

Small Is Beautiful or Big Is Better: How Much Do Industry and Family Ownership Matter in Firms of Different Sizes?

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Drawing on a national survey – the 2011 British Workplace Employment Relations Study (WERS 2011) – this paper examines whether the associations between industry sectors, family ownership and calculative human resource management (CHRM) vary between firms of different sizes. The analysis of 1,293 establishments in the UK suggests that the associations between service industries and CHRM are stronger in smaller than in large firms, whereas family ownership (primarily family-owned and -managed businesses) is significantly and negatively associated with the prevalence of CHRM in large organisations compared to smaller businesses. Overall, the study suggests that: (1) smaller businesses tend to be more coerced to take on CHRM for legitimacy recognition than large organisations; and (2) extending an academically long-held wisdom, owner-management among family businesses has a significantly deleterious effect on the uptake of CHRM in large organisations than in smaller firms.

Keywords: calculative human resource management (CHRM); industry sectors; family ownership; firm size; institutional effect; organisational imprinting effect

Introduction

Extensive human resource management (HRM) research in smaller businesses – often dubbed small and medium-sized enterprises (SMEs) over the past three decades – has suggested that SMEs are not a ‘scaled-down’ version of large firms (Storey, 2004, p.115; Welsh & White, 1981). Research has generally supported that the manner of HRM in SMEs is subject to a range of unique contextual characteristics that may not be applicable in large firms (e.g. Marlow, 2006). Frequent face-to-face communication, for example, coupled with high heterogeneity renders formalisation in SMEs redundant (Greene, 1993; Storey, 1994). This popularises the view of small-is-beautiful and questions the appropriateness of prescribing the rational, calculative and performance-orientated HRM practices (also termed calculative HRM or CHRM for short) (Storey, 1994; Gooderham *et al.*, 2018) widely reported among large firms to SMEs (Goss *et al.*, 1994).

The alternative organisational growth and development perspective, by contrast, argues that formalisation becomes inevitable when firms grow (Mintzberg & Waters, 1990; Reid *et al.*, 2000). Hence, the widely reported deleterious effect of owner-management (family-owned and managed) on formality among SMEs is expected to taper when a business grows, in that effective management tools are needed to handle heightened organisational complexity (Baird & Meshoulam, 1988). Limited research of family ownership among large firms generally reflects a worry-free stance hidden in the strategic HRM literature, where a big-is-better view dominates.

Two theories underpin these contrasting views. First, institutional theorists argue that organisations striving to gain social recognition and legitimacy within a fast-changing and open environment tend to be rational and calculative in adopting (or converge at) specific HRM practices (Pauwe & Boselie, 2003; Wood *et al.*, 2014; Gooderham *et al.*, 2018). Firms, in response to such institutional influence, undergo a process of adjusting organisational structure, which will eventually shape management patterns; this organisational process tends to be stable or even persistent (Schreyögg and Sydow, 2011, p. 326). Among various institutional factors, research has reported that industrial regulations have a direct impact on

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the manner of HRM across businesses (Jaffe *et al.*, 1995; Combs *et al.*, 2006), and the causal link tends to be linear. Compared to manufacturing, the service industry is more subject to industrial regulations, particularly in relation to new codes of conduct, and is more pressured to adopt innovative practices in order to abide by fast-changing conduct rules (Field, 2007; Higginbottom, 2015). This is largely due to business outcomes in services, such as health care, finance and education, that rely heavily upon employee–customer interactions; installing novel management practices to improve employees' skills and knowledge in providing high quality customer consumption experience is imperative (Morrison, 1996; Boxall, 2003). However, a large number of studies conducted among SMEs (e.g., Westhead & Storey, 1996; Harney & Dundon, 2006) and recent developments in the path dependence model all hint that such regulatory impact is likely to vary between firms of different sizes (Sydow *et al.*, 2009), which still awaits empirical evidence.

Second, organisational imprinting theory suggests that organisational patterns set and managed by an owner/founder have persistent effects on a wide array of outcomes across decades and different generations (Baron *et al.*, 1999; Beckman & Burton, 2008; Marquis & Tilcsik, 2013). Following this line of argument, the deleterious effect of owner-management reported among SMEs is likely to last even when they grow into large organisations. However, the divide between SME literature and that in strategic HRM (which is predominately based upon large firms) suggests that the human resource (HR) issues SMEs face are likely to be replaced by a distinctive category of HR problems (Baird & Meshoulam, 1988; Marlow, 2006) when they grow; thus, owner-management is no longer a hurdle for professionalisation in large organisations. Despite this, emerging research speculates large owner-managed organisations, fearing family control and wealth are at risk, may endeavour to escape any attempts to engage professional management (Anderson & Reeb, 2004), allowing the owner-management footprints to remain and continue to influence the business patterns on a daily basis, likely lasting long-term. The extent to which the imprinting effect of owner-management on the implementation of CHRM would hold among large firms is yet to be empirically established.

In this paper, we address the two gaps through focusing on firm size as a moderator as opposed to a control variable documented in prior strategic HRM studies largely informed by institutional theory. This is because firm goals, as well as HRM strategy, are likely to change when firms either grow or scale down (Kotlar *et al.*, 2014). Empirical studies report that firm size positively moderates the association between family ownership and the hire of non-family managers within SMEs (Barrett & Rainnie, 2002; Fang *et al.*, 2016) as well as the association

between managers' awareness of HRM and the introduction of employee engagement practices in small firms (Kroon *et al.*, 2013). However, there is no research to examine the moderation effect of firm size across firms of different sizes, ranging from small to large organisations.

In doing so, this research contributes to extant literature in three ways. First, it contributes to the theoretical discussion by evaluating whether the institutional and/or imprinting effect on CHRM is dependent upon firm size. Second, it bridges the literature of small business management and strategic HRM literature by evaluating the relationship between industry, family ownership and CHRM practices across firms of different sizes. Third, the findings contribute to the family business management literature by stressing that the association between family ownership and informality varies between SMEs and large organisations. We suggest that future research would benefit from extending the study of family businesses to firms of different sizes rather than restricting it to the SME sector, considering the latter dominates the family business management literature.

It should be noted at the outset that this study makes no claim to identify the performance impact of specific bundles of HRM practices; we use the term 'calculative HRM' loosely to reflect that performance-oriented practices are default calculative ones, and the Anglo-Saxon HRM approach is largely characterized as calculative HRM for its performance focus (see Poutsma *et al.*, 2006 for a review). Hence, the term 'calculative HRM' used here should not be confused with Gooderham *et al.*'s (1999) or Gooderham *et al.*'s (2018) calculative measures where communication and consultation among employees are categorised as collaborative practices. Instead, we use the term to encapsulate practices such as consultative committee and mirror that engagement practices facilitate employees' cooperation, improve organisations' internal social structures and eventually enhance organisational performance (Combs *et al.*, 2006).

The association between industries and CHRM

Industry rivalries and regulations are deemed influential over the prevalence of CHRM practices in workplaces (Combs *et al.*, 2006; Jackson *et al.*, 2014). The landscape of economy has vastly changed by transitioning from a manufacturing economy to a service economy (Hislop, 2013). Compared to capital intensive manufacture industry, where organisations must comply with industry regulations in order to produce and market products (Jaffe *et al.*, 1995), business outcomes in services such as health care, finance and education are more reliant upon employee–customer interactions; investment in updating

workforce knowledge base and providing high quality customer consumption experience is crucial (Morrison, 1996; Boxall, 2003). Investment in teamwork training among medical consultants, nurses, and allied professionals, such as support workers, has been a common practice within the global health care sectors to advance the ever-increasing high-quality service (Kabene *et al.*, 2006). In the finance industry, management innovations that involve an accelerating use of information technology have allowed major banks to develop sales-oriented activities that require more demanding skills than those required more than three decades ago (Wilkinson, 1995). Given that service quality and staff performance are key contributors to competitive advantage in the financial service sector (Watkins & Bryce, 1992), employers introduce high-performance work systems comprising remuneration practices to facilitate effective fund management performance (Agarwal *et al.*, 2003). Similarly, increasingly international and marketized education implies growing competition and rivalry in the education sector; developing competitive advantage through effective management practices is essential (Lodge, 2015).

Beyond the argument for a business case, research shows that businesses operating in highly regulated industries are coerced to comply with rules and regulations that affect their work (Field, 2007), as well as constantly installing innovative practices to abide by fast-changing conduct rules. In the finance industry, for example, remuneration-related practices are influenced by external intervention from regulatory bodies (such as bonus caps related to based salary regulated by EU directives, Prudential Regulation Authority (PRA), and Financial Council Authority (FCA)); the resultant new code of conduct will significantly impact the full HRM lifecycle from recruitment and integrating to performance management and termination (Higginbottom, 2015). For example, the introduction of bonus caps of 100% of base pay or 200% with shareholder approval challenges the incentive practice commonly used as an effective tool to attract and retain top-management talents since poaching has long been a conventional recruitment approach in banking (Wilkinson, 1995). The education sector has also witnessed increasing demands for audit, evaluation and other procedural regulatory instruments. Organisational resources then shift away from the front lines of teaching and research towards 'a ballooning of armies of university-based internal quality checkers and other administrators' (Lodge, 2015, p. 3), which popularises CHRM practices such as performance appraisal, goal-oriented management, teamwork, mentoring, induction and performance-related pay (Middlewood & Lumby, 2009). Hence, such practices must be in place to ensure good quality and consistency throughout these services. Thus, we hypothesise:

Hypothesis 1. Relative to manufacturing, there is a positive association between the service industry and the uptake of CHRM across firms of different sizes.

In line with institutional theory, businesses seeking legitimacy in specific industries, large or small, are unexceptionally coerced to adopt management practices to be qualified (DiMaggio & Powell, 1983). This would appear to suggest that industry linearly predicts the intensity of CHRM across firms of different sizes. Indeed, successful small businesses with established market identities within such sectors also report CHRM (Harney & Dundon, 2006), albeit such an uptake still remains rare compared to large firms (Forth *et al.*, 2006; Wu *et al.*, 2014). Research in SMEs has argued that, given a generally short life cycle, an urge for survival often outweighs the impulse for formality (Ram *et al.*, 2001; Marlow, 2006). However, Kitching *et al.* (2015) observe that there is no typical 'small business effect' of regulation when it comes to businesses' compliance with conduct rules and regulations. In fact, the magnitude that SMEs are coerced to adopt such practices to ensure a successful pass of the entry barriers and gain legitimacy in intensively regulated business sectors is likely to be greater compared to large firms. This is because large organisations often play a monopolistic role and exert significant influence in the market in relation to best practices in specific industries (Michie & Sheehan, 2005). Research has also reported that the installation of CHRM for a legitimate purpose may well stretch the already limited resources an SME has and would not always benefit their businesses' economic performance (e.g., Way, 2002). Instead, it likely profoundly impacts the intensity of CHRM practices adopted compared to other SMEs operating in non-service industries, where the entry barriers associated with regulatory requirements are generally low. Overall, alongside severe competition in the market, industry regulations and red tape are the most cited obstacles to business success by SMEs (Lomax *et al.*, 2016). One would, therefore, anticipate that SMEs operating in a highly competitive and regulated industry are more compelled, if not purely driven by high-performance motives, to engage with CHRM practices than other smaller businesses. Conversely, the influence of industry competition and regulation on management practices in large organisations is relatively mild for two reasons: first, formality is a natural consequence for large organisations to cope with complex business operations within a bureaucratic organisational structure (Baird & Meshoulam, 1988; Mintzberg & Waters, 1990; Reid *et al.*, 2000); and second, economies of scale allow large organisations to spread the cost over a large scale of workforce and are financially viable (Westhead & Storey, 1996). Hence, we test:

Hypothesis 2. The positive association between the service industry and CHRM is negatively moderated by firm size; namely, the associations are stronger when firm size is smaller, but weaker when firm size is larger.

The association between family ownership and CHRM

In contrast to the view that industry is one of the key institutional factors associated with the uptake of CHRM in strategic HRM literature, family ownership is widely acknowledged as an antecedent of informality primarily among SME study (where research findings are often extrapolated to small business management). Research has largely reported that owner-managed businesses are less likely to adopt CHRM than non-family-owned businesses (Fiegener *et al.*, 1996), and the reason is twofold. First, from business governance perspective, owner-managers are less likely to delegate HRM authorities compared to non-family-owned businesses, due to risk aversion and intention to maintain family control and wealth (Gedajlovic *et al.*, 2004). Likely consequences include an emphasis on the family link and direct control in business management, which often direct family businesses to non-financial goals and render professional management redundant (Faems *et al.*, 2005). Second, according to agency theory, CHRM is adopted as a control measure to ensure the goals of principals and agents are aligned so that moral hazards can be minimised (Jensen & Meckling, 1976). However, the principal-agent dilemma is no longer a concern among owner-managed companies because principal and agent are the same one (de Kok *et al.*, 2006). This is because the shared goals and values featured in family businesses usually lead to a higher degree of cohesiveness and commitment of the workforce (Lyman, 1991), so scrutiny and monitoring through high-performance oriented practices are no longer necessary.

Prior research of family business disproportionately views owner-manager's idiosyncrasies and direct control in management as an explanation for the lack of formality in SMEs (Lomax *et al.*, 2016). Contrasting this, research studying the impact of owner-management on the manner of HRM in large firms remains rare. This is partly because a large number of small businesses started as family businesses (de Kok *et al.*, 2006; Messersmith & Guthrie, 2010), and owner-managers' characteristics can be very influential on shaping business development, in particular in the early stages of a small family business (Marlow, 2006). Hence, family business management literature tends to view that proprietary control is mainly an issue among SMEs, assuming bureaucracy in large organisations will eventually mitigate the influence of owner-manager's interference in management.

Contradicting this, organisational imprinting theory suggests that the footprints reflected in organisation patterns set and managed by owner-managers stay in the organisation and would have a lasting impact on management modes at various stages of a firm's life cycle (Beckman & Burton, 2008; Marquis & Tilcsik, 2013). Despite that family businesses play a crucial role across all economies (Aronoff & Ward, 1995; Chua *et al.*, 1999), family ownership (especially owner-management) has rarely been examined in a large organisational context. Drawing upon organisational imprinting theory, one would anticipate that owner-managed businesses, large or small, are less likely to employ non-family members and install sophisticated HRM systems to minimise agency problems. This leads to our next hypothesis:

Hypothesis 3. Owner-management is negatively associated with the uptake of CHRM across firms of different sizes.

Compared to the abundant evidence base that informality is associated with family ownership in SMEs, research studying the extent to which family ownership would affect HRM in large firms is rare. A possible explanation is that installing complex HRM systems is a natural consequence when a small firm grows (Baird & Meshoulam, 1988). The urge for enhancing formality to cope with the increasingly complicated operation is likely to outweigh family members' attempt to maintain control of the business. Resource availability and economies of scale provide large organisations greater scope to accommodate high-performance work practices, or they are obliged to follow suit when bundles of CHRM practices have become 'table stake' among large competitors (Boxall & Purcell, 2008).

Opposing the universal view that CHRM will eventually be adopted when organisations' size grows, a voice in family business management literature posits that the modes of internal operations (aiming to strengthen family control and family wealth) and approach to responding to the environment are likely to persist within owner-managed firms regardless of changes in firm size (Kroon *et al.*, 2013). This echoes organisational imprinting effect-management patterns founded and developed at a particular time may persist for years, decades (Johnson, 2007; Schreyögg & Sydow, 2011) or even for generations in the case of family-owned businesses. Beyond the linear causal relationship implied by organisational imprinting theory, a small amount of research nonetheless suggests family ownership may have a greater negative impact on the uptake of CHRM when a small family business expands, matures and becomes a large family organisation (Salvato *et al.*, 2012). Owner-managers in large family organisations seeking to protect their private benefits by manipulating resources

at the board level are likely to inhibit professional management, which likely leads to greater firm failure (Anderson & Reeb, 2004). Ward (1987) observed that an owner-manager sows the seeds of governance by using informal mechanisms such as an advisory board and family meetings to discuss business and family issues. Additionally, owner-managed large family businesses can use their long-established organisational culture to reinforce a shared vision and value (Zahra *et al.*, 2004). Resultant cohesion and commitment in the workplace imply there may be no need to implement complicated monitoring systems; instead, path dependency would suggest informality shaped under family governance is likely to continue to prevail (Sciascia *et al.*, 2013). In contrast to extensive adoption of CHRM among most large organisations, one would, therefore, anticipate the deleterious effect of owner-management on the uptake of CHRM is likely to be greater among large owner-managed organisations than in smaller ones. This is because the impact of the effort to strengthen family control and wealth by minimising the intake of HR expertise from outside the family is likely to be greater in an owner-managed large firm than that in an owner-managed small business. As discussed above, we test:

Hypothesis 4. The negative association between owner-management and CHRM is positively moderated by firm size; namely, the negative association is stronger when firm size is larger but weaker when firm size is smaller.

Methods

Data and sample

The analysis draws data from the authoritative 2011 British Workplace Employment Relations (WERS11) Study management survey (Department for Business, Innovation and Skills, 2013). Designed to be nationally representative of British workplaces with five or more employees, the WERS 2011 survey comprises 2,680 observations from the most senior managers in the workplaces with responsibility for employee relations matters (van Wanrooy *et al.*, 2013).

In line with the OECD (2005, p. 17) and the European Commission's (EC) (2003) method of defining small and medium-sized enterprises (SMEs), this analysis defines smaller businesses as having between 10 and 249 employees and large firms as having 250 or more employees in the private sector. To ensure these firms do not have large overseas operations, this research follows a conventional approach applied by other WERS users

(e.g., Wu *et al.*, 2015) and excludes foreign-owned workplaces and those with overseas subsidiaries from the SMEs category. This produces a sample of 1,293 establishments that entails 534 SMEs and 759 large firms. The frequency distribution for each variable under study here, such as industry and family ownership, are reported in the Appendix. To account for sample selection probabilities and minimise non-response bias, the 2011 WERS survey weight was applied throughout our analysis (Deepchand *et al.*, 2013; Lai *et al.*, 2017).

Measures

Dependent variable

The dependent variable is an additive measure of 19 CHRM practices commonly identified as important within both strategic HRM research (e.g., Combs *et al.*, 2006) and small business management study (Way, 2002). The additive measure of CHRM has also been widely employed by studies using WERS datasets (e.g., Storey *et al.*, 2010; Wu *et al.*, 2014; Wood & Ogbonnaya, 2018). The robustness of this HRM measure (Cronbach's alpha = 0.74) was also tested through constructing a single HRM index via confirmatory factor analysis; both measures were highly correlated ($r = 0.97$), which echoes Wu *et al.*'s (2015) study. Table 1 presents the construction of these variables.

Independent variables

Two contextual factors are studied here (as shown in Table 2), with industry being primarily researched among the strategic HRM literature (e.g., Combs *et al.*, 2006; Boxall & Purcell, 2008) and family ownership, in particular owner-management, predominately documented by SME literature (Rutherford *et al.*, 2003; Marlow, 2006). The construction of these independent variables is consistent with prior studies that also use WERS data (e.g., Bacon & Hoque, 2005; Wu *et al.*, 2014; Wood & Ogbonnaya, 2018). Industry is coded as a categorical variable representing nine industries, where manufacturing forms the base category and is coded as '0' (see Table 2). Family-owned and -managed (owner-management) is coded as '1', if a single individual or family owning at least 25 per cent of the company share is involved in day-to-day management on a full-time basis. Workplaces are coded as family-owned but not family-managed if an individual's or family's share of the company is at least 25 per cent but they are not involved in day-to-day management. Those workplaces in which an individual or family owns less than 25 per cent of the share are coded as non-family ownership.

Table 1 Construction of calculative CHRM

CHRM	Items
Sophisticated recruitment	Conducting either a personality/attitude test or performance/competency test in filling the largest occupational group (LOG) vacancies.
Induction	A standard induction programme designed to introduce new non-managerial employees belonging to the LOG to the workplace and such induction activities normally lasting for at least 2 days (if counted in days) or at least 16 hours (if counted in hours).
Off-the-job training	At least 60 per cent of experienced LOG have been given time off from their normal daily work duties to undertake training over the past 12 months.
Internal labour market	Preference is given to internal applicants, other things being equal, over external applicants, or internal applicants are the only source in case of filling vacancies.
Individual performance-related pay	At least 60 per cent of non-managerial employees at the workplace have their performance formally appraised and individual employees' pay is linked to the outcome of the performance appraisal.
Development appraisal	At least 60 per cent of non-managerial employees at the workplace have their performance formally appraised and the performance appraisal result in an evaluation of employees' training needs.
Teamwork	At least 60 per cent of the LOG at the workplace are working in formally designated teams, in which team members depend on each other to do their job and team members jointly decide how the work is to be done.
Team briefing	Meetings held at least weekly between line managers or supervisors and all the workers for whom they are responsible (team briefing), in which more than 10 per cent of the time is usually available for questions from employees or for employees to offer their view.
Communication	Management communicates or consults with employees at the workplaces through least four of the following ways: notice boards, systematic use of management chain, suggestion schemes, regular newsletters distributed to all employees; regular use of email to all employees; information posted on company intranet.
Information sharing	Management regularly give employees, or their representatives information about all three areas: internal investment plans, financial position of the workplace/the whole organization and staffing plans.
Consultation committee	Committees of managers and employees at the workplace, primarily concerned with consultation, rather than negotiation (joint consultative committees, works councils or representative forums).
Employee attitude survey	Employer or a third party conducted a formal survey of employee views or opinions during the past two years and the results of the survey were made available in written form to those employees that took part.
Quality circles	At least 60 per cent of LOG at the workplace have been involved in problem-solving groups, quality circles or continuous improvement groups.
Functional flexibility	At least 60 per cent of the LOG are formally trained to do jobs other than their own.
Benefits	Three or more of the following non-pay terms and conditions apply to the LOG: employer pension scheme; private health insurance; more than four weeks of paid annual leave (excluding public holidays); sick pay in excess of statutory requirements.
Flexible working/Family friendly practices	Four or more of the following are practised at the workplace: work-at-home; reduced working hours; compressed hours; changed set working hours (including changing shift pattern); job sharing schemes; flexitime; maternity leave receiving normal full rate of pay; working only during school term-time; workplace nursery or nursery linked with workplace; financial help with child-care; financial help with the care of older adults; a specific period of leave for carers of older adults.
Equal opportunities	Recruitment and selection (or promotion procedures) are monitored or reviewed to identify indirect discrimination by at least four of the following characteristics: gender, ethnic background, disability, age, sexual orientation, religion or belief.
Grievance procedures	Workplaces have all of the following four items: a formal grievance procedure; employees are required to set out in writing the nature of the grievance; employees are asked to attend a formal meeting with a manager to discuss the nature of their grievance; and employees have a right to appeal against a decision made.
Job security	Job security or no-compulsory redundancies policies apply to the LOG at the workplace.

Moderator

To test the moderating effect of firm size, the analysis uses a question included in the WERS 2011 management survey asking, "How many employees in total are there within your organisation in the UK?" The responses to the question were based on size categories and then converted to a linear measure of employment size for ease of inferences. This was achieved by plotting the cumulative distribution at the minimum value of each size category, and a logarithmic line was then fitted to the distribution (Hollister, 2004). Then, the median firm size for the number of employees within each size category was calculated by using the fitted cumulative distribution

(Parker & Fenwick, 1983). The fitted line achieved a good fit with the original firm size bands ($R^2 = 0.987$).¹ The linear measure of firm size was then centred at 249 employees (as stated above, SMEs are defined as having between 10 and 249 employees in the private sector) to assist a meaningful interpretation of the results as well as to remedy multicollinearity between independent variables and interactions (Cohen *et al.*, 2003). Results from the analysis with a categorical firm-size variable (namely, SMEs vs. large organisations) are virtually the same to those reported here.² Given the continuous firm-size variable facilitates a more direct dialogue with the hypotheses developed here compared to the

Table 2 Descriptive analysis of study variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CHRM	6.423	0.14	1												
2. Manufacturing	0.098	0.02	0.00	1											
3. Electricity/construction	0.046	0.01	0.00	-0.11†	1										
4. Wholesale/retail	0.315	0.02	-0.14†	-0.17†	-0.12†	1									
5. Hotels/restaurants	0.111	0.01	-0.14†	-0.13†	-0.09†	-0.13†	1								
6. Transportation/communication	0.035	0.01	0.04	-0.10†	-0.07*	-0.10†	-0.08**	1							
7. Finance/other business services	0.211	0.02	0.08†	-0.20†	-0.15†	-0.21†	-0.16†	-0.13†	1						
8. Education	0.033	0.01	0.15†	-0.10†	-0.07**	-0.11†	-0.08**	-0.06*	-0.13†	1					
9. Health	0.110	0.01	0.05	-0.14†	-0.10†	-0.15†	-0.11†	-0.09†	-0.18†	-0.09†	1				
10. Other community services	0.041	0.01	-0.04	-0.13†	-0.10†	-0.14†	-0.11†	-0.08**	-0.17†	-0.09†	-0.12†	1			
11. Not-family owned	0.526	0.02	0.39†	-0.10†	-0.04	-0.15†	-0.02	0.00	0.06*	0.14†	0.10†	0.05	1		
12. Family-owned and Managed (Owner-managed)	0.326	0.02	-0.37†	0.09**	0.08**	0.07*	0.00	-0.03	-0.02	-0.09†	-0.09†	-0.04	-0.078†	1	
13. Family-owned/not owner managed	0.148	0.01	-0.08**	0.03	-0.05	0.13†	0.03	0.03	-0.06*	-0.009†	-0.03	-0.02	-0.44†	-0.22†	1
14. Firm size (log)	0.263	0.02	0.58†	0.02	0.00	0.09**	-0.01	0.15†	-0.07*	0.01	-0.04	-0.11†	0.33†	-0.39†	0.05

Notes: Survey weighted estimations.

* $p < 0.05$,

** $p < 0.01$,

† $p < 0.001$.

categorical size variable, we report and interpret the results from the analyses with the continuous firm-size variable in the Results section.

Control variables

The regression analyses control for variables that also account for the association between institutional/organisational factors and the adoption of CHRM reported elsewhere. These are workplace size (ranging from as few as 10 to more than 100,000 employees); workplace age (ranging from new start-ups to those with more than 25 years in business) and single establishment (Storey *et al.*, 2010); dummy variables for HR specialists (De Winne & Sels, 2010); tenure contract; Investor in People (IiP) (Hoque & Bacon, 2008); client requirement (Bennett & Robson, 1999); benchmarking (Boxall & Purcell, 2008); trade union (Greene, 1993); recession (Wood & Ogbonnaya, 2018), skill mix (Wu *et al.*, 2014), and management consultancy (Klaas, 2008).

Results

Descriptive analysis

The correlation analysis, as shown in Table 2, does not show multicollinearity between any of the study variables. To facilitate better understanding of the extent which firm size may affect the influence that a range of contingency factors (most of which are controlled to minimise any confounding effect on the relationship between industry, family ownership and the adoption of CHRM) may have on the uptake of CHRM, we also construct a table (as shown in the Appendix comprising variables' mean in smaller (or termed SMEs) and large organisations, respectively. The results in the Appendix suggest that overall uptake of CHRM in large firms (mean = 7.656) is significantly higher than that in smaller businesses (mean = 5.495) (t -value = -21.63, $p < 0.000$). Where industry is concerned, smaller firms are more likely to run businesses in manufacturing than large companies (t -value = -4.10, $p < 0.000$). As expected, smaller firms are more likely to be owner-managed (t -value = 14.57, $p < 0.000$) than large organisations.

With regard to control variables, smaller firms are less likely to benchmark against other companies (t -test = -9.51, $p < 0.000$), hire an HR specialist (t -value = -14.28, $p < 0.000$), or have union recognition (t -value = -16.75, $p < 0.000$). In contrast, smaller firms are more likely to seek advice from management consultancy (t -value = 2.75, $p < 0.003$). Smaller businesses also rarely have IiP recognition (t -value = -12.79, $p < 0.000$). There is no evidence, however, suggesting smaller workplaces have a much shorter life cycle when compared to large workplaces in the private sector.

The association between contextual factors and CHRM and the moderating effect of firm size

Survey hierarchical regression analyses, as shown in Table 3, indicate steady increases in R^2 from the base model that is comprised of only control variables ($R^2 = 0.17$; not reported in the table) to Model 1 ($\Delta R^2 = 0.21$), Model 2 ($\Delta R^2 = 0.02$), and Model 3 ($\Delta R^2 = 0.04$), suggesting clear improvement in goodness of fit by adding contextual factors as well as firm size as a moderator. In Model 3, where industry is concerned, Education' ($\beta = 1.99$, $p < 0.05$), "Health" ($\beta = 1.62$, $p < 0.001$) and 'Other community services' ($\beta = 1.33$, $p < 0.01$) are positively associated with CHRM after interaction terms (contextual factors interacted with firm size) were added. Hypothesis 1 is largely supported. As anticipated, firm size moderates the associations between industry and CHRM. Statistically

significant associations with CHRM are demonstrated by interaction terms of 'Finance and other business services*Firm size' ($\beta = -0.36$, $p < 0.05$), "Education*Firm size" ($\beta = -0.64$, $p < 0.05$), "Health*Firm size" ($\beta = -0.75$, $p < 0.001$). The negative sign of the coefficients suggests that the smaller the firm size, the greater the influence these industries exert on the adoption of CHRM, thus lending support to Hypothesis 2.

To assist interpretation, the moderating effect of firm size on the associations between industry and CHRM is plotted in Figures 1a, 1b and 1c. Having centred the firm-size variable at 249 employees, we plotted "smaller firms" as 1 standard deviation below the centred firm-size variable (namely, 10–249 employees) and "Large firms" at 1 standard deviation above the centred firm-size variable (namely, 250+ employees) (Aiken & West, 1991). Thus, Figures 1a, 1b and 1c illustrate, compared to the

Table 3 Hierarchical regression analyses of the association between industries, family ownership and the uptake of CHRM

	Model 1		Model 2		Model 3	
	β	<i>t</i> -values	β	<i>t</i> -values	β	<i>t</i> -values
<i>Industry</i>						
<i>Ref. category = Manufacturing</i>						
Electricity/Construction	-0.45	-0.90	-0.48	-0.99	-0.63	-1.29
Wholesale and retail	-0.27	-0.65	-0.45	-1.10	-0.90*	-2.09
Hotels	1.11	1.95	0.95	1.64	0.51	0.83
Transportation	0.10	0.16	-0.16	-0.27	-0.76	-0.91
Finance/Other business services	0.93*	2.31	1.04*	2.58	0.57	1.37
Education	2.41†	3.91	2.69†	4.33	1.99**	3.26
Health	1.80**	3.46	1.95†	3.79	1.62**	3.43
Other community services	1.51**	2.88	1.61**	3.07	1.33*	2.51
<i>Family ownership: Ref. category: Not family owned</i>						
Owner-managed	-0.63*	-2.47	-0.40	-1.52	-0.52	-1.91
Family-owned/not owner-managed	-0.28	-0.75	-0.26	-0.72	-0.38	-1.03
Firm size (Log) ¹			0.28†	3.78	0.63**	2.76
<i>Interactions</i>						
<i>Industry* Firm size: Ref. category = manufacture* Firm size</i>						
Electricity/Construction*Firm size					-0.04	-0.19
Wholesale and retail*Firm size					-0.23	-1.40
Hotels*Firm size					-0.17	-0.86
Transportation*Firm size					-0.19	-0.86
Finance/Other business services*Firm size					-0.36*	-2.05
Education*Firm size					-0.64*	-2.33
Health*Firm size					-0.75†	-4.02
Other community services*Firm size					-0.42	-1.82
<i>Family ownership: Ref. category: Not family owned</i>						
Owner-managed*Firm size					-0.25*	-2.05
Family owned/not owner-managed*Firm size					0.11	0.82
Intercept	4.70†	6.89	4.53†	6.42	4.82†	6.72
<i>N</i>	1,293		1,293		1,293	
<i>Prob > F</i>	0.00		0.00		0.00	
R^2	0.38		0.41		0.44	

Notes: Survey weighted OLS.

All equations control for single establishment, workplace age, workplace size, full time contract, skill mix, HR specialists, benchmarking, IiP recognition, recession, management consultancy, and trade union.

* $p < 0.05$,

** $p < 0.01$,

† $p < 0.001$.

¹ The Log value of firm size was calculated from a linear measure of employment size.

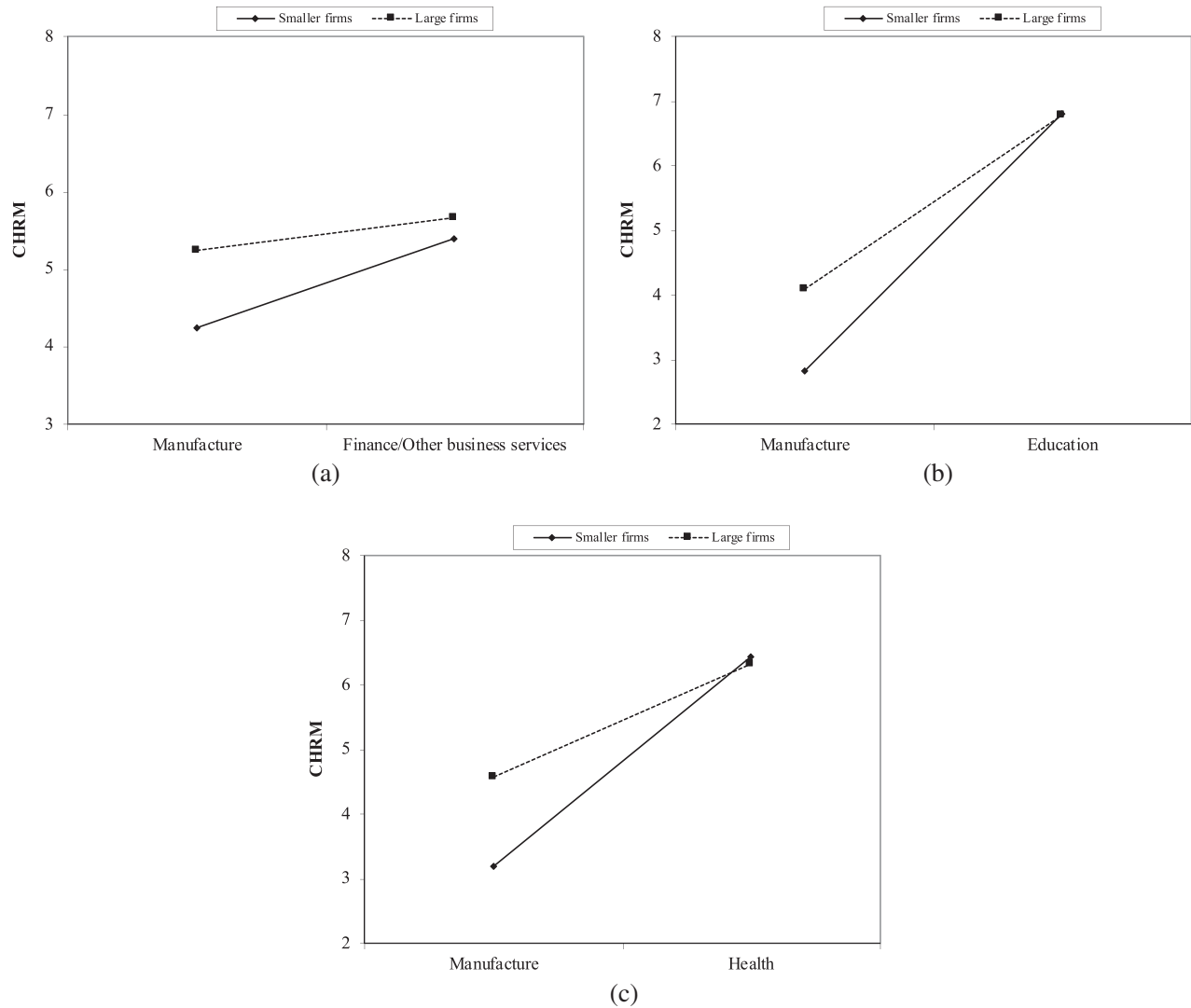


Figure 1 a) Interaction Plot for CHRM in Finance and other business services by firm size, b) Interaction Plot for CHRM in Education sector by firm size, c) Interaction Plot for CHRM in Health sector by firm size

‘Manufacture’ category, service categories such as ‘Finance and other business services’, ‘Education’ and ‘Health; demonstrate a greater influence on CHRM among smaller firms than in large ones, respectively.

Turning to family ownership, as shown in Model 1 in Table 3, owner-managed firms ($\beta = -0.63, p < 0.05$) are less likely to adopt CHRM compared to non-family owned businesses. However, the association is no longer statistically significant after controlling for firm size in Model 2, suggesting the rare adoption of CHRM among owner-managed firms is reliant upon firm size. Hence, Hypothesis 3 is supported, indicating potential non-linear effect of firm size on such association.

With regard to Hypothesis 4, we argued that owner-management is likely to have a significantly deleterious effect on the adoption of CHRM in large firms rather than in small ones. This is confirmed by the

statistically significant coefficient of the interaction term ‘owner-managed*firm size’ ($\beta = -0.25, p < 0.05$) in Model 3. This was plotted in Figure 2, suggesting the negative association between owner-management and CHRM is stronger in large firms than in smaller firms. Hypothesis 4 is therefore supported and firm size matters.

Where control variables are concerned, the results (not included in Table 3) suggest that benchmarking ($\beta = 0.76, p < 0.01$), HR specialists ($\beta = 1.00, p < 0.001$), full-time contracts ($\beta = 1.03, p < 0.001$), skilled workers ($\beta = 0.83, p < 0.05$), union recognition ($\beta = 1.44, p < 0.001$), and IiP award ($\beta = 0.83, p < 0.05$) are positively associated with the practice of CHRM; these associations remain when the firm-size variable is added in the regression. However, there is no evidence suggesting any statistically significant moderating effect of firm size on such associations. These suggest the set

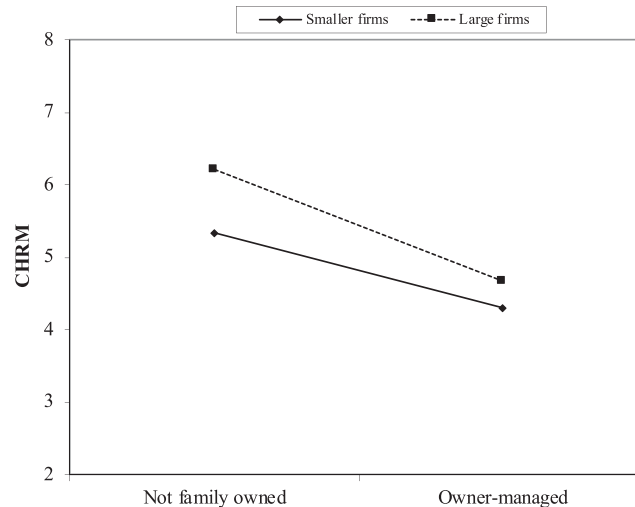


Figure 2 Interaction Plot for CHRM in owner-managed firms by firm size

of contextual factors have consistent influence on the prevalence of CHRM across firms of different sizes. The findings also indicate that recent economic recession, workplace age, client requirements and seeking advice from management consultancy are not statistically related to the adoption of CHRM at workplaces.

Discussion and conclusion

This paper set out to examine the extent to which the institutional effect of industry and imprinting effect of family ownership on CHRM varies between firms of different sizes. Our findings provide new perspectives to both institutional and organisational imprinting theories, suggesting firms respond differently to certain institutional/organisational factors when they grow from smaller start-ups to large mature organisations.

Where Hypothesis 1 is concerned, our findings suggest organisations, either small or large, are more likely to adopt extensive CHRM if they operate in the health, finance and education industries compared to those in manufacturing. In resonance with the institutional theory, a convergence of greater uptake of CHRM among organisations operating in specific services suggests that abiding by intensive and fast-changing regulations and code of conduct is vital (DiMaggio & Powell, 1983; Paauwe & Boselie, 2003; Wood *et al.*, 2014). Greater regulatory impact among services than in manufacturing would appear to suggest employee–customer interactions are likely to demand further investment in advancing employees' skill-mix and providing high quality products/services (Morrison, 1996; Boxall, 2003), rather than regulation compliance mainly for producing and marketing products in the manufacturing industry (Jaffe

et al., 1995). The positive relationships between these services and the prevalence of CHRM remains consistent across firms of different sizes, thus lending support to the view that there is no small business effect with respect to business compliance with industry norms and regulations (Kitcing *et al.*, 2015).

In relation to Hypothesis 2, our analysis reports a statistically significant moderation effect of firm size on the association between specific services and the uptake of CHRM; the association is stronger among SMEs than large firms. These findings would appear to suggest that the adoption of certain HRM practices among SMEs tends to be more of a response to legal compliance than a choice of being selective. Although our research does not directly address the debate on the relationship between CHRM and performance, the coercive effect of regulations on the uptake of CHRM among SMEs begs further questioning on the appropriateness of promoting new management practices among SMEs as a way of improving performance (Westhead & Storey, 1996). Scholars sympathetic to small businesses (mainly from the small-is-beautiful perspective) frequently argue that the presence of a complex CHRM system may be a result of institutional pressure – high entry barriers within specific industries can create an extra bureaucratic burden for small businesses' development (Goss *et al.*, 1994). There has increasingly been a voice in SME literature in the past decade suggesting that investment in CHRM purely aiming to establish legitimacy may stretch resource limits and render potential benefits yielded from these practices cancelled out by extra costs stemmed from such formality (Way, 2002; Wu *et al.*, 2015; Lai *et al.*, 2017).

With regard to Hypothesis 3, we found that owner-management is negatively associated with CHRM,

but such association disappears when firm size variable enters the equation. This suggests the magnitude of the deleterious effect that owner-management has on formality depends on a firm's size, namely, the effect is likely to be non-linear. Rather than suggesting owner-management has a more damaging effect on formalisation among SMEs as argued in small business management literature, the findings suggest that owner-management is more likely to play a crucial role in large firms than SMEs; thus, size matters (Aronoff & Ward, 1995; Chua *et al.*, 1999).

Turning to Hypothesis 4, our findings suggest that the negative association between owner-management and the uptake of CHRM becomes stronger when firm size grows. This finding not only extends the long-held view among the SME literature that owner-management is an indicator of informality among smaller businesses (De Massis *et al.*, 2014), but also suggests that size does not necessarily lead to formality: owner-management is more likely to deter formalisation among large firms than in smaller businesses. A possible explanation could be that the piecemeal manner of adopting CHRM in owner-managed SMEs hardly differentiates them from other SMEs, in that the use of CHRM is generally low compared to their larger counterparts (Storey, 1994; Forth *et al.*, 2006). Another possible explanation is informed by the organisational imprinting theory. Fearing loss of control, large owner-managed organisations protecting their private benefits by manipulating resources at the board level are likely to persistently deter professional management and limit the use of CHRM (McConaughy *et al.*, 2001; Anderson & Reeb, 2004). This is likely to occur on a larger scale compared to what owner-managed SMEs can do. Given that a CHRM system is a common management approach among large organisations (Boxall & Purcell, 2008), the holdback of introducing such practices among large owner-managed organisations is likely to present greater repercussions on management professionalisation in larger firms than smaller ones. This renders the criticism that family ownership (more towards owner-management) being the scapegoat for informality particularly among SMEs spurious. Overall, these would appear to suggest the imprinting effect is likely to be non-linear. This finding also casts doubt on the big-is-better view in terms of formality being the natural outcome of growth.

Alternatively, the findings would appear to suggest that there may be other workplace characteristics associated with firm size that have more explanatory power for the rarity of professional practices than family ownership. A few control variables in our study, such as trade union, benchmarking, skill-mix and IiP recognition, all demonstrate strong and positive associations with the uptake of CHRM. Although they

are not the research focus in our study, they are certainly of significant importance in their own right should future research wish to explore further in relation to the non-linearity of the institutional/imprinting effect.

Overall, our findings lend support to both institutional and imprinting perspectives of strategic HRM that the adoption of CHRM within an organisation, small or large, is influenced by both the industry in which it operates and the proprietorship. The findings also extend institutional theory (with a focus on coercive isomorphism) that the norms and regulations set out within specific industry sectors, such as finance, health and education, have a much greater impact on the prevalence of CHRM in small businesses than large organisations; thus the institutional effect is non-linear. This extends prior research that there is no small business effect when it comes to regulation compliance (Kitching *et al.*, 2015) and, instead, suggests that the regulatory effect among SMEs tends to be greater than that for their large counterparts. What accounts for another notable finding in the study is that the organisational imprinting effect is not always linear; instead, it is subject to firm size: owner-management tends to play a more damaging role in large firms than SMEs, if formalisation through CHRM is deemed effective for performance improvement. Hence, large owner-managed organisations may need to refrain from constantly wielding family control at the expense of formality, should economic performance be at the core of their family business development.

Managerial implications

Practical implications are threefold. First, SMEs are more responsive (coerced) to industry norms and regulations than their large counterparts. This could be partly due to their proximity to the external environment (Harney & Dundon, 2006) and partly because of their lacking economies of scale (Westhead & Storey, 1996). Compared to their large rivals, the increasing uptake of CHRM reported among SMEs in the last two decades may well be a result of coercive effect (Bacon & Hoque, 2005) rather than being driven by high-performance objectives, as evidenced in many large organisations (Wu *et al.*, 2015; Lai *et al.*, 2017). SME employers, therefore, tread a fine line between choosing performance-effective practices that *work* for them and those CHRM practices adopted out of choice.

Second, in addition to identifying CHRM targeting unique HR problems associated with various development stages (Rutherford *et al.*, 2003), future work also needs to identify HRM practices that small businesses adopt mainly as the result of external environmental pressure

or as a marketing tool and differentiate those from other CHRM for performance-enhancement purpose, should the link between HRM and performance in small businesses be better understood. This also calls for a re-examination of potential regulatory burdens on business development, particularly among SMEs (Kitching *et al.*, 2015; Lomax *et al.*, 2016). This is especially pertinent against the backdrop that government policies promote performance-oriented HRM as an effective approach to improve the overall performance within the SME sector (Rowlatt, 2013). There has yet to be any research conducted.

Another implication is concerned with the destructive effect of owner-management on the uptake of CHRM in large owner-managed firms compared to SMEs. Given the economic importance of family businesses (87 per cent of all private businesses in the UK) (IFB, 2017), coupled with limited understanding of how family ownership influences corporate governance and its adaptation to formality (Gedajlovic *et al.*, 2004), it is time to set up a research agenda and study family ownership, specifically owner-management from a governance perspective across firms of different sizes, rather than viewing owner-management as an issue mainly among SMEs.

Limitations

Like most research, this study is not without limitations. The analysis is based on cross-sectional data collected from individual respondents; hence, it is difficult to draw clear causal inferences and may suffer from the common method bias (Podsakoff *et al.*, 2013). Adopting Lindell and Whitney's (2001) approach, this study used geographical locations of workplaces as a marker variable. First, the correlation of this marker variable with other variables in the analysis was tested, and the results show it is not statistically related with CHRM and is unrelated to any of the predictor variables. The correlations of the CHRM contextual factors will remain significant (though with slight variation in significant levels) after making the partial correlation adjustment. This suggests the results reported in this study are robust and cannot be accounted for by common method variance.

Additionally, the analysis focuses on only two institutional/organisational factors that are considered important in strategic HRM and small business literature, respectively, controlling for confounding factors such as single establishment, union, skill-mix, workplace age, iIP award, and workplace size. There are still equally important factors that can shape the approach to HRM, but they were not included in this study. Despite the advantages of a large sample size and representation of the 2011 WERS data, there would appear to be significant scope for future research exploring other contextual factors by interacting with firm

size, or to draw on different data sources and different research designs in order to address these limitations.

Finally, the focus on two institutional and organisational factors and their impact on the uptake of CHRM across firms of different sizes does not allow generalisation for other institutional/organisational factors. Such a focus would neither be able to address other types of institutional effect such as mimetic or normative isomorphism, nor other organisational factors. However, the analysis did account for factors associated with different isomorphic processes or organisational process as controls (for example, benchmarking and management consultancy are factors related to mimetic isomorphism and iIP award to normative isomorphism, whereas workplace age is an important organisational factor) to minimise the potential confounding effect of such factors on the associations studied here.

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Statement of conflict of interest

None

ENDNOTES

¹The fitted line of plotting the cumulative distribution at the minimum value of each firm size category is available from the authors upon request.

²Results of similar analysis using categorical firm size measure are available from the authors upon request.

References

- Aiken, L. S. and S. G. West, 1991, *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Agarwal, V., Daniel, N. D. and N. Y. Naik, 2003, "Flows, Performance, and Managerial Incentives in Hedge Funds". EFA 2003 Annual Conference Paper No. 501. Available at SSRN: <https://ssrn.com/abstract=424369> or <https://doi.org/10.2139/ssrn.424369>

- Anderson, R. C. and D. M. Reeb**, 2004, "Board composition: Balancing family influence in S&P 500 firms". *Administrative Science Quarterly*, **49**: 209–237.
- Aronoff, C. E. and J. L. Ward**, 1995, "Family-owned businesses: A thing of the past or a model for the future?" *Family Business Review*, **8**: 121–130.
- Bacon, N. and K. Hoque**, 2005, "HRM in the SME sector: Valuable employees and coercive networks". *International Journal of Human Resource Management*, **16**: 1976–1999.
- Baird, L. and I. Meshoulam**, 1988, "Managing two fits of strategic human resource management". *Academy of Management Review*, **13**: 116–128.
- Baron, J. N., M. D. Burton and M. T. Hannan**, 1999, "Engineering bureaucracy: The genesis of formal policies, positions, and structures in high-technology firms". *Journal of Law, Economics, and Organization*, **15**: 1–41.
- Barrett, R. and A. Rainnie**, 2002, "What's so special about small firms? Developing an integrated approach to analysing small firm industrial relations". *Work, Employment and Society*, **16**: 415–432.
- Beckman, C. M. and M. D. Burton**, 2008, "Founding the future: Path dependence in the evolution of top management teams from founding to IPO". *Organization Science*, **19**: 3–24.
- Bennett, R. J. and P. J. Robson**, 1999, "Intensity of interaction in supply of business advice and client impact: A comparison of consultancy, business associations and government support initiatives for SMEs". *British Journal of Management*, **10**: 351–369.
- Boxall, P.**, 2003, "HR strategy and competitive advantage in the service sector". *Human Resource Management Journal*, **13**: 5–20.
- Boxall, P. and J. Purcell**, 2008, *Strategy and human resource management*, 2nd ed. Basingstoke: Palgrave-Macmillan.
- Chua, J. H., J. J. Chrisman and P. Sharma**, 1999, "Defining the family business by behavior". *Entrepreneurship: Theory and Practice*, **23**: 19–39.
- Cohen, J., P. Cohen, S. G. West and L. S. Aiken**, 2003, *Applied multiple regression/correlation analysis for the behavioral sciences*, 3rd ed. Mahwah, NJ: Erlbaum.
- Combs, J., Y. Liu, A. Hall and D. Ketchen**, 2006, "How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance". *Personnel Psychology*, **59**: 501–528.
- Deepchand, K., E. Drever, N. Gilby, Y. Prestage, S. Purdon, S. Tipping and M. Wood**, 2013, *Workplace employment relations study (WERS) 2011/12: Technical report*. London: National Centre for Social Research.
- de Kok, J., M. P. Uhlener, M. Lorraine and A. R. Thurik**, 2006, "Professional HPWPs in family owned-managed enterprises". *Journal of Small Business Management*, **44**: 441–460.
- De Massis, A., J. Kotlar, J. H. Chua and J. J. Chrisman**, 2014, "Ability and willingness as sufficiency conditions for family-oriented particularistic behavior: Implications for theory and empirical studies". *Journal of Small Business Management*, **52**: 344–364.
- De Winne, S. and L. Sels**, 2010, "Interrelationships between human capital, HRM and innovation in Belgian start-ups aiming at an innovation strategy". *The International Journal of Human Resource Management*, **21**: 1863–1883.
- Department for Business, Innovation and Skills**, 2013, *Workplace Employee Relations Study: Cross-Section, 2011* [computer file]. Colchester: The Data Archive [distributor], SN: 7226.
- DiMaggio, P. J. and W. W. Powell**, 1983, "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields". *American Sociological Review*, **48**: 147–160.
- European Commission**, 2003, EU SME Definition, 6 May doc C (2003)1422. Available at www.europa.eu.int/comm/enterprise_policy/sme_definition/index_en.htm
- Faems, D., L. Sels, S. De Winnie and J. Maes**, 2005, "The effects of individual HR domains on financial performance: Evidence from Belgian small businesses". *International Journal of Human Resource Management*, **16**: 676–700.
- Fang, H., R. Randolph, E. Memili and J. Chrisman**, 2016, "Does size matter? The moderating effects of firm size on the employment of nonfamily managers in privately held family SMEs". *Entrepreneurship: Theory and Practice*, **40**: 1017–1039.
- Fiegner, M. K., B. M. Brown, R. A. Prince and K. M. File**, 1996, "Passing on strategic vision". *Journal of Small Business Management*, **34**: 15–26.
- Field, R. I.**, 2007. *Health care regulation in America: Complexity, confrontation and compromise*. New York: Oxford University Press.
- Forth, J., H. Bewley and A. Bryson**, 2006, *Small and medium-sized enterprises: Findings from the 2004 workplace employment relations survey*. London: Routledge.
- Gedajlovic, E., M. H. Lubatkin and W. S. Schulze**, 2004, "Crossing the threshold from founder management to professional management: A governance perspective". *Journal of Management Studies*, **41**: 899–912.
- Gooderham, P., M. Fenton-O'Creevy, R. Croucher and M. Brookes**, 2018, "A multilevel analysis of the use of individual pay-for-performance systems". *Journal of Management*, **44**(4): 1479–1504.
- Gooderham, P. N., O. Nordhaug and K. Ringdal**, 1999, "Institutional and rational determinants of organizational practices: Human resource Management in European firms". *Administrative Science Quarterly*, **44**: 507–531.
- Goss, D., D. Adam-Smith and A. Gilbert**, 1994, "Small firms and HRM: Exceptions that prove the rule?" *Journal of Small Business and Enterprise Development*, **1**: 2–8.
- Greene, F.**, 1993, "The impact of trade union membership on training in Britain". *Applied Economics*, **25**: 1033–1043.
- Harney, B. and T. Dundon**, 2006, "Capturing complexity: Developing an integrated approach to Analysing HRM in SMEs". *Human Resource Management Journal*, **16**: 48–73.
- Higginbottom, K.**, 2015, "HR Challenges Facing the Banking Sector In 2015". *Forbes*, 21 January.
- Hislop, D.**, 2013, *Knowledge Management in Organizations: Critical introduction*. Oxford: OUP. <https://www.forbes.com/sites/karenhigginbottom/2015/01/21/hr-challenges-facing-the-banking-sector-in-2015/#569a3f235f1e>
- Hollister, M. N.**, 2004, "Does firm size matter anymore? The new economy and firm size wage effects". *American Sociological Review*, **69**: 659–676.

- Hoque, K. and N. Bacon**, 2008, "Investors in People and training in the British SME sector". *Human Relations*, **61**: 451–482.
- IFB Research Foundation and O. Economics**, 2017, *The State of the Nation: The UK Family Business Sector 2016/17, November*. London: IFB Research Foundation.
- Jackson, S., R. Schuler and K. Jiang**, 2014, "An aspirational framework for strategic human resource management". *The Academy of Management Annals*, **8**: 1–56.
- Jaffe, A. B., S. R. Peterson, P. R. Portney and R. N. Stavins**, 1995, "Environmental regulation and the competitiveness of U.S. manufacturing: What does the evidence tell us?" *Journal of Economic Literature*, **XXXIII**(March 1995): 132–163.
- Jensen, M. and W. Meckling**, 1976, "Theory of the firm: Managerial behavior, agency costs, and ownership structure". *Journal of Financial Economics*, **3**: 305–360.
- Johnson, V.**, 2007, "What is organizational imprinting? Cultural entrepreneurship in the founding of the Paris opera". *American Journal of Sociology*, **113**(1): 97–127.
- Kabene, S. M., C. Orchard, J. M. Howard, M. A. Soriano and R. Leduc**, 2006, "The importance of human resources management in health care: A global context". *Human Resources for Health*, **4**: 20. <https://doi.org/10.1186/1478-4491-4-20>
- Kitching, J., M. Hart and N. Wilson**, 2015, "Burden or benefit? Regulation as a dynamic influence on small business performance". *International Small Business Journal*, **33**: 130–147.
- Klaas, B. S.**, 2008, "Outsourcing and the HR function: An examination of trends and developments within north American firms". *The International Journal of Human Resource Management*, **19**: 1500–1514.
- Kotlar, J., H. Fang, A. De Massis and F. Frattini**, 2014, "Profitability goals, control goals, and the R and D investment decisions of family and non-family firms". *Journal of Product Innovation Management*, **31**: 1128–1145.
- Kroon, B., K. Van De Voorde and J. Timmers**, 2013, "High performance work practices in small firms: A resource-poverty and strategic decision-making perspective". *Small Business Economics*, **41**: 71–91.
- Lai, Y., G. Saridakis and S. Johnston**, 2017, "Human resource practices, employee attitudes and small firm performance". *International Small Business Journal: Researching Entrepreneurship*, **35**(4): 470–494.
- Lindell, M. and D. Whitney**, 2001, "Accounting for common method variance in cross-sectional research designs". *Journal of Applied Psychology*, **86**: 114–121.
- Lodge, M.**, 2015, "Regulating higher education: A comparative perspective". In M. Lodge (ed.), *The regulation of higher education* Discussion paper No:77. London: LSE, pp. 1–9.
- Lomax, S., Wiseman, J., and Parry, E.**, 2016, "Longitudinal Small Business Survey Year 1 (2015): SME employers". BIS Research Paper Number 289. London: Department for Business, Innovation and Skills.
- Lyman, A. R.**, 1991, "Customer service: Does family ownership make a difference?" *Family Business Review*, **4**: 303–324.
- Marlow, S.**, 2006, "Human resource management in small firms: A contradiction in terms?" *Human Resource Management Review*, **16**: 467–477.
- Marquis, C. and A. Tilsik**, 2013, "Imprinting: Toward a multilevel theory". *Academy of Management Annals*, **7**: 193–243.
- McConaughy, D. L., C. H. Matthews and A. S. Fialko**, 2001, "Founding family controlled firms: Performance, risk, and value". *Journal of Small Business Management*, **39**: 31–49.
- Messersmith, J. G. and J. P. Guthrie**, 2010, "High performance work systems in emergent organizations: Implications for firm performance". *Human Resource Management*, **49**: 244–266.
- Michie, J. and M. Sheehan**, 2005, "Business strategy, human resources, labour market flexibility and competitive advantage". *International Journal of Human Resource Management*, **16**: 445–464.
- Middlewood, D. and J. Lumby**, 2009, *Human resource management in schools and colleges*. London: Sage Publications.
- Mintzberg, H. and J. A. Waters**, 1990, "Tracking strategy in an entrepreneurial firm". *Family Business Review*, **3**: 285–315.
- Morrison, E. W.**, 1996, "Organizational citizenship behaviour as a critical link between HPWPs and service quality". *Human Resource Management*, **35**: 493–512.
- OECD**, 2005. *SME and entrepreneurship outlook 2005*. Paris: Organization for Economic Cooperation and Development.
- Paauwe, J. and P. Boselie**, 2003, "Challenging 'strategic HRM' and the relevance of the institutional setting". *Human Resource Management Journal*, **13**: 56–70.
- Parker, R. N. and R. Fenwick**, 1983, "The Pareto curve and its utility for open-ended income distributions in survey research". *Social Forces*, **61**: 872–885.
- Podsakoff, N., S. Whiting, D. Welsh and K. Mai**, 2013, "Surveying for 'artifacts': The susceptibility of the OCB–performance evaluation relationship to common rater, item, and measurement context effects". *Journal of Applied Psychology*, **98**(5): 863–874.
- Poutsma, E., P. E. M. Ligthart and U. Veersma**, 2006, "The diffusion of calculative and collaborative HRM practices in European firms". *Industrial Relations*, **45**(4): 513–546.
- Ram, M., P. Edward, M. Gilman and J. Arrowsmith**, 2001, "The dynamics of informality: Employment relations in small firms and the effects of regulatory change". *Work, Employment and Society*, **15**: 845–861.
- Reid, R., T. Morrow, B. Kelly, J. Adams and P. McCartan**, 2000, "Human resource management practices in SMEs: A comparative analysis of family and non-family businesses". *Journal of the Irish Academy of Management*, **21**: 157–181.
- Rowlatt, A.**, 2013, *SMEs: The Key Enablers of Business Success and the Economic Rationale for Government Intervention*. BIS Analysis Paper Number 2, December. London: BIS.
- Rutherford, M. W., P. Buller and P. McMullen**, 2003, "Human resource management problems over the life cycle of small to medium-sized firms". *Human Resource Management*, **42**: 321–335.
- Salvato, C., A. Minichilli and R. Piccarreta**, 2012, "Faster route to the CEO suite: Nepotism or managerial proficiency?" *Family Business Review*, **25**: 206–224.
- Sciaccia, S., P. Mazzola and F. Chirico**, 2013, "Generational involvement in the top management team of family firms: Exploring nonlinear effects on entrepreneurial orientation". *Entrepreneurship Theory and Practice*, **37**: 69–85.

- Schreyögg, G. and J. Sydow**, 2011, "Organizational path dependence: A process view". *Organization Studies*, **32**(3): 321–335.
- Sydow, J., G. Schreyögg and J. Koch**, 2009, "Organizational path dependence: Opening the black box". *The Academy of Management Review*, **34**(4): 689–709.
- Storey, D.**, 1994, *Understanding the small firm sector*. London: Routledge.
- Storey, D.**, 2004, "Exploring the link, among small firms, between management training and firm performance: A comparison between the UK and other OECD countries". *International Journal of Human Resource Management*, **15**: 112–130.
- Storey, D., G. Saridakis, S. Sen-Gupta, P. Edwards and R. Blackburn**, 2010, "Linking HR formality with employee job quality: The role of firm and workplace size". *Human Resource Management*, **49**: 305–329.
- van Wanrooy, B., H. Bewley, A. Bryson, J. Forth, S. Freeth, L. Stokes and S. Wood**, 2013, *The 2011 workplace employment relations study-first findings*. London: BIS.
- Ward, J. L.**, 1987. *Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership*. San Francisco, CA: Jossey-Bass.
- Watkins, J. and V. Bryce**, 1992, *HORATIO: A survey of human resources ratios in the retail financial services sector*. Bristol: University of Bristol.
- Way, S. A.**, 2002, "High performance work systems and intermediate indicators of firm performance within the US small business sector". *Journal of Management*, **28**: 765–785.
- Welsh, J. A. and J. F. White**, 1981, "A small business is not a little big business". *Harvard Business Review*, **59**: 18–32.
- Westhead, P. and D. Storey**, 1996, "Management training and small firm performance: Why is the link so weak?" *International Small Business Journal*, **14**: 13–24.
- Wilkinson, A.**, 1995, "Towards HRM? A case study from banking". *Research and Practice in Human Resource Management*, **3**: 97–115.
- Wood, G., C. Brewster and M. Brookes**, 2014, "Institution and firm level HRM practice". In C. J. Brewster, M. Brookes, R. Croucher and G. Wood (eds.), *Human resource management and the institutional perspective*. London: Routledge, pp. 1–14.
- Wood, S. and C. Ogbonnaya**, 2018, "High-involvement management, economic recession, well-being, and organizational performance". *Journal of Management*, **44**(8): 3070–3095.
- Wu, N., N. Bacon and K. Hoque**, 2014, "The adoption of high performance work practices in small businesses: The influence of markets, business characteristics and HR expertise". *International Journal of Human Resource Management*, **25**: 1149–1169.
- Wu, N., K. Hoque, N. Bacon and J. C. Llusar**, 2015, "High performance work systems and workplace performance in small, medium-sized and large firms". *Human Resource Management Journal*, **25**: 408–423.
- Zahra, S. A., J. C. Hayton and C. Salvato**, 2004, "Entrepreneurship in family vs. non-family firms: A resource based analysis of the effect of organizational culture". *Entrepreneurship Theory and Practice*, **28**: 363–381.

Appendix

Table A1 Variable construction and variable means

Variables	Smaller firms (SMEs)	Large firms	Full sample
	10–249 employees (N = 534)	250+ employees (N = 759)	10+ employees (N = 1,293)
CHRM	5.495	7.656	6.423
Single establishment	0.599	0.008	0.345
<i>Workplace size</i>			
5–9 employees	0.163	0.408	0.268
10–24 employees	0.597	0.261	0.453
25–49 employees	0.162	0.134	0.150
50–99 employees	0.062	0.086	0.072
100–249 employees	0.015	0.067	0.037
250–499 employees		0.031	0.013
500+ employees		0.014	0.006
<i>Industry sector</i>			
Manufacturing	0.130	0.056	0.098
Electricity/construction	0.064	0.022	0.046
Wholesale and retail	0.209	0.456	0.315
Hotels	0.097	0.129	0.111
Transportation	0.021	0.053	0.035
Finance/Other business	0.260	0.145	0.211
Education	0.047	0.016	0.033
Health	0.130	0.083	0.110
Other community services	0.042	0.040	0.041
Benchmarking	0.320	0.603	0.441
HR specialist/expert	0.181	0.414	0.281
Full-time contract	0.582	0.403	0.505
Skill-mix	0.838	0.810	0.826
Union recognition	0.038	0.236	0.123
Recession	0.498	0.407	0.459
<i>Family ownership</i>			
Non-family-owned	0.425	0.659	0.526
Family-owned and Managed (Owner-managed)	0.450	0.162	0.326
Family owned/not owner managed	0.125	0.179	0.148
<i>Workplace age</i>			
0–4 years	0.109	0.128	0.117
5–9 years	0.230	0.188	0.212
10–24 years	0.290	0.350	0.316
25+ years	0.371	0.334	0.355
Management consultancy	0.204	0.117	0.167
Clients' Requirement	0.703	0.831	0.758
iP recognition	0.110	0.496	0.276
Firm size (LOG)	–1.881	3.111	0.263

Notes: Survey means.