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Working More Than Desired: Determinants of Over-Employment in Australia

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Abstract

Over-employment represents an important dimension of labour market mismatch. While considerable research has examined under-employment, far less attention has been given to the determinants of excess working hours. This paper examines over-employment in Australia using recent waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The results indicate that over-employment is strongly associated with higher earners, workers in managerial and professional occupations, and workers employed on a non-casual basis, while high levels of working-time flexibility reduce the likelihood of over-employment. Women also exhibit significantly higher probabilities of over-employment.

1. Introduction

Concerns regarding the gap between actual and preferred working hours (working-time mismatch) have long been a feature of research on labour market functions, processes and outcomes. Much of this literature has focused on the state of underemployment, in which workers prefer additional hours, although a smaller but important body of research examines over-employment, in which workers prefer fewer hours. The number of workers counted as over-employed is not insignificant. The International Labour Organisation reports that globally, approximately 20 per cent of employed people work more hours than they desire (Messenger et al., 2022), while estimates across individual countries vary with around one-third of all workers in Britain (Böheim & Taylor, 2003), between 30 and 40 per cent in the United States (Reynolds & Aletraris, 2010), around 30 per cent in European union countries (Parent-Thirion et al., 2016) and 30 per cent in Australia (Girtz, 2021; Reynolds & Aletraris, 2006; Wooden et al., 2009).

While over-employment has been described as a 'luxury problem' (Hiemer & Andresen, 2020), meaning that only those who can afford to work less wish to do so, concerns about the negative impact of excessive hours have been persuasive. Within the literature, research has found that working more hours than desired is associated with issues including lower levels of job satisfaction (Angrave & Charlwood, 2015; Wooden et al., 2009; Wunder & Heineck, 2013), increased mistakes and workplace accidents (Dembe et al., 2005), poor physical or mental health (De Moortel, 2022; Kim et al., 2021) and poor work-life balance (Guimarães et al., 2025; Hsu et al., 2019).

Over-employment is best understood not simply as an individual preference mismatch, but as the outcome of structurally constrained choices within labour markets, workplaces and households. While standard labour supply models assume that workers can adjust hours in line with preferences, much of the over-employment literature challenges this assumption by showing that hours mismatches are often embedded in institutional arrangements, occupational cultures and household-level economic constraints (Böheim & Taylor, 2003; Golden & Gebreselassie, 2007; Wooden et al., 2009; Wunder & Heineck, 2013). From this perspective, workers may report a desire to reduce their hours while remaining unable, or unwilling, to do so because shorter hours would involve income loss, weaker career prospects, reduced promotion opportunities, or conflict with prevailing workplace norms (Drago et al., 2009; Golden & Gebreselassie, 2007; Otterbach, 2010).

A central explanation focuses on the role of occupational and organisational expectations. In many professional, managerial and higher-status occupations, long working hours operate as both a formal and informal marker of commitment. Workers may face strong incentives to maintain hours that exceed their preferred level, not because these hours maximise their wellbeing, but because they are tied to career progression, performance assessment and workplace legitimacy. This argument is closely tied with research that differentiates between long-hour "volunteers" and long-hour "conscripts", where some workers, because of occupational and workplace norms, are engaged in long hours despite preferring shorter hours (Drago et al., 2009). It is also associated with the broader organisational research illustrating that the "ideal worker" is viewed as someone who is highly available, has a strong attachment to paid work, and is unencumbered by outside commitments (Acker, 1990; Blair-Loy, 2005; Reid, 2015; Williams, 2001) Under these conditions, rather than simply reflecting excess work by individuals, over-employment signals how organisational cultures convert long hours into a measure of dedication, productivity and professional worth.

Empirical research supports this interpretation by linking over-employment to occupational status, job type and workplace reward structures. Evidence from several studies shows that over-employment is more common for workers in non-manual, professional and managerial occupations, and for workers exposed to bonus schemes, seniority structures or career ladder incentives (Böheim & Taylor, 2003; Drago et al., 2009; Dvouletý, 2023; Golden & Gebreselassie, 2007; Kanji & Samuel, 2017). Golden and Gebreselassie (2007), for example, show that over-employment may persist where labour markets under-provide shorter-hours jobs and employers face costs in adjusting hours downward toward workers' preferences. Drago et al. (2009) similarly, show that ideal-worker norms play a major role in explaining why some long-hours workers are "conscripts" rather than volunteers. These findings suggest that over-employment among workers is not random. Instead, it is more likely to be found in labour-market positions where hours worked represent symbolic and material value. Consequently, over-employment can be interpreted as a product of labour-market power relations whereby workers may formally "choose" long hours, but their choices are impacted by the penalties attached to refusing them.

Beyond occupational and workplace norms, a second lens examines how income and household financial constraints impact individual workers' decision-making. From this viewpoint, over-employment can arise when workers would prefer to spend more time with their families but are unable to reduce their work hours without adversely affecting income or financial security (Drago et al., 2009; Golden & Gebreselassie, 2007; Otterbach, 2010). This position is likely to be enhanced in situations where households face fixed, ongoing costs, such as mortgage or other debt repayments and ongoing household expenses. Viewed through this lens, over-employment reflects a budget constraint in which individuals may prefer fewer hours but deem the potential loss of income unmanageable. This interpretation shifts attention away from preferences as freely chosen individual attributes and toward the material conditions under which preferences are formed and constrained.

Empirically, the hypothesised relationship between income and over-employment is not straightforward. Some studies find that lower-income workers are more likely to be over-employed, consistent with the argument that decisions are driven by economic necessity and limited control over working time (Allan et al., 2016; Böheim & Taylor, 2003). However, another strand of research finds that higher rates of over-employment are seen among higher-income or more advantaged workers, especially those in professional and managerial positions (Girtz, 2021; Golden & Gebreselassie, 2007; Kanji & Samuel, 2017). While this is possibly driven by differences in the measurement and conceptualisation of the income variable, the contradictory patterns suggest that over-employment may have different social bases across the labour market. Among lower-income workers, over-employment may be driven primarily by financial necessity and limited flexibility. For higher-income individuals, over-employment may be less about constraints on income and earnings and more about career advancement incentives or other occupational and workplace norms (Böheim & Taylor, 2003; Cha, 2013; Drago et al., 2005; Golden & Gebreselassie, 2007; Williams et al., 2013).

In addition to occupation, workplace norms, and financial drivers, dynamics within household settings suggest a further conceptual lens for explaining over-employment. Working-time preferences are not formed by individuals in isolation, but within households where income needs, care responsibilities and domestic labour are negotiated (Reynolds, 2014; Wunder & Heineck, 2013). For dual-earner households, there may be a need to balance work-hour demands with demands outside the work

environment, such as childcare, schooling, and other household tasks. Although long hours may be seen as undesirable, reducing hours may affect household income, disrupt the division of paid and unpaid labour, or shift pressure onto another household member (Reynolds & Aletraris, 2007). Conversely, in single-earner, over-employment may be concentrated in one partner, whose longer hours compensate for the other partner's reduced labour-market participation (Kanji & Samuel, 2017). This highlights the need to conceptualise over-employment as both a household-level phenomenon and an individual labour-market outcome.

Gender norms and expectations may also help explain over-employment. For males, over-employment may reflect gendered norms around work and expectations of economic provision, while for women, over-employment may present in a different context, whereby long hours of paid work may be layered on top of a disproportionate share of unpaid care and domestic labour (Ervin et al., 2022; Gerson & Jacobs, 2004; Kanji & Samuel, 2017; Seedat & Rondon, 2021). For women, the consequences of over-employment may therefore be intensified by the "double burden" of paid and unpaid work. These patterns imply that over-employment is gendered not only in its incidence, but also in its causes and consequences (Girtz, 2021; Kanji & Samuel, 2017).

The empirical work around household structure and gender has examined how the incidence of over-employment varies across different arrangements. Supporting the conceptual argument, a number of studies have found that when work activities impede an individual's ability to meet the demands of family life, the likelihood of over-employment increases (Reynolds & Aletraris, 2007; Wunder & Heineck, 2013). While some outcomes were independent of gender, others have found important gendered differences. For example, (Girtz, 2021) found that males are more likely than females to be over-employed, although the difference disappears when occupation effects are considered, while Kanji and Samuel (2017) found that male breadwinners are more likely to be over-employed, especially if they are the sole household earner. Moreover, they report that the factor driving the desire to reduce work hours is the male breadwinner's wish to spend more time with family, suggesting that over-employment is about juggling work-life balance.

From the existing literature, it is clear that over-employment should be analysed as a multidimensional labour-market problem, adopting approaches that consider not only individual preferences but also the interactions among workplace norms, occupational reward systems, income constraints, household arrangements, and gendered divisions of labour. This has important implications for empirical analysis. Models of over-employment should include not only individual demographic characteristics, but also occupation, industry, earnings, employment status, household structure, caring responsibilities and gender. Such an approach allows over-employment to be understood as a socially patterned mismatch between desired and actual hours, rather than as a simple failure of individual choice or time management.

Despite growing interest in working-time mismatch, relatively little recent Australian research has examined the determinants of over-employment. This paper adds to this research gap. Using data from the Household Income and Labour Dynamics Australia (HILDA) survey, the paper presents an analysis of the determinants of over-employment in Australia. The material presented focuses on the post-COVID period, drawing on pooled data to examine the prevalence and correlates of working-time mismatch.

2. Data and Measurement

2.1 Data Source

This paper aims to model the likelihood of over-employment in Australia using a range of explanatory variables. To do so, the paper utilises data drawn from the Household, Income and Labour Dynamics in Australia (HILDA) survey. The HILDA survey is a representative longitudinal study, which has been conducted annually since 2001. Each wave of the survey collects details on labour market participation, working hours, income, education, household composition, and a wide range of socioeconomic characteristics (Wooden et al., 2024).

To undertake the analysis, a dataset was constructed, drawing data from waves 20 to 23 (2020 to 2023) of the survey. In constructing the data set, the focus was on respondents aged 18 to 64 in any wave who were employed at the time of the survey. Individuals outside this age range were excluded to focus on the core working-age population. From the initial selection, observations were excluded if information on actual or preferred weekly working hours was missing. Additionally, observations with missing values for key explanatory variables, including demographic characteristics and job attributes, were also excluded. The final dataset consisted of a pooled panel of 31,529 employed individuals across multiple survey waves. It included variables capturing over-employment, job characteristics, household structure, and demographic characteristics (Table 1).

2.2 Measuring Over-Employment

The dependent variable in this paper is over-employment, defined as individuals reporting working more hours than they would prefer (Table 1). The HILDA survey provides information on both actual and preferred weekly working hours. Actual hours refer to the total number of hours worked per week across all jobs, while preferred hours are based on responses to questions asking respondents if they would prefer to work fewer, the same, or more hours, and if so, how many hours they would ideally work. Using these responses, a measure of working-time mismatch was constructed. This measure was operationalised as the difference between actual and preferred hours:

$$Mismatch_{it} = ActualHours_{it} - PreferredHours_{it}$$

Respondents were considered over-employed if their weekly working hours exceeded their preferred hours by 5 or more hours. In adopting this cut-off, the analysis aligns with the working-time mismatch literature, where similar 5-hour thresholds or bands have been used to identify substantial preferred reductions in working time and to distinguish meaningful degrees of over-employment (Breunig et al., 2015; Nätti et al., 2006; Otterbach et al., 2016).

Table 1 Variable Description

Variable	Description	Measurement
Over-employed (≥5 hours)	Indicator of working-time mismatch	1 if actual hours ≥5 above preferred; 0 otherwise
Age group	Age categories	18–29 (ref), 30–44, 45–59, 60+
Sex	Biological sex	1 = male, 2 = female
Education group	Highest qualification	Bachelor (ref), Postgraduate, Cert/Diploma, Year 12 or less
Occupation group	Major occupation categories	Managers & Professionals (ref), Associate/Trades, Clerical, Sales, Manual
Industry group	Broad industry classification	Public & Social Services (ref), Knowledge & Finance, Retail & Hospitality, Construction & Mining, Manufacturing & Transport, Agriculture
Casual employment	Employment contract type	1 = casual, 0 = non-casual
Log weekly earnings (z)	Standardised log weekly earnings	Standardised log of weekly earnings
Employer tenure	Years with current employer	Continuous (years)
Working-time flexibility	Perceived flexibility over working times	Low flexibility (ref), Moderate flexibility, High flexibility
Job security	Perceived job security	Low (ref), Neutral, High
Firm size	Firm size of employer	Small (<20), Medium (20–99), Large (100+)
Sector of employment	Public sector	1 = public, 0 = private
Relationship status	Partnered	1 = partnered, 0 = not partnered
Children under 5	Presence of dependent children	1 = yes, 0 = no
Wave	Survey wave fixed effects	Categorical (waves)

2.3 Explanatory Variables

Labour market structure

The analysis incorporates a range of explanatory variables capturing respondents' labour market position and employment characteristics. Occupation is measured as a categorical variable consisting of five groups: managers and professionals; associate professionals and trades; clerical and administrative; sales and services; and manual and labour occupations. These categories can be considered proxies for differences in work

intensity, organisational expectations, career structures, and job autonomy, all of which may shape the likelihood of over-employment.

The industry of employment is measured using six categories: public and social services; knowledge and finance; retail and hospitality; construction and mining; manufacturing and transport; and agriculture. Industry context may influence over-employment through differences in overtime practices, labour demand, workplace cultures, and scheduling arrangements.

An individual's employment arrangement is included in the analysis as a dichotomous variable distinguishing between casual and non-casual employment. Non-casual employment may be associated with stronger organisational attachment, more rigid working-time expectations, and reduced capacity to adjust hours worked. The period of employment in the current job is included to account for the impact of employment tenure on over-employment. A longer tenure may reflect stronger workplace attachment and career progression pathways that constrain workers' ability to reduce their working hours.

A measure of income (log of weekly earnings) is included in the analysis. Given the existing research, the a priori direction of association with over-employment is unclear and could be either positive, reflecting financial incentives and occupational career structures associated with high-income workers, or negative, reflecting the possible impact of financial constraints.

Organisational and job-quality conditions

To capture organisational and workplace conditions, the analysis incorporates several additional measures relating to job quality and working-time autonomy. A measure of working-time flexibility was constructed from a survey item that asked respondents to indicate, on a 7-point scale, whether they agreed or disagreed with a statement about the flexibility of their work hours. The responses were recoded into a categorical variable indicating individuals with low, moderate, or high flexibility. Greater flexibility may give workers greater control over scheduling and working hours, thereby reducing the likelihood of a working-time mismatch.

Job security was measured using a survey item capturing respondents' perceived employment security, based on their agreement with the statement that they have a secure future in their job. Responses were measured on a 7-point scale, which was subsequently recoded into three categories: low job security, comprising respondents who disagreed with the statement; neutral job security, comprising respondents who selected the midpoint of the scale; and high job security, comprising respondents who agreed that their future in the job was secure.

A measure accounting for firm size is included as a categorical variable. Each survey respondent was asked about the number of people employed at their place of work or organisation. The responses to this question were recoded into one of three categories representing small firms (<20 employees), medium firms (20-99 employees), and large firms (100+ employees). The inclusion of this variable accounts for differences in managerial practices, organisational expectations and flexibility across firm sizes, which, in turn, may influence the likelihood of over-employment.

In addition, a dichotomous variable indicating public-sector employment is included to capture potential differences in organisational practices, employment protections, and working-time regulation between public- and private-sector workplaces.

Household structure

The analysis incorporates variables that account for household structure, family circumstances, and gender. A dichotomous variable indicating partnership status is included, indicating whether respondents are currently partnered. Gender is measured using a dichotomous variable distinguishing between male and female respondents. The presence of young children in the household is measured using a dichotomous variable indicating whether respondents have at least one dependent child under 5 years old. Taken together, these variables may be expected to influence the likelihood of over-employment through household financial and time-use constraints and expectations around gender roles.

2.4 Control variables

Several control variables are included in the analysis. Age is included as a categorical variable (18–29 years, 30–44 years, 45–59 years, and 60 years and over) to capture differences in labour market decisions. The impact of education level or formal human capital on the likelihood of over-employment is accounted for by including a variable measuring the highest level of educational attainment, coded as Year 12 or less, certificate or diploma, bachelor degree, or postgraduate degree. Finally, as the data pool observations across four survey waves, dummy variables for survey waves are included to control for period-specific labour market conditions and other macroeconomic effects that influence all respondents.

3. Modelling Strategy

The empirical analysis models the probability that an individual $\boldsymbol{i}$in a year $\boldsymbol{t}$ is over-employed as a function of demographic characteristics, job attributes, and household factors. Given the dichotomous nature of the dependent variable, the analysis employs pooled logistic regression models with wave fixed effects.

The baseline specification is expressed as:

$$P(Overemployed_{it} = 1) = logit^{-1}(\alpha + \beta X_{it} + \gamma J_{it} + \delta H_{it} + \lambda_t)$$

where:

- $\boldsymbol{Overemployed_{it}}$ is a dichotomous indicator equal to 1 if the respondent works at least five hours more than their preferred weekly hours;
- $\boldsymbol{X_{it}}$ represents demographic characteristics including age, gender, and education;
- $\boldsymbol{J_{it}}$ represents job-related characteristics including occupation, industry, casual employment status, employer tenure, earnings, and remote work arrangements;
- $\boldsymbol{H_{it}}$ represents household characteristics including partnership status, and the presence of children; and
- $\boldsymbol{\lambda_t}$ represents wave fixed effects.

Wave fixed effects are included to control for differences in labour market conditions and broader macroeconomic circumstances across the waves. Standard errors are clustered at the individual level to account for repeated observations of respondents across waves.

The analysis estimates four nested logistic regression models. Model 1 includes demographic characteristics only, comprising age, gender and education, together with year fixed effects. Model 2 adds core job characteristics, including occupation, industry, casual employment status, earnings and employer tenure. Model 3 adds organisational and job-quality characteristics, including firm size, public/private-sector location, perceived job security, and working-time flexibility. Model 4 adds household structure variables, including partnership status and the presence of dependent children. This nested structure allows the analysis to assess how the estimated associations between demographic characteristics and over-employment change as labour-market position, organisational context and household circumstances are progressively introduced.

In interpreting the results, log-odds from the pooled logistic regression models are used in the first instance. These are supplemented by the inclusion of average marginal effects (AMEs) derived from the estimated models. The AMEs are presented as percentage-point changes in the probability of over-employment and are calculated only for significant variables.

4. Results

4.1 Descriptive Statistics

Table 2 presents descriptive data for the sample. Of the total sample, 22.5 per cent were categorised as being over-employed. Among the sample, individuals aged 30–44 years formed the largest age group, accounting for 36.1 per cent, followed by those aged 45–59 years and 18–29 years, each representing just over one-quarter of respondents. Females (53.4 per cent) comprised a slightly larger share of the sample than males (46.6 per cent). The level of educational attainment was relatively high, with 17.8 per cent holding a postgraduate qualification, 22.4 per cent holding a bachelor's degree, 32.6 per cent holding a certificate or diploma, and 27.2 per cent completing Year 12 or less.

Considering the data on labour-market position, managers and professionals comprised the largest occupational group, with 41.0 per cent of the sample. Associate professionals and trades workers accounted for 17.6 per cent, followed by clerical and administrative workers (15.6 per cent), sales and services workers (13.4 per cent), and manual and labour workers (12.5 per cent). Public and social services were the dominant industry sector, accounting for 43.3 per cent of respondents. This was followed by knowledge and finance (18.1 per cent) and retail and hospitality (16.2 per cent). Most respondents were employed on a non-casual basis (83.8 per cent. The mean standardised log weekly earnings score was 0.099, while average employer tenure was 6.6 years, indicating variation in both earnings position and labour-market attachment.

The sample also varied across organisational and job-quality characteristics. Most respondents reported having high job security (70.2 per cent), and almost half worked in large firms. Private sector workers comprised 61.3 per cent of the sample. Household characteristics also varied: 34.1 per cent of respondents were partnered, and 46.4 per cent had dependent children under 15. This variation across demographic, employment, organisational and household domains provide the basis for assessing whether over-employment is shaped not only by individual characteristics, but also by labour-market position, workplace conditions and family circumstances.

Table 2 Descriptive Statistics

Variable	Category	n	Percent
Over-employed (>=5 hours, %)			22.5
Log weekly earnings (z)			
Employer tenure (years)			
Age group	18–29	5,060	27.3
	30–44	6,685	36.1
	45–59	5,103	27.5
	60+	1,682	9.1
Sex	Male	8,638	46.6
	Female	9,892	53.4
Education	Bachelor	4,144	22.4
	Postgraduate	3,302	17.8
	Cert/Diploma	6,044	32.6
	Year 12 or less	5,040	27.2
Occupation group	Associate Professionals / Trades	3,263	17.6
	Clerical & Administrative	2,887	15.6
	Managers & Professionals	7,592	41.0
	Manual & Labour	2,309	12.5
	Sales & Services	2,479	13.4
Industry group	Agriculture	209	1.1
	Construction & Mining	1,642	8.9
	Knowledge & Finance	3,355	18.1
	Manufacturing & Transport	2,297	12.4
	Public & Social Services	8,018	43.3
	Retail & Hospitality	3,009	16.2
Employment arrangements	Casual	3,002	16.2
	Non-casual	15,528	83.8
Job security	High security	13,000	70.2
	Low security	2,657	14.3
	Neutral	2,873	15.5
Working-time flexibility	High flexibility	8,699	46.9
	Low flexibility	6,959	37.6
	Neutral	2,872	15.5
Firm size	Large firm (100+)	8,833	47.7
	Medium firm (20–99)	5,547	29.9
	Small firm (<20)	4,150	22.4

Variable	Category	n	Percent
Sector of employment	Private sector	11,355	61.3
	Public sector	7,175	38.7
Partnered	No	12,219	65.9
	Yes	6,311	34.1
Children under 5	Has dependent children	3,003	16.2
	No dependent children	15,527	83.8
Survey year	2020	4,841	26.1
	2021	4,700	25.4
	2022	4,492	24.2
	2023	4,497	24.3

4.2 Pooled Logistic Regression Models

Tables 3-6 report the results for the pooled logistic regression models on the determinants of over-employment for the four models specified in Section 3.

Table 3 Model 1, Demographic predictors of over-employment

Variable group	Predictor	Coefficient	Clustered SE
	Intercept	-1.571 ***	0.075
Age groups	Age 30–44	0.533 ***	0.061
	Age 45–59	0.859 ***	0.064
	Age 60+	0.786 ***	0.085
Gender	Female	-0.037	0.045
Education	Postgraduate	0.220 **	0.067
	Cert/Diploma	-0.275 ***	0.061
	Year 12 or less	-0.567 ***	0.069
Survey wave	Wave 21	0.046	0.041
	Wave 22	0.005	0.047
	Wave 23	-0.071	0.048

Note: Logistic regression coefficients shown. • $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The demographic-only specification (Table 3) indicates significant variation in over-employment across age groups. Relative to the reference group (18-19 years), workers aged 30-44 years, 45–59 years, and 60 years and over were significantly more likely to experience over-employment. Gender was not statistically significant in this model. Education was significantly associated with over-employment, with more highly educated individuals more likely to experience it.

Once labour market structure variables were introduced in Model 2 (Table 4), the impact of age lessens, and education becomes non-significant. The effect of gender

becomes positive and highly significant, with females more likely than males to experience over-employment. This relationship remained stable across Models 3 and 4. The emergence of a gender effect following the inclusion of labour-market controls suggests that occupational and employment structures partially mediate underlying gender differences in working-time mismatch.

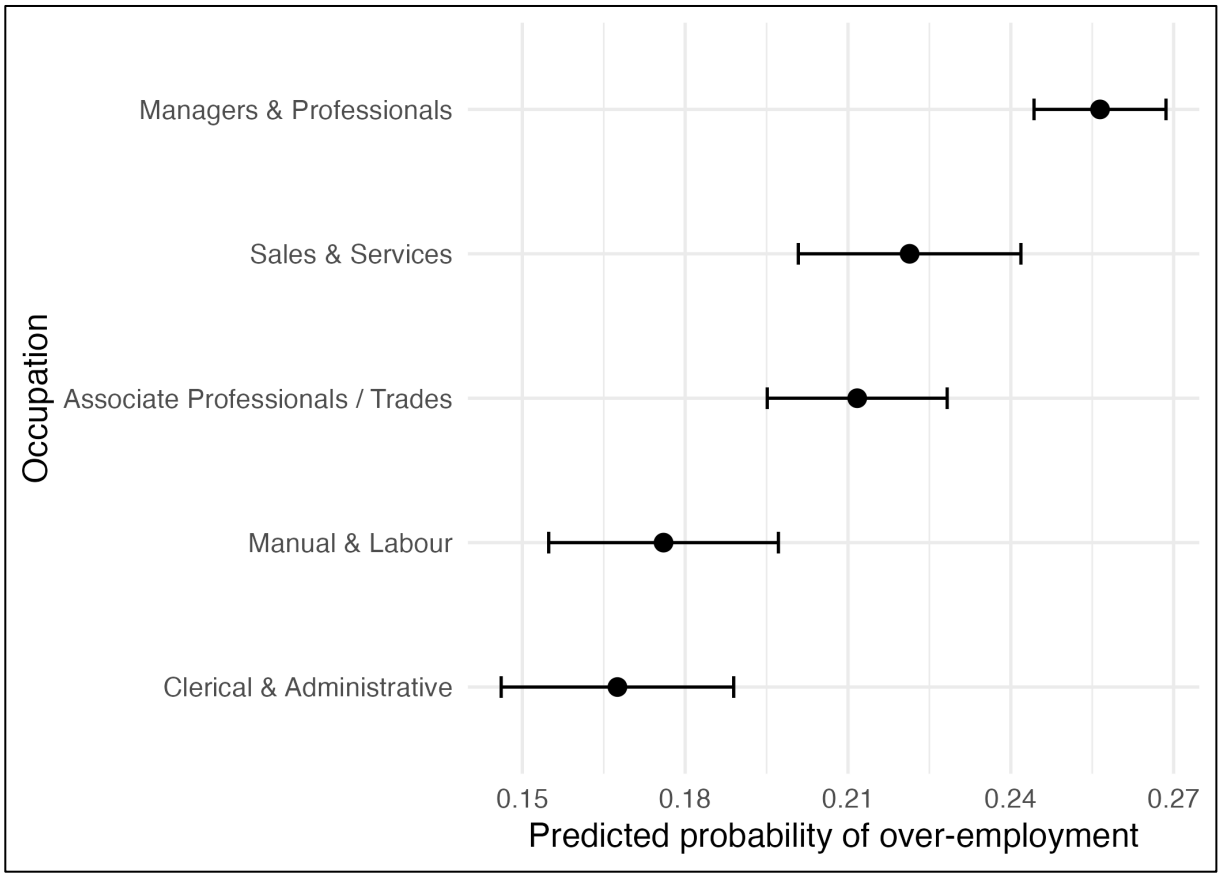
Table 4 also shows that variables reflecting labour market structure have significant effects on the probability of over-employment. Compared with managers and professionals, all other occupational groups exhibited significantly lower probabilities of over-employment. The strongest negative effects were observed among clerical and administrative workers and manual labourers. The significance of the occupation variables is illustrated in Figure 1, which presents the predicted probabilities of over-employment for each occupational group. Managers and professionals exhibited predicted probabilities of over-employment approaching 25 per cent, substantially higher than the probabilities observed among clerical and manual workers, which remained closer to 16–18 per cent.

Table 4 Model 2, Employment predictors of over-employment

Variable Group	Predictor	Coefficient	Clustered SE
	Intercept	-2.339***	0.115
Age groups	Age 30–44	0.098	0.063
	Age 45–59	0.385***	0.069
	Age 60+	0.562***	0.094
Gender	Female	0.373***	0.054
Education	Postgraduate	0.086	0.069
	Cert/Diploma	0.085	0.068
	Year 12 or less	-0.019	0.076
Survey wave	Wave 21	0.011	0.042
	Wave 22	0.035	0.049
	Wave 23	-0.111*	0.051
Occupational groups	Associate Professionals/Trades	-0.259***	0.065
	Clerical & Administrative	-0.550***	0.093
	Manual & Labour	-0.430***	0.092
	Sales & Services	-0.208**	0.077
Industry groups	Agriculture	0.589**	0.219
	Construction & Mining	0.059	0.096
	Knowledge & Finance	-0.005	0.064
	Manufacturing & Transport	0.169*	0.082
	Retail & Hospitality	0.293***	0.081
Employment arrangements	Non-casual employment	0.620***	0.087
Log weekly earnings (z)	Log weekly earnings	0.795***	0.041
Employer tenure	Length in years	-0.000	0.003

Note: Logistic regression coefficients shown. • $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure 1 Occupational Differences in the Predicted Probability of Over-Employment



In contrast to the occupational effects, industry differences were comparatively modest. Across all model specifications, respondents employed in agriculture had significantly higher probabilities of over-employment than the reference category (public and social services). Across the other categories, respondents employed in retail and hospitality, manufacturing, and transport also had higher probabilities of over-employment. No statistically significant differences were observed among respondents employed in construction and mining or in the knowledge and finance industries. Taken as a whole, the results on labour market structure variables suggest that while industry context matters, occupational position and organisational conditions exert a stronger influence on the likelihood of over-employment.

Employment arrangement and earnings were important predictors of over-employment. Workers engaged on a permanent basis were significantly more likely than those with casual employment contracts to experience over-employment across all model specifications. Similarly, income was strongly associated with an increased probability of over-employment. The coefficient for standardised log weekly earnings remained large and highly significant throughout the analysis, suggesting that workers in higher-income jobs are substantially more likely to work longer hours than they prefer.

Model 3 (Table 5) adds organisational and job-quality measures and reveals that workplace conditions play an important role in over-employment outcomes. Among

these variables, working-time flexibility exhibited the strongest relationship with over-employment. Those reporting higher levels of flexibility were significantly less likely to experience over-employment. This significant relationship between job flexibility and over-employment is reinforced in Figure 2, which presents the predicted probabilities of over-employment for each job flexibility group. The figure clearly shows that workers with high flexibility arrangements displayed markedly lower predicted probabilities of over-employment than workers reporting either low or moderate flexibility.

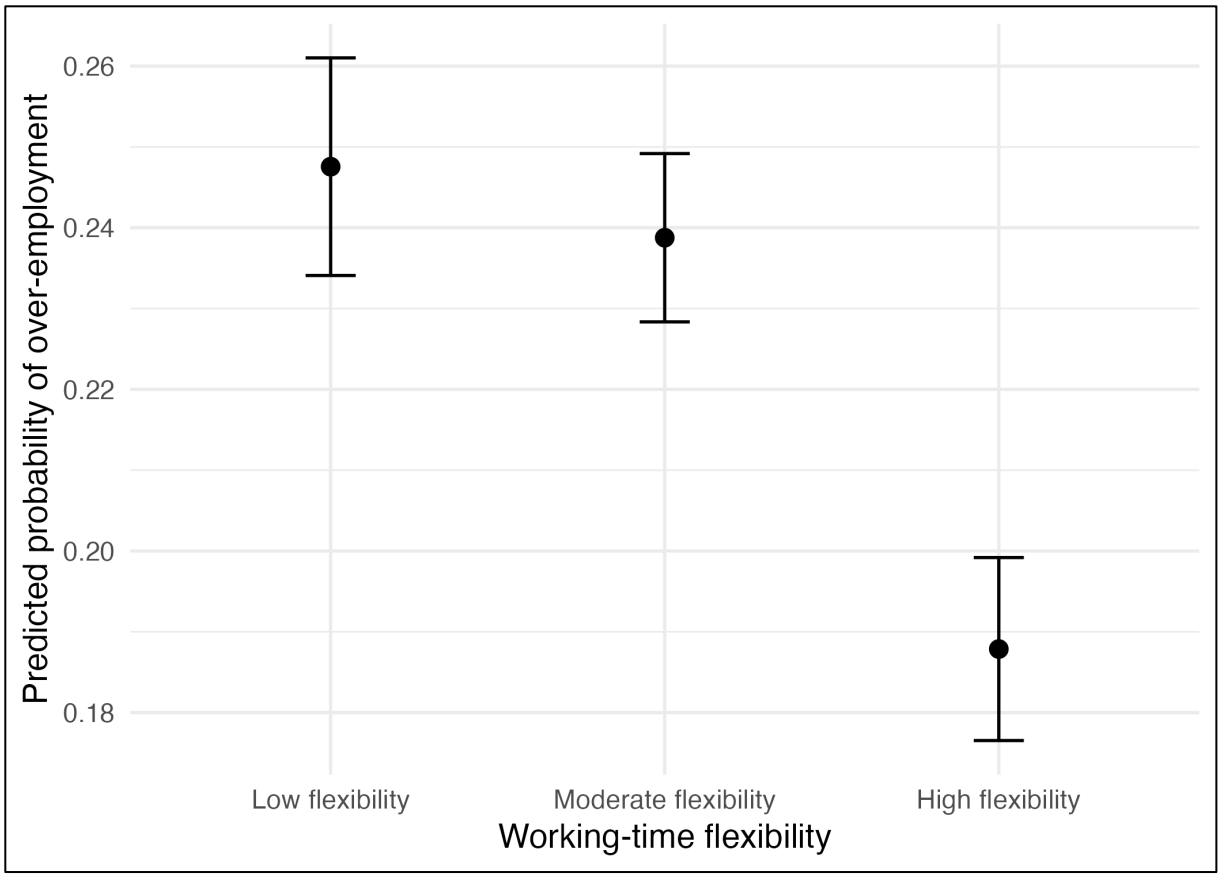
Table 5 Model 3, Job quality and workplace predictors of over-employment

Variable group	Predictor	Coefficient	Clustered SE
	Intercept	-2.532***	0.163
Age groups	Age 30–44	0.100	0.064
	Age 45–59	0.382***	0.070
	Age 60+	0.554***	0.095
Gender	Female	0.369***	0.054
Education	Postgraduate	0.076	0.069
	Cert/Diploma	0.072	0.068
	Year 12 or less	-0.024	0.076
Survey wave	Wave 21	0.009	0.042
	Wave 22	0.070	0.051
	Wave 23	-0.077	0.053
Occupational groups	Associate Professionals / Trades	-0.269***	0.065
	Clerical & Administrative	-0.578***	0.093
	Manual & Labour	-0.512***	0.093
	Sales & Services	-0.208**	0.078
Industry groups	Agriculture	0.465•	0.243
	Construction & Mining	-0.052	0.141
	Knowledge & Finance	-0.081	0.124
	Manufacturing & Transport	0.064	0.132
	Retail & Hospitality	0.191	0.132
Employment arrangements	Non-casual employment	0.646***	0.088
Log weekly earnings (z)	Log weekly earnings	0.834***	0.043
Employer tenure	Years with current employer	0.001	0.003
Working-time flexibility	Low flexibility	0.278***	0.049
	Neutral	0.189**	0.059

Variable group	Predictor	Coefficient	Clustered SE
Job security	Low job security	0.161**	0.062
	Neutral job security	0.136*	0.056
Firm size	Medium firm (20–99)	0.129**	0.046
	Small firm (<20)	0.143*	0.057
Sector of employment	Public sector	-0.098	0.119

Note: Logistic regression coefficients shown. • p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 2 Working-Time Flexibility and the Predicted Probability of Over-Employment



The variable accounting for job security was significantly associated with over-employment. For workers with low or neutral job security, the likelihood of over-employment was significantly higher than for workers with high job security. Similarly, workers employed in small- and medium-sized firms had a higher probability of over-employment than those working in large firms. These findings suggest that organisational constraints and labour market insecurity may limit workers' capacity to align actual and preferred working hours.

For workers employed in public sector jobs, the probability of over-employment was not significant once occupational and organisational controls were included in the models. This suggests that sectoral differences are largely explained by underlying workplace characteristics rather than sector membership itself.

Model 4 (Table 6) includes variables that account for household structure. The inclusion of these variables contributed relatively little additional explanatory power. Partnership status is positively associated with over-employment, but the effect is only marginally significant. By contrast, the presence of a child under five is not statistically significant. This suggests that household structure may play some role in shaping over-employment, but its effect is modest compared with other variables.

Table 6. Logistic regression model of over-employment with person-clustered standard errors

Variable group	Predictor	Coefficient	Clustered SE
	Intercept	-2.292***	0.167
Age groups	Age 30–44	0.105	0.066
	Age 45–59	0.399***	0.070
	Age 60+	0.553***	0.095
Gender	Female	0.365***	0.054
Education	Postgraduate	0.075	0.069
	Cert/Diploma	0.070	0.068
	Year 12 or less	-0.022	0.076
Survey wave	Wave 21	0.009	0.042
	Wave 22	0.070	0.051
	Wave 23	-0.075	0.053
Occupational groups	Associate Professionals / Trades	-0.268***	0.065
	Clerical & Administrative	-0.576***	0.093
	Manual & Labour	-0.511***	0.093
	Sales & Services	-0.208**	0.078
Industry groups	Agriculture	0.462•	0.242
	Construction & Mining	-0.055	0.141
	Knowledge & Finance	-0.083	0.124
	Manufacturing & Transport	0.062	0.132
	Retail & Hospitality	0.189	0.132
Employment arrangements	Non-casual employment	0.643***	0.088
Log weekly earnings (z)	Log weekly earnings	0.835***	0.043
Employer tenure	Years with current employer	0.001	0.003
Working-time flexibility	Moderate flexibility	-0.089	0.059
	High flexibility	-0.280***	0.049
Job security	Low job security	0.163**	0.062
	Neutral job security	0.137*	0.056
Firm size	Medium firm (20–99)	0.128**	0.046
	Small firm (<20)	0.143*	0.057
Sector of employment	Public sector	-0.102	0.119
Relationship status	Partnered	0.083•	0.049
Presence of dependent children	Children under 5	0.054	0.067

Note: Logistic regression coefficients shown. • $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Given the findings on household structure, further modelling (not reported) that included a dependent-child/gender interaction term was run to test whether the presence of young children influenced the relationship between gender and over-employment. Interaction terms between gender and the presence of children aged under 5 years were not statistically significant. This suggests that the higher probability of over-employment among women is not confined to periods of intensive childcare. Instead, the findings point toward broader structural and organisational pressures shaping gendered working-time mismatch.

To provide a more substantive interpretation of the final logistic regression model, Table 7 reports average marginal effects (AMEs) for the key explanatory variables. Overall, the AMEs reinforce the finding that over-employment is strongly shaped by labour market position, organisational conditions, and job quality characteristics.

Table 7 Key Average Marginal Effects from Final Logistic Model

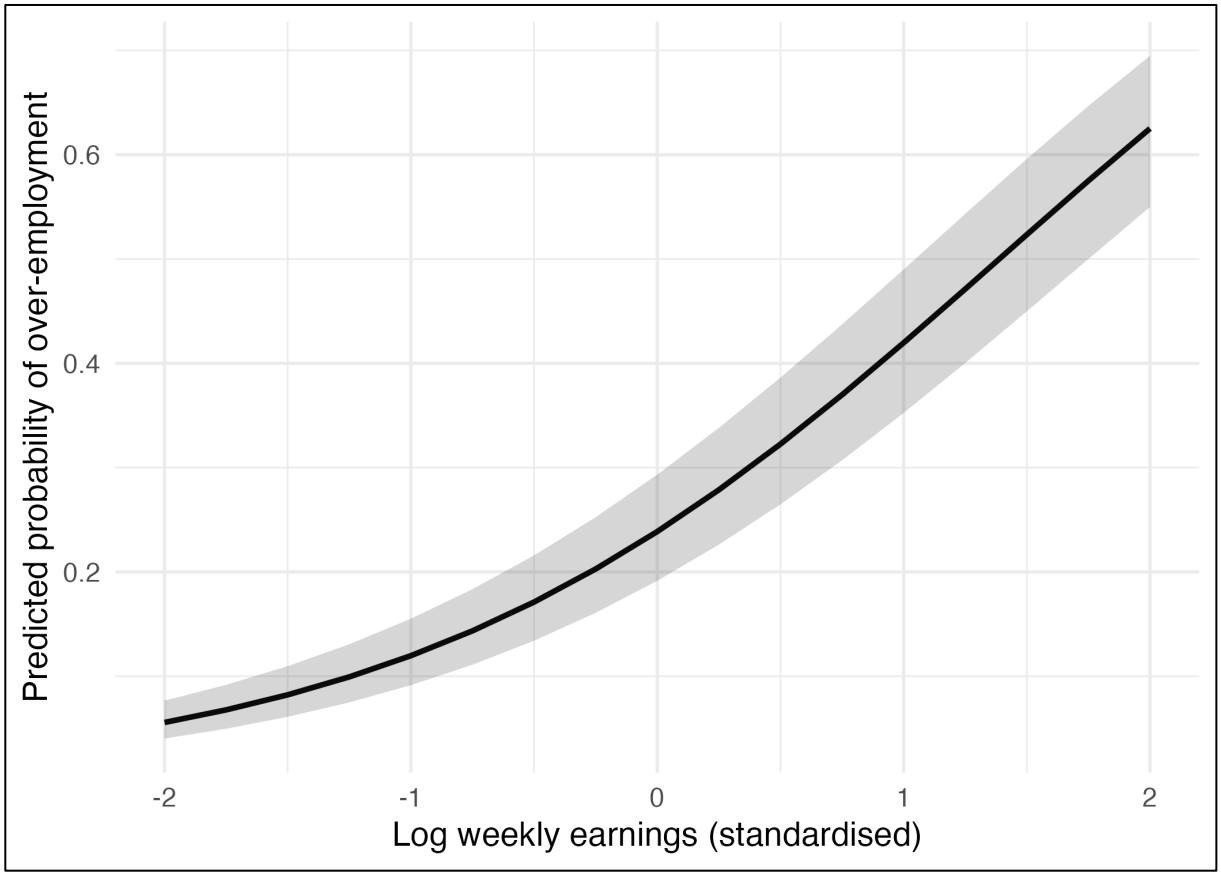
Variable	AME	Robust SE
Age 45–59	6.30***	(1.10)
Age 60+	9.02***	(1.62)
Non-casual employment	8.90***	(1.06)
Medium firm	2.06**	(0.73)
Small firm	2.27*	(0.91)
High flexibility	-5.97***	(0.91)
Low job security	2.41*	(1.02)
Neutral job security	1.93*	(0.90)
Log weekly earnings (z)	13.12***	(0.65)
Associate professionals/trades	-4.47***	(1.05)
Clerical & administrative	-8.89***	(1.30)
Manual & labour	-8.04***	(1.33)
Sales & services	-3.51**	(1.27)
Female	5.77***	(0.83)

Notes: Entries are average marginal effects expressed as percentage-point changes in the probability of over-employment. Robust standard errors clustered by respondent are shown in parentheses. Reference categories are male, age 18–29, managers and professionals, casual employment, low flexibility, high job security, and large firms. + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Higher income was the strongest predictor of over-employment. The AME of 13.12 indicates that a one-standard-deviation increase in log weekly earnings is associated with an approximately 13 percentage-point increase in the probability of being over-employed, holding other variables constant. Figure 3 further illustrates this relationship, demonstrating a steep upward gradient in the predicted probability of over-employment across the earnings distribution. Respondents at the upper end of the earnings distribution exhibited substantially higher probabilities of over-employment than

lower-income respondents, suggesting that working-time mismatch is closely associated with high-intensity and career-oriented labour market positions.

Figure 3 Predicted Probability of Over-Employment Across Standardised Log Weekly Earnings



The AMEs also indicate substantial occupational differences in the likelihood of over-employment. Relative to managers and professionals, all other occupational groups exhibited significantly lower probabilities of over-employment. The largest negative effects were observed among clerical and administrative workers and manual and labour workers, who were approximately 8–9 percentage points less likely to experience over-employment than managers and professionals. Associate professionals, trades workers, and sales and services workers also displayed significantly lower probabilities of over-employment. These findings reinforce the argument that higher-status professional occupations are associated with stronger long-hours norms and greater work intensity.

Several organisational and workplace conditions also exerted important effects on over-employment. Workers employed on a non-casual basis were approximately nine percentage points more likely to experience over-employment than casual workers, suggesting that permanent employment relationships may involve stronger organisational expectations regarding working hours. In contrast, workers reporting high levels of working-time flexibility were approximately six percentage points less likely to be over-employed than workers reporting low flexibility. This finding indicates that greater autonomy over working arrangements may substantially reduce over-employment.

The variables accounting for job security and organisational size were also significant. Workers reporting low or neutral job security were significantly more likely to be over-employed than workers reporting high job security. Similarly, workers in small- and medium-sized firms had modestly higher probabilities of over-employment than workers in large firms. These findings suggest that organisational constraints and labour market insecurity may limit workers' capacity to align actual and preferred working hours.

Finally, the impacts of the demographic variables remain in the AMEs. Females were approximately 5.8 percentage points more likely than males to experience over-employment, after controlling for other characteristics. Older workers also had a higher probability of over-employment, with workers aged 45–59 years and those aged 60 years and over more likely to experience over-employment than the youngest cohort.

5. Discussion

This paper presents an analysis of the determinants of over-employment in Australia. Using a pooled sample covering four waves of the HILDA Survey, the findings indicate that over-employment is a significant feature of the Australian labour market and that its distribution is associated with labour market structure, organisational conditions, and job quality.

The association between occupational structure and the probability of over-employment is one of the most significant associations in the modelling. Managers and professionals were more likely to be over-employed than respondents employed in clerical, service, or manual occupations. This pattern is consistent with earlier research suggesting that long working hours are tied to organisational norms and career structures associated with higher-status occupations and that these norms may, in turn, lead to pressure that encourages individuals to maintain long working weeks even when their preferred hours are substantially shorter (Golden & Gebreselassie, 2007; Wooden et al., 2009).

The strong positive relationship between earnings and over-employment further reinforces this interpretation. Higher-income workers were significantly more likely to experience over-employment, suggesting that over-employment is closely associated with high-intensity labour market positions in which greater remuneration is accompanied by stronger workload expectations, greater work intensity, and longer working hours.

The analysis also identified significant gender differences in over-employment. Female workers were more likely than male workers to be over-employed, even after controlling for occupation, industry, earnings, organisational conditions, and household structure. Moreover, the inclusion of interaction terms between gender and dependent children showed that the presence of young children was not associated with over-employment for females. The findings point toward broader structural and organisational pressures shaping gendered working-time mismatch. These pressures may reflect the combined effects of occupational expectations, unpaid domestic labour, emotional labour, and difficulties reducing working hours within career-oriented labour-market positions and suggest that gendered patterns of over-employment cannot be explained solely through household composition or caregiving responsibilities.

The findings also illustrate the impact of organisational and job-quality on over-employment. Working-time flexibility emerged as one of the strongest predictors in the analysis. Workers reporting high levels of flexibility exhibited substantially lower probabilities of over-employment than workers reporting low flexibility. This suggests that greater autonomy over working schedules and working arrangements may reduce the mismatch between actual and preferred hours. This finding is particularly important in the context of post-COVID labour market restructuring and the expansion of flexible and hybrid working arrangements. While flexibility is often discussed in relation to work–life balance and labour market participation, the results presented here suggest that it may also play an important role in reducing excessive working hours and improving the alignment between preferred and actual working time.

Job insecurity and firm size were also important. Those reporting low or neutral job security were more likely to experience over-employment than those reporting high job security. In addition, respondents working in small and medium-sized firms also had elevated probabilities of over-employment relative to those employed in larger firms. These findings suggest that organisational constraints and labour market insecurity may

reduce workers' bargaining power and limit their capacity to negotiate preferred working arrangements.

The nature of employment arrangements also impacted the probability of over-employment. For workers in permanent positions, over-employment was more likely than among casual workers. This may be the result of stronger attachment to a firm or organisation, expectations associated with the career aspirations of permanent workers, or implicit long-hours norms in ongoing employment relationships. The finding could also reflect that casual workers are less exposed to over-employment because their jobs often involve fewer or less stable hours, weaker employment security, variable hours and earnings, and a heightened risk of under-employment or insufficient hours.

By contrast, household structure variables contributed relatively little explanatory power once labour market and organisational conditions were incorporated into the analysis. While being partnered was marginally associated with over-employment, there was no association with the presence of children.

In the models, neither being partnered nor the presence of dependent children was significantly associated with over-employment. This suggests that over-employment in Australia is shaped more strongly by labour market structures and workplace conditions than by household composition alone.

Taken together, the findings point toward a broader interpretation of over-employment as a structurally embedded labour market phenomenon rather than simply an outcome of individual preferences or household circumstances. Over-employment appears to be concentrated among workers occupying relatively advantaged but demanding labour market positions characterised by strong organisational expectations, high earnings, and reduced capacity to control working hours.

From a policy perspective, the findings suggest that reducing working-time mismatch requires more than simply expanding labour market participation or increasing employment opportunities. Policies aimed at improving working-time flexibility, strengthening workers' control over scheduling, and reducing organisational cultures of excessive working hours may play an important role in reducing over-employment. Similarly, efforts to improve job security and strengthen workers' bargaining power may help them align their actual working hours more closely with their preferred hours.

In the Australian labour market, over-employment remains a significant form of working-time inequality and as such, warrants greater attention across labour market and employment policy debates. Overall, these findings add to the existing evidence base and reiterate the need to understand working-time mismatch as a multidimensional issue. Specifically, the findings highlight how over-employment may be shaped by occupational norms, organisational conditions, and workplace flexibility.

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