



# Employment Outcomes for Men and Women Following an Economic Downturn: Labour Underutilisation in Australia

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## Abstract

In Australia, as elsewhere, there has been continuing interest in understanding questions regarding unequal employment opportunities. While aggregate patterns provide a useful overview, it is insightful to consider employment outcomes across segmented markets. One such segmented market is between men and women, where it is widely understood that labour market engagement opportunities will differ. This paper provides an investigation of these uneven labour market outcomes. It presents an analysis of labour underutilisation for men and women using panel data, taking account of both individual-level supply-side factors together with the strength of the local labour market (demand side) and the performance of the broader macroeconomic environment. The result is an analysis that accounts for the impact of changing macroeconomy, local labour market conditions and men and women's employability assets.

**Keywords** Labour underutilisation · Australia · Unemployment · Gender

## 1 Introduction

Like all large economies, the Australian labour market is characterised by uneven and volatile performance across different segments. While some groups appear resilient as the economy changes, others are more likely to face disadvantages as opportunities shift, and precarious employment situations become increasingly problematic. In recent periods, attention has been given to poor labour market outcomes,

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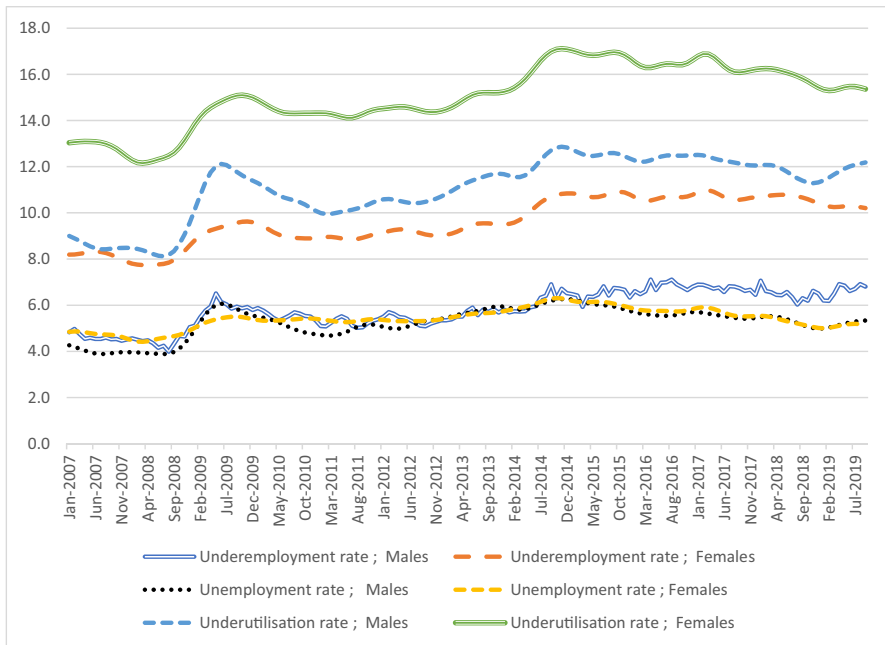
including unemployment and other forms of underutilisation. Statistics are now routinely provided on labour underemployment and general underutilisation levels, and commensurately, greater academic and policy research have gone towards understanding these broader states of labour market disadvantage. Research questions have focused on exploring the drivers of different aspects of underutilisation, understanding how long-term patterns have shifted and considering the individual and aggregate consequences of underutilisation (Baum et al. 2008; Campbell 2008; Mitchell and Carlson 2000; Rodríguez Hernández 2018). As with the narrow concept of unemployment, it is generally understood that an effective evidence-based suite of policy interventions should be possible by understanding the nature of underutilisation.

Comparing the patterns of labour underutilisation for women and men is the focus of this paper. Its primary purpose is to consider the factors associated with underutilisation, including the characteristics of at-risk individuals and the features of the local labour markets, and the macroeconomy that individuals operate in. The analysis in the paper provides a unique opportunity to consider how these cross-cutting factors have impacted labour market outcomes by utilising panel data regarding labour market outcomes for women and men and linking individual data to other broader factors at the macro-level. The data cover the years 2008–2015 and are taken from the Household, Income and Labour Dynamics Australia (HILDA) survey and are combined with regional labour market data obtained from the Australian Bureau of Statistics. This dataset allows the following questions to be addressed:

1. What was the effect of supply-side characteristics on the risk of an individual's labour being underutilised?
2. What was the effect of aggregate/spatial demand-side characteristics on the risk of an individual's labour being underutilised?
3. What was the effect of macroeconomic forces in the post-GFC period on an individual's underutilised labour?

### 1.1 The Extent of Labour Underutilisation in Australia

The Australian Bureau of Statistics regularly provides data regarding the extent and scope of labour underutilisation within Australia. Taking the period of 2007/2008, when the Global Financial Crisis began to bite until the most recent period, a general worsening of labour market outcomes can be noted. While there was a sharp increase in all measures in the immediate period of the GFC, the consequences for both men and women have continued to deteriorate until 2019 and have yet to return to pre-GFC levels. This is despite an improvement in aggregate labour market figures over the same time. Moreover, the post-GFC period has seen underemployment taking a larger share of the total underutilisation rate than had previously been the case. In terms of magnitudes, for women, the headline unemployment rate moved from 4.9% before the GFC to peak at 6.2% in June 2015, while underemployment moved from 8.2 to 10.7% over a similar period. The combined underutilisation rate moved from 13.0 per cent before the GFC to a high of 16.9 per cent at



**Fig. 1** Unemployment, Underemployment and Underutilisation Men and Women, Australia, 2007–2019 (trend data). Source: Australian Bureau of Statistics, Labour Force Australia, cat no. 6202.0

the end of 2014 before declining to the current (September 2019) level of 15.4 per cent (Fig. 1). For men, the headline unemployment rate moved from 4.0% before the GFC to peak at 6.3% in June 2015, while underemployment moved from 4.7 to 6.9% over a similar period. The combined underutilisation rate moved from 8.9 per cent before the GFC to a high of 12.4 per cent at the end of 2014 before declining to the current (September 2019) level of 12.2 per cent (Fig. 1). If hidden unemployment (those who are unemployed, not actively looking for work, but who would take a job) is added to these figures, conservative estimates might add an extra 5 per cent to the total underemployment rate suggesting a much more severe issue.

Reflecting the official statistics, empirical research based on survey data has often shown that women are more likely to find themselves underemployed or marginally attached to the labour force than men when a range of socio-demographic characteristics is controlled for. In contrast, men were more likely to face unemployment. Such differences clearly illustrate the gendered nature of segmented labour markets (Baum et al. 2008) and suggest that in contrast to some arguments (Flinn and Heckman 1983) for men and women, the different states of underutilisation are quite distinct.

## 1.2 Determinants of Underutilisation

Given the distinct states of underutilisation experienced by males and females, it is useful, as this paper does, to consider how the determinants in labour market engagement might differ within gender-segmented outcomes. While conceptual frameworks differ, researchers have increasingly utilised a broad employability framework (Baum et al. 2008; Baum and Mitchell 2010b; Doran and Fingleton 2016, 2018; Wilkins 2006) that employs aspects of both labour supply and labour demand. This broad framework provides an understanding of a person's ability to transition into and within labour markets and to realise their potential via accessible employment opportunities. For particular individuals, employability might depend on their skills level or the way that their personal characteristics are presented. Employability may also be associated with the broader social context within which employment is sought as well as the broader economic context (Department of Higher and Further Education 2002). These supply and demand (employability) characteristics include a person's formal education, their health status, proficiency in English, the employment history of their family, their social networks and external factors such as the strength of the labour market they operate in and the condition of the broader macro-economy (McQuaid and Lindsay 2005).

In many cases, the existing research has identified that particular labour supply and demand characteristics such as education or age tend to have similar impacts regardless of gender. The Australian work by Baum and Mitchell (2010a) using a single wave of the Household Income and Labour Dynamics Australia (HILDA) survey identified that factors including age, ethnic background, English proficiency, family employment history and the presence of critical social networks were significant explanatory variables for both males and females when comparing the risk of unemployment and marginal attachment relative to being fully employed. Similar findings for the Australian context are also reported in the research by Wilkins (2006).

In a similar vein, the more recent work by Rodríguez Hernández (2021) on underutilisation in Spain during the Global Financial Crisis identified that at the end of the economic crisis, factors such as age, education level and living with elderly parents or parents-in-law were significant in explaining the employment outcomes for both men and women. The authors also found that the strength of the local labour market was also important for both males and females, with those living in poorer performing regions being more likely to be disadvantaged in terms of employment.

Focusing only on the rise of involuntary part-time work (underutilisation), the early research by Leppel and Clain (1988) found very little by way of differences in the drivers of involuntary part-time employment in their sample of males and females in the USA. In particular, they found that regardless of gender, economic slowdowns and service sector employment growth were significant factors in increasing the level of involuntary part-time work. In contrast, declining proportions of young children and a rising skill level of the employed had the opposite effect. The research by (Van Ham et al. 2001) also suggested that there may be only minor differences in factors contributing to the likelihood of labour market outcomes for males and females.

Many of the labour supply and demand factors identified by researchers suggest little or no bias along gender lines. However, moving beyond these findings, there has also been analysis that has identified significant gender-specific effects, although often with no clear direction of the association. The circumstances where differences in gender outcomes are often considered associated with the types of occupation or industry an individual is employed in or the gendered stereotypes associated with the need to provide child care or similar caring functions. It is also argued that in line with potential differences in industry or occupational characteristics, males and females are impacted differently during economic downturns. This may also be an essential labour demand aspect accounting for differential outcomes.

The Australian work by Baum and Mitchell (2010a) referred to above found that males tended to be impacted by the strength of local employment opportunities, which may have a particular industry or occupation characteristic, especially in terms of them being unemployed, while for females labour underutilisation (marginal labour market attachment) tended to be associated with a need or desire to provide childcare. This finding that the presence of children was associated with a reduced likelihood of women being adequately employed was also highlighted by Kjeldstad and Nymoen (2012) in their study of the Norwegian labour market. In their analysis, the authors found that the likelihood that a female would be underemployed rose as the age of children increased. The finding that the presence of children was associated with an increased probability of marginal attachment to the labour force by women is contested by the conclusions of others who argue that the presence of children does not necessarily result in increases in the likelihood of underemployment (Cam 2014; Rodríguez Hernández 2021; Wilkins 2006). For the Spanish sample utilised by Rodríguez Hernández (2021), the authors find that the presence of younger aged children reduces the likelihood that women would find themselves underemployed or a male would be unemployed. The Australian research by Wilkins (2006) also shows contested outcomes regarding the association between child care responsibilities and labour underutilisation. The difference between this analysis and other Australian work is explained by differences in samples and measurement of variables.

Over and above the issue of childcare, research has also pointed to the impact that industry or occupation characteristics can have on gendered labour market outcomes. Here the problem is associated with the likelihood that some industry sectors or occupations are more likely to be related to part-time work and therefore more likely to be associated with underutilisation. The recent Spanish work by Acosta-Ballesteros, Osorno-del Rosal, and Rodríguez-Rodríguez (2021) illustrates this point, suggesting that being employed in female-dominated occupations and industries results in a higher likelihood of underemployment than in male-dominated ones. Similar arguments are made about the impact of economic downturns on the labour market outcomes of men and women. Researchers note that in some circumstances, male-dominated occupations have tended to be hardest hit by downturns resulting in males being more likely to find themselves unemployed or marginally attached to the labour market. For example, Hoynes et al. (2012), considering employment outcomes across several recessionary

periods, found that men experienced more cyclical labour market outcomes when compared to women; an outcome they argue is the result of men being employed in more highly cyclical industries including construction and manufacturing. Similar findings have been discussed in Elsby, Hobijn, and Sahin (2010) and (Albanesi and Şahin 2018).

## 2 Data and Methods

### 2.1 Data

This paper aims to model individual labour market outcomes as a function of a range of individual-level socioeconomic and demographic variables, a temporal dimension and a local labour market performance measure. To carry out such an analysis, data from two primary sources are utilised: (1) individual-level longitudinal panel data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey, managed by the Melbourne Institute of Applied Economic and Social Research (Wilkins, Vera-Toscano, Botha and Dahmann 2021); and (b) aggregate-level local labour market data from Small Area Labour Markets data, published by the Australian Commonwealth Department of Employment (Australian Government 2021) and aggregated into Functional Economic Regions.

The individual-level data from the HILDA survey follows a large cohort of Australians across consecutive years, gathering responses on various economic, social and labour/employment questions. The HILDA Survey began in 2000–2001 (Wave 1) and has produced 16 consecutive output waves, with a high participant retention rate. This paper uses waves 8 to 15 (2008–2015) data.

The Small Area Labour Markets data consist of regional labour force estimates of unemployment for approximately 2200 Australian Bureau of Statistics Statistical Area 2 (SA2s) every quarter (Australian Government 2021). As the purpose of using the labour force estimates is to account for the impact of local labour markets on individuals' employment outcomes, the SA2-level data were aggregated into a form representing local labour market regions. We define an individual's local labour market as the functional region they live in using the Centre of Full employment and Equity's Functional Economic Regions (CFERs) (Stimson et al. 2016). These regions, which cover the whole of Australia, are designed explicitly as labour markets, informed by the commuting patterns of workers throughout the country. The areas are unencumbered by administrative or political requirements and have been shown to produce better measures of labour market statistics. This is important as we use the region's unemployment rate to measure a region's influence on an individual's labour force outcomes. As the CFERs are made up of aggregations of Statistical Area 2 s (SA2s), a region's unemployment rate is determined by the unemployment and labour force numbers of its constituent SA2s, as provided in the Small Area Labour Markets publication and aggregated up to the constituent CFER. Local labour market data were calculated to match each wave (year) of the HILDA data.

An essential aspect of the dataset development was linking an individual respondent from the HILDA data to their specific functional economic region. This was achieved using the SA2 geography code provided for each respondent in the survey with the corresponding SA2 codes associated with each aggregate functional economic area. In this way, the dataset comprised a set of individual-level variables and an associated functional economic region indicator.

## 2.2 Variables

As stated, the model is set up to determine the influence a range of individual- and aggregate-level explanatory variables have on the response variable, employment status. Employment status for a respondent is divided into one of four categories:

- *Fully employed (FE)*: Employed full-time, or employed part-time without wanting more work;
- *Underemployed (UDE)*: Employed part-time and wanting more work;
- *Unemployed (UNE)*: Not employed and actively looking for work; and
- *Marginally attached to the labour force (MALF)*: Not employed and not actively looking for work but would work if a job became available.

Given the nature of the dependent variable, the appropriate model to use is a multinomial logit model with a categorical dependent variable. The logit compares a base response variable state to the other response variable states. To account for the panel nature of the data, the multinomial logit model is altered to introduce individual-specific random effects. This then becomes a mixed logit model, where the parameters are assumed to vary between individuals, thus taking into account the population's heterogeneity (Croissant 2012). Separate models are run for both men and women.

The explanatory variables are listed in Table 1. Most of the explanatory variables are categorical variables where, like the response variable, a baseline reference category is chosen to which all the other categories are compared.

## 3 Results

Tables 2, 3, and 4 present the regressions performed for the cohorts of men and women, comparing the likelihood of being fully employed to each of the underutilised states. A person's age has a significant impact on their labour force status. Regardless of gender, a person aged 15 to 24 years old is more likely to have their available labour underutilised than being fully employed, compared to persons aged 25 to 54, with men having more substantial odds than women for each of the underutilisation states. Further, older workers, from 55 to 64 years and over 65 years of age, are more likely to be marginally attached to the labour force than those in the reference age group, regardless of gender, again with men having more substantial odds. However, the other significant impacts favour full employment to underutilisation.

**Table 1** Independent Variables Used in Analysis

Variable	Description	Reference variable
Age 15 to 24	1 if person <i>i</i> is aged between 15 and 24 years at time <i>t</i> ; 0 otherwise	Person aged between 25 and 54 years at time <i>t</i>
Age 55 to 64	1 if person <i>i</i> is aged between 55 and 64 years at time <i>t</i> ; 0 otherwise	Person aged between 25 and 54 years at time <i>t</i>
Age 65 plus	1 if person <i>i</i> is aged 65 years or greater at time <i>t</i> ; 0 otherwise	Person aged between 25 and 54 years at time <i>t</i>
Poor health	1 if person <i>i</i> reports a long-term health condition at time <i>t</i> ; 0 otherwise	No long-term health condition reported at time <i>t</i>
Born in a non-English-speaking country	1 if person <i>i</i> was born in a non-English-speaking country; 0 otherwise	Person born in English-speaking country
Highest education—post-secondary	1 if person <i>i</i> 's highest level of education at time <i>t</i> is post-secondary (inc certificate and diploma); 0 otherwise	Person has no post-school qualification at time <i>t</i>
Highest education—tertiary	1 if person <i>i</i> has completed tertiary-level education at time <i>t</i> (bachelor degree and above); 0 otherwise	Person has no post-school qualification at time <i>t</i>
Person in couple household with children	1 if person <i>i</i> is part of a couple relationship with dependent children at time <i>t</i> ; 0 otherwise	Person is single at time <i>t</i>
Person in single-parent household	1 if person <i>i</i> is a single parent at time <i>t</i> ; 0 otherwise	Person is single at time <i>t</i>
Person in couple household without children	1 if person <i>i</i> is part of a couple with dependent children at time <i>t</i> ; 0 otherwise	Person is single at time <i>t</i>
Parent unemployment	1 if both parents of person <i>i</i> were not in paid employment when person <i>i</i> was 14; 0 otherwise	At least one of person's parents were in paid employment when 14
Previous unemployment	1 if person <i>i</i> did not have a job anytime in the previous 12 months at time <i>t</i> ; 0 otherwise	Person had a job some time in last 12 months
Social capital	Social capital/networks value for person <i>i</i> at time <i>t-1</i> . This was calculated through a principal component analysis of responses to 9 questions from HILDA survey	N/A
Regional unemployment rate	Log of the unemployment rate of the region (CFER) person <i>i</i> is resident in at time <i>t</i>	N/A
2009	1 if period is time 2 (2009), 0 otherwise	Year 1 (2008)
2010	1 if period is time 3 (2010), 0 otherwise	Year 1 (2008)
2011	1 if period is time 4 (2011), 0 otherwise	Year 1 (2008)
2012	1 if period is time 5 (2012), 0 otherwise	Year 1 (2008)



**Table 1** (continued)

Variable	Description	Reference variable
2013	1 if period is time 6 (2013), 0 otherwise	Year 1 (2008)
2014	1 if period is time 7 (2014), 0 otherwise	Year 1 (2008)
2015	1 if period is time 8 (2015), 0 otherwise	Year 1 (2008)

**Table 2** Regression analysis results. Likelihood of being underemployed compared to being fully employed.

	Men	Women
Intercept	−4.917***	−3.235***
Age 15 to 24	2.043***	1.073***
Age 55 to 64	0.175	−0.181*
Age 65 plus	−0.096	−0.350
Poor health	0.702***	0.301***
Born in a non-English-speaking country	0.738***	0.410***
Highest education—post-secondary	−0.555***	−0.084
Highest education—tertiary	−0.507***	−0.671***
Person in couple household with children	−0.255**	0.470***
Person in single-parent household	0.625***	0.727***
Person in couple household without children	−0.384***	−0.208**
Parent unemployment	0.334	0.689***
Previous unemployment	2.140	1.594
Social capital	−0.050***	−0.071***
Regional unemployment rate	10.17***	4.207*
2009	0.294*	0.067
2010	0.131	0.077
2011	0.336**	0.241**
2012	0.248*	0.065
2013	0.494***	0.067
2014	0.492***	0.329***
2015	0.471***	0.147

Source: HILDA Survey, DoE Small Area Labour Markets, authors' calculations

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Women between 55 and 64 years are more likely to be fully employed than underemployed or unemployed than those in the reference age group. Meanwhile, men and women over 65 years are more likely to be fully employed than unemployed.

A person with a long-term health condition is significantly more likely to have their available labour underutilised rather than be fully employed, regardless of gender. Command of the English language affects a woman's ability to be fully employed more than a man. A woman born in a non-English-speaking country is more likely to be underemployed, unemployed or marginally attached to the labour force than fully employed, compared to women born in English-speaking countries. However, for men, being born in a non-English-speaking country only significantly increases their likelihood of being underemployed rather than fully employed; it does not significantly affect the possibility of being unemployed or marginally attached instead of fully employed.

Education level also has a gender bias on a person's ability to be fully employed. Men with a post-school qualification are more likely to be fully employed than in a

**Table 3** Regression analysis results. Likelihood of being unemployed compared to being fully employed.

	Men	Women
Intercept	−5.019***	−4.638***
Age 15 to 24	1.458***	1.346***
Age 55 to 64	−0.160	−0.467***
Age 65 plus	−1.671***	−1.457***
Poor health	0.459***	0.430***
Born in a non-English-speaking country	0.163	0.348**
Highest education—post-secondary	−0.410***	0.079
Highest education—tertiary	−0.297**	−0.679***
Person in couple household with children	−0.462***	−0.382***
Person in single-parent household	0.144	0.212
Person in couple household without children	−0.470***	−0.282*
Parent unemployment	0.853***	0.746***
Previous unemployment	20.076	19.231
Social capital	−0.081***	−0.091***
Regional unemployment rate	12.96***	1.534
2009	0.105	0.088
2010	0.140	0.326*
2011	0.156	0.166
2012	0.408**	0.177
2013	0.252	0.308*
2014	0.153	0.249
2015	0.220	0.380*

Source: HILDA Survey, DoE Small Area Labour Markets, authors' calculations

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

state of labour underutilisation compared to men without a post-school qualification. However, women with a post-school qualification only increase their chances of being fully employed rather than marginally attached to the labour force, but it has no impact on their ability to be fully employed instead of underemployed or unemployed. On the other hand, a tertiary education significantly improves both cohorts' likelihood to be fully employed rather than underutilised, with this increasing a woman's odds much more than a man's across the board.

A person's gender significantly impacts their ability to be fully employed if they are in a couple relationship with children. It seems the traditional roles of men and women remain strong. Men in these relationships are more likely to be fully employed than underutilised, compared to single men, but women in these relationships are more likely to be underemployed or marginally attached to the labour force than fully employed, compared to single women. Interestingly, women in these relationships are more likely to be fully employed than unemployed compared to single women. This reflects those traditional relationships where men are the primary income earners, and women work part-time or not

**Table 4** Regression analysis results. Likelihood of being marginally attached compared to being fully employed.

	Men	Women
Intercept	−5.000***	−4.248***
Age 15 to 24	1.594***	0.850***
Age 55 to 64	0.763***	0.484***
Age 65 plus	1.799***	1.274***
Poor health	0.980***	0.716***
Born in a non-English-speaking country	0.014	0.333**
Highest education—post-secondary	−0.482***	−0.367***
Highest education—tertiary	−0.599***	−0.730***
Person in couple household with children	−0.230*	0.421***
Person in single-parent household	0.519**	0.611***
Person in couple household without children	−0.502***	−0.218*
Parent unemployment	0.350	0.611**
Previous unemployment	21.124	20.353
Social capital	−0.069***	−0.074***
Regional unemployment rate	1.195	−1.460
2009	0.281	0.063
2010	0.420*	0.178
2011	0.449**	0.227
2012	0.583***	0.163
2013	0.732***	0.200
2014	0.387*	0.167
2015	0.191	0.005

Source: HILDA Survey, DoE Small Area Labour Markets, authors' calculations

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

at all. The fact that women in these relationships are more likely to be underemployed than fully employed reflects their willingness to take part-time jobs, perhaps to fulfil their home and caring duties outside this paid employment. Similarly, the fact that women in these relationships are more likely to be marginally attached to the labour force than fully employed, yet fully employed rather than unemployed, also reflects these women's situation. Women in these relationships who do not have paid employment are generally supported financially and have things to fill in their time, so they do not need to look for work actively yet would take on work if available.

There is no gender bias for single parents, with both men and women more likely to be underemployed or marginally attached to the labour force than fully employed, compared to single people. There is no significant relationship between being fully employed and unemployed for single parents. Similarly, there is no gender bias for people in couple relationships without children. In these relationships, both men and

women are more likely to be fully employed than underutilised, with men having a more substantial likelihood across the board.

Women are generally more influenced by their parents' employment situation when they were children than men. Women whose parents were not in paid employment when they were 14 are more likely to have their available labour underutilised than those with at least one parent in paid work. However, there is only a significant relationship for men in the same situation in being unemployed rather than fully employed.

The strength of a person's social capital and networks positively influences them being fully employed rather than underemployed, unemployed or marginally attached to the labour force. This is the case for both men and women, with women having slightly stronger odds of full employment given their social capital.

The local labour market a man lives in has a more substantial influence on their chances of being fully employed than a woman. The higher a region's unemployment rate, the more opportunity a man has of being underemployed or unemployed, while there is a much slighter chance of women being underemployed only. A region's unemployment rate has no impact on whether a man or woman is marginally attached to the labour force rather than fully employed.

The macroeconomic effects of the Global Financial Crisis hit men harder relative to women in terms of their ability to find and maintain full employment. As the first effects were felt nationally in late 2008, men had lower unemployment and underemployment rates than women. Still, these advantages were eroded mainly in terms of unemployment, and the gap narrowed in terms of underemployment. The same was true of HILDA respondents, with fully employed men as a proportion of those in or wanting work (including marginally attached men) falling from 87 per cent in 2008 to 81 per cent in 2015, while for women, it fell from 78 per cent to 74 per cent. Further, the groups of men and women alternated in which cohort had a higher unemployment rate in the ensuing years. The underemployment rate among respondents rose by three percentage points for men, over the eight years, compared to two for women.

This reflection of the national situation is also evident in the impact the different years had on the ability of men and women to be fully employed relative to underemployed. With only one exception, through the seven years following 2008, men were more likely to be underemployed than fully employed, while this was only true in two years for women. Further, men were significantly more likely to be marginally attached to the labour force than fully employed in all but two of the ensuing years after 2008, whereas in no years was this significant for women. With regard to unemployment, women showed a slight tendency to be unemployed rather than fully employed in 3 of the years after 2008, while men only showed this once.

## 4 Discussion

This paper has sought to develop an analysis of the circumstances associated with labour underutilisation between men and women in Australia in the immediate aftermath of the Global Financial Crisis. Specifically, the paper uses available data

from waves 8 to 15 of the Household, Income and Labour Dynamics in Australia (HILDA) survey and small area labour statistics. It undertakes an analysis of the differences between men and women in the likelihood of being underutilised in one of three forms of labour underutilisation (underemployment, unemployment and marginal labour force attachment) relative to being adequately employed.

Considering the analysis undertaken in this paper, it is important to recognise that the identified outcomes and patterns have several potential limitations. Firstly, it is recognised that the paper does not seek to identify causal relationships. Instead, the analysis has identified associations between a range of independent variables net of other factors in the model and the dependent variable of interest, namely labour underutilisation. Moreover, while the independent variables covered a wide range of possible factors that might be hypothesised to impact underutilisation, in some cases, the indicators only provided broad proxies. Additionally, it may also be the case that several possible associations have not been accounted for due to the inability to identify appropriate data.

These caveats aside, the research presented here provides insights into the issues surrounding labour underutilisation for men and women. Given the established literature dealing with labour underutilisation, it is not surprising that several individual characteristics such as formal higher education and health status are implicated in the employment outcomes for both men and women. That is, for both men and women, factors such as personal capabilities measured by higher levels of education or the absence of severe health issues are associated with a person's ability to successfully engage in the labour market—not be underutilised—albeit with differing levels of influence. Other factors measuring the broader social context within which a person finds themselves are also influential across men and women. One such example is the employment history of parents. Regardless of gender, individuals who grew up in job-poor families were more likely to be unemployed, reflecting the potential impacts of intergenerational transfers of disadvantage discussed by authors such as Berloff et al. (2016) and identified in the earlier Australian research by Baum and Mitchell (2010a). The impact of social capital was also equally important across men and women in the sample. Using a proxy measurement of an individual's level of social capital, the analysis found that regardless of gender, higher levels of social capital were associated with a lower likelihood of underutilisation.

Over and above the factors that have similar impacts across men and women, several noteworthy differences were also identified in the analysis. Several studies have recognised the importance of regional labour market performance on employment outcomes for individuals. There is clear evidence presented here that men are more likely to be impacted by weakness in the local labour market than women, regardless of other factors. Men were more likely to be underemployed or unemployed as the level of unemployment in the local region increased. One explanation for this outcome may be that during the economic downturn following the Global Financial Crisis, men were more likely to find themselves unemployed or underemployed due to the types of jobs impacted by the downturn (Borland 2009). As these jobs are likely to have a particular spatial pattern, the impact of the regional labour market performance indicator may be accounting for these patterns.

Throughout much of the literature, it is often considered that gendered employment outcomes are in part a reflection of life cycle choices and constraints, particularly in the context of child care and through broader gender ideologies (Besamusca et al. 2015; Crompton and Harris 1998; Steiber and Haas 2012). In line with the previous Australian research by Baum and Mitchell (2010a), the analysis undertaken in this paper found that family responsibilities may be influencing women's engagement in different labour market outcomes with the presence of children within a couple-only household is associated with a higher likelihood that women find themselves either be underemployed or being marginally attached to the labour force. The opposite is found concerning couple-only households, where both men and women are significantly less likely to be in a state of underutilisation. The presence of children in a single-parent household raises the likelihood that both men and women would be underemployed or marginally attached to the labour force, suggesting that the need to provide childcare is impacting labour market outcomes. The finding that the need to provide child care is impacting employment outcomes is at odds with several other existing studies that report no such association (Cam 2014; Rodríguez Hernández 2021) and, especially concerning the impact of women in couple households, maybe a function of how policy in different countries enable or hinder women's engagement in the labour market (Signorelli et al. 2012).

The final noteworthy finding from the analysis relates to the last research question posed for this paper—the impact of the broader macroeconomy over time. Again, men were more likely to be negatively impacted by more general macroeconomic conditions (measured by year) than women, especially in terms of being underemployed or marginal to the labour market. It also appeared that men were more likely to be negatively impacted across more and more extended periods. For the years 2009 and 2011–2015, men were more likely to be underemployed than fully employed than the beginning of the GFC (2008) and were more likely to be marginally attached to the labour market during the years 2010–2014. One possible explanation for these patterns is that overall economic conditions following the GFC were less in favour of men than women. Hence, men were more likely to face underemployment as hours were cut or where they reduced their participation in the labour market (become marginal to the labour force) (Plumb, Baker and Spence 2010). In addition, these patterns were also likely to be explained by the uneven impacts of government fiscal policy, which, when wound back following an initial increase at the start of the GFC, had differing effects on employment outcomes.

If one of the reasons for analysing the drivers of individual labour underutilisation is to contribute to debates around policy, the findings of this paper provide a valuable addition to the labour market evidence base. The impact of individual-level characteristics on underutilisation is evidence of the need to progress the employment capacity of an individual through place neutral approaches including skills training. This has been a focus of a substantial amount of Australian labour market policy in the past. However, as pointed out elsewhere (Baum et al. 2008), a focus on these people-based or place-based neutral policies can only be seen as a necessary but not sufficient condition towards improving labour market outcomes. An emphasis on the

strength and performance of local labour markets through place-based policies will provide demand-side approaches that complement policies targeting factors such as skill improvement. The final take-home message from this research relates to the responsibility of governments to act as an enabler for the inclusion of individuals into all aspects of society, including the paid labour market (Signorelli et al. 2012). While there is significant policy discussion about individuals taking more responsibility for their own employment, as has been illustrated here and elsewhere (Baum et al. 2008), governments must actively pursue policy approaches and programs that ensure positive labour market outcomes for all.

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**Conflict of interest** On behalf of all my coauthor, I declare that we do not have any conflict of interest with any person or any institution.

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