than 20% lower than pre COVID-19 lockdown levels by the end of October 2020.
- ▶ **Meal delivery** surged since late March 2020, with weekly consumer spend 70% higher than pre COVID-19 lockdown levels in June 2020. The second round of lockdowns in Victoria caused meal delivery spend to rise even higher, up more than 100% since mid-July 2020 compared to the pre COVID-19 lockdown period.

The gig economy meal delivery services helped address a key need during the pandemic.

The high growth in meal delivery services of the gig economy reflect its success in addressing a key need during the pandemic for customers and workers of restaurants and cafes to safely interact. Digital platforms have also enabled quick onboarding of restaurants and cafes so they could quickly pivot to meal delivery when lockdown was initiated (Page, 2020). As a result, the gig economy has supported ongoing trade and employment in this sector.

¹⁹ Analysis based on electronic consumer spend

Conclusion

6

The rise of the gig economy in Australia has brought both opportunities and risks to existing sectors and to the workers who participate in the gig economy. Given the rapid growth of gig economy, it is important that these opportunities and risks are better understood so we ensure gig workers, and the workers impacted by the gig economy, are adequately supported.

In this paper, we identified impacts to existing sectors from gig economy entrants as well as impacts to workers participating in the gig economy. The Private Transport and Meal Delivery sectors have experienced strong growth driven by the gig economy, at the expense of some cannibalisation of traditional providers. A large proportion of gig workers experience a short-term boost in Affluence (i.e. purchasing power) after entering the gig economy, however minimal superannuation contributions and lower insurance coverage highlight longer-term financial risks and greater likelihood of dependency on public safety nets.

By better understanding the ongoing opportunities and risks to the Australian workforce and the consequences for government-funded social schemes (e.g. the age pension), policy implications can be informed to better protect workers most at risk.

However, to identify targeted and relevant policy implications, there is a need for further research, particularly as the gig economy continues to evolve under the influence of the COVID-19 pandemic. Further research will provide a deeper understanding of gig economy workers based on their distinct risks and needs for support. The ultimate goal of policy implications is to inform changes to policy that ensure the Australian workforce is adequately supported, whilst not reducing the benefits of economic activity that the gig economy brings.

The gig economy in Australia has brought both new opportunities and new risks to existing market sectors.



Methods

7

Quantum transaction data ('Transaction Data')

The Transaction Data contains a fully de-identified and privacy compliant sample of electronic bank transactions for more than three million individuals in Australia over five years.

Private transport	Meal delivery	Task based
Bolt	Deliveroo	99designs
DiDi	Delivery Hero	Airtasker
Go Buggy	DoorDash	Careseekers
Ola	Easi	Dribbble
Shebah	Eat Now Services	Fiverr
Shofer	Menulog	Freelancer.com
Taxify	Supertime	Guru
Uber	TuckerFox	Helping
	Uber Eats	hipages
		Hireup
		Mable
		Mad Paws
		oDesk
		Oneflare
		Pawshake
		PeoplePerHour
		Sherpa
		Sidekicker
		TaskRabbit
		Toptal
		Tribe Group
		Upwork
		Zoom2U

The transactions are weighted to remove skews relative to total population and generate nationally representative insights. All outputs from Transaction Data in dollar format (e.g. gig economy market size) are reported in Australian dollars (AUD).

For this paper, the Transaction Data has been analysed at a customer segment level (e.g. population aged 25-34), category level (e.g. Gig Economy brands, Private Transport sector, Meal Delivery sector) and over periods of time (e.g. by calendar year, by week during 2020).

Gig economy Transaction Data definition

The analytical definition of the gig economy includes consumer spend in Australia for digital platforms (brands) in the adjacent table (left).

The sample data was sourced from more than three million people and from a five year period.

All consumer spend analysis using the gig economy analytical definition includes electronic spend only (no adjustment for cash adjustment).

Private transport and meal delivery Transaction Data definitions

The analytical definition of the 'Private Transport' and 'Meal Delivery' includes consumer spend in Australia for gig economy providers and traditional providers in the table below.

	Private transport	Meal delivery
Gig economy providers (digital platforms)	Bolt	Deliveroo
	DiDi	Delivery Hero
	Go Buggy	DoorDash
	Ola	EASI
	Shebah	Eat Now Services
	Shofer	Menulog
	Taxify	Supertime
	Uber	TuckerFox
		Uber Eats
Traditional providers (non-gig economy)	Taxi and Limousine services	Online food orders from fast food chains and restaurants

Notes on the analytical definition for traditional providers:

- ▶ Consumer spend for 'Taxi and Limousine services' includes adjustments for cash usage (since there is significant cash usage in 'Taxi and Limousine services').
- ▶ Consumer spend for 'Online food orders from fast food chains and restaurants' includes electronic spend only (no adjustment for cash adjustment).

Gig worker Transaction Data sample specifications

Using 'Transaction Data', we have identified a sample of gig economy workers at the point in time they join the gig economy.

The sample size is 8,008 gig economy workers. These workers are identified as engaging in gig economy work in 2018 or 2019 with at least one of the following digital platforms:

- ▶ Didi
- ▶ Freelancer.com
- ▶ Ola
- ▶ Uber
- ▶ Uber Eats

The above five digital platforms were the only digital platforms where workers could be identified using the Transaction Data. The implication is that insights from the analysis of the gig worker sample in 'Transaction Data' is based on the aggregated workforce of these five digital platforms.



Gig worker Transaction Data 'Affluence' specifications

The 'Affluence' score from 'Transaction Data' is a proxy of an individual's purchasing power. Affluence is scored at an individual level by analysing 12 months of prior transactional behaviour, including the purchasing mix between discretionary and non-discretionary (electronic) transactions, as well as analysing the relative price-point of brands transacted within a category.

There are five Affluence bands (one to five) that individuals are segmented into. The bands are ordered by the level of Affluence. The purchasing behaviour of 'Affluence band 1' individuals indicate they are the lowest Affluence population segment (higher concentration of non-discretionary spend and budget brands). While the purchasing behaviour of 'Affluence band five' individuals indicates they are the highest Affluence population segment (higher concentration of discretionary spend and premium brands).

Gig economy worker's Affluence is scored at the point of time they entered the gig economy workforce and six months after they join the gig economy workforce.



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