Firm Size Differences in Financial Returns from Flexible Work Arrangements (FWAs)

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Abstract

Firms of differing sizes make FWAs available to employees, with varying performance outcomes. Research on the financial outcomes of FWAs is sparse and tends to focus on large firms. This study investigates the associations between FWAs and return on labour (ROL) as well as the relevance of these associations to small, medium and large firms, using a sample of 3244 employees working in 602 businesses. The findings show negative associations between flexible leave as FWA and ROL for all firms. Job-sharing has financial value for firms with 100 or more workers, with the majority being females but it is not feasible in small firms due to limited employee numbers. Flexible work hours pay off for firms with up to 99 employees but the financial outcomes become negative thereafter, requiring closer monitoring in larger firms. The findings indicate that firm size is relevant to FWA regulations and negotiations with implications for employers, employees and policymakers.

Keywords: FWAs, return on labour, small and medium firms, large firms, work-life balance, linear mixed effect, dominance analysis

JEL Classification: J24, J81, L25, M12, M54. O15,

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1 Introduction

Employers do not have direct control over employee performance but must create conditions that motivate employees to improve their performance. The human resource (HR) literature has therefore focussed on practices that enhance performance (Guest, 2011). This has led to identification of HR practices associated with high performance referred to as high performance work practices (HPWP) (Becker & Huselid, 1998). While consensus differ on individual HPWPs, they can be grouped into six areas: staffing, compensation, flexible job assignments, teamwork, training and communication (Patel & Conklin, 2012). Within the flexible job assignment group, practices that enable employees to balance work and non-work commitments and achieve effective work-life balance have received considerable attention recently, because they affect HR outcomes. Nonetheless, the financial impact of these HR practices for firms of varying sizes is an area sparsely covered in the literature.

Flexible work arrangements (FWAs) provide employees the right to negotiate working hours, start and finish time, and place of work (Kelliher & Anderson, 2010; Russell et al., 2009) in order to achieve satisfactory work-life balance. In addition to legislation such as the Fair Work Act Australia (2009) and the British Flexible Working Legislation, (2014), factors such as industry sector, competition and labour market conditions push employers to make FWAs available to their employees (Barney et al., 2011). FWAs are also encouraged on grounds of positive contribution to firm performance and the literature overwhelmingly demonstrates that FWAs improve HR outcomes. For example, Croucher et al. (2013) and Posthuma et al. (2013) reported that FWAs enhance employee morale and consequently improve their loyalty and retention. Abid and Barech (2017) and Werner et al. (2014) noted that by making work pleasurable, FWAs reduce absenteeism and employee turnover and therefore lessen both direct and indirect costs of hiring new staff. Others have identified that FWAs add to productivity and profits (Messersmith et al., 2011). Kelliher and Anderson (2010) found that employees

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intensify their work when allowed to work from home or to work reduced hours. Proponents of FWAs affirm that they provide net benefits to employers (Dex & Scheibl, 2001).

A few studies, however, discuss the performance-diminishing outcomes of FWAs. Dickens (2006) raised the issue of cost of implementing FWAs. Ransome (2007) posited that passing on the work of FWA beneficiaries to the remaining workers may increase their workloads and stress levels. It is noted that employees on FWA miss out on promotion prospects (Wheatley, 2012). According to Baltes et al. (1999), the positive benefits of flexitime decreases over time, as employees begin to see them as a right. These performance-reducing outcomes indicate that the relationship between FWAs and performance is not always positive and may differ with the specific FWA under consideration, a position sparsely examined in the literature. The focus on HR outcomes in the literature leaves the association between FWAs and financial outcomes, such as productivity and profitability, underexplored and unclear (De Menezes & Kelliher, 2011; Kelly et al., 2008). Consequently, the net costs or benefits to employers of providing specific FWAs are unknown.

Again, the literature suggests that factors such as employees' gender, skill level and employment terms as well as organisation-type, size and industry sector of their employers determine access to FWAs (Atkinson & Sandiford, 2016; Powell & Cortis, 2017; Zeytinoglu, Cooke, & Mann, 2009). Since size directly determines the structure of an organisation (Blau, 1970), knowing how size, and therefore structure and locus of decision-making, affects financial outcomes from FWAs should help improve management of FWAs to benefit both employer and employees. In addition, knowing the relative importance of each FWA should help in deciding which FWAs are beneficial for firms in each size group.

This study seeks to investigate differences in the associations between FWAs, as HR practices, and return on labour (ROL) as financial outcomes, for small, medium and large-size businesses as well as the relative importance of the different FWAs across firm sizes. It

contributes to the extant literature by focusing on firms of all sizes, especially SMEs (Cegarra-Leiva et al., 2012; Maxwell et al., 2007) that account for the majority of private sector employment (OECD, 2010). ROL is defined as net income per dollar of wage cost.

The rest of the article is organised into the following sections. Section two overviews the literature on HR practices and firm performance, and then focuses on FWAs as HR practices and performance outcomes for firms of various sizes. The section ends with development of hypotheses for testing. The research methodology is described in section three while results and discussion of findings are presented in section four. The last section concludes the study with implications for policy and practice.

2 Literature Review

The study draws on a number of theories to examine performance outcomes from FWAs for various firm sizes. First, is the HPWP literature that links HR practices to performance and second, the benefit-cost theory is used to assess the direct and indirect benefits and costs associated with FWAs as HR practices. The social exchange theory is then invoked to explain how employees alter their work, loyalty, job satisfaction and turnover intentions when FWAs are made available or provided to them. Differences in FWA practices among small, medium and large firms are considered as a fourth dimension, drawing on the theory of formalisation of HR practices with firm size (Deshpande & Golhar, 1994; Kotey & Slade, 2005).

2.1 HR practices and performance

The HR literature tends to focus on practices that enhance firm performance (Boselie, Dietz, & Boon, 2005; Guest, 2011). Several theories have emerged over the decades to identify and

explain how employees can be motivated to contribute positively to firm performance (Kotey & Sharma, 2019). This pursuit has become increasing relevant in the current environment of rapid changes in technology, globalisation and intense competition, as non-substitutable and inimitable tacit knowledge has become an increasingly valuable and rare resource for competitive advantage (Shaw, Park, & Kim, 2013). This view of human resources has led to the strategic human resource management (HRM) literature that integrates HRM with the overall strategic orientation of the organisation (Combs, Liu, Hall, & Ketchen, 2006).

From a strategic HRM perspective, an organisation's human resources constitute strength or weakness that affect its ability to deal with external opportunities and threats (Buller & McEvoy, 2012). Organisations that pursue competitive advantage through human resources invest in practices that motivate employees to perform, referred to as HPWP (Becker & Huselid, 1998). Since Becker and Huselid's (1998) publication on HPWPs, several researchers have sought to identify practices that lead to high performance (Posthuma et al., 2013; Wang, Yi, Lawler, & Zhang, 2011). It appears however, that the relative importance of these practices change over time. FWAs have risen to the forefront as HPWPs with ageing and feminisation of the workforce (Stirpe, Trullen, & Bonache, 2018; Stirpe & Zárraga-Oberty, 2017). This is because no amount of knowledge, skills and ability development or motivation and opportunity will enhance performance of employees facing work-life conflict. Furthermore, the replicability of HPWPs across firms depends on internal and external factors including firm size and resources (Kroon, Van De Voorde, & Timmers, 2013).

Research indicates that HR practices tend to be informal in small firms and dependent on the relationship between employee and employer, with formal structures emerging as firms grow (Kotey & Slade, 2005; Storey et al., 2010). Limited employee numbers and financial resources tend to constrain the ability of small firms to make certain FWAs available to their employees at the same rate as large firms (Kotey & Sharma, 2016; Maxwell et al., 2007).

Moreover, the informal and family work environment of small firms, where employers are directly concerned about the welfare of their employees, provide a performance advantage not available to large firms (Patel & Conklin, 2012). As such, FWAs associated with performance may differ across firm sizes. These postulations are examined in this study that evaluates relative importance of and performance outcomes from various FWAs across firm size.

2.2 FWAs and performance

From a benefit-cost perspective, every outcome from FWA that directly or indirectly enhances benefits or adds more to benefits than to costs can be considered as improving performance. In contrast, performance will decrease if FWAs add more to costs than to benefits. Pursuing the cost-benefit position, Been et al. (2016) argued that Dutch managers make decisions about work-life balance initiatives based on institutional pressures as well as analysis of the potential costs and benefits to their organisations. Maxwell et al. (2007) also confirmed that FWA decisions are handled on a case by case basis in Scottish small firms, with the final decisions largely dependent on the benefits and costs to both employer and employee.

FWAs have been widely acknowledged to lead to indirect benefits such as job satisfaction, work commitment and employee retention, while reducing the indirect costs associated with employee turnover and absenteeism (Cegarra-Leiva et al., 2012; Kelliher & Anderson, 2010; Kim & Wiggins, 2011; McNall et al., 2009; Posthuma et al., 2013; Russell et al., 2009). It is contended that FWAs help reduce employees' work-life conflict (Adame-Sánchez & Miquel-Romero, 2012) and improve their psychological health by reducing stress, anxiety, sleep disorders and depression (Haar et al., 2014). These ultimately enhance employees' physical and mental well-being (Beauregard & Henry, 2009).

At the organisational level, these employee benefits translate to better citizenship behaviour (Lambert, 2000), and improved morale, self-efficacy and motivation (De Menezes

& Kelliher, 2011; Pedersen & Jeppesen, 2012; Sweet et al., 2014), leading to better customer satisfaction (Lewis et al., 2017) and productivity gains (Giardini & Kabst, 2008; Shockley & Allen, 2012). Organisations that provide FWAs gain good reputations in the labour market, enabling effective competition for superior calibre of employees (Abid & Barech, 2017; Beauregard & Henry, 2009; Lewis et al., 2017). In some organisations, employers build a culture of flexibility that motivates employees to willingly cover for their colleagues on FWAs (Dex & Scheibl, 2002). This encourages a positive work environment that fosters teamwork and increases productivity (Golden, 2001). The assumption has been that the net benefits from these HR outcomes increase financial returns from FWAs (Cegarra-Leiva et al., 2012).

Kotey and Sharma (2019) classified FWA outcomes into direct and indirect. They argued that direct improvements in productivity accrue from additional exertion from employees who work intensively during hours conducive to them. Drawing on the social exchange theory (Blau, 1970; Serrat, 2017), Kotey and Sharma (2019) explained that indirect benefits such as reduced absenteeism and commitment to work emanate from employees' reciprocation of the favour of making FWAs available to them. The authors posited that the resulting job satisfaction reduces turnover intentions and, consequently, recruitment costs. In effect, benefits from FWAs should exceed costs leading to win-win outcomes for both employer and employees. Nonetheless, the literature identifies situations where the cost of FWAs may exceed benefits or when employees' negative experiences with FWAs increase direct and indirect costs above the expected benefits.

Cost of FWAs would exceed benefits when employers pay additional wages to replace employees on flexible leave (Kotey & Sharma, 2016). Dickens (2006) drew attention to employers' reluctance to provide FWAs due to high cost of implementation and administration. Furthermore, conflict and poor communication between job-sharing partners could reduce output and therefore benefits (Williamson, Cooper, & Baird, 2015). Lee and Hong (2011) did

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not find any association between work from home and employee turnover and attributed this to the employee's lack of active communication with peers and feeling of isolation due to release from direct control or supervision. Kotey and Sharma (2016) reported negative outcomes for work from home for industries such as agriculture and human services, where employees have to be present at the workplace to perform. Distortions in the workload balance when a full-time employee reduces his/her work hours (Ransome, 2007) also has the potential to reduce benefits or impose cost. Employees on long-term FWAs may experience setbacks in career progression and bypassed when it comes to promotion, more challenging job responsibilities and special projects (Blankenship, Friedman, Dworkin, & Mantell, 2006; Frank & Lowe, 2003) due to the 'presenteeism' culture that permeates many organisations (Atkinson, 2016). This may in turn reduce motivation and performance. These direct and indirect costs of FWAs question the validity of claims that FWAs always benefit employers and ultimately increase financial outcomes. This study seeks to clarify the association between FWAs and ROL and to investigate the relative importance of the associations for each firm size.

2.3 FWAs and firm size

Despite the importance of FWA to employee welfare and performance, the majority of FWA studies focus on large firms (Maxwell et al., 2007). Consequently, researchers have called for investigation into the availability and outcomes of FWAs in SMEs (Cegarra-Leiva et al., 2012).

The general contention is that, compared to large firms, SMEs are less likely to make FWAs available to their employees because they tend to lack the financial and structural resources to administer them (Maxwell et al., 2007; Muse, Rutherford, Oswald, & Raymond, 2005; Zeytinoglu et al., 2009). This position is however, challenged in the literature. Houseman (2001) argued that small firms have greater propensity to provide FWAs than large firms. Stavrou (2005) also found no significant differences between FWA provisions in large and

small firms. These mixed findings call for investigation into the relative importance of each FWA in small, medium and large firms and the performance effect of making FWAs available in each firm size. This is particularly important since SMEs comprise the majority of firms in most countries and account for a sizeable share of private sector employment (OECD, 2010).

Dex and Scheibl (2001) noted that FWA negotiations in SMEs are usually informal and their approval depends, to a large extent, on the employee-employer relationship. In contrast, documented policies support FWAs in large firms, which follow structured and standardised processes in administering and negotiating FWAs. Following from this, Atkinson and Sandiford (2016) contended that informal administration and management of FWAs in SMEs could result in inequitable access. Access is likely to be more equitable with firm growth as a more structured approach to request, provision and reporting is introduced.

The small number of employees in small firms tend to be drawn from family or friends (Kotey & Slade, 2005). Their close relationship and supervision by the owner enable FWAs to be discussed individually with decisions based on employees' affiliation with the owner and assessment of benefit and cost to the business (Atkinson & Sandiford, 2016; Maxwell et al., 2007). Close association with the owner elevates employees' obligation to reciprocate FWA approvals, ultimately enhancing benefits to the owners. Moreover, peer pressure, accommodation of other needs of employees, as well as close supervision by owners may reduce employees' negative responses to refused FWA requests. All of these may serve to ensure benefits exceed cost or at worse, outcomes are neutralised for FWAs in small firms.

Notwithstanding the above, certain FWAs would impose more costs than provide benefits to SMEs compared to large firms (Reeve, Broom, Strazdins, & Shipley, 2012). Passing on work of FWA-beneficiaries to the small number of remaining employees could significantly increase workload and the resulting stress could reduce output (Poelmans & Beham, 2008). FWAs could also disrupt the supply chain, as scheduled employees may be inadequate to meet

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production requirements. Cost increases when owners engage temporary workers to replace employees on FWAs and pay the wages of both. Furthermore, it may be difficult to replace highly skilled workers with temporary workers. Doing so may lead to loss of customers who wish to maintain relationships with preferred employees on FWA, so that the net effect on performance may not always be positive.

From the above position, it is argued that flexible working hours can be accommodated in small firms with positive associations with ROL from close monitoring by employers as well as from employee loyalty and reciprocation. In contrast, flexible leave and job-sharing, which may impose additional costs to employers, could result in negative associations with ROL. Exertion and depleted energies from working prolonged hours, in order to take time off subsequently, could also lead to negative associations between ROL and time in lieu and banking hours as FWAs. Reduced hours should not have a significant association with ROL if it does not entail additional costs to owners. Where feasible, employees could be allowed to work from home with no effect on ROL.

2.4 FWAs and formalisation of HRM practices

The above positions would apply especially to small firms with up to twenty employees, after which the limits of span of control requires appointment of middle managers (Kotey & Slade, 2005). HR expertise would be required, as employee numbers increase, to advise on HR policies and compliance with regulation. This is particularly important as employees are recruited from outside the close circles of family and friends and the affection, loyalty, and close association with the owners begin to dissipate (Kotey & Slade, 2005). Even so, there is a level of fluidity in HR decisions and owners or top managers rather than the middle managers would negotiate FWAs, following a quasi-formal process based on costs and benefits. While FWAs such as job-sharing and flexible leave should become available to employees in

medium-size firms, the tight scheduling that often accompanies growth (Mintzberg, 1994) could make them less feasible, resulting in negative associations with ROL. Flexible work hours should continue to have a positive association with ROL while time in lieu and banking hours would also have negative associations with ROL for the reasons presented above. Similarly, no significant associations are expected between work from home, reduced work hours and ROL. In sum, it is contended that the above positions would apply to both small- and medium-size firms with up to 99 workers. The following hypotheses are therefore tested:

H1 Flexible work hours are positively associated with ROL in small firms.

H2 Time in lieu, banking hours, job-sharing, and flexible leave each has a negative association with ROL in small-size firms.

H3 Work from home and reduced hours each has no association with ROL in small firms.

H4 Flexible hours is positively associated with ROL in medium-size firms.

H5 Time in lieu, banking hours, job-sharing, and flexible leave each has a negative association with ROL in medium-size firms.

H6 Work from home and reduced hours each has no association with ROL in medium firms.

As growth continues beyond 99 employees and with functional managers, FWA decisions become the responsibility of HR departments and are based on documented HR policies. These decisions follow formal procedures that emphasise equity and compliance over benefits and costs. FWA availability is likely to be part of the negotiated contracts with employees and seen as entitlements than as favours with reciprocal obligations. Moreover, the size of the workforce would enhance feasibility of FWAs such as flexible leave, job-sharing and reduced work hours with less stressful impact on the remaining employees who take up the work of FWA beneficiaries. Beyond 99 employees, firms would continue to benefit from making flexible

work hours available to employees, who in turn would increase output by working intensively during hours conducive to them (Kelliher & Anderson, 2010). Moreover, time in lieu and banking hours would continue to be negatively associated with ROL due to exertion and depleted energies from working prolonged hours in a compressed workweek. The more formal and unaffectionate work environment would make work from home appealing to employees, leading to positive association with ROL. The hypotheses below are developed for testing:

H7 Flexible work hours, job-sharing, flexible leave, reduced hours and work from home each is positively associated with ROL in medium/large-size firms.

H8 Time in lieu and banking hours each has a negative association with ROL in medium/large firms.

H9 Flexible work hours, job-sharing, flexible leave, reduced hours and work from home each has a positive association with ROL in large-size firms.

H10 Time in lieu and banking hours each is negatively associated with ROL in large firms.

The theoretical position from the above discussion is that firm size influences the relationship between FWAs and ROL such that the association between each FWA and ROL will vary with size of the firm. This position is yet to be assessed empirically, especially in response to the call for more studies that focus on FWAs in SMEs (Cegarra-Leiva et al., 2012; Croucher et al., 2013). This study addresses the gaps and the findings should help improve management of FWAs. The methodology used to test the above hypotheses is described next.

3 Methodology

3.1 Data and sampling

Data from the Australian Work Relations Survey (AWRS), collected from a combination of surveys of employers and their employees between February and July 2014 were used. The survey comprised six questionnaires: i) employee demographics and employment profile, ii) employee relations, iii) organisational structure and operation, iv) workforce profile, v) financial information, and vi) organisational characteristics. The data collection involved computer-assisted telephone interviewing and self-administered online and paper-based questionnaires, each tailored to specific questionnaires to allow maximum accuracy in response. The total dataset had 5038 employees working in 1509 organisations in the public, private and not-for-profit sectors. The variables were assigned weights to ensure they were representative of the populations of organisations and employees in Australia (AWRS, 2015). For this study, the sample comprised only private firms with five or more employees. Cases with missing values for variables analysed were excluded so that a total of 3244 employees from 602 firms were studied. The sub-samples comprised 888 employees in small firms; 1651 in medium firms; 300 in medium/large firms and 405 in large firms.

3.2 Measurement of variables

Employers would derive significant decision-making value from knowing the income generated from using a resource such as labour. Therefore, in this study financial performance was measured by ROL, adapted from the OECD measure of productivity (measure of output / measure of input) (Freeman, 2008). Output was calculated as total income adjusted for changes in inventory during the year, less the value of all other operating costs (including depreciation) to normalise differences between labour- and capital-intensive organisations. Total wage cost, comprising the total of all wages and salaries and other labour costs, was the denominator used to cater for the different types of labour within and among the samples. The resulting values were converted to logarithms to enhance distribution of the ROL variable.

FWAs examined include: (i) flexible start and finish times (Flexible hours), (ii) job-sharing, (iii) reduction in working hours, (iv) time in lieu of overtime, (v) arrangements for working from home or teleworking from another location, (vi) flexible leave arrangements such as purchasing additional leave and cash-out leave (Flexileave); and (vii) banking hours as in accrued days off. Employers were asked if they made FWAs available to employees and if they did to list the FWAs available. They were then asked to rate the extent to which the FWAs were made available on a four-point scale ranging from none (1) to some (2), most (3) and all employees (4). The majority of employers had negotiated formal FWAs with some employees, so that FWA availability correlated highly with FWA provision.

It is argued that FWA availability provides a good indication of FWA provision and is a more stable measure of FWAs than provision or usage (Avgar, Givan, & Liu, 2011; Budd & Mumford, 2006). FWA availability signals how organisations perceive their employees (Beauregard & Henry, 2009). Using the social exchange theory, Bal and Dorenbosch (2015) argued that employees' responses to available and provided FWAs are similar. This means employees derive satisfaction from awareness of their organisation's FWA intentions through its availability and would eliminate turnover intentions and enhance their commitment accordingly, ultimately impacting performance.

Employee age and gender and the percentages of permanent part-time and casual employees were included in the regression models as control variables. Males were coded 0 and females 1. The percentages of permanent part-time and casual workers and employee age were continuous variables with normal distributions. The businesses were categorised as: small (5-19 employees); medium (20-99 employees); medium-large (100-199 employees); and large (200 plus workers), each assigned a value of 1 if they belonged to the size group or else 0.

Although Australian and New Zealand Standard Industrial Classification (ANZSIC) codes were used to denote industry in the mixed effects model, industry sectors were organised

into fewer categories for the dominance analyses. These were: professional services (health, education, professional & scientific, financial & insurance, public administration, and administrative & clerical services); personal services (accommodation, food, arts & recreation, and other services); the secondary sector (mining, manufacturing, construction and utilities); retail trade; information and rental; and wholesale trade. The Pearson correlation coefficients in Table 1 show that the highest correlations (between small and medium firms and casual and part-time employees) are below the threshold of 0.7 for collinearity (Dormann *et al.*, 2013). All the variables were therefore included in the analysis.

3.3 Analytical tools

Differences among the size groups with respect to the variables examined were assessed by ANOVA for the continuous variables and Chi-Square tests for variables measured by nominal scales. Multi-level analysis, involving linear mixed effects models were used to ascertain the association between ROL (as dependent variable) and FWAs and the control variables (as independent variables). The relationships between the dependent and independent variables were modelled as fixed effects and randomised effect ascertained for industry sector, using the ANZSIC codes. The multi-level analyses enabled: i) calculation of unbiased estimates of the standard errors associated with the regression coefficients, and ii) consideration of the effect of industry on ROL in the model estimates (Gelman & Hill, 2014; Hox, Moerbeek, & Van de Schoot, 2017). The Restricted Maximum Likelihood method was used (Kenward & Roger, 1997) and parameter estimates, test for covariance parameters and covariance of random effects assessed. Analyses were carried out separately for the main sample and four size sub-samples. These allowed the association between the independent and control variables on one end and the dependent variable to be examined for each firm size, providing insight into the relationships for each and in comparison with the other sub-samples and the overall sample.

Dominance analysis was used to identify the relative effect of each FWA on ROL for the overall sample and for each of the firm size sub-samples. The technique estimates several subset models (following a step-wise approach) to match each regressor's unique variance in all subset models against other regressors (Azen & Budescu, 2003; Koomson, Annim, & Peprah, 2016; Nathans, Oswald, & Nimon, 2012). Of the three main approaches to dominance analysis, results from the general dominance analyses are reported in Table 3. This approach produces the variance generated by each independent variable to all subset model regressors (Azen & Budescu, 2003) and ranks the variables based on their standardized dominance statistic. The dominance statistics and rankings were generated using random effects (Luo & Azen, 2013; Snijders & Bosker, 1994) and involved 2,097,151 and 131,071 regressions for the full sample and for each firm sample respectively.

3.4 Sample characteristics

The majority of employees worked in medium-size firms (51%) followed by small firms (27%) with medium/large firms having the least (9.5%) number of employees. ROL was U-shape across the size groups. Starting with 1.66 in small firms, it fell in medium firms (1.62) with a further fall in medium/ large firms (1.55), and rose in large firms, which recorded the highest ROL among the size groups (1.73). The majority of employees were in the secondary sector (25%), especially in small (26%) and medium-size firms (28%) but not for large firms (16%) (Table 2). The professional services sector followed with 21% of employees; with employees in this sector most prevalent in small firms 30%. Personal services comprised 19% of employees with the largest concentration in large-size firms (29%) but were least in small firms (15%). Retail and wholesale trade together comprised 26% of employees, who were mostly in medium/large firms (38%) but least in small-size firms (16%). The information and rental

services sector was least represented (9%) and employees in the sector were mostly in small firms (13%) and least in large firms (5%) (Table 2).

Employees on permanent casual or part-time contracts were most visible in medium/ large firms (66%). The average employee age of 39.4 years was similar across the size categories and female employees were relatively more in large (56%) and medium/large (54%) firms than in small and medium-size firms.

Flexible working hours, flexible leave and time in lieu were the most common FWAs available to employees (Table 2). These were followed from a distance by reduced work hours, then banking hours. Job-sharing and work from home were least popular. The availability of flexible leave and flexible hours as FWAs in the sampled data were reasonably consistent with ABS data (ABS, 2011). Flexible work hours was least available in large firms, while job-sharing and reduced work hours were more available in large and medium/large firms than in small- and medium-size firms. Work from home and flexible leave were more likely to be available in medium than small firms. Banking hours was least visible in large firms but most available in medium/large firms, which were both different from the others in this respect.

4 Results

The dominance analyses in Table 3 shows that FWAs had lesser effect on ROL (particularly reduced hours, job-sharing, flexible work hours and to a lesser extend time in lieu) when compared with the effect of industry sector and employment terms for all private firms. The results were however, different for the various size groups. In small-size firms, job-sharing and to some extent time in lieu and flexible leave had the most effect on ROL, while banking hours, work from home, reduced hours, and flexible work hours had least effect. The important FWAs

for medium-size firms were banking hours, flexible leave and flexible hours while reduced work hours, time in lieu, and job-sharing had relatively limited effect on ROL. In contrast, work from home had the most effect on ROL in medium/large firms, followed by job-sharing, flexible leave and to a lesser extent flexible work hours and banking hours. Time in lieu and reduced work hours had least effect on ROL in medium/large firms. Time in lieu was however, important to ROL in large-size firms, as was flexible work hours and somewhat flexible leave and job-sharing, while reduced hours and banking hours had limited effect. Industry sector had the most effect on ROL in all four-size groups followed by the size of the permanent casual and part-time workforce, but the effect of gender and age were relatively low.

Results from the mixed effect analyses are reported for the four firm sizes in Table 4. For small-size firms flexible work hours (β=2; p$\leq$0.01) and time in lieu (β=3; p$\leq$0.01) had positive associations with ROL while the association with ROL was each negative for job-sharing (β=-4; p$\leq$0.001), flexible leave (β=-2; p$\leq$0.05) and banking hours (β=-4; p$\leq$0.05). The associations between reduced hours and work from home and ROL were each not significant. H1 (Flexible hours are positively associated with ROL in small-size firms) and H3 (Work from home and reduced work hours each has no association with ROL in small firms) were supported. H2 (Time in lieu, banking hours, job-sharing, and flexible leave each has a negative association with ROL in small firms) was partially supported since the association was positive for time in lieu. In small-size firms, time in lieu had the most dominant positive influence on ROL while job-sharing had the largest reducing effect on ROL.

In medium-size firms, the associations between FWAs and ROL were each positive for flexible work hours (β=10; p$\leq$0.001) and work from home (β=10; p$\leq$0.001) but negative for job-sharing (β=-5; p$\leq$0.001), time in lieu (β=-5; p$\leq$0.001), flexible leave (β=-0.03; p$\leq$0.001), and banking hours (β=-5; p$\leq$0.001) (Table 4). The association was not significant for reduced work hours. H4 (Flexible hours are positively associated with ROL in medium-size firms) was

supported and H5 (Time in lieu, banking hours, job-sharing, and flexible leave each has a negative association with ROL in medium-size firms) was also supported since the associations between these FWAs and ROL were all negative. H6 (Work from home and reduced work hours each has no association with ROL medium-size firms) was partly supported (for reduced work hours). In medium-size firms, flexible hours was most dominant in enhancing ROL but banking hours and flexible leave had the most influence among the FWAs that reduced ROL.

The results for medium/large firms indicate positive associations between job-sharing (β=15; p$\leq$0.001), work from home (β=14; p$\leq$0.001), banking hours (β=6; p$\leq$0.001) and ROL. The associations with ROL were negative for flexible work hours (β=-16; p$\leq$0.001), time in lieu (β=-15; p$\leq$0.001) and flexible leave (β=-9; p$\leq$0.001) (Table 4). H7 (Flexible work hours, job-sharing, flexible leave, reduced work hours and work from home each is positively associated with ROL in medium/large-size firms) was partly supported; the associations with ROL were negative for flexible work hours and flexible leave and not significant for reduced work hours. H8 (Time in lieu and banking hours each has a negative association with ROL in medium/large-size firms) was also partly supported; the association was positive for banking hours. For medium/large firms, work from home and, to a lesser extent, job-sharing were influential in increasing ROL while flexible leave was dominant in decreasing ROL.

FWAs with positive links to ROL in large-size firms were job-sharing (β=7; p$\leq$0.001) and banking hours (β=12; p$\leq$0.001) while significant negative associations were observed for flexible work hours (β=-16; p$\leq$0.001), time in lieu (β=-16; p$\leq$0.001), work from home (β=-16; p$\leq$0.001) and flexible leave (β=-16; p=0.001) (Table 4). H9 (Flexible hours, job-sharing, flexible leave, reduced hours and work from home each is positively associated with ROL in large firms) was only supported for job-sharing. The association was positive for banking hours but negative for time in lieu so that H10 (Time in lieu and banking hours have negative

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associations with ROL in large firms) was also partly supported. The dominant ROL-increasing FWA in large firms was job-sharing while time in lieu was a dominant ROL-reducing FWA.

The random effect analyses show that industry variables had stronger effect on ROL than firm level variables across the firm sizes but particularly in medium/large firms, where the residual firm level effect was very small, though significant. Medium firms showed the highest capacity to influence ROL through practices within the firm and were followed by large firms and then small firms. Personal services was the industry sector with strongest impact on ROL across the four firm-sizes. Taking on casual employees was negatively and significantly associated with ROL in small and medium firms while this trend was overturned in large-size firms. The percentage of part-time employees correlated negatively with ROL in all but small-size firms. Nonetheless, outcomes from casual employees were relatively more important (especially to the two groups of medium-size firms) than outcomes from part-time workers, which was moderately relevant to medium/large and large-size firms. These findings are discussed next.

5 Discussions

Compared with other HR practices that motivate employees to high performance, the association between FWAs and objective financial performance has received limited attention in the literature, particularly the relevance of these associations to different firm sizes. Yet, FWAs have become important to HRM since employees' pursuit of balance between their work and non-work commitments affect their performance. In turn, employers would want to know the financial impact of providing or making FWAs available to employees in order to effectively manage FWA negotiations and explain any adverse consequences to employees. However, the sparse research in this area means employers have limited empirical evidence on which to base their FWA decisions. This study sought to investigate the relationships between

FWAs and ROL and the relative importance of the associations to each of four firm size groups: small, medium, medium/large and large.

Using dominance analysis to assess level of importance and linear mixed models to investigate direction of relationship, the study found that overall, FWAs have relatively small effect on ROL compared with variables such as industry sector and percentage of permanent casual and part-time employees in the workforce. Nonetheless, some FWAs are more dominant than others in their effect on ROL in each firm size group. For example, the association between ROL and flexible leave is important to firms with twenty or more workers. This signals to employers to pay attention to management of flexible leave in order to minimise the potential negative effect on ROL or to accept it as a necessary cost of employment. In contrast, making reduced work hours available has no significant association with ROL and its relevance is relatively limited for all size groups. It is likely that the financial effect of this FWA is absorbed by the associations between ROL and the permanent casual and part-time workforce for which the dominance analyses show high to moderate importance, pointing to the need for employer attention in this area.

In addition to the above common FWAs, the findings show significant negative relationships between job-sharing and banking hours as FWAs and ROL in small firms, while the relationship is positive for flexible work hours and time in lieu, but not significant for work from home. Of these, job-sharing is relevant to small firms. It is difficult for small firms to find suitable job-sharing partners for employees who want to reduce their work hours (Gallo, 2013). This would apply particularly to manufacturing and professional service firms, which account for the majority of employees in this group, and for which the required skills may not be readily available on part-time basis. Banking hours and work from home have low relevance to small firms perhaps because they are not readily available in these firms while the ready availability and informal administration of flexible hours may limit its relevance to small firms. The

relevance of time in lieu is moderate and small firms are the only group in which the relationship with ROL is positive. Again, the informal setting allow small firms to accommodate these work time alterations with some benefit.

The associations between FWAs and ROL are positive for flexible hours and work from home but negative for time in lieu, banking hours and job-sharing in medium firms. In contrast to small firms, the financial pay-offs from allowing employees to start and finish work at times conducive to them could be important to medium firms. This is because standard start and finish times become defined as formal HR systems emerge, requiring formal approval of employees' request for this FWA. Those with the potential to benefit would work hard to ensure it is maintained (Kelliher & Anderson, 2010). Flexible leave and banking hours should be of concern to employers in medium-size firms. Banking hours may not be particularly conducive to the tight scheduling of operations in the secondary, trade, professional and personal services sectors, which have the majority of employees in the medium-size group. The findings indicate that medium-size firms can make the other FWAs (job-sharing, time in lieu and work from home) available to employees with limited financial consequences.

ROL associations are positive for job-sharing, work from home and banking hours in medium/large firms, but negative for flexible hours, time in lieu and flexible leave. Making work from home and job-sharing available is important and pays off for employers in this firm size group. This may emanate from the relatively large proportion of female and permanent casual and part-time employees, who may wish to share jobs or complete all or part of their work at home. Like medium-size firms, making time in lieu available has limited effect for medium/large firms, where this FWA is more available than in other size groups. Negative outcomes for flexible hours is of moderate importance to medium/large firms and may emanate from the ease of negotiating but poor monitoring of this FWA.

The majority of employees in large-size firms work in professional and personal services sectors and are likely to be female than male. HR departments are well established and firms benefit from high ROL associated with economies of scale. Similar to medium/large firms, time in lieu and flexible work hours have negative associations with ROL but these are relevant to large firms. It may be that in service industries, where client availability determines work schedules, flexibility in employee availability distorts service provision with negative ROL outcomes. Moreover, monitoring compliance with time in lieu and flexible hours in large firms may be more difficult than small-size firms, so that the correlations between these FWAs and ROL are negative in large firms but positive in small firms. These findings may explain the lower than average availability of flexible work hours in large firms. In contrast, job-sharing has positive ROL associations and moderate relevance because employee numbers make it feasible in large firms.

The negative ROL associations with percentage of permanent part-time staff increase in importance as firms grow and may result from diminishing returns to scale. Engaging employees on permanent casual basis is important to the two groups of medium-size firms but costly for firms with 20-99 employees. Permanent part-time and casual contracts also deny employers the flexibility of using these positions to manage costs during periods of fluctuating demand.

6 Conclusions and implications

The study demonstrates that FWAs are HR practices of relevance to performance. It also shows that firm size affects FWA associations with ROL and that the relevance of the associations vary by firm size. Medium- to large-size firms need to attend to flexible leave and percentage of employees on part-time contracts in order to reduce the potential negative effects on ROL. Firms with 100 or more employees can benefit from making job-sharing available, because of

their large employee numbers. Job-sharing could be effective for managing the high percentage of female employees who choose to work reduced hours (Williamson *et al*., 2015). In contrast, job-sharing is difficult in small firms due to the limited size of the workforce.

Making flexible hours available pays off for medium-size employers, where the HR environment begins to be formalised, and employees require formal approval to change their work hours. On the contrary, this FWA as well as time in lieu are problematic for large firms. Perhaps, the need to schedule work around clients in the service industries highly represented in large firms makes it difficult to accommodate and monitor employees' need for flexible hours. Allowing employees to work from home has beneficial outcomes for medium/large firms with a large permanent casual and part-time female workforce in industry sectors where work from home is feasible. In general, the other FWAs can be made available in the various size groups with limited financial consequences for employers.

The findings signal to policy makers that blanket FWA regulations are detrimental to firms, which are unable to comply due to their size and industry sector of operation. The '*ability to meet request*' clauses that accompany FWA legislation (Fair Work Act Australia, 2009; The Flexible Working Legislation, 2014) are therefore relevant. Employees must consider potential detrimental impacts on their employers when they negotiate FWAs.

The findings reported in this article must be interpreted with caution since they are specific to Australia and the prevailing regulatory environment. This provides opportunity to examine their application in other countries. There is also opportunity for longitudinal studies to establish stability of the findings over time.

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Table 2: Means and standard deviations for the main sample and sub-samples

	Private		Small		Medium		Medium/Large		Large	
Variable	Mean	Std.dev	Mean	Std.dev	Mean	Std.dev	Mean	Std.dev	Mean	Std.dev
Return on labour	1.62	0.70	1.66	0.68	1.62	0.68	1.55	0.62	1.73	0.78
Secondary	25.16	0.43	25.55	0.44	27.77	0.45	21.70	0.41	16.14	0.37
Wholesale	10.25	0.30	6.22	0.24	11.59	0.32	11.32	0.32	12.77	0.33
Retail	15.56	0.36	10.04	0.30	16.52	0.37	26.73	0.44	15.18	0.36
Professional	20.90	0.41	30.35	0.46	16.41	0.37	16.67	0.37	21.93	0.41
Personal services	18.91	0.39	14.52	0.35	19.13	0.39	17.30	0.38	28.92	0.45
Info & Rentals	9.22	0.29	13.32	0.34	8.58	0.28	6.29	0.24	5.06	0.22
Small	27.31	0.44								
Medium	50.94	0.50								
MedLarge	9.26	0.29								
Large	12.50	0.33								
Casual staff	18.84	0.26	15.09	0.25	16.77	0.24	35.09	0.33	23.48	0.26
Part-time staff	23.60	0.26	21.94	0.25	23.02	0.25	30.67	0.29	24.40	0.26
Employee age	39.40	12.66	39.70	12.55	39.35	12.72	39.61	13.01	39.98	12.37
Female	51.00	0.50	51.00	0.50	48.00	0.50	54	0.50	56.00	0.50
Flexible hours	2.79	1.13	2.81	1.23	2.82	1.13	2.92	0.98	2.58	0.94
Job sharing	1.99	1.13	1.91	1.19	1.92	1.07	2.34	1.27	2.19	1.07
Reduced time	2.20	1.23	2.02	1.20	2.19	1.23	2.62	1.24	2.30	1.14
TOIL	2.66	1.20	2.63	1.34	2.65	1.16	2.75	1.07	2.70	1.09
WFH	1.77	0.91	1.91	1.07	1.69	0.84	1.81	0.90	1.79	0.79
Flexileave	2.76	1.35	2.87	1.38	2.70	1.37	2.75	1.22	2.77	1.23
Banking hours	2.09	1.25	2.05	1.32	2.15	1.25	2.31	1.21	1.79	1.00
Sample Size	n=3244		n=888		n=1651		n=300		n=405	

Table 1: Correlation coefficients for the independent variables

	Small	Med	Med Large	Large	Sec	Whole	Retail	Prof	Pers	Info	Casual	Part time	Age	Sex	Flex Hrs	Job share	Red. Hrs	TOIL	WFH	Flex Leave
Medium	**-0.62**																			
MedLarge	-0.20	-0.33																		
Large	-0.23	-0.38	-0.12																	
Secondary	0.01	0.06	-0.03	-0.08																
Wholesale	-0.08	0.05	0.01	0.03	-0.20															
Retail	-0.09	0.03	0.10	0.00	-0.25	-0.15														
Professional	0.14	-0.11	-0.03	0.01	-0.30	-0.17	-0.22													
Personal services	-0.07	0.01	-0.01	0.10	-0.28	-0.16	-0.21	-0.25												
Info & Rentals	0.09	-0.02	-0.03	-0.05	-0.18	-0.11	-0.14	-0.16	-0.15											
Casual staff	-0.08	-0.09	0.20	0.07	-0.22	-0.11	0.16	-0.02	0.26	-0.07										
Part-time staff	-0.04	-0.03	0.09	0.01	-0.28	-0.14	0.29	-0.01	0.18	-0.03	**0.68**									
Employee age	0.01	-0.01	0.01	-0.01	0.04	0.07	-0.02	-0.02	-0.02	-0.05	-0.04	-0.07								
Female	0.02	-0.05	-0.01	0.05	-0.22	-0.05	0.09	0.14	0.00	0.07	0.12	0.24	-0.09							
Flexible hours	0.00	0.02	0.04	-0.07	-0.05	0.03	-0.08	0.13	-0.02	0.00	-0.02	0.04	-0.02	0.04						
Job sharing	-0.05	-0.06	0.11	0.06	-0.13	0.04	0.04	0.07	0.06	-0.09	0.09	0.16	-0.02	0.09	0.21					
Reduced time	-0.09	-0.01	0.12	0.04	-0.09	-0.01	0.02	0.05	0.04	0.00	0.06	0.13	-0.04	0.08	0.23	0.42				
TOIL	-0.02	-0.01	0.03	0.01	-0.09	-0.04	-0.03	0.08	0.06	0.01	-0.08	-0.06	-0.03	0.03	0.26	0.20	0.20			
WFH	0.09	-0.09	0.02	0.01	-0.03	0.08	-0.15	0.20	-0.13	0.03	-0.17	-0.15	0.00	0.04	0.28	0.19	0.21	0.17		
Flexileave	0.05	-0.05	0.01	0.00	0.04	0.07	-0.02	-0.09	0.06	-0.05	-0.03	-0.08	-0	-0.05	0.12	0.17	0.17	0.22	0.14	
Banking hours	-0.02	0.05	0.05	-0.09	0.02	-0.01	-0.04	-0.06	0.07	0.04	-0.03	-0.05	0.02	-0.04	0.15	0.17	0.14	0.30	0.11	0.19

Table 3: General dominance statistics for the relative effect of FWAs on ROL

Return on Labour	Full Standardized Domin. Stat	Ranking	Small Standardized Domin. Stat	Ranking	Medium Standardized Domin. Stat	Ranking	Medium Large Standardized Domin. Stat	Ranking	Large Standardized Domin. Stat	Ranking
Flexible hours	0.007	16	0.008	12	0.065	6	0.034	8	0.124	4
Job sharing	0.006	17	0.075	5	0.032	12	0.092	5	0.025	9
Reduced time	0.003	19	0.004	13	0.016	14	0.016	14	0.005	15
TOIL	0.012	14	0.025	9	0.027	13	0.006	16	0.143	2
WFH	0.015	11	0.004	14	0.033	11	0.209	1	0.023	10
Flexileave	0.016	10	0.010	11	0.066	5	0.047	6	0.036	7
Banking hours	0.024	9	0.004	15	0.066	4	0.028	9	0.012	14
Second	0.074	5	0.101	3	0.059	8	0.025	10	0.030	8
Whole	0.042	8	0.070	6	0.012	15	0.148	3	0.080	6
Retail	0.084	4	0.066	7	0.069	3	0.021	12	0.126	3
Profess	0.064	6	0.081	4	0.064	7	0.021	11	0.022	12
Personal	0.365	1	0.313	1	0.261	1	0.178	2	0.248	1
InfoRent	0.086	3	0.181	2	0.049	10	0.013	15	0.023	11
Proportion of casual employees	0.105	2	0.042	8	0.122	2	0.098	4	0.020	13
Proportion of part time employees	0.056	7	0.012	10	0.056	9	0.041	7	0.081	5
Age	0.003	20	0.003	16	0.004	16	0.017	13	0.002	16
Gender	0.002	21	0.003	17	0.002	17	0.005	17	0.001	17
Small	0.007	15	—	—	—	—	—	—	—	—
Medium	0.013	13	—	—	—	—	—	—	—	—
Medium large	0.005	18	—	—	—	—	—	—	—	—
Large	0.013	12	—	—	—	—	—	—	—	—
Number of regressions	2,097,151		131,071		131,071		131,071		131,071	
Number of Obs	3244		888		1651		300		405	
Overall Fit Statistic	0.2007		0.176		0.229		0.457		0.511	

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Table 4: Results from mixed linear effect for the relationships between FWAs and ROL

Sample Group	Private (N=3244)				Small (N=888)				Medium (N=1651)				Medium/Large (N=300)				Large (N=405)			
Parameter	B	Std. Error	T	Sig	B	Std. Error	T	Sig	B	Std. Error	T	Sig	B	Std. Error	T	Sig	B	Std. Error	T	Sig
Intercept	1.89	0.14	13.36	**0.00**	1.81	0.16	11.56	**0.00**	1.63	0.14	11.30	**0.00**	2.25	0.24	9.26	**0.00**	2.66	0.21	12.54	**0.00**
Small	-0.10	0.03	-3.63	**0.00**																
Medium	-0.19	0.02	-7.75	**0.00**																
MedLarge	-0.22	0.03	-6.45	**0.00**																
Casual staff	-0.11	0.04	-2.65	**0.01**	-0.14	0.07	-2.02	**0.04**	-0.16	0.07	-2.27	**0.02**	0.13	0.14	0.95	0.34	0.27	0.11	2.47	**0.01**
Part-time staff	-0.19	0.04	-4.38	**0.00**	0.07	0.06	1.02	0.31	-0.23	0.07	-3.20	**0.00**	-0.74	0.15	-5.01	**0.00**	-0.58	0.11	-5.14	**0.00**
Employee age	0.00	0.00	0.05	0.96	0.00	0.00	-2.68	**0.01**	0.00	0.00	1.96	**0.05**	0.00	0.00	-1.63	0.10	0.00	0.00	0.11	0.91
Female	-0.03	0.02	-2.15	**0.03**	-0.03	0.02	-1.49	0.14	0.01	0.02	0.25	0.80	-0.10	0.03	-3.05	**0.00**	-0.06	0.04	-1.40	0.16
Flexible hours	0.03	0.01	4.37	**0.00**	0.02	0.01	2.51	**0.01**	0.10	0.01	8.83	**0.00**	-0.16	0.02	-6.68	**0.00**	-0.16	0.03	-5.21	**0.00**
Job sharing	-0.01	0.01	-1.22	0.22	-0.04	0.01	-3.38	**0.00**	-0.05	0.01	-4.16	**0.00**	0.15	0.02	7.09	**0.00**	0.07	0.03	2.90	**0.00**
Reduced time	0.02	0.01	2.34	**0.02**	0.02	0.01	1.48	0.14	-0.01	0.01	-0.63	0.53	-0.01	0.03	-0.47	0.64	0.01	0.02	0.57	0.57
TOIL	-0.03	0.01	-4.84	**0.00**	0.03	0.01	2.77	**0.01**	-0.05	0.01	-4.36	**0.00**	-0.15	0.02	-8.24	**0.00**	-0.12	0.03	-4.42	**0.01**
WFH	0.03	0.01	3.06	**0.00**	0.00	0.01	-0.16	0.87	0.10	0.01	6.66	**0.00**	0.14	0.03	4.18	**0.00**	-0.13	0.03	-3.88	**0.00**
Flexileave	-0.02	0.01	-2.98	**0.00**	-0.02	0.01	-1.92	**0.05**	-0.03	0.01	-3.39	**0.00**	-0.09	0.02	-4.39	**0.00**	-0.09	0.03	-3.53	**0.00**
Banking hours	-0.02	0.01	-3.75	**0.00**	-0.04	0.01	-3.92	**0.00**	-0.05	0.01	-5.61	**0.00**	0.06	0.02	3.49	**0.00**	0.12	0.03	4.43	**0.00**
	B	Std. Error	Wald Z	Sig	B	Std. Error	Wald Z	Sig	B	Std. Error	Wald Z	Sig	B	Std. Error	Wald Z	Sig	B	Std. Error	Wald Z	Sig
Residual	0.18	0.00	40.06	0.00	0.10	0.00	20.69	0.00	0.19	0.01	28.48	0.00	0.05	0.00	11.72	0.00	0.15	0.01	13.77	0.00
Intercept	0.32	0.11	2.90	0.00	0.37	0.13	2.87	0.00	0.31	0.11	2.87	0.00	0.67	0.27	2.51	0.01	0.39	0.15	2.55	0.01

The β values are multiplied by 100 in the results section to take account of log transformation of the dependent variables