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THE EFFECTS OF MARKET ECONOMY AND FOREIGN MNE SUBSIDIARIES ON THE CONVERGENCE AND DIVERGENCE OF HRM

ABSTRACT

This study explores patterns of human resource management (HRM) practices across market economies, and between indigenous firms and foreign MNE subsidiary operations, offering a novel perspective on convergence and divergence. Applying institutional theorizing to improve our understanding of convergence/ divergence as a process and an outcome, data collected from nine countries at three points in time over a decade confirm that convergence and divergence occur to different extents in a non-linear fashion, and vary depending on the area of HRM practice observed. Patterns of adoption and convergence/ divergence are explained through the effect of institutional constraints, which vary between liberal and coordinated market economies, and between indigenous firms and foreign MNE subsidiaries. The study contributes a more graded conceptualization of convergence/ divergence, which reflects the complex dynamic reality of international business.

INTRODUCTION

Multinational enterprises (MNEs) are key contributors to the spread of business practices around the world (Edwards, Sánchez-Magnas, Jalette, Lavelle & Minbaeva, 2016). However, neo-institutional theory (DiMaggio & Powell, 1983; Scott, 2001) posits that context will be an important constraint on managerial autonomy over business practices. Human resource management (HRM) is a particular test case, having long been identified as the most 'national' of practices (Rosenzweig & Nohria, 1994). Does the global drive for convergence on the basis of the most economically effective practices apply to HRM, or do economies with different institutional bases continue to constrain the possibility of convergence? And do local subsidiaries of MNEs act as norm entrepreneurs or are they similarly constrained by the institutional base? We use data from an extensive international survey, with a more comprehensive and diverse range of HRM practices than in previous studies, to examine these under-researched temporal developments, offering a novel, non-dichotomous, approach to convergence/ divergence that better reflects the dynamic reality of international business. Consequently, we uncover new categories of the convergence/ divergence process and demonstrate these through our findings. We make an additional contribution by examining simultaneously convergence over time from two under-researched sub-dimensions of geographic location, i.e. market economy and location of operation (indigenous vs. foreign), as well as the interactions among these dimensions.

In the International HRM literature, there is a lively debate about the extent to which the actions of MNEs and a tendency towards global standardization are fueling convergence (Brewster, Mayrhofer, & Smale, 2016; Edwards et al., 2016). This literature focusses on mezzo-level processes playing out in MNEs (Kaufman, 2016) arguing that HRM practices, like other management practices, are being standardized to a universal paradigm (Lawler, Chen, Wu, Bae & Bai, 2011; Pudelko & Harzing, 2008). While it is acknowledged that some MNEs are polycentric (Perlmutter, 1969) and make no attempt to standardize any of their practices, preferring to exploit subsidiary specific advantages (Rugman & Verbecke, 2001), the predominant discourse suggests that many MNEs do attempt to standardize their operations globally. Other firms adopt the best practices of those that are more successful, believing that

this will improve their own performance (Björkman, Smale, Sumelius, Suutari & Lu, 2008). As practices are mimicked, with MNE subsidiaries providing examples to local businesses, convergence arises.

Perhaps, however, rather than converging, HRM is grounded in its institutional context and change is path dependent (Rosenzweig & Nohria, 1994). Early research found that countries were becoming more different rather than converging in their macro-environmental characteristics, and that any similarity was more likely between proximal than distant countries (Craig, Douglas & Grein, 1992). Comparative HRM literature asserts that firms are embedded in the country context in which they operate (Gooderham, Nordhaug & Ringdal, 1999; Gunnigle, Murphy, Cleveland, Heraty, & Morley, 2002), and as a result, are subject to local regulations and traditions affecting employment practices (Björkman, Fey & Park, 2007; Huo, Huang & Napier, 2002). This embeddedness literature, including comparative capitalisms (Hotho, 2014; Jackson & Deeg, 2008), argues that we should not expect to see convergence and that, in practice, non-convergence is more likely to be the norm.

In short, the literature to date is equivocal as to whether convergence in HRM has been occurring globally. One reason is the current lack of integration across Comparative HRM and International HRM fields (Brewster et al., 2016; Kaufman, 2016). More specifically, the macro contexts of market economies have not been studied alongside the mezzo contexts of MNEs and their subsidiaries to see how these effects interact. We address this failing (Gooderham & Nordhaug, 2011), building from Tempel and Walgenbach (2007), who critique both neo-institutional and comparative capitalisms theorizing for its lack of attention to firm-level analyses. Moreover, we address a shortcoming in extant convergence literature which largely relies on reporting consistent trends to identify convergence/divergence (Kaufman, 2016). Given the non-consistent (dynamic) context in which firms are operating, we develop a more nuanced way of studying the convergence process that can incorporate the dynamics of firms' institutional contexts.

The empirical contribution of this study is its focus on data covering a broad range of HRM practices gathered over three points in time across multiple countries, based on the Cranet surveys. Prior studies using this database have focused on a narrower range of practices and/ or a shorter or more distant

period of time - examples of these studies are summarized in Table 1. Other than Goergen, Brewster, Wood and Wilkinson (2012), who focus on organization-level analyses, all studies reported focus on country-level convergence. The most ambitious attempt was by Mayrhofer and colleagues (2011). With 2004-05 as their end-point, they examined three bundles of HRM practices (development, reward, communication) as well as the configuration of the HRM department. Their findings highlighted some common national trends (directional convergence) but little evidence of country-level practices being isomorphic. We expand on this and other studies by exploring a more recent time period (1999-2010), a broader range of HRM practices (17 individual practices), and including comparison of foreign MNE subsidiaries with indigenous organizations, in different market economies. As Mayrhofer et al. (2011: 63) note with regard to the need for future research: "the interplay between drivers at various analytical levels is crucial". This study is thus one of very few (see: D'Arcimoles, 1997; Guest, Michie, Conway, & Sheehan, 2003) to explore change in the adoption of HRM practices over an extended period of time across multiple countries.

Insert Table 1 about here

GLOBALIZATION, CONVERGENCE AND DIVERGENCE

The international business (IB) literature has debated the globalization phenomenon in relation to HRM practice convergence (Edwards et al., 2016; Huo et al., 2002; Mayrhofer et al., 2011). Convergence is, by definition, a process that occurs over time, whereby organizations adopt more similar practices, leading ultimately to universal implementation ('final' convergence) or parallel trends ('directional' convergence) (Mayrhofer, Müller-Camen, Ledolter, Strunk, & Erten, 2002; Mayrhofer et al., 2011). Divergence, in contrast, occurs when HRM practices being adopted by different organizations become more dissimilar over time. In most cases, extant research has focused on establishing whether convergence/ divergence is taking place or not, which leaves the field open to critique based on what Kaufmann (2016: 339)

describes as "the analytically problematic definition and measurement of the concept of HRM convergence—divergence". We present here arguments as to how a more nuanced conceptualization of the convergence/ divergence process (i.e. extent of convergence) might address some of the current theoretical shortcomings in the field.

The debate concerning the observed reality of convergence/ divergence is rife within the HRM literatures: The Comparative HRM literature largely argues for divergence due to the embeddedness of management practices within a given national context (Björkman et al., 2007; Gooderham et al., 1999; Gunnigle et al., 2002); while the International HRM literature observes the HRM activities of MNEs, presenting a stronger case for convergence based on standardization arguments of economies of scale and scope (Björkman et al., 2008; Edwards et al., 2016). This debate originated from the labor relations discipline, suggesting that work within industrial societies will look increasingly similar, because science and technology are universal (Kerr, Dunlop, Harbison, & Meyers, 1960), and as technology spreads, there would be increasing convergence "over time and place" (ibid.: 10) towards a single model of industrial society. Later studies agreed (Colvin & Darbishire, 2013; Katz, 1993), but noted that this extended further in some countries than in others (Marginson, Sisson & Arrowsmith, 2003; Schnabel, Zagelmeyer, & Kohaut, 2006).

We argue that the operationalization of 'geographic location' is creating the confusion as to whether convergence or divergence is dominating HRM: Adopting a country level of analysis, as Comparative HRM scholars most often do, largely leads us to a conclusion of divergence; adopting the MNE level of analysis tends to lead to conclusions of convergence or at least standardization. The critical factor that is not being discussed is that isomorphism occurs within a specific 'organizational field', defined as "a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (DiMaggio & Powell, 1983: 143). While firms react to isomorphic pressures in their particular field (e.g. country, industry, organization type, size of operation), nation states affect the extent of isomorphism across organizational fields (Scott & Meyer, 1994; Tempel & Walgenbach, 2007). To move this debate forward,

we explore the HRM convergence/ divergence debate focusing on two levels of geographic location that have not been studied together before: market economy and the indigenous firm vs. MNE foreign subsidiary.

Market economies

Market economies are expected to differ in their pattern of HRM practice adoption and diffusion based on "systematically interdependent configurations" (Jackson & Deeg, 2008: 545). The varieties of capitalism literature (Hall & Soskice, 2001) identifies two ideal types of market economy - liberal market economies (LMEs) and coordinated market economies (CMEs). LMEs are the Anglo-Saxon societies (e.g. the U.S.A., U.K., Australia), dominated by shareholder ownership, focused on short-term profit maximization, preferring a minimal role for government, with deregulated labor markets and strong market competition. CMEs, typified by Germany, have a wider stakeholder approach, higher regulation of the labor market and hence less firm autonomy, with a longer-term focus on return on investment. In LMEs, internal relationships echo the competitive and utilitarian relationships of the external market, while in CMEs there is more employer-employee interdependence (Hall & Soskice, 2001).

The comparative capitalisms literature argues for 'institutional complementarities', whereby the characteristics of each type of market economy give them their value (Höpner, 2005), and institutions work together to reinforce or substitute for each other in a way that creates economic success, creating within market economy convergence and between market economy divergence. This is in line with institutional logics theory, which identifies the "socially constructed historical patterns of cultural symbols and material practices, including assumptions, values and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences" (Thornton et al., 2012: 2). These logics align at the level of organizational fields, producing institutional complementarities (Hall & Soskice, 2001) that represent mutually reinforcing relationships between different institutional logics at societal or organizational levels.

The comparative capitalisms literature struggles, however, to deal with two issues related to convergence. One is change over time (Thelen, 2014). The liberalization thesis posits that the Anglo-Saxon model of LMEs is increasingly penetrating CMEs, leading to convergence to the LME model (Schneider & Paunescu, 2012). Alternatively, it has been argued that, despite this liberalization trend, substantial differences remain between market economies (Hall & Thelen, 2009). Thelen (2014) suggests that although there may be a growing movement in favor of certain kinds of institutional liberalization in CMEs, these may not lead to firms there operating more like LMEs. Such debates are typical of what is described as institutional change (Dacin, Goodstein, & Scott, 2002): Institutions are formed over time, but the actors who are operating within these institutional constraints can also effect change, in turn creating new institutional conditions. The implication here is that a more nuanced understanding of the convergence/ divergence process may be required.

Indigenous firms vs. foreign MNE subsidiaries

A second issue that the comparative capitalisms literature struggles with is the role of MNEs (indeed, they are not mentioned in Hall and Soskice, 2001). If we take the case of MNE subsidiaries operating in a host country, these operations require an alternative conceptualization of the 'organizational field' as they operate beyond national or market economy boundaries (Kostova, Roth, & Dacin, 2008; Tempel & Walgenbach, 2007), and are thus faced by multiple, potentially conflicting, institutional contexts. MNEs may attempt to leverage advantages from their global presence, hence foreign subsidiaries are not independent of the parent (Poutsma, Lightart, & Veersma, 2006). MNE headquarters may try to impose standardized policies to subsidiaries in host countries, believing that their way of operating is what has created the firm's particular advantage and that it is likely to hold in all contexts (Dore, 2008). MNE subsidiaries are, however, neither independent of headquarters, nor independent of the country in which they are located, where local institutions can play both constraining and enabling roles (Andersson, Forsgren, & Holm, 2001; Saka-Helmhout, Deeg, & Greenwood, 2016).

In any country, innovation may come from outsiders, such as MNE subsidiaries, who have fewer ties and less commitment to an existing order (Dore, 2008). Indigenous firms might in turn be influenced by foreign MNE subsidiaries and move their practices closer toward them. Evidence points towards noticeable convergence effects of these global players on HRM practices in host countries (Almond, Edwards, & Clark, 2003; Farndale, Brewster, & Poutsma, 2008; Ferner & Quintanilla, 1998; Gooderham et al., 1999; Poutsma, Ligthart, & Schouteten, 2005). Nevertheless, although local managers in the host country may embrace or resist the standardization of practices (Edwards, Sanchez-Magnas, Tregaskis, Levesque, McDonnell, & Quintanilla, 2013), they are unlikely to have total autonomy in their foreign operations (Kostova & Roth, 2002). Any evidence of convergence/ divergence is likely, therefore, to be complex and may not be linear in its progression.

INSTITUTIONAL CONTEXT OF HRM PRACTICES

HRM has long been a particular concern in the IB literature – being one of the most costly yet important resources for all organizations, and being particularly complex to manage when operating across national borders. Macro-level differences in practices, usually between countries (Brewster & Mayrhofer, 2012; Kaufman, 2016), are often explained through neo-institutional, comparative capitalisms theorizing (Festing, 2012; Goergen et al., 2012). Institutions ("the rules of the game": Kaufman, 2007: 14) are argued to constrain the discretion of organizational actors to adopt certain practices, but the durability and determinism of institutional differences has been questioned (Saka-Helmhout et al., 2016).

Institutional constraints can be broadly defined as comprising elements of legitimacy and efficiency (Kostova & Zaheer, 1999). Legitimacy is achieved when HRM practices are aligned with internal and external expectations, including legislative requirements and employee/employer interests, whereas efficiency is focused on achieving optimal use of resources. All areas of HRM are subject to some form of institutional constraint, but some practices are expected to have a higher threshold to achieve legitimacy (i.e., those subject to strong traditions or regulations), while others can display greater

variation in practice with all forms similarly being considered legitimate so that efficiency may be more deterministic of organizational practice.

Our theorizing around the extent to which we expect to observe convergence/ divergence related to higher or lower levels of institutional constraint is based on the two core arguments presented by the varieties of capitalism and IB literatures. The former relies on arguments that there will be greater similarity within a market economy than between market economies due to the differential extent of regulation of firms' HRM activities across market economies (Hall & Soskice, 2001; Jackson & Deeg, 2008). The IB argument acknowledges the prevalent institutional constraints, but argues that indigenous firms are more embedded in the local context and thus will show more extensive use of constrained practices (Looise & Drucker, 2002) compared to foreign MNE subsidiaries. Although the subsidiaries must comply with certain constraints, they are not independent of the (foreign) parent (Poutsma et al., 2006), and have local managers who are influenced by headquarters' pressures for implementation of a standard global strategy (Edwards et al., 2016; Kostova & Roth, 2002).

In summary, we predict considerable variation in HRM practice use between LME and CME-based firms due to the different sets of institutional constraints, so that convergence of such practices is not expected to occur between CME and LME contexts. Similarly, we predict considerable variation in HRM practices between indigenous firms and foreign MNE subsidiaries, as well as less convergence due to continued standardization pressures faced by subsidiaries from the parent headquarters. We apply this reasoning to five areas of HRM practice (compensation, wage bargaining level, contingent employment, direct employee information provision, and training), illustrating why we anticipate each area might be considered more or less institutionally constrained. This in turn allows us to hypothesize which HRM practices are expected to vary or converge over time.

Compensation practices are impacted by considerable differences in national pay structures, and fiscal policies (Fay, 2008; Festing, Engle, Dowling, & Sahakiants, 2012), and are frequently regulated at the national level in terms of statutory pay or minimum benefits. Financial participation schemes, as part of compensation packages, are also subject to local legislation, tax concessions, and industrial relations

systems and ideologies (Pendleton & Poutsma, 2012). Institutional constraints are high for compensation practices, as they are path dependent, tied into local norms, traditions, and corporate governance mechanisms (Festing & Sahakiants, 2010). We therefore predict considerable variation (and a lack of convergence) in compensation practices between LME and CME firms, as well as between indigenous firms and foreign MNE subsidiaries.

We posit that the level at which wage bargaining occurs is similarly context-dependent, commonly influenced either through voluntarist systems or national legal frameworks (Brewster, Wood, & Brookes, 2008). Discretion regarding what is considered legitimate is potentially less where regulation is substantial (in CMEs: Thelen, 2001), such as a requirement to deal with employee representatives (Björkman et al., 2007; Huo et al., 2002). Similarly, less discretion is expected where MNE parents impose standardized policies, although the extent to which local managers in the host country embrace or resist these practices varies (Edwards et al., 2013; Kostova & Roth, 2002). An interaction effect of market economy and MNE strategy has also been found related to wage bargaining, with evidence that HRM practice is localized in more regulated European countries, particularly among European- rather than U.S.-owned MNEs (Gunnigle et al., 2002).

Contingent employment contracts have legitimacy constraints driven by legislation in many countries. For example, in Europe, numerous reforms have promoted contingent employment by ensuring that it is regulated (Gialis & Taylor, 2016; Williams & Padmore, 2013). Firms choose to use their workforce flexibly, contingent on fluctuations in demand, changes in the organization of production, and the periodic crises typical of the capitalist mode of production (Kalleberg, 2003). Nevertheless, Tregaskis and Brewster (2006: 122), studying contingent employment contracts in Europe, conclude: "There is no evidence that either the regional institutional pressures coming from the European Commission or regional or global competitive pressures are creating 'final' convergence in organizational practice". In other words, there are elements of legitimacy requirements in terms of meeting legislative requirements, but within those constraints contingent employment may largely be driven by more efficiency-related firm-level criteria. This leads us to predict that contingent employment practice will show less variation

between, and therefore be more likely to converge across, market economies, and when comparing indigenous firms and foreign MNE subsidiaries.

We posit that training may also be weakly institutionally constrained, despite having country-specific elements including local skill requirements, different skill formation trajectories (Thelen, 2004), and a range of government investment levels in education (Tregaskis & Heraty, 2012). Organizations likely consider these factors when devising training strategies, but are not compelled to implement particular practices. Efficiency may therefore be considered a stronger driver than legitimacy. There is evidence, for example, from comparative OECD studies (1995–2002) that training is largely dependent on R&D investments and deregulation of sectoral product markets, and less on, for example, unionization (Bassanini & Brunello, 2011). Training tends to vary with economic cycles, with budgets quickly being cut in a downturn (Goergen et al., 2012), being a matter of organizational choice rather than an institutional demand. We therefore predict that training demonstrates considerable leeway for organizations to choose which practices to adopt, largely avoiding institutional constraint.

The direct provision of information to individual employees is perhaps one of the areas of practice least institutionally constrained (Brewster, Wood, & Goergen, 2015). For example, although European Union regulations set minimum standards around employee communication, these are largely concerned with collective and representative forms of communication rather than individual communication (Kessler, Undy & Heron, 2004). Direct employee information provision is therefore largely left to management discretion. From a legitimacy perspective, greater provision may be driven by the general climate of information sharing (i.e. what is normal practice), whereas an efficiency perspective might observe that managers feel constrained to provide information only when it is perceived that a positive outcome will occur.

There is an additional layer of complexity when considering the interaction effect on convergence between market economies and foreign MNE operations. Extant research provides evidence of such an effect. HRM practices vary between foreign-owned MNEs, domestic-owned MNEs and domestically-operating organizations, and these variations have been found to be smaller in CME than LME contexts

(Farndale et al., 2008). Similarly, Gooderham et al. (1999) found that U.S. MNE subsidiaries largely maintained their practices in other LMEs but they made more adjustments in their subsidiaries in CMEs, while Gunnigle et al. (2002: 276) noted "nationally embedded barriers to diffusion in strong regulatory environments". This evidence implies that the local norms in LMEs may be closer to those of the foreign MNEs or that they allow MNEs more discretion than do norms in the more tightly regulated CMEs (Fenton-O'Creevy, Gooderham, & Nordhaug, 2008).

In summary, we have argued that the extent of variety and convergence will be affected by a broad set of institutional constraints, i.e. a combination of legitimacy and efficiency drivers of organizational practice, determined at least in part by the market economy in which the firm is operating and whether it is operating as an indigenous firm or a foreign MNE subsidiary. In order to develop a more comprehensive definition of 'the extent of convergence', the empirical study that follows attempts to categorize convergence, from which future research might benefit. In order to achieve this, we test two hypotheses based on the theorizing presented:

H1: There will be greater variation in the use of compensation and wage bargaining level practices than in the use of contingent employment, training, and direct information provision practices, when comparing between: (a) liberal and coordinated market economies; (b) foreign MNE subsidiaries and indigenous firms; and (c) foreign MNE subsidiaries and indigenous firms embedded in liberal and coordinated market economies.

H2: Convergence will be more likely in the use of contingent employment, training, and direct information provision practices than in the use of compensation and wage bargaining level practices, when comparing between: (a) liberal and coordinated market economies; (b) foreign MNE subsidiaries and indigenous firms; (c) and foreign MNE subsidiaries and indigenous firms embedded in liberal and coordinated market economies.

METHODOLOGY

In order to test the hypotheses, we use data from the on-going Cranet surveys on HRM. The Cranet questionnaire is designed by an international team in English, translated and back-translated (Brislin, 1976) into the language(s) of each country, and minimally revised between rounds of data collection to maintain consistency over time. The survey is distributed either by paper, telephone, or online (depending on location) by partners based in each of the participating countries, with each collecting its own sample data, later combined into an international dataset. The survey is targeted at senior-level managers responsible for HRM, who are selected as key informants as they are likely to be well-versed in the firm's HRM practices (Huselid & Becker, 2000).

Response rates for the individual countries represented here vary between 8% and 37%, with a mean of 18%. HR managers are asked to respond on items that cover many of the HRM practices in their organization, predominantly asking for yes/ no answers or for numbers or percentages. Example questions are: 'Approximately what proportion of the annual salaries and wages bill is currently spent on training?' (open response); 'Please indicate the approximate proportion of your workforce who are on each of the following working arrangements: part-time, temporary, fixed-term contracts' (answer options: not used/ <1%; 1-5%; 6-10%; 11-20%; >20%).

We use evidence from nine countries and three rounds of the survey carried out in 1999-2000 (time 1), 2004-05 (time 2), and 2009-10 (time 3). We exclude organizations that: (a) are public or semi-public, and (b) employ less than 100 employees. Both groups tend to have a distinctive nature with regard to HRM, which makes cross-national comparisons more complex to interpret when simultaneously including larger organizations and the private sector (Bozeman & Loveless, 1987). In total, 5,743 cases across the three time intervals of data collection are included (see Table 2). 96.3% of respondents were (senior) HRM practitioners. Across the whole sample, the median respondent organization size is 445 employees. The sampling frames used in each country generally produce stratified representative samples, and are consistent with those generated by other studies. The partners of the network report the representativeness of the country sample according to industry, size, and private-public sector proportions. The sample of the

countries included in this study is largely representative except for the private-public divide, which is not relevant here.

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Insert Table 2 about here

Measures

Organization type. Organizations are defined as a 'foreign MNE subsidiary' when the respondent identifies the home country of the firm's headquarters as being other than the country in which the firm is operating. Otherwise the organization is defined as 'indigenous'.

Market economy. The country from which the data were collected defines the market economy. Based on Hall and Soskice (2001: 19-20), the UK and Australia are examples of LMEs, while Austria, Belgium, Denmark, Finland, Germany, the Netherlands and Sweden are examples of CMEs. The imbalance in the number of LME (two) and CME (seven) countries may be a limitation to the study, though it reflects the smaller number of LMEs in the world and is the same for many previous studies using comparative capitalisms theories. Australia was also the only non-EU country in the sample, although as an LME country it fits the comparative capitalisms analysis. Additional analyses were conducted comparing the default model with a model including Australia as an additional main effect. The results for the two models (available from the authors) were substantially similar, providing confidence that the model estimations are stable, and that there is no noticeable EU effect on the data.

HRM practices. Compensation, wage bargaining level, contingent employment, information provision, and training practices were selected as a broad range of HRM practices. Respondents reported the extent of adoption of a range of individual practices in each of these areas. Table 3 provides an overview of the HRM practice variables and the percentage of organizations indicating use of the practice.

Insert Table 3 about here

Control variables. Firm characteristics (industry, organization size, trade union membership rate) are included as control variables given their pertinence to the 'organizational field' (Gooderham et al., 1999; Rosenzweig & Singh, 1991).

Table 4 presents the correlations across the whole dataset. There were no issues of multicollinearity among the independent variables, with variance inflation factors (VIF) of main effects ranging from 1.05 to 2.68. We conducted a multi-level random-intercept regression model using STATA (v14.2), using STATA's (v13.1) program GLLAMM (v2.3.20) (Rabe-Hesketh & Skrondal, 2004, 2005) as the dataset includes organization-level data of 5,743 firms nested in the nine countries¹. The intracountry coefficients across the HRM variables range significantly between 0.02 and 0.19 (on average 0.09), supporting adopting the multilevel analysis approach. For all HRM practices, the full model results are significantly different from the random intercept only model with R² ranging from .04 to .27 (mean = 0.10).

Insert Table 4 about here

RESULTS

The following results present the hypothesized effects, above and beyond the impact of country, year and firm-level firm characteristics². After examining the findings, the pattern of effects is categorized according to the extent of convergence observed, ranging from 'constant no difference' via 'robust convergence' and 'robust divergence' to 'constant difference' (see Table 5). To explain this further, we first present the effects of market economy (LME vs CME) and its impact on convergence (Table 6),

followed by the effects of organization type (foreign MNE subsidiary vs indigenous firm) (Table 7). Finally, we explore whether the interaction effects of market economy and organization type suggest convergence within the timeframe studied (Table 8).

Insert Table 5 about here

Observing the hypothesized (H1a) baseline LME simple effect (the effect in 2009-10 at the end of our timeframe³), there are four practices with significant odds ratios (Table 6). Based on the size of the odds ratio, reported here in decreasing order, company wage bargaining (4.49, p<.01), employee share ownership (2.70, p<.01) and group bonus (1.96, p<.01) are used significantly more in LMEs than in CMEs, while individual level bargaining (0.37, p<.05) is used significantly less. This provides some support for H1a as half of the compensation and wage bargaining level practices show significant differences in the likelihood of use across market economies, whereas there are no contingent employment, direct information provision, or training practices with significant differences.

Insert Table 6 about here

To test for the occurrence of convergence in the use of each practice (H2a), we first observe the LME effect, exploring the odds ratios comparing time 1 to time 3 and time 2 to time 3 (Table 6 interaction effects). All of the contingent employment (except for temporary contracts), direct information provision, and training practices indicate no significant difference in odds ratios for any of the time points studied. We refer to these cases as having 'constant no difference', i.e. the practice may have converged at some point in the past or never been different between market economies. Temporary contracts showed a pattern of robust convergence.

In contrast, the wage level bargaining and compensation practices show more variation. There are three practices for which there is a significant odds ratio at time 3 (company level bargaining, employee

share ownership, group bonus) and that show a pattern of 'non-robust divergence', i.e. practices show an irregular trend of difference over time ending in significant difference in 2009-10. Two practices show a pattern of 'robust convergence' (site level bargaining, profit sharing): The significant odds ratio comparing time 1 to time 3 decreases in size when comparing time 2 to time 3, and is non-significant in the baseline. There are also two practices that do not have significant odds ratios in the baseline (national level bargaining, performance related pay) that show an irregular trend of convergence over the time period studied, i.e. the odds ratio is non-significant when comparing time 1 to time 3 but significant when comparing time 2 to time 3. We label this 'non-robust convergence'. Finally, individual level bargaining shows 'constant difference': The odds ratio is significant in the baseline, but non-significant at the two comparison time points.

Overall, this gives some support for H2a as all contingent employment, training, and direct information provision practices displayed some form of convergence, while this was only true for half of the compensation and wage bargaining practices.

Testing H1b (Table 7), foreign MNE subsidiaries differ significantly from indigenous firms for nine practices, six of which are wage bargaining and compensation practices. Foreign MNE subsidiaries make significantly more use (in decreasing order of size of the odds ratios) of employee share ownership (2.79, p<.01), group bonuses (2.16, p<.01), performance-related pay (2.14, p<.01), workforce briefing on finance (1.51, p<.05), company level bargaining (1.50, p<.05), strategy briefing (1.40, p<.05) and site level bargaining (1.30, p<.05). They also make significantly less use of national level bargaining (0.68, p<.01) and part-time contracts (0.57, p<.01). Overall there is support for H1b as three quarters of the wage bargaining and compensation practices demonstrate variation, whereas this is only true for one third of the contingent employment, training, and direct information provision practices.

Insert Table 7 about here

17

H2b explores convergence of practices over time between MNE subsidiaries and indigenous firms. Five of the nine contingent employment, indirect information provision and training practices show a pattern of 'constant no difference', while two demonstrate 'robust convergence'. In line with H2b expectations, only two practices do not demonstrate convergence: Strategy briefing shows 'non-robust divergence' and part-time contracts 'constant difference'. In contrast, six wage bargaining level/ compensation practices demonstrate some degree of divergence, with only two practices (individual level bargaining, profit sharing) showing a pattern of 'constant no difference', again largely in line with H2b.

Observing the hypothesized (H1c) interaction effect between LME and foreign MNE subsidiaries in 2009-10 (Table 8), there are five practices with significant odds ratios. Decreasing in odds ratio size, these are temporary contracts (2.27, p<.05), strategy briefing (1.52, p<.05), site level bargaining (0.74, p<.01), part-time contracts (0.57, p<.01), and employee share ownership (0.45, p<.01). Testing these interactions, H1c is not supported as only one quarter of the compensation and wage bargaining level practices show significant differences in the likelihood of use, whereas one third of the contingent employment, training, and direct information provision practices show significant differences.

Insert Table 8 about here

When we examine convergence and the combined effects of market economy and foreign MNE subsidiary versus indigenous firms (H2c) (Table 8), 11 of the 17 practices observed show a trend of 'constant no difference'. The exceptions are: a pattern of 'non-robust divergence' for share ownership, strategy briefing, part-time and temporary contracts; 'constant difference' for site level bargaining; and 'non-robust convergence' for national level bargaining. These findings do not support H2c as the spread of convergence and divergence trends observed does not align with the expected division by practice areas.

Looking across the findings, Figure 1 demonstrates the simultaneous relevance of market economy and foreign MNE subsidiary vs indigenous firms, relative to other factors included in the study.

As can be observed, country remains a dominant factor in many practice areas, however, market economy and foreign MNE subsidiary are, in addition to year and firm characteristics, important variables in understanding HRM practice adoption.

Insert Figure 1 about here

DISCUSSION

This study has applied institutional theorizing to improve our understanding of convergence/ divergence as an outcome and as a process. The notion of institutionally-constrained HRM practices was introduced to explore the extent to which complementarities and isomorphism occur within a specific 'organizational field' (DiMaggio & Powell, 1983), exploring both market economy and foreign MNE subsidiary vs indigenous firm effects. While prior convergence research has primarily been restricted to observing the country or market economy organizational fields, we have extended this literature by including the dual (simultaneously global and local) organizational fields applicable to foreign MNE subsidiaries (Kostova et al., 2008; Tempel & Walgenbach, 2007).

Our findings that convergence/ divergence occurs to different extents (i.e. is graded) provides empirical support for Kaufman (2016), who highlights the problems of current definitions of convergence, explaining the lack of inclusion of alternative permutations such as different conclusions being drawn depending on the time point at which comparisons are made. We argue that the convergence question is both contextual and temporal and is not a simple linear phenomenon given the dynamic contexts in which firms operate. We have therefore proposed a more graded conceptualization of convergence/ divergence ranging from constant no difference, through robust convergence, non-robust convergence, non-robust divergence, and robust divergence to constant difference. This allows us to tease out the more subtle manifestations of the process that can incorporate institutional context dynamics.

In order to provide this more graded conceptualization, we examined a diverse range of individual HRM practices, each one illustrative of practices that may be more or less affected by institutional constraints. The logic of market economy isomorphism would be that the practices most deeply embedded in the local context would be the least likely to converge across market economies (Hall & Soskice, 2001; Hotho, 2014). Similarly, we argued that the most institutionally-embedded HRM practices would be least likely to converge across indigenous firms vs foreign MNE subsidiaries: Whereas indigenous firms are strongly embedded in their local context, foreign subsidiaries are independent of neither the parent company nor the host setting (Looise & Drucker, 2002; Poutsma et al., 2006) and hence will be less likely simply to align with local firms. Specifically, we expected (and largely found) that the degree of institutional embeddedness would decrease (and the degree of convergence increase) when comparing the use of compensation and wage bargaining level practices with the use of contingent employment, training, and direct information provision practices.

We first hypothesized that we would observe differences in the extent of HRM convergence based on the degree to which a practice area might be constrained by market economy institutional complementarities (Höpner, 2005). This was supported for half of the wage bargaining level and compensation practices studied (company and individual level bargaining, employee share ownership, and group bonus) aligned with predictions from comparative capitalisms theories (Hall & Soskice, 2001; Jackson & Deeg, 2008). For such institutionally-constrained practices, we also expected market economy differences to endure over time (Hall & Thelen, 2009). This was supported for the same four practices. We therefore surmise that these practices are particularly strongly institutionally constrained, rooted in fundamental differences in the employment relationship between the LME and CME contexts.

In contrast, contingent employment (except temporary contracts), training, and direct information provision practices all demonstrated constant no difference between market economies, indicating that either practice has converged at some point in the past, or any differences are due to factors other than market economy. We conclude that these practices are less constrained by market economy institutions, and hence firms have greater leeway over choosing which practices to adopt (Hall & Soskice, 2001;

Hotho, 2014). Any institutional context is therefore not in itself determinative of the practices adopted by firms: Powerful firms have some leeway over how they adapt to institutional constraints for some HRM practices (Crouch, 2005; Jackson & Deeg, 2008), driven at least in part by the direction of the firm's corporate strategy and the actions of management.

We also observed nine practices showing significant difference in their likelihood of use between foreign MNE subsidiaries and indigenous firms. Six of these nine practices were wage bargaining and compensation practices, each indicating some degree of divergence. This again supports our argument that such practices are more institutionally constrained (Festing & Sahakiants, 2010; Thelen, 2001). In practice, indigenous firms likely adopt the norms of their country, with foreign firms showing less mimetic isomorphism (Pudelko & Harzing, 2007; Saka-Helmhout et al., 2016). For less institutionally constrained practices, however, there is again more commonality of practice across firm operating locations. This is in line with Edwards et al. (2016), who explored the standardization of performance management (arguably also less institutionally-constrained), comparing practice adoption between indigenous and U.S.-owned MNEs across six European countries. They argued that countries with stronger institutional constraints reduce the adoption of typical U.S. performance management practices, though they conclude that such evidence is still limited.

Although our findings are broadly supported by the existing literature as we have noted, there are several areas of unexpected details in the results. For example, we found that individual bargaining is used less in LMEs compared with indigenous firms in CMEs (although the odds ratio is small). This may be explained by the ongoing trend of decentralization and hybridization of collective bargaining in the CME context. National level bargaining in CMEs has come under pressure and is increasingly combined with bargaining at lower levels in order to leverage more flexibility in terms and conditions of employment (Traxler, Arrowsmith, Nergaard, & Molins Lopez-Rodo, 2008; Kalmi, Pendleton, & Poutsma, 2012). There is also a significant positive association between national and individual level bargaining in CMEs suggesting more leeway in setting labor terms and conditions individually. The strong significant negative association between company and individual level bargaining in LMEs

suggests more single level bargaining in LMEs compared to multilevel bargaining in CMEs: There is a trade-off between increased company, site and individual level bargaining in LMEs. We were also surprised that, compared to indigenous firms in CMEs, foreign MNE subsidiaries in LMEs tend to have lower use of part-time work. That may be because in CMEs part-time jobs are preferred to temporary and fixed-term contingent work arrangements due to its more stable character and greater employee-centeredness: In LMEs the more employer-centered flexibility and efficiency offered by temporary and flexible working are more accepted (Chung & Tijdens, 2013; Williams & Padmore, 2013). Finally, the greater use of strategy briefings in foreign MNE subsidiaries in LMEs compared to indigenous firms in CMEs may initially seem to be a surprise, but can be explained as the mirror image of the lower use of trade union and works council channels for communication.

Observing both market economy and organization type over time (H1c and H2c), we noted very few three-way interaction effects, indicating that the direct effect of these two factors over time has greater explanatory value. The findings indicate that HRM practice adoption in foreign MNE subsidiaries in LMEs rarely varies significantly from indigenous firms in CMEs. This could in part be related to characteristics of our sample: Only one third of the sample represented foreign MNE subsidiaries reporting strong control of HRM from headquarters, whereas two thirds reported being able to adapt HRM practices to the local context. This speaks to extant understanding that MNEs prefer to exploit subsidiary specific advantages (Rugman & Verbecke, 2001). In addition, in identifying 'foreign' MNE subsidiaries, the parent headquarters could be operating in the same type of market economy as the subsidiary, potentially diluting any 'foreign' effect. Future research might tease out these complex relationships in greater detail.

Our findings indicate that whether we observe HRM practice adoption through the lens of market economies or of indigenous firms vs foreign MNE subsidiaries, we find a similar pattern of compensation and wage bargaining level practices being more embedded (and less likely to converge across market economies or firm operating locations) than contingent employment, training, and direct information provision practices. These findings demonstrate the need for more detailed theories of MNE global

standardization and of comparative capitalisms. Both sets of theories have tended to focus on economic pressures and institutional differences independently and have, perhaps inevitably, looked for measurable areas of institutional difference and similarity. There may, however, be important effects of 'soft' institutions (North, 1990). It may be, for example, that executives in MNEs choose to localize rather than standardize practices (counter to corporate strategy), because of the costs of overturning local assumptions about legitimate behavior. In this respect, the focus on hard institutional differences in these theories may need to be modified.

The findings also raise theoretical challenges for the role of MNEs as understood in the IB literature. Comparing to indigenous firms, foreign MNE subsidiaries in any particular locale show both differences and similarities in their use of HRM practices. This provides some support for the validity of MNE organizational fields needing to balance global and local factors, supporting the ideas of duality (Kostova et al., 2008) and of the hybridization of HRM practices (Chung, Sparrow, & Bozkurt, 2013). Overall, our findings indicate that there are HRM practice areas where a more graded concept of convergence/ divergence helps us understand the processes that play out in dynamic firm contexts. As Figure 1 demonstrates, future research requires careful and detailed analysis to understand the range of antecedents affecting the patterns of use of HRM practices in firms internationally.

CONCLUSIONS

The simultaneous study of market economies and foreign MNE subsidiaries vs indigenous firms presented here brings together what have previously been two parallel streams of discussion around convergence and standardization in the Comparative and International HRM literatures. This has allowed us to develop a more graded understanding of convergence/ divergence than has been available to date. We have also been able to apply our theorizing to a more comprehensive and diverse range of HRM practices than has been done hitherto.

Despite the intriguing findings, our study, of course, has certain limitations. Firstly, the survey uses a single respondent approach, although the critical issue is the collection of data from the most

knowledgeable sources. Obtaining more raters may increase reliability but, except in cases where the views of the respondents or areas of their specific knowledge are being studied, will not increase the accuracy (validity) of the raters' evaluations. In short, it is not simply how many people respond to a survey that is critical but whether the respondents are knowledgeable (Huselid & Becker, 2000).

The study is also limited by the use of 'country' as a proxy control variable rather than including other national economic indicators that might capture change over time. It was decided not to include economic indicators given the broadly similar level of economic development of the countries included and a lack of variance in GDP growth over the timespan studied (all, broadly speaking, being rich countries with similarly qualified workforces). Although interesting for future studies, we also did not develop hypotheses at the industry or organization size level for similar reasons. These will be important variables to consider in future research as they are known to influence HRM (Gooderham et al., 1999; Rosenzweig & Singh, 1991).

The response rate within each country might also be considered a limitation. The rates are comparable with other large scale, international surveys (Mayrhofer et al., 2011) and are acceptable for whole-population samples, as the survey is in many smaller countries. Obviously more respondents are always preferred, but since our interest is in comparative trends, the sample within each country is broadly representative of the economies, as measured against Eurostat and NACE evidence, rather than being matched in terms of sector and size or the proportion of MNEs. Cranet data, although longitudinal, are not the result of a panel survey. It is a repeated cross-sectional design in which longitudinal data is collected "on the same set of variables for (and perhaps at) two or more periods to include non-identical but comparable cases in each period" (Menard, 2007: 2-3). This repeated cross-sectional form of non-cohort longitudinal analysis is "well-suited to examine change in values of variables in relationships" (ibid: 6).

The analysis is also limited to some extent by our selection of HRM practices, although we argue that they are illustrative of practices that may be either more or less institutionally constrained. We urge future research to continue to focus on individual HRM practices (rather than HRM system bundles), as

our findings indicate clear variability in practice adoption in our comparisons. We were also limited to nine countries, and the results therefore may not be generalizable to other LME and CME contexts. Future research could focus on other interesting examples of LME countries (e.g. U.S.A.) and CME countries (e.g. Japan). The LME/ CME dichotomy that we used is the most frequently adopted in empirical research into comparative capitalisms, but more nuanced market economy taxonomies (Amable, 2003; Hotho, 2014) could have been adopted.

Finally, future research might explore why certain trends might be occurring over specified time periods. We limited ourselves to discussing convergence in terms of the equal likelihood of use of a practice, avoiding conclusions about directionality. Future research might involve qualitative studies that explore changes in HRM practice to uncover the dynamic processes behind convergence trends. For example, moving forward from our 2009-10 end point, it will be interesting to see the impact that the global financial crisis that began in 2008 had on HRM practice adoption over the longer-term.

Despite these limitations, the findings presented here can assist HRM leaders to understand the influences on their field of expertise, recognizing the importance of the context in which they are embedded at the firm and market economy level. Foreign MNE subsidiaries have different practices in place compared to indigenous firms but need to fit in locally, at least to some extent, i.e. the best form of economic organizing is that which delivers both efficiency and legitimacy (Kostova & Zaheer, 1999). When considering whether to adopt a strategy of globalization or localization, or some hybrid approach, MNEs can assess the potential challenges they may face by considering the extent to which the institutional constraints around specific HRM practices might vary across the parent and host locations. By undertaking such an analysis, implementation of the strategy might be both more efficient and yield higher returns.

We suggested criteria against which firms might determine the extent to which different HRM practices are more or less institutionally-constrained. The evidence presented here points to wage bargaining levels and compensation practices offering less leeway for local adaptation away from institutional norms, compared with contingent employment, direct information provision and training

practices. The constraining element of institutions therefore needs to be considered per area of practice to avoid over- or under-statement. Overall, this study has highlighted that institutions matter: For firms, this means that discretion is limited unless they are able to influence these institutions. To this end, in some countries, particularly the CMEs where competition is less of a requirement, firms organize themselves into business/ employer associations to be part of the institutional context and to instigate favorable arrangements.

In conclusion, our study provides insights into the phenomenon of HRM practice convergence/divergence, offering a multi-faceted reflection of reality. This poses a challenge to theories of 'constant white water change', as much as it does to theories such as those dealing with comparative capitalisms that struggle to explain change. By adopting a more graded concept of convergence/ divergence and applying it simultaneously to market economy and foreign MNE subsidiaries vs indigenous firms, our study has revealed a more complex but arguably a more realistic picture than previous attempts to study convergence in HRM. Our assumptions of institutional constraint (or a lack thereof) were largely supported, offering a way forward in the understanding of which HRM practices are more likely to converge over time and which are more likely to remain distinctive.

ENDNOTES

¹OLS regression would have resulted in unreliable standard deviations because the assumption of independent observations would have been violated (Snijders & Bosker, 1999).

² Full models are available on request from the authors.

³ Given the higher-order interaction parameters in the model, the lower-order parameters (e.g. LME) test conditional effects providing the baseline odds ratios for the reference group. In our model, the reference group contains organizations in the last year of our timeframe (2009-10). The corresponding interaction parameters involving the preceding years test whether firms in specific years have an additional effect beyond the baseline effect (see: Ai & Norton, 2003).

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TABLE 1 Longitudinal multi-country studies of HRM practice convergence using Cranet data

Study	HRM practice area	Countries included	Data collection rounds	Research aims	Analysis	Conclusions
Morley, Brewster, Gunnigle, & Mayrhofer (1996)	trade union membership, recognition and influence, policy determination locus	13 European countries	1990/ 91, 1992, 1995	To investigate a number of key aspects of industrial relations at the level of the employing organization as a means of evaluating developments in the nature and conduct of industrial relations.	Comparison of statistics per year to signal trends but no significance testing of differences to explore convergence	n/a
Nikandrou, Apospori, & Papalexandri (2005)	Broad range of HRM department measures and HRM practices	18 European countries	2 rounds: 1995, 1999- 2000	To examine whether a change toward more similarities in HRM exists in Europe. To identify country-specific changes which may account for a country's transfer from the periphery closer to a cluster, or from one cluster to another.	Cluster analysis at the country level of analysis	"the two clusters do not show any considerable change towards convergence" (p. 549).
Tregaskis & Brewster (2006)	Part-time, temporary, and fixed-term contracts	5 European countries	3 rounds: 1991, 1995, 1999-2000	To examine the extent of use of time/ temporary/ fixed-term contracts between organizations operating in different countries over time.	MANOVA analysis for planned contrasts to test for the effect of country	"There is no evidence that either the regional institutional pressures coming from the European Commission or regional or global competitive pressures are creating 'final' convergence in organizational practice" (p. 122).
Brewster, Croucher, Wood, & Brookes (2007)	collective representation mechanisms	3 European countries	4 rounds: 1991, 1995, 1999-2000, 2004-05	To explore the general trend away from collective and towards individual voice mechanisms, reflecting a predominant trajectory of managerial practices	Estimating and comparing probabilities of practice use	"Our analysis gives the convergence argument some limited support in that German organizations, controlling for differences in size and sector,

				towards convergence with the liberal market model.	at country level	show a decreasing tendency to use their works councils" (p. 1259)
Goergen, Brewster & Wood (2009)	Trade union membership/ influence	Western European countries	3 rounds: 1995, 1999-2000, 2004-05	To test relationships between institutions, corporate governance, and union power.	Logit regression analyses based on country- level legal traditions	"the strongest indicator of union strength was national legal tradition, suggesting a significant degree of path dependence" (p. 632)
Goergen, Brewster, Wood & Wilkinson (2012)	training days, training spend	18 European countries	4 rounds: 1991, 1995, 1999-2000, 2004-05	To explore the relationship between national institutional archetypes and investments in training and development based on varieties of capitalism theorizing.	Cluster analysis at the organization level of analysis	"specific national realities are associated with specific firm-level practices, underscoring the existence of clear alternative clusters of institutions and practices" (p. 523)
Mayrhofer, Brewster, Morley & Ledolter (2011)	HRM practice bundles: development, reward, communication, plus HRM responsibilities, HRM-staff ratio	European countries	4 rounds: 1992, 1995, 1999-2000, 2004-05	To analyze empirically the development of HRM in private sector firms in 13 European countries between 1992 and 2004, not only examining the extent of convergence in HRM in Europe, but also exploring the theoretical implications for the interplay between convergence and divergence.	Comparison over time at country level of the use of bundles of practices (likelihood ratios)	"We find considerable evidence of directional similarity – practices increasing or decreasing in the same way across the countries – but no evidence of final convergence – countries becoming more alike in the way they manage people" (p. 50)
Poor, Karoliny, Alas, & Vatchkova, (2011)	training, and role of the HRM department	3 Central and Eastern European countries	3 rounds: 1995, 1999-2000, 2004-05	To draw attention to the similarities in the historical background and in the transitional period of the post-socialist CEE (Central and East European) countries related to the modernization of the HRM function.	Comparison of statistics per year to signal trends but no significance testing of differences to explore convergence	n/a

TABLE 2 Respondent characteristics

United Kingdom Australia 6.39 Germany 18.77 Sweden 9.73 Denmark 13.53 Netherlands 4.61 Finland 5.45 Austria 7.70 Belgium 9.14 Year 1999/2000 41.56 2004/05 2004/05 2009/10 20.67 Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME LME 0rganization type Indigenous Foreign MNE subsidiary Organization size Size(Ln) 6.33 1.20 Size (median) 4.63	Country	Per cent	Mean	SD
Germany 18.77 Sweden 9.73 Denmark 13.53 Netherlands 4.61 Finland 5.45 Austria 7.70 Belgium 9.14 Year 1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	United Kingdom	24.67		
Sweden 9.73 Denmark 13.53 Netherlands 4.61 Finland 5.45 Austria 7.70 Belgium 9.14 Year 999/2000 2004/05 37.77 2009/10 20.67 Industry Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Australia	6.39		
Denmark 13.53	Germany	18.77		
Netherlands 4.61 Finland 5.45 Austria 7.70 Belgium 9.14 Year 1999/2000 2004/05 37.77 2009/10 20.67 Industry Construction Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln)	Sweden	9.73		
Finland 5.45 Austria 7.70 Belgium 9.14 Year 1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Denmark	13.53		
Austria 7.70 Belgium 9.14 Year 1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Netherlands	4.61		
Belgium 9.14 Year 1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Finland	5.45		
Year 1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry 20.67 Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size Size(Ln)	Austria	7.70		
1999/2000 41.56 2004/05 37.77 2009/10 20.67 Industry 20.67 Industry 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size Size(Ln)	Belgium	9.14		
2004/05 37.77 2009/10 20.67 Industry 4.56 Construction 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size Size(Ln)	Year			
2009/10 20.67 Industry 4.56 Construction 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy 68.94 LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	1999/2000	41.56		
Industry 4.56 Construction 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy Economy CME 68.94 LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size Size(Ln)	2004/05	37.77		
Construction 4.56 Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size 5ize(Ln)	2009/10	20.67		
Transportation 5.26 Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Industry			
Banking and finance 11.58 Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Construction	4.56		
Chemicals 7.73 Other industries 29.24 Manufacturing 41.63 Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Transportation	5.26		
Other industries 29.24 Manufacturing 41.63 Trade union membership 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy 68.94 LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size 53.20 Size(Ln) 6.33 1.20	Banking and finance	11.58		
Manufacturing 41.63 Trade union membership 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME LME 31.06 Organization type Indigenous Foreign MNE subsidiary 46.80 Organization size 53.20 Size(Ln) 6.33 1.20	Chemicals	7.73		
Trade union membership 0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy 68.94 LME 31.06 Organization type 53.20 Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size 6.33 1.20	Other industries	29.24		
0% 11.84 1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy 68.94 LME 31.06 Organization type 53.20 Foreign MNE subsidiary 46.80 Organization size 53.20 Size(Ln) 6.33 1.20	Manufacturing	41.63		
1-25% 24.53 26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Trade union membership			
26-50% 13.09 51-75% 15.46 76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	0%	11.84		
51-75% 15.46 76-100% 18.67 missing 16.40 Economy 68.94 LME 31.06 Organization type 53.20 Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size 6.33 Size(Ln) 6.33	1-25%	24.53		
76-100% 18.67 missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	26-50%	13.09		
missing 16.40 Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	51-75%	15.46		
Economy CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	76-100%	18.67		
CME 68.94 LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	missing	16.40		
LME 31.06 Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Economy			
Organization type Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	CME	68.94		
Indigenous 53.20 Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	LME	31.06		
Foreign MNE subsidiary 46.80 Organization size Size(Ln) 6.33 1.20	Organization type			
Organization size Size(Ln) 6.33 1.20	Indigenous	53.20		
Size(Ln) 6.33 1.20	Foreign MNE subsidiary	46.80		
Size(Ln) 6.33 1.20	Organization size			
Size (median) 445.00	Size(Ln)		6.33	1.20
	Size (median)		445.00	

N= 5,743

TABLE 3 HRM practices descriptive statistics

	1999-	2004-	2009-		
HRM areas and practices ^(a)	2000	2005	2010	Total (d)	<u>n</u>
Level of wage bargaining					
National/regional level wage bargaining	57.7%	59.3%	69.9%	60.84%	5,743
Company/establishment level wage bargaining	43.1%	55.6%	37.2%	46.61%	5,743
Site level wage bargaining	35.3%	36.7%	40.2%	36.84%	5,743
Individual level wage bargaining	70.0%	72.6%	84.0%	73.88%	5,743
Compensation					
Share ownership	29.4%	40.6%	33.4%	34.44%	5,743
Profit sharing	40.4%	42.7%	41.9%	41.58%	5,743
Group bonuses	35.8%	37.4%	59.9%	41.37%	5,743
Performance related pay	59.8%	54.4%	78.0%	61.55%	5,743
Contingent employment					
>10% of workforce on part-time contracts	17.1%	26.4%	34.9%	24.29%	5,596
>0% of workforce on temporary contracts	57.9%	80.5%	81.7%	71.51%	5,515
>0% of workforce on fixed-term contracts	53.0%	76.1%	81.2%	67.70%	5,511
Information provision					
Workforce briefing on financial performance ^(b)	81.0%	83.5%	80.7%	81.87%	5,743
Workforce briefing on strategy ^(b)	60.2%	72.3%	75.5%	67.93%	5,743
Written mission statement	79.5%	81.5%	83.2%	81.00%	5,679
Written corporate strategy	76.0%	80.4%	81.3%	78.76%	5,684
Training					
Percentage of payroll costs spent on training	61.3%	56.6%	78.3%	63.72%	4,316
Number of training days received by employees ^(c)	87.9%	89.0%	90.1%	88.71%	3,993

⁽a) Dichotomous items unless otherwise indicated - practice adopted (1) versus no practice adopted (0).
(b) To employees beyond management alone.
(c) Other than management.

⁽d) Percentage of organizations reporting the presence of a practice (across all years combined).

TABLE 4
Spearman's correlations of HRM practice variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	National/regional																
	level wage bargaining																
2.	Company level	at.															
	wage bargaining	-0.10*															
3.	Site level wage	-0.05*	0.06^{*}														
	bargaining	-0.03	0.00														
4.	Individual level	0.20^{*}	-0.21*	0.06^{*}													
_	wage bargaining				0.02												
5.	Share ownership	-0.07*	0.09*	0.04*	-0.02	0.00*											
6.	Profit sharing	0.05*	-0.02	0.04*	0.08*	0.09*											
7.	Group bonus	0.02	0.07^{*}	0.07^{*}	0.03	0.16^{*}	0.02										
8.	Performance related pay	0.03	0.04^{*}	0.07^{*}	0.08^{*}	0.15^{*}	0.09^{*}	0.30									
9.	- •	0.02	-0.01	-0.05*	-0.05*	-0.03	-0.04*	0.01	0.00								
10	. Temporary																
10	contracts	0.00	0.06^{*}	0.04^{*}	-0.02	0.10^{*}	-0.05*	0.10^{*}	0.07^{*}	0.07^{*}							
11.	Fixed-term contracts	0.07^{*}	0.02	0.03	0.09^{*}	0.03	0.13*	0.04*	0.10^{*}	0.06*	0.19*						
12	Financial																
	performance	0.03	0.04^{*}	0.05^{*}	0.02	0.11^{*}	0.10^{*}	0.10^{*}	0.08^{*}	-0.02	0.04	0.03					
	briefing																
13.	Strategy Briefing	-0.02	0.08^*	0.03	-0.02	0.12^{*}	0.00	0.12^{*}	0.08^{*}	0.02	0.10^{*}	0.06^{*}	0.33^{*}				
14.	. Mission statement	0.03	0.02	0.00	-0.01	0.06^{*}	0.01	0.09^{*}	0.06^{*}	0.05^{*}	0.06^{*}	0.02	0.14^{*}	0.18^{*}			
15.	. Corporate strategy	0.02	0.05^{*}	0.02	-0.01	0.12*	0.02	0.10^{*}	0.09^{*}	0.01	0.09^{*}	0.04^{*}	0.15*	0.29^{*}	0.44*		
16.	. Training spend	-0.02	0.04^{*}	0.03	0.00	0.07^{*}	0.00	0.10^{*}	0.09^{*}	0.02	0.08^{*}	0.07^{*}	0.08^{*}	0.15^{*}	0.10^{*}	0.12^{*}	
	. Training days	-0.01	0.02	0.03	-0.01	0.07^{*}	0.01	0.05^{*}	0.05^{*}	0.02	0.04^{*}	0.03	0.06^{*}	0.11^{*}	0.08^{*}	0.09^{*}	0.31*
	. ·																

^{*} p < 0.05. n = 3,993 to 5,743.

TABLE 5
Trend categorizations

	Trend	Baseline (2009-10)	Preceding years	Description
1	Constant no difference	No difference	No difference in either preceding year	No changing trend observed, ending with no significant difference
2	Robust convergence	No difference	Decreasing differences	Stable trend of diminishing difference over time ending in no significant difference
3	Non-robust convergence	No difference	Mix of decreasing/ increasing differences	Irregular trend of difference over time ending in no significant difference
4	Non-robust divergence	Difference	Mix of increasing/ decreasing differences	Irregular trend of difference over time ending in significant difference
5	Robust divergence	Difference	Increasing differences	Stable trend of increasing difference over time ending in significant difference
6	Constant difference	Difference	No difference in either preceding year	No changing trend observed, ending with a significant difference

TABLE 6
Odds-ratios of conditional effects of market economy on the use of HRM practices over time

Practice	Simple effect	Interacti	on effects	Trend	
	LME	LME x 2004-05	LME x 1999-2000		
National level wage bargaining	0.22	1.71*	1.35	Non-robust convergence	
Company level wage bargaining	4.49**	0.30*	1.01	Non-robust divergence	
Site level wage bargaining	0.80	1.89	2.10*	Robust convergence	
Individual level wage bargaining	0.37*	1.13	1.04	Constant difference	
Share ownership	2.70**	0.43**	0.86	Non-robust divergence	
Profit sharing	0.46	0.79	1.90*	Robust convergence	
Group bonus	1.96**	0.30**	1.10	Non-robust divergence	
Performance related pay	1.31	0.45**	1.10	Non-robust convergence	
>10% part-time contracts	0.70	0.75	0.75	Constant no difference	
>0% temporary contracts	0.45	5.27*	6.10*	Robust convergence	
>0% fixed-term contracts	0.65	0.81	0.58	Constant no difference	
Briefing on financial performance	0.66	0.97	0.99	Constant no difference	
Briefing on strategy	0.71	1.46	0.99	Constant no difference	
Written mission statement	0.71	0.70	1.26	Constant no difference	
Written corporate strategy	0.58	1.26	2.11	Constant no difference	
Training spend	0.73	1.51	1.45	Constant no difference	
Training days	0.63	1.18	1.44	Constant no difference	

Notes: ** p<0.01, * p<0.05 using robust standard errors; Effects tested under conditions of: CME, 2009-10, Indigenous.

 ${\bf TABLE~7} \\ {\bf Odds-ratios~of~conditional~effects~of~organization~type~on~the~use~of~HRM~practices~over~time}$

Practice	Simple effect	Interaction	on effects	Trend	
	Foreign	Foreign x 2004-05	Foreign x 1999-2000		
National level wage bargaining	0.68**	1.29*	1.26	Non-robust divergence	
Company level wage bargaining	1.50*	0.81	1.11	Constant difference	
Site level wage bargaining	1.30*	1.00	1.14	Constant difference	
Individual level wage bargaining	1.33	0.82	0.80	Constant no difference	
Share ownership	2.79**	0.85	0.74	Constant difference	
Profit sharing	1.20	1.07	1.20	Constant no difference	
Group bonus	2.16**	0.49**	0.75	Non-robust divergence	
Performance related pay	2.14**	0.69	0.84	Constant difference	
>10% part-time contracts	0.57**	1.26	0.79	Constant difference	
>0% temporary contracts	1.27	0.87	1.12	Constant no difference	
>0% fixed-term contracts	1.29	0.85	0.98	Constant no difference	
Briefing on financial performance	1.51*	0.77	1.02	Constant no difference	
Briefing on strategy	1.40*	1.12	0.83*	Non-robust divergence	
Written mission statement	1.01	1.19	1.71*	Robust convergence	
Written corporate strategy	1.25	1.09	1.52**	Robust convergence	
Training spend	0.92	1.04	1.26	Constant no difference	
Training days	1.07	1.05	1.47	Constant no difference	

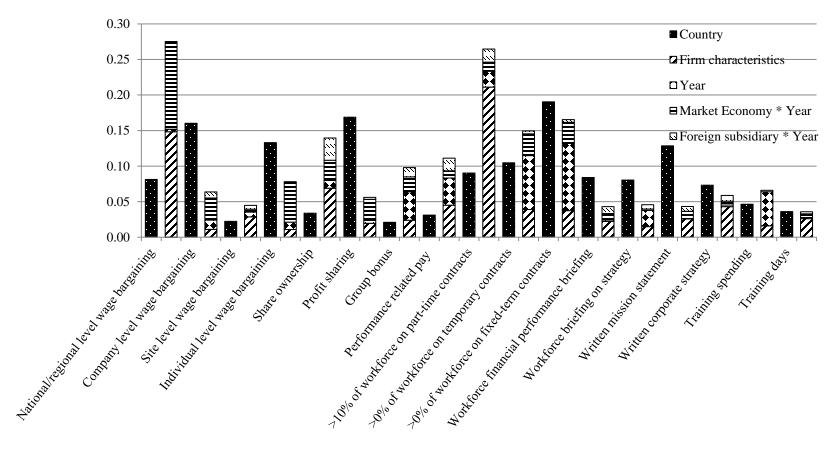
Notes: ** p<0.01, * p<0.05 using robust standard errors; Effects tested under conditions of: Indigenous, 2009-10, CME.

TABLE 8
Odds-ratios of conditional interaction effects of market economy and organization type on the use of HRM practices over time

Practice	LME x Foreign	LME x Foreign x 2004-05	LME x Foreign x 1999-2000	Trend
National level wage	1.14	0.54**	0.69	Non-robust convergence
bargaining				
Company level wage bargaining	0.64	0.99	0.69	Constant no difference
Site level wage bargaining	0.74**	1.70	1.00	Constant difference
Individual level wage bargaining	1.27	0.65	0.78	Constant no difference
Share ownership	0.45**	1.77**	2.23**	Non-robust divergence
Profit sharing	0.49	1.55	1.45	Constant no difference
Group bonus	0.88	1.00	1.11	Constant no difference
Performance related pay	0.75	1.00	1.30	Constant no difference
>10% part-time contracts	0.57*	1.76*	1.67	Non-robust divergence
>0% temporary contracts	2.27*	0.40**	0.48	Non-robust divergence
>0% fixed-term contracts	1.82	0.42	0.63	Constant no difference
Briefing on financial performance	0.95	1.21	1.26	Constant no difference
Briefing on strategy	1.52*	0.41**	0.94	Non-robust divergence
Written mission statement	1.46	0.77	0.55	Constant no difference
Written corporate strategy	0.98	0.88	0.72	Constant no difference
Training spend	1.60	0.76	0.79	Constant no difference
Training days	0.85	0.95	0.77	Constant no difference

Notes: ** p<0.01, * p<0.05 using robust standard errors; Effects tested under conditions of: Indigenous, CME, 2009-10.

FIGURE 1 Effect sizes on HRM practice use



Notes: Per practice, bar 1 = level 1 (country), bar 2 = level 2 (firm characteristics, year, foreign MNE subsidiary*year, market economy*year); McKelvey-Zavoina R. The first components entered are the country (level 1) and the firm characteristics and year (level 2, main effects only), subsequently followed by foreign MNE subsidiary including year interactions, and market economy including year interactions.