Multinational Companies in Cross-National Context: Integration, Differentiation and the Interactions between MNCs and Nation States

Tony Edwards[1], Paul Marginson[2] and Anthony Ferner[3]

1 Department of Management, Kings' College, London

2 IRRU, University of Warwick

3 Leicester Business School, De Montfort University

Revised Draft: March 2012

Abstract

This paper outlines the key features of an international research project consisting of parallel surveys of MNCs and employment practice in four countries: Canada, Ireland, Spain and the UK. The surveys are the most comprehensive investigations of the employment practices in MNCs in their respective countries. In setting up the comparative analysis of these data, the paper has four objectives. First, we explore the processes of integration and differentiation in MNCs, how these frame the interactions between MNCs and nation states and the impact on employment practice. Second, we chart the importance of foreign direct investment (FDI) and the systems of industrial relations in the four countries in question. Third, we outline the key elements of the research design and chart the process of collecting data. Fourth, we provide a summary of some of the key findings in relation to patterns of integration and differentiation.

Introduction

Multinational companies (MNCs) are central actors in the international economy. There are 82,000 MNCs in the world, controlling 810,000 foreign affiliates, accounting for around a third of total world trade, employing approximately 80 million people outside their home bases (United Nations 2010). MNCs are sometimes seen as 'an emerging global class of organizations' with the potential to 'form their own intra-organizational field' (Kostova et al. 2008:996) leading to them having major effects on employment practices in the host environments (Edwards and Walsh 2009). In summarizing the findings and implications of comparative research in call centres, Batt et al. (2009:474) argue that MNCs have a marked impact on the direction of change in national systems of employment relations and call for fresh research into MNCs to study how they 'operate similarly or differently'.

Yet our understanding of how MNCs operate has many gaps, which arise from both empirical and conceptual shortcomings. Concerning the former, while the way that MNCs develop HR policies for their operations across countries has been extensively studied, previous surveys of MNCs are either partial in coverage (for example, because they are confined to certain sectors or particular countries of origin) or there are major doubts concerning their representativeness (Edwards et al. 2008). Moreover, closely coordinated surveys of MNCs in different countries are rare. Case study research has been revealing concerning how MNCs operate but has tended to focus on certain types of MNCs, especially large, US-based firms (Collinson and Rugman 2005).

The conceptual shortcomings stem from the way in which research into MNCs and employment relations has been dominated by the issue of the 'global-local' tension in management practice; this tension is commonly seen as a universal one with which all MNCs must grapple (Edwards and Kuruvilla 2005). In this paper, and in the wider research project, we go beyond this approach by addressing the various ways in which MNCs simultaneously integrate across national employment systems and differentiate between them as they select from a complex range of options. A similar constraining dualism has characterized the related convergence-divergence debate (Katz and Darbishire, 2000). As Giles (2000:186) puts it: 'the usual way of framing the convergence / divergence debate – opposing convergence and divergence as if they were independent forces, the former consisting of technology, markets and multinational practices, the latter of cultures and institutions – is not especially helpful'. For us, globalization promotes both closer integration of the operations of MNCs across countries *and* more elaborate differentiation between countries, while the interactions between the strategies of MNCs and national institutional influences are becoming increasingly complex.

The research is the product of an international network of academics conducting parallel surveys of MNCs and employment practice in four countries: Canada, Ireland, Spain and the UK.[1] The surveys are the most comprehensive investigations of the employment practices in MNCs in their respective countries. Each documents the variety of employment practices among MNCs and explores the level at which decisions on such issues are determined, how practices are transferred across borders, and how policies are monitored and enforced. To date, the survey data have been analysed independently at national level.[2] The creation of an international dataset from the closely co-ordinated national surveys provides an unprecedented opportunity for cross-national, comparative analysis of multinationals and employment practice.

This opening paper has four objectives. First, we explore the processes of integration and differentiation in MNCs by examining how MNCs are simultaneously building strong linkages between their operations across borders, adapting to local circumstances in some respects *and* exploiting the differences between countries by differentiating the functions and approach to managing workers. Second, we explain the choice of the four countries in the light of the importance of foreign direct investment (FDI) and the similarities and differences between the countries. Third, we outline the key elements of the research design, chart the process of collecting data and consider the extent of the comparability between the parallel surveys. Fourth, we provide a summary of some of the key findings in relation to patterns of integration and differentiation.

Integration, Differentiation and the Interactions between MNCs and National Systems of Employment

Studies across several decades show how national institutions shape employment practices resulting in persistent national diversity (e.g. Dore 1973). Recently, scholars have adopted the ‘varieties of capitalism’ (VoC) perspective in which the institutional embeddedness of economic activity, and the ‘complementary’ nature of institutions within countries, create enduring national differences in management practices even in an age of globalization (Hall and Soskice 2001). Many studies have shown that most MNCs retain strong links with their (distinctive) home business system, leading to a ‘country of origin effect’ (e.g. Ferner 1997). However, some observers have found evidence of convergence towards ‘dominant’ practices; at any one time there is a hierarchy of nation states according to perceptions of their performance, with the dominant nation – commonly the US, though in the 1980s and 1990s it was Japan – serving as the basis for practices that other firms emulate (Smith and Meiksins 1995; Pudelko and Harzing 2007). Thus this literature has identified distinct sources of a transnational dimension to employment practice; national institutions on the one hand, notions of ‘dominant’ practice on the other. A second debate concerning national diversity and MNCs is the extent to which they are constrained by host institutions. While some argue that ‘adherence to local practices is the dominant influence’ on MNCs’ employment practice (Rosenzweig and Nohria 1994:250), others emphasize the malleability of host systems (Kostova et al. 2008).

A different research stream charts the increasingly globalized nature of international production and service provision. Incorporating the ‘new international division of labour’ (Frobel et al. 1980) and more recent work concerning ‘global value chains’ (Gereffi et al. 2005) and ‘global production networks’ (Coe et al. 2008), this literature shows how firms exploit differences between countries, breaking up the production process by locating distinct activities in different countries. This approach emphasizes the opportunities, rather than the constraints, for MNCs in operating in different institutional contexts..

We see the *integration* of production and the way that MNCs *differentiate* between host systems not as opposites but rather as inter-dependent. The VoC and global production network approaches each capture an element of what national diversity in a globalized era means for MNCs but do not provide a robust framework for the task at hand. Therefore, the concepts of integration and differentiation need to be refined. Doz et al. (1981) equated integration with ‘global competitive pressures’ and differentiation with ‘host country demands’. Subsequent work showed how MNCs strike the balance differently across their product divisions (Bartlett and Ghoshal 1998). Some functions are more globally integrated than others, and even within functions some tasks are more globally integrated than others (ibid.). Moreover, employees at lower levels within the corporate hierarchy are more likely to be subject to differentiation than those at higher levels (Rosenzweig 2006). Yet there is a common assumption of a tension between global integration and local differentiation (e.g. Schuler et al. 1993; De Cieri and Dowling 2006). As Stahl and Bjorkman (2006:5-6) put it: ‘One particularly important duality that global organizations must manage and that has major implications for [international HRM] policies and practices is that of centralization (global integration) versus decentralization (local responsiveness)’.

It is this dualism, in which the labels of integration and differentiation are used interchangeably with global and local and centralization and decentralization, that we seek to challenge. There are global elements to how MNCs manage their international workforces, including the standardization of practices and routines across borders, and there are also local elements, such as the adaptation of practices to national context. However, while these are sometimes in tension, they are not always opposites; rather, they are interdependent, non-orthogonal, and can take many forms. In order to explore this we consider the role of MNCs in both integrating across, and differentiating between, national employment systems and how this frames the interactions between MNCs and nation states.

Integration stems from the ways in which MNCs build linkages between their international operations (Dicken 2011). Drawing on Boxall and Purcell (2011), we see integration as occurring at multiple levels within the multinational firm. At the ‘upstream’ level, ‘first-order’ issues are the strategy of the firm and how it is configured, including the extent to which the functions of operations in different countries are similar or different and the ways in which business activities are inter-linked across countries. ‘Second-order’ matters relate to internal operating structures, including forms of international management organization. Further downstream, ‘third-order’ issues concern how functions such as HR are organized at the international level and include any transnational dimension to MNC employment practice, both formal and informal.

Concerning first-order issues, MNCs can derive synergies from integrating their operations internationally in two main ways. Some MNCs are configured through *segmentation*, with local operations having distinct roles, reflecting the advantages of the host, such as low-cost labour, or the availability of specialist skills. National operations supply others, are supplied by others, or both, resulting in the MNC being linked through ‘chains’ or ‘webs’, creating synergies from vertical integration. Each national subsidiary is a distinct segment of an inter-dependent production process. Such international integration operates not only in manufacturing but also increasingly in services, for example call centers, transcription of medical records, and formatting in publishing.

Other MNCs are configured through *replication* whereby local operations perform similar functions to each other, have comparable technologies and occupational profiles and serve a local market (Ivarsson and Alvstam 2005), creating synergies from horizontal integration (Gupta and Govindarajan 1991). In this scenario, the roles of national operations are similar and the multinational expands by replicating what it does in other countries. While segmentation may be becoming more feasible, in some sectors there remain significant pressures towards having a local operation to serve a local market. These pressures include, for example, the perishable nature of some food products and the immediacy of the relationship between firm and consumer in sectors like hospitality.

Some MNCs are not configured to realize synergies from international integration, pursuing instead ‘financial economies’ (Hill and Hoskisson 1987) through the operation of an internal capital market amongst autonomous businesses that have no operational inter-linkages. This strategy was quite common historically amongst British MNCs, many of which were highly diversified. Their rationale was that the hierarchy of the firm enjoyed information advantages over the financial markets and so was a more efficient mechanism for allocating capital across diverse businesses. While such firms appear to have declined in number, it is unlikely that this *modus operandi* has disappeared altogether.

The first-order issue of configuration may be linked to the second-order issue of corporate structure. Clearly, those firms that pursue financial economies are less likely to set up influential international structures across their operations. Conversely, firms pursuing integration strategies are likely to have international structures to provide organizational channels for implementing such strategies.

We might also explore the association between the first- and second-order issues on the one hand and the third-order structuring of employment practice transnationally on the other (Edwards 2011; Marginson and Meardi 2010). The latter may embrace formal structures such as international policy-making bodies (Tregaskis et al. 2005) or European Works Councils (Marginson et al. 2004) and informal channels of socialization and forms of networking (Frost and Zhou, 2005), often as part of management development and succession planning programmes. While greater integration upstream can lead to greater integration downstream, there is no straightforward relationship between the levels. Third-order issues may operate in a manner relatively independent of those at higher orders.

Where there is a link, the nature of any transnational HR dimension may differ according to the type of upstream approaches. For instance, segmentation limits the attractiveness of global HR policies given that the technologies deployed and the occupational profile of each site differ markedly (Dedoussis 1995). Yet MNCs may use international management networking to promote the smooth exchange of components and knowledge across countries and thereby realise the synergies from segmentation. Such MNCs may also be vulnerable to disruption from local disputes (Marginson 1992), and this risk may be reduced by establishing formal structures to ensure consistency in practice across borders. Amongst replicated MNCs, the incentives for managers to develop a transnational dimension differ from those in segmented firms (Edwards and Zhang 2008). Since production routines are identical across countries, benefits derive from avoiding precedent-setting in situations where workforces, as well as managers, can more readily compare across borders. The extent of the transnational HR dimension may be shaped by whether MNCs tailor their products to national markets or standardize across them, with impetus being stronger amongst the latter.

This consideration of the different types of integration has two crucial implications. First, the benefits of integration should not be assumed; some MNCs achieve financial economies from having operationally independent international units and here there will be no tension between global and local influences because there is no attempt to exert global influence. Second, even amongst integrated firms, integration can take different forms with markedly different consequences. In particular, integration through segmentation limits the attraction of global HR policies; indeed, such MNCs exploit national differences rather than being constrained by them. This is not to say that global and local pressures are never in tension, but it demonstrates that such a tension is not universal. It follows that various forms of integration are associated with different patterns of differentiation.

Turning to differentiation, this concept complements integration in distinguishing between the functions performed across countries. The conventional view of MNCs was for sales and manufacturing operations to be established abroad whilst the full range of headquarters functions remained in the home country. With the progressive location of strategic functions outside the country of origin, often termed 'internationalization of the second degree' (Forsgren et al. 1992), and the development of 'mandates' for foreign subsidiaries giving them responsibility for an aspect of the MNC's global operations (Birkinshaw and Hood 1998), headquarters functions have also become geographically dispersed. This opens up multiple lines of differentiation within MNCs. Thus there can be differentiation *between* countries arising from MNCs' spatial decisions to locate particular functions according to characteristics such as costs, skills, forms of flexibility, etc. (Dedoussis 1995). This role of MNCs in consolidating differences between host systems inverts the logic of adaptation that is prominent in the literature (cf. Meardi and Tóth 2006).

A key implication is that the company level is not the only relevant unit of analysis; an examination is also needed of the distinctive roles that subsidiaries play (e.g. Bouquet and Birkinshaw 2008; Jarillo and Martinez 1991; Luo 2005). Where MNCs differentiate the roles of national units, subsidiaries are likely to differ in the extent to which they are the source of innovations that are spread across the company and in their capability to shape company policies. Case study evidence on 'reverse diffusion', whereby MNCs identify practices utilized in their foreign operations and subsequently transfer these to operations in other (including the home) countries, suggests that actors in subsidiaries are differentially placed to engage in this process as a result of institutional differences (Edwards and Ferner 2004; Edwards et al. 2005). Moreover, it is plausible that subsidiaries with high value added activities will exhibit quite different employment practices from those with low value added activities; the former are more likely to be recipients of significant resources for training, to be actively involved in decisions affecting their work through semi-autonomous teams, and to receive extensive information about developments within the company (e.g. Wilkinson et al. 2001).

The concurrent tendencies of greater integration and differentiation draw attention to how the strategies and practices of MNCs within national systems depend not only on which countries, types of practice or workforce groups are under consideration but also on the configuration of MNCs and subsidiary roles. Integration and differentiation are not opposites; there are many ways in which they interact and, crucially, in some instances greater integration implies greater differentiation, not less. This approach usefully draws attention to the variability in the strategies of MNCs; it acknowledges the range of constrained choices that actors face, taking us beyond the assumption of the universal tension between global and local pressures.

However, the choices that MNCs face in arriving at a configuration of integration and differentiation are influenced by their embeddedness in multiple national environments; there continue to be important national institutional influences and constraints on MNCs. A key one, referred to above, is the ‘country of origin’ effect (Ferner 1997) under which MNCs implement employment practices associated with their respective home countries, distinguishing them from one another according to their nationality. The weaker are the constraints imposed by the host system, the more clearly will national preferences of MNCs show through. For example, varying degrees of centralization of MNCs of different nationalities within a given host country have been observed (e.g. Child et al. 2001). Yet few studies have looked at the approach of MNCs of the same nationality across countries. The operations of MNCs in countries with more deregulated labour markets may exhibit clearer evidence of home country effects compared with those in more regulated countries. Thus there may be variability in the strength of country of origin effects across host countries.

We extend our understanding of the interactions between competing national influences in two further ways. First, as noted above, country of origin effects are likely to be either accentuated or weakened by dominance effects: they are accentuated among MNCs from the current dominant system, leading to a particularly marked influence from the corporate HQs of US MNCs; in contrast, in MNCs from less dominant nations, senior managers may be keen to emulate the practices of firms from countries seen as successful, and country of origin effects are likely to be correspondingly muted. Second, the influence of the country of origin is contingent on howMNCs configure and structure themselves. In non-integrated MNCs in which sites are operationally independent, for instance, the scope for standardized HR policies set by the corporate centre is less than in integrated MNCs, particularly compared with those that are integrated through replication. In other words, the country of origin effect is filtered through MNCs’ configuration and structure.

In sum, in this section we have established the concepts that promise to extend our understanding of how MNCs manage HR internationally. The VoC and global production networks approaches are ultimately insufficient for analysing employment practice in MNCs. We have built our own conceptual framework of integration and differentiation, taking us beyond the global-local tension by showing that they are interdependent, are not always opposite ends of a continuum, and operate at multiple levels. These factors frame the interactions between the strategies of MNCs and national institutional configurations; indeed it is these interactions between national institutions and global dynamics which make the study of MNCs so important.

The Four Host Countries

In comparative projects there is always an element of pragmatism in the research design. Thus the inclusion of the countries built from an existing research network and was crucially shaped by the capacity of potential national teams to secure the resources required, major considerations in a project of this magnitude and technical challenge. However, the grounds for including these four countries are not merely pragmatic. Relative to their size, all four countries that feature in this study are the recipients, and sources, of large amounts of FDI (see Table 1). Thus all four are 'open' economies, making them appropriate locations in which to investigate MNCs and their employment practices.

Table 1 about here

While FDI is an important feature of all four countries, the position of each within an evolving international division of labour differs. The UK economy has long been open internationally and has become a centre of strategic importance for MNCs. Many firms from outside Europe have located their regional HQ in the UK. FDI into Spain has risen sharply in the last two decades following Spain's entry into the EU. Ireland and Canada share the characteristic of a high degree of dependence on US MNCs. In Ireland this was the result of a key plank of public policy in which low corporate tax rates attracted large flows of FDI, while there has been a long-standing concern over American MNCs' potential role in 'hollowing out' Canada's economy as headquarters, R&D and knowledge-intensive functions become concentrated in the US (Arthurs 2000). These historical patterns concerning the position of the countries in the international division of labour raise important questions that the research addresses relating to whether patterns of integration and differentiation are similar or different across the countries. For example, are the subsidiaries in one or more of the countries more strongly linked to the international operations of the MNCs than are the subsidiaries in other countries? And do the functions performed by subsidiaries differ across the countries?

More specifically, the four countries allow comparisons on the basis of both similarities and differences. Comparisons can be made between countries within a 'most similar research design' in which the cases share many characteristics, sources of variation are reduced and differences can be attributed to distinctive features (Djelic 1998). However, introducing greater degrees of differences into the research design by including more distinct countries can avoid the dangers of 'systematically bias(ing) research by favouring some forms of explanation at the expense of others' (Wailes 1999: 1024). Our design allows us to balance these competing considerations and the degrees of similarity and difference between the four countries can be considered along three dimensions.

The first of these is economic dominance. As argued above, the concept of dominance rests on a notion that there is a hierarchy of nation states according to perceptions of their performance, with the nation perceived to be at the top of this hierarchy serving as the basis for practices that other firms emulate (Smith and Meiksins 1995). A crucial factor in this respect, therefore, is the exposure of each country to the dominant national state of the past several decades, the US. All four countries are recipients of large amounts of American capital, but the US influence is more evident in some countries than in others. In particular, the deliberate strategy of the Irish state of attracting American MNCs, and the geographical position of Canada together with its insertion into a regional trading block with the US, mean that US-inspired dominance effects are likely to be particularly strong in these two countries. As Table 1 shows, over half of the stock of inward FDI is of US origin in these two countries. US MNCs have a strong influence in the UK as well, constituting a third of total inward investment, but FDI is of more varied origins; for example, Japanese MNCs established a significant presence, and attracted considerable attention, in the 1980s and 1990s. In Spain, American ideas and practices have become something of a de facto model for business and management only in the last two decades or so, partly through US MNCs but also through strongly US-influenced business schools. However, the weight of US MNCs is considerably lower than in the other three hosts; while there is some doubt concerning the proportion of FDI into Spain that originates in the US (see Table 1), it is probably in the range of 10-20%. In this sense, Spain and the UK exhibit similarities with Ireland and Canada but some subtle differences in the impact of dominance.

The second dimension along which there are similarities and differences is their national business systems. The UK, Ireland and Canada all offer a predominantly Anglophone, 'liberal market' context. The countries are not identical in terms of their business systems, with some differences in terms of how 'liberal' they are. They occupy different positions on Hall and Gingerich's (2004) index of coordination, which assesses the institutions in each country and generates a composite, relative score indicating whether the country is closer to the liberal or coordinated end of the spectrum. With zero as the most liberal and one as the most coordinated, the UK is 0.07, Canada is 0.13 and Ireland is 0.29. Nevertheless, they are at broadly the liberal end of this index and thus exhibit notable similarities. Spain, in contrast, is seen as a type of 'coordinated market economy' by some – it has a coordination score of 0.57 in the index, for example – albeit one that is clearly distinct from highly coordinated systems such as Germany. Amable characterizes Spain as an example of 'Mediterranean' capitalism in which there is 'more employment protection and less social protection than the Continental European model' (2003:15). The contrast with the other three countries introduces greater degrees of difference into the research design. Ideally we would also have had a 'purer' version of a coordinated market economy within our research design, but this did not prove possible.

The third dimension is the industrial relations system. Here, the three Anglophone countries share similarities in that they have 'single channel' forms of employee representation, and unions have become significantly weaker in the last quarter of a century. Yet the institutional trajectories have also diverged in certain respects. For instance, the legal position of unions in terms of seeking recognition from employers is not the same, and the extent of industrial relations institutions above the level of the firm, particularly multi-employer bargaining, varies, being strongest in Ireland through national-level concertation which from 1986 to 2009 delivered a series of agreements on wages policy and other matters[3]. Canada stands out from the UK and Ireland in the strength of the legal framework which underpins the system (Murray and Verge 1999; Thompson and Taras 2004). Given these differences, the study will treat the three countries not as exemplars of a fixed liberal market system but as national systems with core similarities and variations on the theme (Crouch 2005). Spain introduces a greater degree of variation, partly through the dual channel system of representation, characterized by the co-existence of trade unions and works councils, and by mandatory rights to consultation within firms, alongside collective bargaining (Martinez Lucio 1998). Indeed, the Spanish case differs from the others in the extent to which there is a web of legal regulations that ostensibly constrain MNCs' employment practices. Nevertheless, the degree of difference should not be over-estimated. As argued in previous studies (e.g. Quintanilla et al. 2008), an idiosyncratic feature of the Spanish business system is its malleability, both in terms of openness to new managerial styles from abroad, and of the existence of considerable room for manoeuvre in the implementation of employment practices.

In sum, the four countries exhibit a mix of similarities and differences. Crucially, they all have substantial FDI and allow considerable scope for employer choice concerning their desired practices. However, differences are evident, such as subtly different dominance effects and rather more marked differences in institutional frameworks. Institutional differences show up in the distinctions between liberal market economies in three cases and a variant of the coordinated market economy in the other, the difference between single versus dual channels of representation, and in the legal basis of representation and consultation. Thus MNCs exercise choices in the face of different constraints and, therefore, we might expect them to exploit the latitude they have to different degrees and in different ways. This has implications for how the patterns of integration and differentiation interact with these national institutions.

The Research Design, Process and the Comparability of the National Surveys

The project sought to fill the gaps in our understanding of MNCs identified above. We set out to realize a co-ordinated set of parallel, nationally representative surveys of employment policies and practices in MNCs that would lend themselves to comparative analysis. Many of the team members had spent some years studying MNCs, and in several cases had collaborated across countries on various projects. The planning behind this project goes back to the early 2000s, yet despite the length of planning it has encountered more challenges than we anticipated. The issues described below are summarized in Appendix A.

Research Design

A number of features of the surveys were agreed at the outset. Crucially, each survey sought to be comprehensive in its coverage of the private sector and of the countries of origin of MNCs and, hence, to be representative of the wider population of MNC operations in that country. All the surveys focused on medium- and large-sized MNCs, defined in terms of common employment-size thresholds, with the unit of analysis being the national operation of the MNC and the respondent being a senior HR executive at this level of the company. In every survey an initial 'screening' check to verify the population was carried out prior to the main stage of the fieldwork. All the surveys used a structured questionnaire instrument, which had a particular focus on four aspects of employment policy and practice (pay and performance, training, employee involvement and employee representation) and distinguished between policies towards managerial employees and those towards the largest occupational group (LOG) of non-managerial employees. The surveys use some established questions and measures – such as those employed by the Workplace Employment Relations Surveys (WERS) in Britain and the Company Level Industrial Relations Surveys (CLIRS) in which some of the UK project team were involved (Marginson et al. 1993) – but also broke new ground in developing questions based on our extensive case study-based research into MNCs. These questions tackled such issues as the integration of production or service provision across borders and the level of discretion enjoyed by the national operations of MNCs.

Several additional aspects of the research are noteworthy. First, each survey initially established a population listing of all but the smallest MNCs. Medium- and large-sized MNCs were defined by employment size criteria, for foreign-owned MNCs of at least 500 employees worldwide and at least 100 in the host country, and for domestically-owned MNCs of at least 500 employees worldwide with at least 100 in one or more countries outside the country of origin. In order to compile a comprehensive listing, we investigated various sources of company information. We found that no single database adequately covered all MNCs. In the UK, for example, we began with two well-known databases and used our size criteria to generate two lists. While these lists produced similar numbers of firms, there were some that appeared on one listing but not on the other and vice versa. Moreover, some MNCs, such as those in financial services, did not appear on either. It quickly became apparent that there was going to be no substitute for using multiple listings and resolving discrepancies through labour-intensive cross-checking. Even when multiple listings had been reviewed, however, we still had reservations concerning their reliability. In many cases employment data were missing, and it was often not clear whether some of the companies were part of another firm or not. Thus all four teams carried out a 'screening' exercise to check crucial aspects of the listing. This was a time-consuming and expensive process, involving a combination of telephone interviews and web-based checks. Many companies 'screened out' at this stage because they were smaller than the initial listing had suggested, they were part of another 'ultimate controlling company', or they had closed down or moved. As we were unable to carry out a screening interview with every single firm, even after this process some uncertainty remained over the true size of the population. In the UK, where this was a notable problem, this led us to estimate an upper and lower bound for the population. The details of how the populations were constructed are set out in the first section of Appendix A.

Second, the survey covers both foreign-owned and home-owned MNCs. Therefore, the level of the company at which the interview was conducted was not quite equivalent in the two types of firm: whereas it was the national subsidiary level (the HQ of the operations in the given country) in foreign MNCs, it was the global corporate HQ in domestic MNCs. The rationale for the inclusion of both was partly that the latter provided a benchmark of domestically owned firms against which the policies and practices of foreign MNCs could be judged, and also that the inclusion of domestic MNCs generated data of substantial interest in its own right. However, this aspect of the design did mean that the questionnaire needed to be adapted for the questions to make sense, and for some issues this means that the data are not identical across both sets of firms. We draw attention to this where relevant.

Third, a key part of the planned data analysis was to explore differences between MNCs. One aspect of this was to analyse differences by nationality and we were anxious to contribute to and extend our understanding of this issue. Thus we considered stratifying the screened population listing to ensure that the companies surveyed contained sufficient numbers of firms from different national groups. Stratification could also make sure that we had adequate numbers of firms from the key sectors and different size groupings. In the UK, Canada and Spain the teams judged the population to be sufficiently large for it to be highly likely that the companies that took part in the survey contained reasonably high numbers in each of the categories. In Ireland, in contrast, the listing was stratified by ownership, size and sector (see the third section of Appendix A).

Fourth, our research design placed importance on seeking information from an individual who was able to speak for the national operations in question. Thus we sought to carry out the survey with a senior HR respondent at the national HQ, asking questions about the nature of employment policies and practices in the country and about the structure and nature of the wider firm internationally. One challenge in this respect was that some MNCs do not have an operational HQ at national level. While there is almost always some sort of national HQ, in some cases it is very small, dealing only with tax issues for example, with major functions such as HR having no presence. The absence of an operational national HQ was more common in firms with several divisions in very different sectors and in those in which regional HQs have become more influential recently. The pragmatic solution was to seek a respondent at the largest division or site in those firms where there was no national HQ or no HR specialist. The second section of the Table in Appendix A demonstrates that the data relate to all of the operations in the country in between 80% and 95% of cases.

Fifth, the surveys relied on a single respondent per firm. Seeking two or more respondents in each firm to answer a lengthy questionnaire would inevitably have significantly increased the cost and adversely affected the response rate, something that was demonstrated in the experience of the second CLIRS, which was based on matched pairs of interviews with senior HR and finance executives (Marginson et al. 1993). However, this can lead to the problem of common method variance (CMV) in which bias is introduced through key variables being derived from the same respondent (Chang et al. 2010). As Podsakoff et al. (2003) note, this is likely to be 'particularly problematic in those situations in which respondents are asked to provide retrospective accounts of their attitudes, perceptions and/or behaviors' (2003:881). We judge that CMV is unlikely to be a problem in this research, partly because the data were collected in two stages (with the variables derived both from the initial 'screener' interviews or checks and from the main stage) and partly because the scales and anchors differed across our key variables. Both of these factors are recommendations of Chang et al. (2010) as ways of avoiding CMV. Perhaps even more importantly, most of the variables are derived from questions about contemporary aspects of the organization, particularly its basic features, structures and the existence of certain HR policies and practices, and are consequently not primarily retrospective, attitudinal or perceptual measures. However, it is still necessary to be sensitive to the likelihood of measurement error. Following Wright et al. (2001) we took a number of steps to minimize such error by: ensuring that the most knowledgeable and authoritative respondent was used; being sensitive to the information demands on the respondent; communicating in advance the kind of information we would require; and devoting considerable time to the wording of the items through exhaustive development and piloting of the questionnaire. In addition, we drew extensively on our own collective qualitative experience of interviewing such respondents in designing the questions.

Sixth, we were sensitive to the challenges of gathering accurate data about the national operations of MNCs which were in many cases large and varied. One aspect of this is variation in the pattern of control and practices according to workforce group. To ensure that we gathered meaningful data about particular groups of staff, as opposed to general statements about an entire workforce which inevitably would have masked considerable variation, we distinguished between managers and non-managerial employees and then within the latter we asked about the largest occupational group (LOG), making clear throughout the survey to which group each question referred.[4] We also faced the challenge of being sensitive to variation in practices between sites. We dealt with this partly by asking about the existence of policies across sites and on some issues by asking explicitly about variations in practice between sites.

Seventh, we needed to translate the questionnaire into two languages. The questionnaire was designed in English (the working language of the international research team) and subsequently translated into the home language of the survey country. These translations were carefully checked in order to assess the equivalence in meaning had not been distorted through language translation (cf. Brewster et al. 1996; Hult et al. 2008). The Canadian team translated it into French with respondents able to choose which language they wanted to use. This was relatively straightforward as all of the team members are bilingual and are used to working with dual language research instruments. The translation into Spanish required rather more collaboration between national teams, with one of the UK team members, Anthony Ferner, who is fluent in Spanish, helping the team through this process and checking the equivalence of terms (see the seventh section of Appendix A).

Eighth, all of the surveys were carried out with guarantees of confidentiality to the participating firms. In all cases this included an assurance that nothing would get into the public domain that led to the firm being identified. However, confidentiality took on additional forms across the countries, with the UK data being supplied to the research team with an anonymous identifier instead of the company name in accordance with the code of conduct of the firm that was contracted to carry out the survey. This limits our ability to analyse how particular firms behave in different institutional contexts, although the restriction was relaxed in order to allow the research team to create a datafile (with access limited to two individuals) which contained an identifier on firms that participated in two, three or four of the surveys. This is an issue we return to below.

Process

The project relied on a comparative parallel design. The survey design and instrument in each country were created collaboratively. Equivalent questions were devised where necessary to allow the same phenomena to be explored whilst taking account of national context. This comparative parallel design, which is elaborated upon below, represents an alternative to integrated or post-hoc designs: integrated designs emphasize the collaborative development of near identical questions and thus tend to focus on structures and practices that lend themselves more readily to transnational comparison (e.g. the 'Cranet' project which now covers over 30 countries); post-hoc comparative designs attempt to align questions from similar national surveys at the point of data analysis (e.g. WERS in Britain and REPONSE in France), which constrains the scope of comparisons. Our comparative parallel design is an innovative way of carrying out bottom-up yet coordinated comparative research and involved a high degree of collaboration and conceptual exchange in the co-construction of the questionnaire, a process which provided a way of integrating institutional variation into the conception of the instrument.

The surveys yielded a total of 1100 responses from MNCs operating in the UK (n=302), Ireland (n=260), Spain (n=330) and Canada (n=208). The response rates varied across the four surveys, from just over 14% to just over 50%.[5] The lower response rates were in the countries with the larger populations, meaning that the overall numbers of participating firms in each national survey did not vary as much as the response rates. In all the surveys the teams carried out checks of the representativeness of the responding firms in relation to the population according to the three criteria of nationality, size and sector available in the population listings. In Canada and Ireland the profile of the responding firms was in line with the population. In Spain, larger and home-based MNCs were over-represented and weights were constructed to adjust for this. In the UK the firms taking part in the main survey were found to be mildly skewed towards manufacturing compared with those in the 'screening' stage. This was adjusted for through weighting the data. (See the eighth and ninth sections of Appendix A.) In the analysis the data are weighted when presenting descriptive findings (as in Appendix C) and left unweighted in the multivariate analysis reported in the papers that follow.

The survey instrument contains a set of questions, such as those relating to country of origin and size levels, which were phrased in exactly the same way in each survey. A further set of questions were almost identical but national teams added or reduced response options because of institutional differences, question saliency or variations in filters according to method of survey administration (see below). Thus, data transformation was required to produce equivalent data. A third set of questions were functionally equivalent in that questions were asked about the same issue, but because the institutions governing this activity varied across countries the question was adapted. For example, in exploring the influence of unions the survey instrument needed to reflect different national arrangements underpinning union presence within firms. Here again data transformations were required. A fourth set of questions were thematically equivalent; questions asked about the same phenomenon, but due to institutional differences the structures and practices examined were unique to each country. These questions provided valuable national contextual insights that expand upon some of the functionally equivalent and identical data. Considerations of functional equivalence and, for non-core questions, data availability in each national data set, mean that some transformed variables could be specified for two or three countries only rather than all four.

Given that the research involved a comparative parallel design, with many questions that were not identical, the task of integrating the datasets was not straightforward. Substantial and painstaking work was undertaken by an international working group that identified the identical and equivalent questions, produced a code book defining the SPSS transformations to be undertaken, and wrote syntax which converted the original national variables into new comparative variables. The process of integrating the national data into one comparative international dataset was centralized, to minimize error, with an expert located in the UK undertaking the merging process. Substantial cross-checking was carried out to ensure the integrity of the international data, with subject experts taking responsibility for each section. This had the advantage of checking data across countries rather than solely within countries. The checking process involved variable-by-variable checks between the merged and unmerged data.

Comparability

The resulting comparability of the surveys was high, but not complete. Below we detail three challenges in this regard.

a. Method of Survey Administration

One challenge in the research design concerned how to administer the questionnaire. Previous experience of surveys highlighted some advantages to using a personal interview, notably that it allows the use of a longer questionnaire since once respondents have agreed to an interview they tend to feel obliged to continue to the end. For similar reasons, they tend not to skip questions that are demanding or complex (McKnight et al. 2007). This was pursued in the three countries where it was feasible: the UK, Ireland and Spain. The exception was Canada where the huge geographical distances involved made face-to-face interviews prohibitively expensive. A choice of completing the questionnaire through a paper version or online was presented to respondents (see the fourth section of Appendix A). In the Canadian survey, it is possible to check whether the profile of companies responding was the same in each mode. Reassuringly, there were no significant differences by country of origin, sector or size in the companies that took part through the web-based questionnaire as opposed to the postal version. In addition, there is other research that confirms the measurement equivalence of internet-based and paper-and-pen modes of data collection (De Beuckelaer and Lievens 2009). Moreover, non-response to questions in the Canadian survey was not significantly higher than in the other three. Nonetheless, the difference between face-to-face administration in three countries and self-completion in the fourth remains.

b. Conduct of Interviews

For the three countries that used personal interviews as the mode of administration, an additional issue to resolve was who was to carry out these interviews. There are some advantages to contracting out the interviews to a professional survey firm, particularly the infrastructure to support large surveys that such firms possess and the use of Computer Assisted Personal Interviewing (CAPI). On the other hand, the use of survey firms is expensive and means the interviews are carried out by individuals with little expertise in the subject matter. There was variation on this issue: the UK team contracted the professional survey firm GfKNOP to carry out the survey using CAPI but were also closely involved in the process e.g. through interviewer briefings; in Spain the research team conducted the interviews themselves; and in Ireland there was a mix of professional interviewers and research team members carrying out the interviews (see the fifth section of Appendix A). In the latter case, checks have indicated that there were not systematic differences in relation to missing values or key variables between those companies where a professional interviewer carried out the data collection and those where a research team member did so.

c. Timing

A further issue to consider in assessing the comparability is the timing of the surveys. The research teams secured the resources at different times and so there was some limited variation in this respect; the bulk of the fieldwork in the UK, Canada and Ireland was completed during 2006 but in Spain the survey was in the field until the end of 2008 (see the tenth section of Appendix A). Such a time lag between surveys used in comparative analysis is not unusual (e.g. Whitfield, Marginson and Brown 1994; Coutrot 1998; Schnabel, Zagelmeyer and Kohaut 2006). Evidence suggests (cf. Tregaskis and Brewster 2006) small temporal variation as in the case of the UK, Canada and Ireland, is likely to have an insignificant impact on a wide range of variables and even a two-year time lag may have only a marginal impact. One factor that makes this time difference less significant in this study is that many of the questions concerned phenomena that tend not to change quickly, such as structures for employee representation. However, we carried out checks on whether the data gathered towards the end of the fieldwork period in Spain are significantly different from those gathered earlier. This is particularly important given the sharp change in economic conditions which characterized the final phase of the fieldwork in Spain. Reassuringly, there were very few areas in which the pattern of responses differed over time. More generally, we are able to control for the timing of the survey. Including time dummies as a check in analysis undertaken in each of the papers revealed no significant time-related differences.

Method of Comparative Analysis

In undertaking analysis on cross-national data two approaches are possible. The first is to carry out parallel analyses by partitioning the dataset by host country. This allows for comparisons to be made of differences in the overall significance of the models and of the coefficients on key variables. Under a regression analysis, for example, expectations about the impact of host country environments could be explored by examining differences in Beta coefficients and the variation accounted for, respectively capturing ‘uniformity’ and ‘determination’ effects. This is the approach taken in the small number of cross-national analyses of data from workplace surveys of employment relations such as those in Australia, Britain, France and Germany (e.g. Whitfield et al. 1994; Coutrot 1998; Schnabel et al. 2006). The second is a single analysis on the integrated data set including a dummy variable for survey country, which would pick up any differences in local institutional and legal environment. In effect, other right hand side variables besides country are constrained to have the same Beta coefficients. This is the approach taken in the majority of the studies that formed the Special Issue of ILRR on the international call center research (see Batt et al. 2009).

The former, parallel analysis, is more appropriate when examining national / local phenomena in MNCs across host countries, particularly where functionally equivalent variables are involved. Integrated analysis, on the other hand, is better suited to transnational structures, policies and practices. To better understand the relative advantages of the two approaches, a given issue can also be explored using both modes of comparative analysis. Indeed, this is the approach taken by van Jaarsveld et al. (2009) on the call center research; in analysing the effects of institutional and organizational characteristics on types of workforce flexibility in the US, Canada and the UK, they carry out both integrated analysis on the three-country dataset and separate analysis on each national dataset, with the latter allowing them to 'further examine within country differences' (2009:582).

One issue that integrated analysis highlights is the unit of analysis, the national operations of the multinational. It was highly probable that some MNCs would appear in more than one national survey and we were conscious that the integrated dataset would contain information from two or more parts of the same parent firm in some cases. In explaining variation across firms, therefore, we faced the prospect of encountering constrained variation. In one respect this was not a problem: the primary focus was on policies and practices at national level and there is no reason why these should not vary across countries within the same firms; indeed, we know from case study research that they often do. However, constrained variation in an integrated analysis can affect the standard errors of regression estimates. We have investigated the scale of the problem, and found that 140 of the 1100 cases are affected (see Appendix B). At 13% of the dataset, this is not large but is not small enough to ignore and we have devised a strategy to address the issue, involving the creation of an identifier for such cases. This has enabled data analysis to be re-run omitting the relevant cases to establish whether findings are affected. The outcome of undertaking this procedure for each of the papers indicates that the removal of the duplicates makes little difference to the results reported. Overall significance and explanatory power are unchanged. The signs of Beta coefficients remain the same, and there are minor changes in magnitude for some coefficients only. In several instances standard errors increase slightly, which was anticipated given the reduction in the number of observations.

Key Findings

In this section we pick out five headline findings relating to the overarching themes of integration, differentiation and the interactions between MNCs and nation states. The summary is in part a descriptive analysis, with further details of the basic variables, frequencies and standard deviations available in Appendix C, but it also draws on the key findings from the multivariate analyses in the papers that follow.

First, levels of integration amongst MNCs are high when viewed in terms of each of the three levels identified above: first-order business strategy and configuration of the firm; second-order operating structures and procedures; and third order organization of the HR function. Starting with business strategy and configuration, standardization of products across markets is widespread. The main product is standardized, either globally or regionally in almost three-quarters of MNCs (73%), including 40% where it is standardized globally. Conversely, the main product is adapted to national markets in only a quarter. Likewise segmentation of operations across countries, assessed through the extent of intra-firm linkages, is also widespread. 60% of operations act as a supplier of components or services to other parts of the worldwide company, including 14% where this accounted for all local output. Two-thirds (67%) of MNCs are supplied from elsewhere in the company. Almost half of national subsidiaries are integral elements of internationally networked production, both supplying to, and being supplied by, other parts of the worldwide company. In contrast, under a quarter (22%) of firms have operational linkages in neither direction. Consistent with this, asked about their worldwide diversification strategy, the vast majority of home-owned MNCs (92%) either produced a single or dominant product (23% and 17% respectively) or a number of related products (52%), all strategies which are based on the realization of synergies from operational linkages. Just 8% produced a number of unrelated products, which is the strategy most characteristic of the diversified conglomerates that seek financial economies from an internal capital market rather than synergies from operational integration.

Internationalization of product strategy and of the organization of production and market servicing across national operations is reflected in the prevalence of international structures of management organization amongst MNCs. The overwhelming majority (91%) of firms are variously structured along one or more of three main international axes: international product divisions (61%); regional structures (73%); and/or global business functions (67%). Matrix structures, combining at least two of these axes, characterize 68% of firms. Although national subsidiaries remain reasonably widespread (63%), they are rarely the most important level of management organization: this was the case in just 8% of cases where there were international management structures. Firms without international structures below corporate headquarters tended to be smaller, were more likely to adapt products to national markets, and were more likely than firms with at least two international structures to supply no inputs to other parts of the MNC.

The high level of international integration of MNCs ‘upstream’, in terms of their business strategy and configuration and their internal management structures, is significant for the ‘downstream’ organization of particular business functions including HR (Boxall and Purcell 2011). There is evidence of an ‘international architecture' (Waechter et al. 2005) of HR in a substantial proportion of MNCs. The majority of firms (61%) have an international policy-making body in HR; bring their HR managers from different countries together systematically on at least an annual basis in meetings (56%); and have in place an international HR information system (55%).

Part of the international architecture of HR is the use of international monitoring of HR indicators by headquarters. Of the eight issues identified in questioning about monitoring of HR in national operations, two were systematically monitored in some three-quarters of firms (numbers employed, 77%; labour costs, 75%) and a further four in around one-half (managerial career progression, 59%; labour productivity, 49%; employee attitudes, 48%; staff turnover, 43%). The final two indicators (workforce diversity and absenteeism) were both monitored in just over a quarter. Just 5% of MNCs monitored none of these indicators. There was also evidence of an international approach to HR policy. Asked on a 1 to 5 scale whether they agreed with the statement that there is a worldwide philosophy concerning how employees should be managed, 60% of respondents agreed or strongly agreed. The proportion for an equivalent statement about a common philosophy at regional level was 42%. Taken together, respondents in three-quarters (74%) of MNCs indicated agreement or strong agreement with one or both statements.

Second, in their impact on HR and employment relations practices, the respective influences of these different, first-, second- and third-order levels of MNCs' international configuration on employment practices are partially nested within each other, rather than fully so. The impact of upstream configuration is directly evident in the uptake of different types of HR practice: P. Edwards et al. find that outcomes on motivation, opportunity and control practices for both LOG and managers are influenced by intra-firm linkages (specifically, the supply of inputs to other parts of the company). In addition, Lamare et al. report that such forward supply linkage is a significant predictor of 'double breasting' in union recognition arrangements (though not of union recognition practices per se). Yet when it comes to control and influence over employment practices and to transnational employment relations structures, the impact of upstream configuration would seem to be largely indirect. Ferner et al.'s analysis of HR policy discretion in the subsidiaries of US MNCs; T Edwards et al.'s analysis of the influences on the use of 'output' and 'social' forms of control in HR; and Marginson et al.'s analysis of European Works Councils and of management's information and consultation practice towards them each come to the same broad finding. This is that the effect of first- and second-order variables – such as product standardization, supply of products or services to other subsidiaries and presence of international axes of management organization – on the employment practice in question is substantially dampened (and tends to lose significance) once third-order HR variables, covering international structures, monitoring and policy approach, are introduced. Partial nesting of third-order HR structures, control practices and policy approach within first- and second-order international configuration implies that the former is not fully determined by the latter; it operates according to a logic which is only partly connected to business strategy, operational configuration and internal structures of management organization. Confirmation of this comes from the significant improvement in the explanatory power of the relevant models in each of the three papers associated with the inclusion of the international HR variables.

The variability of findings concerning the relationship between variables at different levels of integration raises the question of the circumstances under which each set have a direct influence, are indirectly influential, or have no influence on HR outcomes. Ongoing analysis of the dataset will address these issues but what is already clear is that the implications of the analyses in this issue are potentially far-reaching. Global HR managers may have more freedom of manoeuvre in the design of HR policy and practices and of international HR architecture than might be inferred from the analyses of writers such as Boxall and Purcell (2011) and Kochan et al. (1994) who emphasize the 'downstream' nature of HR/ER. HR outcomes do reflect higher-order integration strategies in the MNC to some extent, but not straightforwardly so and they have a relative autonomy. This is an important finding for MNC actors, both managers and employee representatives, who have an interest in understanding the constraints and possibilities for action and choice within which they operate.

Third, differentiation across countries in the ways in which subsidiaries are integrated into the worldwide company, and in the functions they perform, flows through into variations in employment practice.
For a given host country, a high proportion of subsidiaries supplying operations elsewhere in the MNC can be seen as indicating that the country concerned has a strategic role in inputting resources into the MNCs' worldwide production networks. Examining the patterns cross-nationally, there are some marked differences in the ways in which the four host environments are inserted into the international production networks of MNCs. Operations in Ireland, and to a slightly lesser extent the UK, are distinctive in being the most likely to supply to other parts of the worldwide company. For Ireland this includes a high proportion (almost 40%) in which all (as distinct from some) of their output goes elsewhere in the MNC, arguably reflecting the extent to which Ireland has become an export platform within the internationally networked production operations of non-European MNCs in particular. For the other three countries, the proportion which supply their entire output to other parts of the MNC is less than 10%: Spanish operations are the least likely to supply other parts of the worldwide company. Cross-country variation in the proportion of subsidiaries which are supplied from elsewhere in the MNCs is less marked. Data on the largest occupational group (LOG) throw further light on the functions performed by subsidiaries with differences being evident across the four host countries. The proportion of Canadian and, to a lesser extent, Irish subsidiaries where the LOG is production operatives is noticeably higher than elsewhere, while Spanish subsidiaries are distinctive in the comparatively high

proportion where sales and customer service staff formed the LOG. For Canada and Spain, this relates to the contrasting extents to which subsidiaries are located in the production or service sectors, respectively.

The impact of these two dimensions of differentiation on employment practice is demonstrated by the findings of two of the papers. In their investigation of the take up of HRM practices associated with motivation, opportunity and control, respectively, P Edwards et al. find that whether subsidiaries supply other parts of the worldwide company has a positive and significant impact on the utilization of such practices for both the LOG and managerial employees, consistent with the idea that such subsidiaries have a more strategic role within the MNC. Concerning the nature of the LOG, T Edwards et al. find significant associations with the extent to which the HQ monitors HR outcomes (which they call 'output control'): compared to professional and technical employees, sales staff and administrative employees are more likely to be subject to monitoring of hard HR indicators, including headcount, costs and productivity, whilst production operatives are less likely to be subject to monitoring of soft HR indicators including employee attitudes and diversity.

Fourth, country of origin effects are either accentuated or countered – and even reversed – according to dominance effects. Accentuation occurs in the case of MNCs based in the contemporarily dominant business system, the US. Ferner et al. confirm that, as anticipated given the organizational capabilities associated with the American business system, US-owned companies exercise significantly greater policy control over their subsidiaries than MNCs headquartered in any other country, including France, Germany, the UK, the Nordic area, Japan, the rest of Europe and the rest of the world. The finding holds for each of the four host environments, despite differences in regulation and institutional distinctiveness across them. It might have been expected that the difference between US and non-US -owned MNCs in more highly regulated host environments would be less apparent: this was not the case. Lamare et al. find that US companies' well-established preference for union avoidance carries over to their union recognition (certification) practice in their subsidiaries in three other liberal market economies, Canada, Ireland and the UK. The incidence of recognition (certification) is lower than that for MNCs headquartered in Germany, the UK, the Nordic area and the rest of Europe, although not for French- and Japanese-owned companies. The pervasiveness of accentuation is, however, tempered by P Edwards et al.'s finding that whilst US-owned firms are distinctive in their take up of certain control practices associated with American employment practice, such as use of forced distribution in appraisal, contrary to what might have been expected they are no more likely to utilize a range of HR control practices than are MNCs based in coordinated market economies. This suggests that country of origin effects operate more on processes of policy control in which practices are embedded than on the uptake of HR practice per se.

Country of origin influences have the potential to be most sharply countered by dominance effects arising from imitation of practices associated with the American business system amongst MNCs headquartered in co-ordinated market economies. The issue has not formed a central thrust in the analysis of the papers, although the idea of such reversal finds support in Lamare et al's additional analysis of union recognition (certification) practice by host country. As a group, MNCs based in Europe's coordinated market economies were no more likely to recognize (certify) unions in their Canadian and UK subsidiaries than their US counterparts (in Ireland they were significantly more likely to do so). The implication is that continental European companies may be using the opportunity which operations in liberal market economies provide to experiment with a practice that is precluded by domestic institutional arrangements. At the same time, findings from the papers show that country of origin influences emanating from co-ordinated market economies are not necessarily always countered by dominance effects. The expectations of Ferner et al. on the extent of policy control exercised by MNCs based in the coordinated market economies of Germany, the Nordic Area and Japan are confirmed. Likewise, Marginson et al. find that, as expected, management's information and consultation practice towards EWCs is more extensive amongst MNCs based in Germany and the Nordic area.

Fifth, the effects of host country institutional environments both constrain and enable MNCs' employment practices. There is noticeable variation in the degree of constraint exercised by the three liberal market hosts, whilst in important respects Spain's institutional environment operates in ways which question any presumption that it be straightforwardly regarded as a coordinated market economy. The notion that host country institutions might enable particular types of employment practice derives from the central contention developed earlier that it is the possibility of taking advantage of institutional differences that drives MNCs to differentiate between countries in terms of the location of different kinds of operation. The issue is addressed directly by T Edwards et al. which establishes patterns of output and social control consistent with variations in subsidiary function. Nonetheless, it also finds significant host country effects, pointing to an element of constraint. That the institutions of different host environments act to constrain to differing degrees is underlined by Ferner et al. Whilst the extent to which US- and non-US-owned MNCs differ in the policy control they exert over their subsidiaries in the four host environments is broadly similar, the actual level of policy control varies between the four.

Differences in the degree of constraint exercised by host institutions are apparent between the three liberal market economies, as well as with Spain. Ferner et al. find that the policy control exerted by US MNCs over subsidiaries in Ireland and the UK is significantly less than that exercised over Canadian subsidiaries, attributable to the geographic proximity of the Canada to the US as well as to the greater similarity between the Canadian and US business systems. Lamare et al's analysis of union recognition finds substantial differences in the incidence of union recognition (certification), which is highest in Canada and lowest in the

UK. They contend that the pattern is attributable to differences in institutional arrangements framing practice across the three countries. In similar vein, P Edwards et al find that unions appear to limit the use of opportunity and control HR practices in Canada, but that this is not the case for Ireland or the UK, In the case of Spain, there is a complex pattern. Ferner et al. show that although overall control of HR policy is as high in Spain as it is in Canada, the aggregate picture masks considerable variations between Spain and Canada on individual issues. For some, Canadian operations are subject to greater control, for others Spanish subsidiaries are more highly controlled. This seems to reflect the ambiguous nature of the Spanish business system. While it continues to have highly regulated areas where MNCs' options are constrained, it is at the same time a system that has undergone rapid economic transformation in which foreign investment has played an important role by providing models of innovative management practice. P Edwards et al. find evidence of greater adoption of motivation and control measures for managers in Spain, suggesting that these are groups more subject to the innovating influences of inward investment. Similarly, T Edwards et al. find a higher use of 'social control' mechanisms for the development of managers and 'high potentials' in Spain compared with other hosts. Again therefore, crude stereotypical depictions of business systems need to be qualified by sensitive attention to how specific issues and areas of activity are influenced by the complex structuring of a host business system.

The impact of host environments on employment practice also interacts differentially with any influence stemming from MNCs' country of origin. This is demonstrated by Ferner et al. in their disaggregated analysis of policy control in US and non-US-owned MNCs, respectively. For the US multinationals, there are clear differences in the extent of the policy control exercised according to host environment, as already indicated, but for multinationals headquartered in other countries there are no significant differences between host environments. The implication is that non-US MNCs do not experience these host environments as constraining of their preferred approach, whereas US-owned MNCs do.

Summary

This opening paper has explored the processes of integration and differentiation in relation to MNCs and the impact that these concurrent tendencies, and their complex interaction with national institutional influences, have on employment practice. It has elaborated a conceptual framework the potential of which has been demonstrated by reviewing a set of key findings from the surveys. In addition, it has set the scene for the analysis by establishing the key aspects of the four countries in terms of the importance of (FDI) and the similarities and differences between the systems of industrial relations and has outlined the key elements of the research design, charted the process of collecting data and discussed the comparability of the surveys. What follows are five papers that pick up these themes. Together, they make a contribution to filling gaps in our understanding of how these key players in the global economy operate similarly or differently across borders.

Hyman (2009:12) recently observed that ‘comparative analysis is essential but perhaps impossible’. This paper also documents the main challenges confronting a cross-national project aimed at generating data for comparative analysis from a set of parallel, large-scale, nationally-based surveys. At each step, the approach of the teams involved has been to recognize the challenges and forge solutions which deal with them as best we can. Given constraints arising from differences in the available directory information on MNCs, resources available to the research teams, and pressures and priorities of funders across countries, pragmatic compromises had to be made at times. Documenting the process of undertaking such a comparative research project provides transparency as to how the four research teams set about realising ‘the art of the [im]possible’.

Endnotes

1. A second wave of surveys are in the field in Argentina, Mexico, the Nordic area (Denmark/Norway) and Australia.

2. Details of the publications developed from the national data can be found at http://www2.warwick.ac.uk/fac/soc/wbs/projects/mncemployment
An account of the design and method and an overview of the findings of the national surveys are provided in Edwards, T. et al. (2008) and Edwards, P. et al. (2007) for the UK, in Bélanger et al. (2006) for Canada, McDonnell et al. (2007) and Lavelle et al. (2009) for Ireland) and Quintanilla et al. (2010) for Spain.

3. The collapse of national-level concertation at the end of 2009 post-dated our survey.

4. The Standard Occupational Classification identifies nine groups: managers; professional staff; associate professional and technical; administrative; skilled manual workers; personal care staff; sales and customer service; operatives; and elementary occupations. For full details see: http://www.ons.gov.uk/about-statistics/classifications/current/soc2010/index.html
The subsidiaries in the UK more commonly had a LOG that was in the 'multiple coded' category (just over 10% of the total), probably reflecting the interviews being done by a professional interviewer who did not probe further when presented with a mixed category.

5. It should be noted that because of the difficulty in establishing the definite number of MNCs that meet the size criteria in the UK, we use an estimated response rate as well as a minimum.

References

Almond, Phil and Anthony Ferner. 2006. *American Multinationals in Europe: Managing Employment Relations Across National Borders*, Oxford: Oxford University Press.

Amable, Bruno 2003. *The Diversity of Modern Capitalism*, Oxford: Oxford University Press.

Arthurs, Harry 2000. "The Hollowing out of Corporate Canada?" In Jane Jenson and Boaventura de Sousa Santos eds. *Globalizing Institutions*, pp. 29-51. Burlington: Ashgate.

Bartlett, Christopher and Sumantra Ghoshal. 1998. *Managing Across Borders: The Transnational Solution*, 2nd edition, London: Hutchinson.

Batt, Rose, David Holman and Ursula Holtgrewe. 2009. "The Globalization of Service Work: Comparative Institutional Perspectives on Call Centers: Introduction to a Special Issue of ILRR." *Industrial and Labor Relations Review*, Vol. 62, No. 4, pp. 453-88.

Bélanger, Jacques, Pierre-Antoine Harvey, Patrice Jalette, Christian Lévesque, and Gregor Murray. 2006. Employment Practices in Multinational Companies in Canada: Building Organizational Capabilities and Institutions for Innovation, Montreal: CRIMT.

Birkinshaw, Julian and Neil Hood. 1998. "Multinational Subsidiary Evolution: Capability and Charter Change in Foreign-owned Subsidiary Companies." *Academy of Management Review*, Vol. 22, No. 4, pp. 773-90.

Bouquet, Cyril and Julian Birkinshaw. 2008. "Weight versus Voice: How Foreign Subsidiaries Gain Attention from Corporate Headquarters." *Academy of Management Journal*, vol. 51, no. 3, pp. 577-601.

Boxall, Peter and John Purcell. 2011. *Strategy and Human Resource Management*, Basingstoke: Palgrave.

Brewster, Chris, Olga Tregaskis, Ariane Hegewisch and Lesley Mayne. 1996. "Comparative Research in Human Resource Management: a Review and an Example." *International Journal of Human Resource Management*, Vol. 7, No. 3, pp. 585-604.

Chang, Sea-Jin, Arjen Witteloostuijn and Lorraine Eden. 2010. "From the Editors: Common Method Variance in International Business Research." *Journal of International Business Studies*, Vol. 41, No. 2, pp 178-84.

Child, John, David Faulkner and Robert Pitkethly. 2001. *The Management of International Acquisitions* Oxford: Oxford University Press.

Coe, Neil, Peter Dicken and Martin Hess. 2008. "Global Production Networks: Realizing the Potential", *Journal of Economic Geography*, Vol. 8, No. 3, pp. 271-95.

Collinson, Simon and Alan Rugman. 2005. "Studying the Wrong Firms: Selection Biases in Management Research." unpublished paper, University of Warwick.

Coutrot, Thomas. 1998. "How do Institutional Frameworks affect Industrial Relations Outcomes?" *European Journal of Industrial Relations*, Vol. 4, No. 2, pp. 177-205.

Crouch, Colin. 2005. *Capitalist Diversity: Recombinant Governance and Institutional Entrepreneurs* Oxford: Oxford University Press.

De Beuckelear, Alain and Filip Lievens. 2009. “Measurement Equivalence of Paper-and-Pencil and Internet Organisational Surveys: A Large Scale Examination in 16 Countries.” *Applied Psychology*, Vol. 58, No. 2, pp. 336-61.

De Cieri, Helen and Peter Dowling. 2006. “Strategic IHRM in Multinational Enterprises: Developments and Directions” In Gunter Stahl and Ingmar Bjorkman (eds) *Handbook of Research in International Human Resource Management*, pp 15-35. Cheltenham: Edward Elgar.

Dedoussis, Vagelis. 1995. “Simply a Question of Cultural Barriers? The Search for New Perspectives in the Transfer of Japanese Management Practices.” *Journal of Management Studies*, Vol. 32, No. 6, pp. 731-46.

Dicken, Peter. 2011. *Global Shift: Mapping the Changing Contours of the World Economy*. London: Sage.

Djelic, Marie-Laure. 1998. Exporting the *American Model: The Postwar Transformation of European Business*, Oxford: Oxford University Press.

Dore, Ronald. 1973. *British Factory-Japanese Factory: The Origins of National Diversity in Industrial Relations*, Berkeley: University of California Press.

Doz, Yves, Christopher Bartlett and C. K. Prahalad. 1981. “Global Competitive Pressures and Host Country Demands: Managing Tensions in MNCs”, *California Management Review*, Vol. 23, No. 3, pp. 63-74.

Edwards, Paul, Tony Edwards, Anthony Ferner, Paul Marginson and Olga Tregaskis. 2007. “Employment Practices of MNCs in Organisational Context: A Large-Scale Survey.” Report of the Main Survey, http://www2.warwick.ac.uk/fac/soc/wbs/projects/mncemployment/conference_papers/full_report_july.pdf

Edwards, Tony forthcoming 2011. “The Nature of International Integration and HR Policies in Multinational Companies.” *Cambridge Journal of Economics*.

Edwards, Tony, Phil Almond, Ian Clark, Trevor Colling and Anthony Ferner. 2005. “Reverse Diffusion in US Multinationals: Barriers from the American Business System.” *Journal of Management Studies*, Vol. 42, No. 6, pp 1261-86.

Edwards, Tony and Anthony Ferner. 2004. “Multinationals, Reverse Diffusion and National Business Systems.” *Management International Review*, Vol. 24, No. 1, pp. 51-81.

Edwards, Tony and Sarosh Kuruvilla. 2005. “International HRM: National Business Systems, Organizational Politics and the International Division of Labour in MNCs.” *International Journal of Human Resource Management*, Vol. 15, No. 1, pp. 1-21.

Edwards, Tony, Olga Tregaskis, Paul Edwards, Anthony Ferner and Paul Marginson with Jane Arrowsmith, Duncan Adam, Michael Meyer and Ali Budjanovcanin. 2008. “Charting the Contours of Multinationals in Britain: Methodological Issues Arising in Survey Research.” Warwick Papers in Industrial Relations, No 86, Coventry: IRRU / Leicester Business School Occasional Paper, Leicester: De Montfort University.

Edwards, Tony and Janet Walsh. 2009. “Foreign Ownership and Industrial Relations” In William Brown, Alex Bryson, John Forth and Keith Whitfield, eds. *The Evolution of the Modern Workplace*, pp. 285-306. Cambridge: Cambridge University Press.

Edwards, Tony and Miao Zhang. 2008. “Multinationals and National Systems of Employment Relations: Innovators or Adapters.” *Advances in International Management*, Vol 21, pp. 33-58.

Ferner, Anthony 1997. “Country of Origin Effects and HRM in Multinational Companies.” *Human Resource Management Journal*, Vol. 7, No. 1, pp. 19-37.

Forsgren, Mats, Ulf Holm and Jan Johanson. 1992. Internationalization of the Second Degree – the Emergence of European-based Centres in Swedish Firms, in Stephen Young and James Hamill, eds., *Europe and the Multinationals – Issues and Responses for the 1990s*, London: Edward Elgar.

Frobel, Folker, Jurgen Heinrichs and Otto Kreye. 1980. *The New International Division of Labour: Structural Unemployment in Industrialised Countries and Industrialisation in Developing Countries*, Cambridge: Cambridge University Press.

Frost, Tony and Chinghui Zhou. 2005. “R&D Co-practice and “Reverse” Knowledge Integration in Multinational Firms.” *Journal of International Business Studies*, Vol. 36, pp. 676-87.

Gereffi, Gary, John Humphrey and Timothy Sturgeon. 2005. ‘The Governance of Global Value Chains’, *Review of International Political Economy*, Vol. 12, No. 1, pp. 78-104.

Giles, A. 2000. ‘Globalization and Industrial Relations Theory’, *Journal of Industrial Relations*, Vol. 42, No. 2, pp. 173-94.

Gupta, Anil and Vijay Govindarajan. 1991. “Knowledge Flows and the Structure of Control within Multinational Corporations.” *Academy of Management Review*, Vol. 16, No. 4, pp. 768-92.

Hall, Peter and David Soskice. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford: Oxford University Press.

Hall, Peter and Daniel Gingerich. 2004. “Varieties of Capitalism and Institutional Complementarities in the Macroeconomy: An Empirical Analysis”, MPIfG Discussion Paper 04/5.

Hill, Charles and Robert Hoskisson, Robert 1987. “Strategy and Structure in the Multiproduct Firm.” *Academy of Management Review*, Vol. 12, No. 2, pp. 331-341.

Hult, G. Thomas, David Ketchen, David Griffith, Carol Finnegan, Tracey Gonzalez-Padron, Nukhet Harmancioglu, Ying Huang, M. Berk Taylay, and S. Tamer Cavusgil. 2008. “Data Equivalence in Cross-cultural International Business Research: Assessment and Guidelines.” *Journal of International Business Studies*, Vol. 39, No. 6, pp. 1027-44.

Hyman, Richard. 2009. “How can we Study Industrial Relations Comparatively?” Paper presented to Comparative Employment Relations and Governance Study Group, LSE, 22nd January.

Ivarsson, Inge and Claes Alvstam. 2005. “Technology Transfer from TNCs to Local Suppliers in Developing Countries: A Study of AB Volvo’s Truck and Bus Plants in Brazil, China, India and Mexico.” *World Development*, Vol. 33, No. 8, pp. 1325-44.

Jarillo, J. Carlos and Jon Martinez. 1991. “Different Roles for Subsidiaries: the Case of Multinational Corporations in Spain.” *Strategic Management Journal*, Vol. 11, pp. 501-12.

Kostova, Tatiana, Kendall Roth and M Tina Dacin. 2008. “Institutional Theory in the Study of MNCs: A Critique and New Directions.” *Academy of Management Review*, Vol. 33, No. 4, pp. 994-1007.

Lavelle, J., McDonnell, A. & Gunnigle, P. (2009) *Human Resource Practices in Multinational Companies in Ireland: A Contemporary Analysis*, Dublin: The Stationery Office, Government Publications.

Luo, Yadong 2005. “Toward Coopetition within a Multinational Enterprise: a Perspective from Foreign Subsidiaries.” *Journal of World Business*, Vol. 40, No. 1, pp. 71-90.

Marginson, Paul 1992. “European Integration and Transnational Management-Union Relations in the Multinational Enterprise.” *British Journal of Industrial Relations*, Vol. 30, No. 4, pp. 529-545.

Marginson, Paul, Peter Armstrong, Paul Edwards and John Purcell with Nancy Hubbard. 1993. ‘The Control of Industrial Relations in Large Companies’ Warwick Papers in Industrial Relations No. 45, Coventry : IRRU.

Marginson, Paul, Mark Hall, Aline Hoffman and Torsten Müller. 2004. “The Impact of European Works Councils on Management Decision-making in UK- and US-based Multinationals.“ *British Journal of Industrial Relations*, Vol. 42, No. 2, pp. 209-33.

Marginson, Paul and Guglielmo Meardi. 2010. ‘Multinational companies: transforming national industrial relations?' in Trevor Colling and Mike Terry, eds. *Industrial Relations: Theory and Practice*, pp 207-30.Chichester: Wiley

Martínez Lucio, Miguel. 1998. “Spain: Regulating Employment and Social Fragmentation.” in Anthony Ferner and Richard Hyman, eds., *Changing Industrial Relations in Europe*, Oxford: Blackwell.

McDonnell, Anthony, Jonathan Lavelle, Patrick Gunnigle and David Collings. 2007. “Management Research on Multinational Corporations: A Methodological Critique.” *Economic and Social Review*, Vol. 38, No. 2, pp. 235-58.

McKnight, Patrick, Katherine McKnight, Souraya Sidani and Aurelio Figueredo. 2007. *Missing Data: A Gentle Introduction*, New York: Guilford Press.

Meardi, Guglielmo and Andras Tóth. 2006. “Who’s Hybridising What?” In Anthony Ferner, Javier Quintanilla, and Carlos Sanchez-Runde, eds. *Multinationals and the Construction of Transnational Practices*, pp 155-183. Basingstoke: Palgrave Macmillan.

Murray, Gregor, and Pierre Verge. 1999. *La Représentation Syndicale: Visage Juridique Actuel et Futur*. Sainte-Foy: Les Presses de l’Université Laval.

Podsakoff, Philip, Scott MacKenzie and Jeong-Yeon Lee. 2003. “Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies.” *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.

Pudelko, Marcus and Anne-Wil Harzing. 2007. “Country of Origin, Localization or Dominance Effect? An Empirical Investigation of HRM Practices in Foreign Subsidiaries.” *Human Resource Management*, Vol. 46, No. 4, pp. 535-59.

Qunitanilla, Javier, Maria Belizon, Rocio Sanchez and Lourdes Susaeta. 2010. “Employment Practices of Multinational Companies in Spain.” Survey Report, Madrid: IESE.

Quintanilla, Javier, Lourdes Susaeta, and Rocío Sánchez-Mangas. 2008. “The Diffusion of Employment Practices in Multinationals: ‘Americanness’ within US MNCs in Spain?” *Journal of Industrial Relations*, Vol. 50, No. 5, pp. 680-696.

Rosenzweig, Philip. 2006. ‘The Dual Logics behind international human resource manangement: Pressures for Global Integration and Local Responsiveness’ in G. Stahl and I. Bjorkman, eds., *Handbook of Research in International Human Resource Management*, pp 36-48, Cheltenham: Edward Elgar.

Rosenzweig, Philip and Nitin Nohria. 1994. “Influences on Human Resource Management Practices in Multinational Corporations.” *Journal of International Business Studies*, Vol. 25, No. 2, pp. 229-51.

Schnabel, Claus, Stefan Zagelmeyer and Suzanne Kohaut. 2006. “Collective Bargaining Structure and its Determinants.” *European Journal of Industrial Relations*, Vol. 12, No. 2, pp. 165-88.

Schuler, Randall, Peter Dowling and Helen De Cieri. 1993. ‘An Integrative Framework of Strategic International Human Resource Management’, *Journal of Management*, Vol. 19, No. 2, pp. 419-59.

Stahl, Gunter and Ingmar Bjorkman. eds. 2006. *Handbook of Research in International Human Resource Management*, Cheltenham: Edward Elgar.

Thompson, Mark and Daphne Taras. 2004. “Employment Relations in Canada” In Greg Bamber, Russell Lansbury and Nick Wailes, eds., pp. 91-118. *International and Comparative Employment Relations: Globalisation and the Developed Market Economies*, London: Sage.

Tregaskis, Olga and Chris Brewster. 2006. “Converging or Diverging? A Comparative Analysis of Trends in Contingent Employment Practice in Europe over a Decade.” *Journal of International Business Studies*, Vol. 37, No. 1, pp. 111-26.

Tregaskis, Olga, Linda Glover and Anthony Ferner. 2005. *The Function of International HR Forums*, London: CIPD.

United Nations 2010. *World Investment Report: Investing in a Low Carbon Economy*, New York: United Nations.

Van Jaarsveld, Danielle, Hyunji Kwon, and Ann Frost. 2009. ‘The Effects of Institutional and Organizational Characteristics on Work Force Flexibility: Evidence from Call Centers in three Liberal Market Economies’, Industrial and Labor Relations Review, Vol. 62, No. 4, pp. 573-601.

Wailes, Nick. 1999. “The Importance of Small Differences: The Effects of Research Design on the Comparative Study of Industrial Relations Reform in Australia and New Zealand.” *International Journal of Human Resource Management*, Vol. 10, No. 6, pp.1006-30.

Whitfield, Keith, Paul Marginson and William Brown. 1994. “Workplace Industrial Relations under Different Regulatory Systems.” *British Journal of Industrial Relations*, Vol. 32, No. 3, pp.319-38.

Wilkinson, Barry, Jos Gamble, John Humphrey, Jonathan Morris and Douglas Anthony. 2001. “The New International Division of Labour in Asian Electronics: Work Organization and Human Resources in Japan and Malaysia.” *Journal of Management Studies*, Vol. 38, No. 5, pp.675-95.

Wright, Patrick, Timothy Gardner, Lisa Moynihan and Hyeon-Jeong Park. 2001. “Measurement Error in Research on Human Resources and Firm Performance: Additional Data and Suggestions for Future Research.” *Personnel Psychology*, Vol. 54, pp. 875-902.

Table 1: Select Macroeconomic Statistics, 2006

Measure	UK	Ireland	Canada	Spain
Size of GDP ($m)[(1)]	2,432,185	222,402	1,278,682	1,232,283
Population[(2)]	60,587,000	4,240,000	32,533,000	43,758,000
GDP per capita ($)	40,144	52,453	39,304	28,161
Inward FDI stock ($m) [(1)]	1,139,155	156,491	375,157	461,527
Inward FDI stock as % of GDP	46.8%	70.4%	29.3%	37.5%
Inward FDI stock from the US ($m)[(4)]	406,358	86,372	205,134	49,356
% of inward FDI stock from the US	35.7%	55.2%	54.7%	10.7%*
Outward FDI stock ($m) [(1)]	1,454,904	120,728	445,241	436,068
Outward FDI stock as % of GDP	59.8%	54.3%	34.8%	35.4%
Union density[(3)]	28.1%	33.3%	27.4%	14.6%
Collective bargaining coverage[(5,6)]	33.5%	44.0%	31.7%	80.0%
GINI coefficient (after taxes & transfers)[(3)]	0.34	0.33	0.32	0.32
Statutory corporate tax rate[(7)]	30.0%	12.5%	36.1%	35.0%

* The figure for US FDI in Spain is very likely to underestimate the true figure partly because of the use of ‘Special Purpose Entities’, financial companies that are set up as conduits for investment and which are often registered in the Netherlands even if the investment do not originate there. Other estimates suggest it may be around 20%.

Sources

(1) UNCTAD, 2010.*UNCTADstat*, http://unctadstat.unctad.org/ (accessed 12/04/2011).
(2) IMF, 2006. *World Economic Outlook Database*, http://www.imf.org/external/pubs/ft/weo/2006/02/data/index.aspx (accessed 12/04/2011).
(3) OECD, 2011. *OECDStatExtracts*, http://stats.oecd.org/ (accessed 12/04/2011).
(4) Bureau of Economic Analysis (BEA), 2011. *U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data*, http://www.bea.gov/international/di1usdbal.htm (accessed 12/04/2011).
(5) Visser, J., 2009. *ICTWSS: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts in 34 countries between 1960 and 2007*, Amsterdam Institute for Advanced Labour Studies.
(6) Industrial Relations News (IRN), 2011.
(7) KPMG, 2006. *KPMG’s Corporate Tax Rates Survey 2006*.

APPENDIX A

1. CONSTURCTION AND CHECKING OF THE POPULATION LISTING

Experience shows the inadequacies of a single listing, pointing to the need to use multiple listings and to carry out extensive checks of the resulting amalgamated listing before carrying out the survey

	Canada	**Ireland**	**Spain**	**UK**
a. primary data sources	Dun & Bradstreet proprietary database	IDA Ireland Enterprise Ireland	SABI, AMADEUS, HOOVERS ORBIS	FAME AMADEUS
b. data checking	databases (Lexis-Nexis, Mergent Online, Fortune's Global 500, Financial Post 500); internet searches, co. websites, annual reports; direct telephone or internet inquiries; Conference Board links	Údarás naGaeltachta; Shannon Development; Irish Times List of Top Co's; Kompass; Major Companies of Europe; M'ship lists of 2 Irish bodies; D&B 'Who Owns Whom'; International Financial Services Centre Companies list; *Top 5000 Companies;* Irish manufacturing cos list; Irish cos listed on UK SE; Irish Stock Exchange; use of private consultant; website and direct phone checking	*Actualidad Económica*; Bolsa de Madrid; *Expansión*; *For certain sectors:* Asociación Española de Banca Dirección general de seguros Multinacional Marketing list; *other* UNCTAD, *World Investment Report* 2005; Spain-US Chamber of Commerce; website checks; IESE contacts	FT Top 500 companies; Personnel Managers' Yearbook 2001/2; ETUI MNCs Database 2000; Hoover Online; Lexis-Nexis Professional; Global Access; FT company online facility; Datastream; individual company websites updating through: *Acquisitions Monthly* UKTI database Pers. Managers H'book 2004-5
c. due diligence challenges	multiple listing of same co.; establishing real UCC; establishing employment size of foreign ops of Can. MNCs; establishing nationality	lack of comprehensiveness of databases, missing firms and sectors; difficulty of identifying Irish owned firms; duplication of firms; discrepancies between lists; inaccuracy of data; multiple firm levels in Ireland	establishing employment size; identifying HQ/UCC; country of location of UCC; firm duplication through multiple names and levels; missing sectors in principal database (SABI); companies missing from d-base; establishing key contact	incomplete and discrepant database listings (many firms not common); UCC unclear; duplication of firm entries; nationality of 'flag of convenience' firms, questionable attributions (e.g. NL);
d. screening	Telephone screener with polling co Echo Sondages, telephone follow up to remove doubts	Research team carried out telephone and web-based checks	Random telephone screening by survey team	Telephone screener of population carried out by survey firm (GfKNOP)
e. final population total	1398	517	1083	2148 (upper), 1729 (estimated), see Edwards et al., 2008)

2. ABSENCE OF A COUNTRY HQ

Previous experience and the screening process revealed that many MNCs do not have an operational HQ at national subsidiary level, raising the issue of establishing the most appropriate level at which to carry out the main interview

	Canada	Ireland	Spain	UK
Approach taken and outcome	identification of key individuals through tel. screener – confirmation of org level of respondent through q're; respondents asked whether answering for all ops or their own; 86% of respondents reporting multiple ops in Canada could answer for all ops	where no Irish HQ, sought to interview senior HR respondent from largest Irish op; respondents asked whether answering for all ops or their own; in foreign MNCs, 80% of respondents able to provide response for whole of Irish ops	where no Spanish HQ, contact with senior HR respondent for largest Spanish operation respondents asked whether answering for all ops or their own; 95% of respondents able to provide data for the whole of the Spanish ops	where no British HQ, respondent asked whether respondent could answer for all UK ops or only part respondents asked whether answering for all ops or their own; 81% able to provide data for all ops in the UK

3. STRATIFICATION

The national teams considered the merits of stratifying the population in order to make sure that the key categories (e.g. by nationality) had sufficient cell size

	Canada	Ireland	Spain	UK
Approach taken	stratification not needed given population size	stratified sample of 414 drawn up by ownership, size, sector	stratification not needed given population size	stratification not needed given population size

4. METHOD OF SURVEY ADMINISTRATION

Choice between face-to-face and self administration

	Canada	Ireland	Spain	UK
Method chosen	paper copy mailed to every company in database; possibility to complete questionnaire through web (54.8%) or by mail (45.2%) No significant differences are observed in the method of response by major control variables: country-of-origin, size, sector, etc.	face-to-face paper-based survey by researchers from study team and interviewers from Economic and Social Research Institute (ESRI) (research team did 47% while ESRI did 53%)	face-to-face, not using CAPI, administered by survey team members	Face-to-face CAPI by survey firm contract interviewers (GfKNOP)

5. SOURCING OF INTERVIEWS

The guidance given to respondents and training of interviewers where they were used

	Canada	Ireland	Spain	UK
Approach taken	self-administered with option of having a team member to talk the respondent through the questionnaire	ESRI + survey team with common ½ day training for interviewers	survey team	GfK NOP survey firm with survey team supervision of interviewer training

6. STRUCTURE AND CONTENT OF QUESTIONNAIRE

The structure and content of the questionnaire needed to vary slightly to take account of national context

	Canada	Ireland	Spain	UK
Structure adopted	- same basic structure as UK relative to HR areas, discretion and company structures - additional sections on Canadian operations in the global value chain and additional questions on institutional context - sequencing adjusted to balance response burden and ensure logical links in the light of pilots	Follows UK model with some differences: - screener Qs integrated into q're - section on coll. repn. adapted to Irish context (esp. re central p'ship agreements) - additional Qs on experience of MNCs in IRL, and their mandate	near identical to UK version - added section on diversity; - significant differences in employee representation section	Base

7. TRANSLATION

The questionnaire needed to be translated into French for Quebec and Spanish for Spain

	Canada	Ireland	Spain	UK
Procedure adopted	team members have capability in both languages; test interviews conducted with French respondents to validate translation of terms	NA	translation checked by Anthony Ferner who is bilingual, with subsequent revisions emerging from equivalence exercise; changes incorporated into q're; problems minimised by involvement of team members in interviewing	NA

8. RESPONSE RATE AND N

The number of responses and the proportion of the population

	Canada	Ireland	Spain	UK
Outcome	N = 208 14.9% of total population	N = 260 50.3% of total population (62.8% of the stratified sample)	N = 330 30.2% of total population	N = 302 14.1% of upper limit of population; 17.5% of estimated population (33.4% of 'screened' population)

9. REPRESENTATIVENESS

Checks were carried out to ensure that the responding companies were representative of the population

	Canada	Ireland	Spain	UK
Checks and action taken	Profile of the responding firms is in line with the population	Profile of the responding firms is in line with the population	Initial over-representation of large US co's – corrected for during data collection process. Outcome is that the profile of responding firms is in line with the population	Concordance checks screener → database (response bias not detected); representativeness checks main response → screener under-representation of services → adjusted through weighting so that profile of responding firms is in line with the population

10. TIMING

The carrying out of the compilation of the population, screening of the population and carrying out of the fieldwork differed slightly from one country to the next

	Canada	Ireland	Spain	UK
a. database compilation	Sept 2004 - Dec 2005	Nov 2004, updated to start of fieldwork in May 2006	2005, updated 2007	2002, updated 2004
b database checking/screening	Aug – Dec 2005	Continuous screening of database through to fieldwork stage	Jan-Mar 2006	screener May 2005 – March 2006
c. start/end fieldwork	Dec 2005 – Dec 2006	Feb 2006 – Feb 2007	June 2006 – Aug 2008	Nov 2005 – June 2006

Appendix B

The Number of Companies in Multiple Combinations Across the National Surveys

Country Combinations	No of cases	% of Possible Cases
Canada – Spain	20	9.7
Canada – Ireland	12	5.8
Canada – UK	12	5.8
UK – Ireland	13	5.0
UK – Spain	22	7.3
Ireland – Spain	40	15.4
Canada – Spain – Ireland	7	3.4
Spain – Ireland – UK	5	1.9
Ireland – UK – Canada	3	1.5
Spain – Canada – UK	3	1.5
UK – Canada – Spain – Ireland	3	1.5

The percentage overlap is calculated by dividing the number of cases by the number of companies that could be a part of the combination (the denominator is the smallest N of the surveys concerned).

The Number of Companies in Pairs of Countries Across the National Surveys

Country Combinations	No of cases	% of Possible Cases
Canada – Spain	33	16.0
Canada – Ireland	25	12.1
Canada – UK	21	10.2
UK – Ireland	24	9.2
UK – Spain	33	10.9
Ireland – Spain	53	20.4

In this table the number of cases is calculated by combining the two, three and four country combinations together, giving the total number of cases featuring in the six pairs of national surveys.

Appendix C

Descriptive Statistics of Independent Variables

	Country of Survey			
	UK	Canada	Ireland	Spain
Business Strategy and Configuration of the Firm				
Product standardisation *(ref cat: standardised)*				
Adapted to national markets	0.25 (0.43)	0.29 (0.46)	0.32 (0.47)	0.23 (0.42)
International linkages *(ref cat: neither)*				
Supplies to	0.07 (0.25)	0.12 (0.33)	0.19 (0.39)	0.07 (0.26)
Supplied by	0.19 (0.39)	0.21 (0.41)	0.15 (0.36)	0.17 (0.38)
Both	0.56 (0.50)	0.38 (0.49)	0.46 (0.50)	0.42 (0.49)
Product diversification *(ref cat: multiple products)*				
Single product	0.17 (0.38)	0.26 (0.44)	Not included in survey	0.13 (0.33)
Dominant product	0.18 (0.38)	0.24 (0.43)		0.18 (0.39)
Organisational Structure				
Regions *(ref cat: no)*				
Yes	0.81 (0.39)	0.61 (0.49)	0.70 (0.46)	0.74 (0.44)
Product divisions *(ref cat: no)*				
Yes	0.66 (0.48)	0.60 (0.49)	0.60 (0.49)	0.58 (0.49)
Global functions *(ref cat: no)*				
Yes	0.69 (0.46)	0.74 (0.44)	0.60 (0.49)	0.67 (0.47)
HR Structures and Policies				
International HR committee *(ref cat: no)*				
Yes	0.53 (0.50)	0.66 (0.48)	0.58 (0.49)	0.69 (0.46)
HR networking				
Regular meetings				
Annually or more frequently	0.47 (0.50)	0.62 (0.49)	0.58 (0.49)	0.62 (0.49)
International conferences				
Annually or more frequently	0.43 (0.50)	0.40 (0.49)	0.43 (0.50)	0.31 (0.46)
Task forces				

Annually or more frequently	0.21 (0.41)	0.48 (0.50)	0.24 (0.43)	0.10 (0.31)
Virtual groups				
Annually or more frequently	0.39 (0.49)	0.74 (0.44)	0.49 (0.50)	0.38 (0.49)
HR monitoring (hard) *(min = 0; max = 4)*				
Is data collected by higher level about labor costs, headcount, turnover and productivity?	2.62 (1.23)	2.93 (1.06)	2.73 (1.35)	1.70 (1.35)
HR monitoring (soft) *(min = 0; max = 4)*				
Is data collected by higher level about mgt careers, diversity and attitude surveys	1.29 (1.13)	1.32 (1.07)	1.66 (1.15)	1.16 (0.99)
Worldwide philosophy *(ref cat: strongly disagree)*				
Disagree	0.13 (0.33)	0.13 (0.33)	0.27 (0.44)	0.11 (0.31)
Neither agree nor disagree	0.16 (0.37)	0.18 (0.38)	0.10 (0.31)	0.16 (0.37)
Agree	0.27 (0.45)	0.36 (0.48)	0.41 (0.49)	0.22 (0.41)
Strongly agree	0.33 (0.47)	0.29 (0.45)	0.12 (0.32)	0.39 (0.49)
HR managers				
Number of HR managers in the subsidiary	7.07 (17.61)	8.23 (47.35)	2.98 (3.19)	3.15 (4.65)
Nationality				
MNC Country of Origin *(ref cat: Rest of World)*				
France	0.08 (0.27)	0.05 (0.21)	0.03 (0.16)	0.12 (0.32)
Germany	0.06 (0.23)	0.03 (0.17)	0.07 (0.26)	0.10 (0.30)
Spain	0.01 (0.10)	0.00 (0.00)	0.00 (0.06)	0.25 (0.43)
Nordic	0.07 (0.25)	0.01 (0.10)	0.03 (0.17)	0.03 (0.18)
UK	0.15 (0.35)	0.07 (0.26)	0.13 (0.34)	0.08 (0.27)
Ireland	0.01 (0.08)	0.00 (0.00)	0.18 (0.39)	0.00 (0.00)
Rest of Europe	0.09 (0.29)	0.05 (0.21)	0.11 (0.31)	0.10 (0.30)
North America	0.42 (0.49)	0.72 (0.45)	0.41 (0.49)	0.28 (0.45)
Japan	0.07 (0.25)	0.05 (0.22)	0.02 (0.12)	0.03 (0.17)
Home owned MNC *(ref cat: no)*				
Yes	0.15 (0.35)	0.21 (0.41)	0.18 (0.39)	0.25 (0.43)

Other Organizational Characteristics				
Ownership *(ref cat: privately owned)*				
Publicly traded	0.67 (0.47)	0.83 (0.38)	0.71 (0.45)	0.35 (0.48)
Sector *(ref cat: services)*				
Production	0.57 (0.50)	0.67 (0.47)	0.49 (0.50)	0.45 (0.50)
Worldwide employment size *(ref cat: 500-999)*				
1000-4999	0.30 (0.46)	0.33 (0.47)	0.24 (0.43)	0.19 (0.40)
5000-29999	0.40 (0.49)	0.39 (0.49)	0.34 (0.47)	0.35 (0.48)
30000-59999	0.15 (0.36)	0.12 (0.32)	0.13 (0.34)	0.10 (0.30)
60000+	0.11 (0.31)	0.11 (0.31)	0.22 (0.42)	0.32 (0.47)
Subsidiary employment size *(ref cat: 100-499)*				
500-999	0.18 (0.38)	0.18 (0.38)	0.16 (0.37)	0.18 (0.39)
1000-4999	0.32 (0.47)	0.28 (0.45)	0.26 (0.44)	0.34 (0.47)
5000+	0.09 (0.28)	0.06 (0.24)	0.03 (0.18)	0.13 (0.33)
Workforce Characteristics				
LOG *(ref cat: Professional)*				
Customer facing and sales	0.08 (0.28)	0.22 (0.41)	0.21 (0.41)	0.29 (0.46)
Manual operatives	0.33 (0.47)	0.50 (0.50)	0.43 (0.50)	0.38 (0.49)
Clerical and administrative	0.30 (0.46)	0.07 (0.26)	0.14 (0.35)	0.10 (0.30)
Union recognition *(ref cat: no)*				
Yes	0.48 (0.50)	0.50 (0.50)	0.61 (0.49)	0.82 (0.38)