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**Title**

Multinational Companies and the Diffusion of Employment Practices from Outside the Country of Origin: Explaining Variation across Firms

**Abstract and Key Results**

This paper analyses the issue of variation between multinational companies in the extent to which they use their foreign operating units as the origin of employment practices that are subsequently transferred across the firm. It uses data from a nationally representative survey of MNCs in the UK and contrasts the relative influences of three sets of factors on diffusion.

The results demonstrate that while the nationality of the parent firm and the way in which the multinational is configured have only modest effects on diffusion, the organisational conduits through which the diffusion of practices can occur are central to explaining variation between firms.

**Key Words**

multinational companies, diffusion, employment practices

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**Abbreviated Heading**

Multinational companies and diffusion of employment practices

# Multinational Companies and the Diffusion of Employment Practices from Outside the Country of Origin: Explaining Variation across Firms

## Introduction

The role of the foreign subsidiaries of multinational companies (MNCs) as employers has been studied from many different perspectives. Some observers see them as ‘screwdriver’ sites which carry out low value added functions and have a ‘peripheral’ status within the company (e.g. Dedoussis 1995). The implication of this view is that work is largely unskilled, managers operate with little scope for innovation and foreign direct investment (FDI) causes a ‘hollowing out’ of the economy (e.g. Mytelka and Barclay 2004). In contrast, others see the foreign subsidiaries of MNCs as having the potential to take on international ‘mandates’ within the company, carrying out key functions with responsibilities beyond their shores (e.g. Birkinshaw *et al.* 1998). This implies that work may be challenging in its complexity, that managers have the potential to lead on new policy initiatives and that FDI can make a positive contribution to economic development (e.g. Rasiah 2004). While these perspectives differ in the impact they envisage, they share an assumption that MNCs concentrate particular activities in certain countries and, therefore, that the roles of the various national units within MNCs are differentiated from each other.

In few countries is the issue of foreign ownership in general, and the role of the foreign subsidiaries of MNCs in particular, more significant than in Britain. A key plank of public policy for the last three decades or so has been to encourage ‘greenfield’ investment by MNCs and to allow the acquisition of British firms by foreign ones. Accordingly, FDI into the UK has risen sharply in the last two decades, particularly through mergers and acquisitions. The UK is the second largest recipient of FDI in the world (UN 2007) and firms in industries which were previously state-owned, such as

telecommunications, electricity provision and steel, have been acquired by foreign MNCs in what has been described as a 'buying spree unprecedented in (Britain) or any comparable western country' (Hutton 2007).

Moreover, the UK is a particularly appropriate context in which to explore the role of foreign subsidiaries of MNCs for a further reason, namely that the institutional permissiveness that characterises the British business system allows firms considerable scope in deciding on the role of their operations. One tendency that this permissiveness creates is for the UK to be an attractive location for low value-added functions, such as assembly sites and call centres, which utilise a relatively cheap and disposable labour force. Another quite different tendency is for the fluidity of labour and capital markets to lead MNCs to locate high value-added functions in the UK, such as design and development units. In other words, the role of MNCs in the UK is likely to be particularly diverse.

One indication of the importance of British subsidiaries is the extent to which they are able to exert influence on the development of international HR policies in the wider firms of which they are a part. This can occur through the diffusion of practices that originate in the foreign operations of MNCs and are transferred to other parts of the company. Such diffusion can either take the form of practices flowing back to the domestic operations, termed 'reverse diffusion', or practices being transferred from one set of foreign operations to another, referred to as 'horizontal diffusion'. Both of these contrast with 'forward diffusion', in which practices flow from the firm's original national base to foreign subsidiaries (Edwards and Ferner 2004). Being the origin of a practice that is incorporated into the rest of the multinational may reflect the high status already achieved by a site; alternatively, initiating diffusion may enable the site to raise its profile within the multinational. Either way, the extent and variation of diffusion from the UK operations is a key indicator of the status of the sites.

The paper explores the type of multinational in which diffusion from British subsidiaries is most likely to occur. In order to do this we draw on data from the most comprehensive

and reliable survey of employment policy and practice in MNCs in the UK. We begin by using the literature on MNCs in general, and that on the diffusion of practices in particular, to establish a set of factors that we might expect to affect the role of the national units within MNCs. These factors are subsequently explored in the data analysis. We argue that while such factors as the nationality of the parent firm and the way in which the multinational is configured explain some of the variation between companies, it is the type and nature of the mechanisms for intra-firm learning that are the key influences in explaining which MNCs use their UK operations as the source of new practices that are spread across borders.

## **Literature Review**

A small but growing literature has shed some light on the sources of variation between firms in the incidence of diffusion from the foreign operations of MNCs. Three main types of explanation have been advanced, the first of which is the influence of national business systems. There is a well developed literature concerning how variation in the national context in which subsidiaries are embedded leads to these subsidiaries being differentially placed to instigate diffusion, particularly relating to technological innovations (e.g. Ambos and Schlegelmilch 2008) and to a lesser extent of employment practices (e.g. Edwards *et al.* 2006). When exploring variation among MNCs in a single host country, however, the relevance of national distinctiveness shows through in a different way, namely the role of the country of origin effect. On this issue, there is only a piecemeal literature which we use to structure expectations in the ensuing analysis.

It is well established in the literature on MNCs that the extent of central influence varies between multinationals from different countries (e.g. Child *et al.* 2000). Perhaps most notably, American MNCs are distinctive in the extent of central influence that they exert over their foreign operations and in the formalised nature of this control (Ferner *et al.* 2004). This has been shown to result in international HR policies in US MNCs being based on a home country model rather than on aspects of other national systems and to the creation of a well resourced central HR group which may feel threatened by pro-

active moves by the foreign sites to instigate new policy developments. Previous case study work has shown these features of US MNCs to constitute barriers to diffusion from the UK (Edwards *et al.* 2005). The literature concerning French MNCs is also indicative of the barriers in the home country to the incorporation of practices from other countries such as the history of seeking national champions that created a strong home country orientation (Thory 2008), though some evidence also shows how some French firms have looked to restructure themselves through using the practices deployed in their foreign operations to aid this process (Mtar 2001).

The limited evidence from MNCs based in some other countries shows that the openness to new policies being modelled on those in the foreign operations is seemingly less hindered by influences from the country of origin. For example, Hayden and Edwards (2001) have shown how the ‘Swedishness’ of their case study firm led to its openness to actors ‘bypassing the hierarchy’, the term that described the institutionalised disposition towards seeking the views of actors from across the firm in developing a common approach across borders. Moreover, the Swiss-Swedish firm ABB is one that is often used as an example of a multinational that has a well-established inter-dependent network of sites which transfer knowledge to each other (e.g. Bartlett and Ghoshal 1998). In a similar vein, some evidence has revealed that many German MNCs have accorded ‘vanguard’ status to their operations in other countries, particularly those in the UK and US, enabling them to lead initiatives on which international HR policies are subsequently based (Ferner and Varul 2000). Accordingly, many German MNCs have introduced Anglo-American style share options, albeit in ways that are amended to fit the German context (Buck *et al.* 2006). The limited evidence concerning Chinese MNCs indicates that many are using a strategy of localisation in their Western operations in order to absorb new practices into the wider firms (e.g. Rui and Yip 2008). For instance, Zhang and Edwards show how this has led to ‘substantial reverse diffusion’ (2007, p2160), though the impact of this was constrained by the organisational inertia typical of large state-owned firms in China.

The nationality of the parent firm also matters because of ‘dominance’ effects. This is the notion that within the international economic system there is a hierarchy of nations according to their performance which gives rise to an interest among firms in poorly performing economies in emulating the practices that are perceived to contribute to the success of firms in the countries at the top of the hierarchy (Smith and Meiskins 1995). Some recent evidence suggests that the dominance effect is becoming increasingly evident in the way that MNCs manage their international workforces (Pudelko and Harzing 2007). Despite some limitations in the concept – in its simplest form, for example, it implies there is homogeneity within national systems – it does capture the way in which notions of international ‘best practice’ emerge amongst managers in MNCs. Dominance effects evolve as the hierarchy of economies changes over time. For much of the 1970s and 1980s it was Japanese firms that were widely held to have found the most efficient way of operating and the practices associated with lean production attracted considerable interest in other countries (e.g. Oliver and Wilkinson 1992). In the last decade or so, however, the faltering of the Japanese economy and the resurgence of the American, and to a lesser extent British, economies has meant that the current conventional wisdom is that it is the Anglo-American business model that provides the necessary flexibility to compete in a context of rapidly evolving technologies and globally competitive markets. Drawing on practices in overseas operations can be one way that dominance effects are felt as MNCs draw on their experience of practices in other countries. This suggests that it is MNCs from non-dominant countries that are most likely to use this as a way of catching up with firms from dominant ones.

Taken together, then, the arguments concerning the nationality of the parent firm lead us to the expectation that American MNCs are less likely to use their British subsidiaries as sources of new practices when compared with those of other nationalities. The impact of nationality, however, is likely to vary from one area of employment practice to another. This is partly because the national system in the multinational’s country of origin will provide a stronger and more distinctive model for practices in some areas than in others. For example, while German MNCs may be inclined to look to their foreign operating units to help achieve new forms of flexibility and variable pay, they are rather less likely

to do so in relation to forms of work organisation where the German economy is noted for the development of diversified quality production (Streeck 1997). Moreover, the constraints posed to reverse diffusion (though not so clearly horizontal diffusion) vary by the nationality of the parent firm since practices in some countries are embedded in institutions that make it difficult to introduce novel practices from other countries. For example, the relative weakness of skills amongst manual workers in the US may mean that American MNCs lack the capacity to adopt team-based forms of working and associated employee involvement practices that operate in their foreign operations. This points to the need to consider the incidence of diffusion in MNCs of different nationalities across various areas of employment relations.

The second main source of variation is the configuration of the multinational firm. The literature provides some indications as to the organisational characteristics that provide fertile ground on which the foreign operations of MNCs may exert most influence. One such characteristic is the way the multinational is structured and here the network form in which there are 'active and flexible links between the HQ and the periphery' (Johnson and Medcof 2007, p482) appears to be the organisational form that affords the subsidiaries the most scope to exert influence (see also Harzing and Noorderhaven 2006). Within network structures, particular aspects to the structure that link actors across countries, such as product- or service-based international divisions which group together sites engaged in similar activities, can provide a favourable context in which the diffusion of practices occurs (Edwards 2000). A regional dimension to the structure may also fulfil the function of providing such a favourable context for diffusion. In contrast, those MNCs based primarily around national units with little in the way of organisational linkages between countries lack the structures that enable actors in the foreign units to spread their practices to other parts of the firm.

A further set of organisational characteristics concerns the extent and nature of commonalities across borders within the multinational. In essence, the greater the similarities in the functions that sites in different countries perform, the more scope there is for these sites to share practices. Thus we might anticipate that there is greater potential



for foreign operations to be the source of new practices in firms producing a narrow range of products than in highly diversified MNCs. This potential is likely to be even greater where the products or services are standardised across borders since the work processes are also more likely to have strong commonalities in these firms when compared to those in which the products or services are differentiated to national regulations or tastes (Edwards 2000). A further element of the strategy of MNCs that affects diffusion is the extent of intra-enterprise trade. There is evidence that MNCs are increasingly engaging in cross-border integration that involves sites specialising in an activity and having linkages with other sites (Buckley and Ghauri 2004). This form of integration leads to each site acting as the recipient of a component or service from other sites, the supplier of components or services to other sites, or both (Dicken 2007, Gereffi *et al.* 2005). The impact of this integration is not clear-cut, however: significant trading between sites may facilitate corresponding flows of knowledge concerning employment practice, thereby making diffusion of employment practices more common; on the other hand, intra-enterprise trade may be associated with the role of sites being quite distinct from one another and these inter-site differences may limit the potential for diffusion.

A further dimension of how the configuration of the multinational shapes the incidence of diffusion from foreign operating units concerns how the firm has grown. Growth through investment in greenfield sites involves the multinational relying heavily on expertise and practices that it already possesses and transfers to its newly established sites. Indeed, the choice of growing in this way may be motivated by a desire to minimise the barriers from the local context to forward diffusion. In contrast, growing through acquisition involves the multinational inheriting a pre-existing set of practices (Zou and Ghauri 2008), some of which it may absorb and spread to other sites. In some cases, growth through acquisition itself may be motivated by a desire to access, absorb and transfer practices in this way (Schuler *et al.* 2003), but even where it was not part of the rationale for acquisition it still gives firms the potential to do so. For instance, Bresman *et al.* (1999, p439) argue that while ‘the immediate post-acquisition period is characterised by imposed one-way transfers of knowledge from the acquirer to the acquired, ... over time this gives way to high quality reciprocal knowledge transfer’. While this should not be

seen as in anyway inevitable, growing through acquisition does appear to increase the scope a firm has to learn from its international operations.

This discussion of the way that MNCs are configured has lead us to expect that the presence of an international dimension to the corporate structure, strong commonalities between operating units in different countries and growth through acquisition will facilitate a higher incidence of UK sites leading new corporate initiatives. As was the case for nationality, it may be that the impact of this second set of factors varies from one area of employment practice to another. For example, where acquisitions are motivated by absorbing innovative practices then it is plausible to argue that these are more likely to be found in those areas that the parent firm sees as crucial to its competitive position, such as accessing fresh expertise which is subsequently spread through the multinational through common training programmes.

The third main source of variation relates to the organisational conduits through which practices may be diffused. Previous research has demonstrated that the ‘richness of transmission channels’ between subsidiaries is central to the transfer of expertise across borders (Gupta and Govindarajan 2000). When considering employment practices, one aspect of this is the extent to which the HR function has international channels through which diffusion might occur. One distinction that is linked to different types of international HR channels is between ‘codifiable’ and ‘tacit’ knowledge (Adenfelt and Lagerstrom 2006, Kogut and Zander 2003, Minbaeva 2007). There is some evidence that codifiable knowledge concerning HR practices can effectively be transferred through such mechanisms as international committees, information systems, databases and management audits (e.g. Ferner and Varul 1999, Edwards *et al.* 2006). Such ‘procedural’ channels are likely to be ineffective for tacit knowledge, however, for which ‘people-based’ channels are likely to be more effective (Tregaskis *et al.* 2005). Within this category the literature has identified mechanisms such as cross-national working groups and international assignments as effective conduits for diffusion of tacit knowledge (e.g. Bossard and Peterson 2005, Harzing 2001, Martin and Salomon 2003).

A further dimension to the characteristics of the HR function concerns the relative influence that each set of national operations possesses within the international firm. One of the key themes of previous research into diffusion has been the political nature of the phenomenon, particularly the influence of the potential donor units (Edwards and Ferner 2004). While it should not be assumed that HR managers in the operating units will always want to spread practices to the rest of the firm that they have developed, where they seek to do so the evidence indicates that they will be successful if they possess expertise and other resources on which the rest of the firm is dependent (e.g. Kristensen and Zeitlin 2005). Thus the more resources are controlled by the local HR function, the better placed will be the subsidiary to supply practices to the rest of the group. This discussion of the organisational conduits, therefore, has led us to expect that the British sites of MNCs are most likely to provide practices to the rest of the firm where there are appropriate procedural and people-based mechanisms across the company and where the HR function in Britain has the resources to exert influence within the wider firm. As implied above, since the conduits differ in the sort of knowledge they are well placed to handle there are grounds for expecting their role to differ from one area of employment practice to another.

The literature on sources of variation is evidently patchy. This section has reviewed its main findings and discussed its key themes, resulting in certain expectations that can guide empirical analysis. American MNCs appear to be those least likely to engage in diffusion from the UK. In terms of the configuration, those with a strong international dimension to the structure, with commonalities between sites and which have grown through acquisition are those most likely to use their British sites as sources of new employment practices. And in relation to transmission channels, those with a mix of procedural- and people-based mechanisms and in which the local HR function is well resourced are those in which this phenomenon is most likely to be found. What is the empirical support for each of these possible sources of variation? And does the evidence suggest one group of these are more important than the others? The data that were used to address these questions are described in the next section.

## Method

The data were drawn from a large-scale survey of employment practice in the operations of MNCs in the UK. Unlike most surveys of this nature which rely on postal questionnaires, the study involved personal interviews with a senior HR executive in each firm. The survey covered MNCs with at least 500 employees worldwide. In addition, overseas-owned companies had to have at least 100 employees in the UK, while UK-owned MNCs were required to have an operation employing 100 or more in at least one other country. The survey was based on the most comprehensive listing of the population of multinationals that has been constructed to date, involving use of multiple databases and extensive cross-checks to resolve discrepancies (see Edwards *et al.* 2007 for a full discussion).

The first stage of the survey itself involved a short ‘screening’ questionnaire being carried out through a telephone interview, which was sought from all of the firms on the provisional listing. Many of the 3099 firms on this list turned out not to exist or to have closed down. Moreover, of the 1419 companies where agreement for an interview was secured, a third turned out to be smaller than the size criteria or not be part of a multinational after all. This complicates the calculation of the response rate since it is impossible to know exactly how many of the companies that we know exist but which did not take part in the screening survey would also have screened out. However, assuming that the same proportion of these would have done so then the 903 successful telephone interviews constitutes an estimated response rate of 54%. The second stage involved a wide-ranging face-to-face structured interview with a senior HR manager in the UK operations. Interviews of approximately 70 minutes were completed in 302 multinationals, representing just over one-third of the telephone survey.

Representativeness checks between the two stages of the survey revealed that the profiles of the two groups were similar according to country-of-origin and employment size, but indicated slight under-representation of service sector firms in the main survey when compared with the screener. Thus, weights were constructed and were applied to correct for this.

The inclusion of overseas-owned as well as UK-owned MNCs in the survey necessitated two versions of the questionnaire. Since interviews were conducted in a foreign unit or subsidiary in the former and in the corporate HQ in the latter some questions had to be phrased differently. This is true for the issue of diffusion of practices from the UK operations. Thus this paper concentrates on the data from the face-to-face interviews in the 258 overseas-owned MNCs in the dataset. (When the data are weighted this changes to 257). In order to assess the issue at the heart of the paper, the questionnaire needed to utilise a measure of the extent to which the UK operations have spread practices to the rest of the multinational. In the absence of such a measure from previous research, the study developed a set of questions that are used to assess the extent of diffusion across the firm and this is applied in different areas of employment practice. The nature of the resulting variable, together with others used in the analysis, is described in the next section.

A limitation of the survey is that it relies on a single respondent in each organisation. This can give rise to the problem of common method variance in which bias is introduced through ‘any artifactual covariance between the predictor and criterion variable produced by the fact that the respondent providing the measure of these variables is the same’ (Podsakoff *et al.* 2003, p881). As Podsakoff *et al.* 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, p881). In this paper, and for that matter in the wider study, the key variables are derived from questions about contemporary aspects of the organisation, particularly its structures and the nature of HR policies and practices. Thus we might anticipate the risks of relying on a single respondent to be modest in this case.

## **The Variables**

The principal measure of the role of the UK operations as sites of innovation in employment practices stems from a question concerning the role of British sites in

supplying practices to the rest of the firm. Respondents were asked: ‘Has the UK company provided any new practices in the following areas that have been taken up elsewhere in the worldwide company?’ and were then presented with a list of four substantive HR areas – pay and performance management, training and development, employee involvement and employee consultation. If they said yes in any of these four areas they were subsequently asked whether the new practice had spread to ‘a few parts of the firm’, to ‘major businesses’ or had been ‘taken up globally’. The design of the question was aided by the lessons from case study research and, in addition, it was piloted in a number of MNCs, the results of which were reassuring that it was measuring the phenomenon in a reliable way. This question was used to construct the four dependent variables for the statistical analysis.

Overall, diffusion from the UK operations of employment practices in at least one of the four areas was found in 61% of firms. There was considerable variation, however, for each of the four variables, which is shown in Table 1. It is evident that diffusion from UK operations was most commonly found in training and development, for which exactly half the respondents indicated it had occurred, and was less common in the other three areas, none of which exceeded 30%. This contrast might be explained in three ways. First, the institutional context in virtually all countries provides more room for manoeuvre for management in devising practices in the former area when compared with the three others; in other words, that training practices are more readily transferable because they are less enmeshed in supportive institutions. Second, training and development may be seen as a more ‘strategic’ issue in that how the firm develops and retains key staff is seen as important in shaping its competitive position. Third, the relatively small proportions identifying diffusion in employee involvement and employee consultation may reflect the dominant pattern of practice in the UK, which is characterised by mainly one-way forms of top-down communication that MNCs are unlikely to perceive as innovative. The other notable finding was that where the UK operations were the source of new practices, these were most commonly transferred to ‘a few parts of the firm’. Indeed, for each of the four issues more than half of those that chose one of the three ‘yes’ options were in this category. For the subsequent analysis,

the latter two categories ('yes, in major businesses' and 'yes, taken up globally') were merged because of small cell sizes. Hence the measures contain three categories, with each taking on a value of 0 where the answer was 'no', 1 where it was 'yes, in a few parts of the firm' and 2 if it was 'yes, in major businesses' or 'yes, taken up globally'. Because of the nature of the resulting variables the analysis rests on four ordinal regression models with these as the dependent variables. Following conventions on regression analysis, the data used are unweighted.

*Table 1 about here*

There were a set of independent variables that enabled us to address the three sources of variation established above:

1. Nationality of origin

This variable was split into seven national or regional groups – the US, France, Germany, Nordic, Rest of Europe, Japan and Rest of the World.

2. The Configuration of the Multinational

There were six variables in this category. The first two measure the structure of the firm, with dummy variables relating to the presence of two international axes of organisation, namely international divisions and regional structures. A further three variables assess the extent of commonalities within MNCs: first, the extent of diversification, which was split into two (a single or dominant product or service versus a number of products or services); second, the degree of product adaptation or standardisation, which was also split into three (from it is standardised globally, through it is adapted to different regions of the world but standardised within them, to it is adapted significantly to national markets); and, third, the linkages in production or service provision across sites, which was split into four (no linkages in either direction, foreign sites supply UK sites, UK sites supply foreign sites, and both). The sixth variable in this category was the method by which the firm has grown in the UK, which was assessed through whether the multinational had made an acquisition in the UK in the last five years.

### 3. The Organisational Conduits

The existence of mechanisms capable of facilitating the transfer of codifiable knowledge was assessed through the existence of an HR Information System in the worldwide company. Two conduits through which tacit knowledge could be transferred were identified, namely the existence of regular meetings between HR managers from different countries and whether staff have been sent from the UK operations to other parts of the multinational on long-term assignments. The resources controlled by the HR function at national level was captured by a proxy, namely its size in relation to the UK company which was measured by the proportion of managers in the HR function divided by total employment in Britain.

### 4. Control Variables

In addition, there were two control variables, size and sector, both of which are well established as influences on a range of aspects of employment practice. The first of these was measured by the number of employees in the UK, while the second was split into three (manufacturing, services and other).

The frequencies and mean values for these independent variables are presented in Table 2.

*Table 2 about here*

## **The Findings**

The results of the ordinal logit regression analysis using the four variables measuring diffusion for each of the functional areas are presented in Tables 3 to 6. It should be noted that the Ns for these four models varied from 215 to 223 due to non-response on some of the questions. All four models were significant, those for pay and performance management and employee involvement at the 5% level and those for training and development and employee consultation at the 1% level. The Nagelkerke  $R^2$ s were



between 18% and 26%. Tests of linearity were carried out and confirmed the assumption that the dependent variables were ordered. Each of these models was built up in three stages, enabling us to assess the impact on the model of the addition of new sets of variables. We examine these sets of variables by assessing both the impact of the addition of each block of variables and by considering the significance or otherwise of each individual variable in the final model, which is presented in the final column in each table.

*Tables 3 to 6 about here*

What does the analysis tell us about the role of nationality of origin? When the regressions were run with just the nationality variable and the two controls none of the models were significant. When we examined each of the final models there were some significant associations between nationality and the dependent variables in two of the four cases. In relation to the pay and performance management model, the British subsidiaries of MNCs from the Nordic area, the Rest of Europe and the Rest of the World (a category that consists mainly of Australian, Canadian and South African firms) were significantly more likely than those from the US to initiate diffusion. This was also the case for subsidiaries of MNCs from the Rest of the World on the issue of training and development. While these significant associations were evident, this should be seen in the context of American MNCs not being significantly more or less likely to engage in this sort of diffusion than French, German or Japanese MNCs on any issues and there being no significant differences at all on the issues of employee involvement and employee consultation. Overall, then, the evidence provides only very limited support for the expectation that US MNCs would be less likely than MNCs of other nationalities to engage in diffusion from their UK operations.

Is there stronger empirical support for the second set of variables, which relate to the configuration of MNCs? The impact of adding this set of variables varied across the models. Those for pay and performance management and employee involvement were still insignificant once the six variables in this category were added to the nationality and

control variables. In the cases of the training and development and employee consultation models, however, the inclusion of these variables did create a significant model at the 5% level of significance. In relation to the former, the addition of this block of variables produced a change in the model chi-square that was significant at the 1% level.

Examining the impact of the variables in the four final models that achieved significance produced the following findings. The first and second variables, which measured the international dimension to corporate structures, were not significant in any of the four models. Similarly, the third and fourth measures of configuration, relating to the degree of diversification and of product standardisation, were not significant in any of the four models. The remaining two variables in this category did produce a significant finding in one of the four models. The measure of integration of sites across borders through intra-enterprise produced a significant association in the training and development model; firms in the category of 'foreign sites supply UK sites' were less likely to have the British sites as the source of new practices when compared with the reference category of neither type of integration. The final variable, whether the multinational had grown through acquisition in the UK, was positively associated with using the UK operations as the source of new practices for the issue of employee involvement. Overall, however, this set of variables produced only two significant associations out of a possible twenty-four and even then only at the 10% confidence level. This cannot be seen as convincing evidence that the configuration variables enhance the potential for British operations to act as suppliers of new practices.

The third set of factors, those to do with the organisational conduits through which diffusion can occur, had a marked impact on the models. When these variables were included, the models relating to pay and performance management and employee involvement became significant at the 5% level having not been significant previously, while the models relating to training and development and employee consultation moved from being significant at the 5% level to the 1% level. Moreover, in all four cases the addition of this block of variables produced a change in the model chi-square that was significant at the 1% level. It is evident that these factors are very important in explaining variation across firms. The final models including all of the independent variables

revealed several significant associations between the nature of organisational conduits and the measures of diffusion. The existence of HR information systems was significant in the areas of pay and performance management, employee involvement and employee consultation. Regular meetings of HR practitioners across borders were also positively and significantly associated with this occurring in three of the four models, those relating to training and development, employee involvement and employee consultation. The movement of staff from the UK to operations elsewhere on long-term assignments was positively and significantly associated with diffusion originating in the UK for the issue of training and development. Taken together, these findings provide strong support for the expectation that the extent and nature of international channels in the HR function shapes the likelihood that diffusion from the UK will occur. An even clearer finding relates to the measure of the size of the HR function relative to that of the UK operations as a whole. The larger the HR function, the more likely were the British sites to be the suppliers of new practices in all four areas of employment relations, providing strong support for the notion that MNCs in which local HR functions are well resourced are those in which foreign operations act as the source of new practices that are spread across the firm.

## **Discussion and Conclusion**

The aim of this paper has been to explore the type of multinational in which UK operations are the origin of practices that are diffused across the firm. In order to accomplish this we built a series of four models, all of which were significant and explained a reasonable proportion of the variation between firms. We have also been able to address the relative importance of the factors that might explain this variation and it is this issue that we reflect on in this final section.

The results for nationality of origin suggest it explains only a little of the variation in the extent to which MNCs use their British subsidiaries as sources of new employment practices. One association that was evident for the issue of pay and performance management, and to a lesser extent for training and development, was for MNCs from

outside the core ‘axes’ of the global economy (Dicken 2007) to be more likely than American MNCs to engage in diffusion from the UK, whereas there were no significant differences between American MNCs and those from other large economies. One interpretation of this is consistent with the notion of dominance effects, namely that MNCs which originate outside the main centres of activity for multinational firms – essentially North America, Western Europe and Japan – use their operations in these countries to influence practice in their wider operations.

As we noted above, however, when we look across the four models the data only provide very limited support for nationality as a source of variation between MNCs. How can we reconcile this with our expectations? One interpretation might be that this is an indicator of convergence amongst MNCs of different nationalities. However, this would be at odds with the body of evidence covered in the literature review, which testifies to the enduring influence of nationality of ownership. Perhaps a more plausible explanation is that the key role of nationality is not so much on the prevalence of diffusion from the UK operations but rather on its impact. One distinction in this respect is between that which is ‘evolutionary’ in that the diffusion of practices is essentially a fine-tuning of the firm’s existing approach or *modus operandi* and that which is ‘transformative’ in that diffusion of practices shifts the firm to a new *modus operandi* (Edwards and Ferner 2004). The previous evidence from US MNCs referred to above suggests that the barriers presented by the American business system are significant but do leave room for instances of evolutionary reverse diffusion to occur (Edwards et al. 2005). In other words, it may be that diffusion from foreign subsidiaries occurs almost as frequently in US MNCs when compared with others but that its impact is less marked. Another possible interpretation concerns the geographical spread of diffusion. The arguments concerning the influence of nationality rest partly on the extent to which there are barriers to diffusion presented by the home country business system. What this leaves open is that even in MNCs for which the home country does indeed present such constraints, diffusion can plausibly occur between foreign subsidiaries. In the terms that we set out at the beginning of the paper, nationality may affect reverse diffusion more than it affects horizontal diffusion.

Turning to the configuration variables, there was very limited evidence that these impacted on the extent to which MNCs use their British operations as the source of new practices. Why, then, were the expectations not supported by the data in these models? We offer three speculative thoughts. The first is that the insignificance of the measure of growth by acquisition (apart from on employee involvement) provokes the observation that it may be that the acquisitions had been too recent to lead to diffusion across sites in different countries. Such a view is consistent with Bresman *et al.*'s (1999) finding that the realisation of 'reciprocal transfers' takes a long time after the acquisition. The data in this paper relate to acquisitions within the previous five years, some of which may have been very recent and hence the full learning potential that this method of growth entails had not been realised. The second observation is a possible explanation for why the practices that managers identify as having the potential to be diffused may not be constrained by some of the aspects of configuration that we identified. That is, even where firms are diversified, where their products differ in character across borders and the roles of sites are distinct within integrated production processes, there may be enough similarities in the work process for practices to have applicability across different parts of the multinational. In this sense, managerial notions of 'best practice' may transcend quite different technological and organisational contexts, as lean production did for example. The third thought is in relation to the structures that promote diffusion from foreign operations. While there was no evidence that international divisions or regional groupings promoted diffusion, it is quite possible that our measures of structure do not get at the precise structural factors that are central in this respect. In particular, while divisional and regional structures certainly provide concrete lines of responsibility and reporting relationships across borders, they may not provide the 'active and flexible links' between units that is an essential feature of international network structures. Moreover, it might be structures at a different level, such as the HR function, are more important than general aspects of the corporate structure.

This leads on to an assessment of what was revealed by analysis of the organisational conduits, particularly those in the HR function. The clearest findings in the paper are that the structures within the HR function and its size are key determinants of whether MNCs

draw on the practices in their UK operations. In relation to the former, the structures that are capable of promoting cross-border dialogue and transferring knowledge seem to be important in explaining in which MNCs the UK operations act as the source of new practices. Indeed, it may be that the presence of such mechanisms is almost a prerequisite for diffusion to occur. In particular, there is apparently a role both for ‘procedural’ channels, such as HR Information Systems, and for ‘people-based’ channels, such as international meetings of HR staff and, to a lesser extent, the movement of staff on long-term assignments. In relation to the latter, a consistent finding was that the size of the UK HR function in relation to the size of the UK operations was strongly associated with the incidence of cross-border diffusion originating in Britain. While it may be that large HR functions at national level are sometimes indicative of decentralised firms with a lack of synergy across the MNC, this finding suggests that they are commonly associated with local actors having the voice and the resources to instigate diffusion to other parts of the firm.

The findings also reveal some differences in the importance of these organisational conduits across the four areas. Practices in the area of pay and performance management seem to be transferred through the procedural channel. Given that pay structures and performance management systems are commonly administered through HR information systems in MNCs (Almond *et al.* 2006), it follows that such a channel is used for the diffusion of such codifiable practices. In contrast, training practices appear to be diffused through people-based mechanisms. Arguably, this reflects the importance of tacit knowledge in this area and that understanding the nuances of training routines requires face-to-face contact. For employee involvement and consultation both procedural- and people-based mechanisms are significant, suggesting that while detail on the nature of practices in these areas can be codified and stored, this needs to be complemented with direct contact between actors in different parts of the firm.

Finally, what issues can usefully be pushed further in subsequent research? We identify two areas. First, in some ways more refined measures could be developed. For instance, we have provided some evidence of the ‘conduits’ through which diffusion can occur and

argued that a mix of procedural and people-based mechanisms is in evidence. However, how do the various mechanisms interact? Are they complements or substitutes? Another issue that would benefit from more refined measures is the resources controlled by the local operations. In this research we have used the size of the HR function as a rather crude proxy for its voice within the company. The significance of this variable despite its rather crude nature indicates that there is probably mileage in exploring additional measures for voice and locally controlled resources.

The second area that we identify as a future research issue is the capacity of the subsidiaries of MNCs across countries to initiate diffusion. This would require the gathering of comparable data from subsidiaries in different national contexts and would open up scope to examine the role of the national business systems in which the units are located. This would allow an assessment to be made of ways in which the distinctiveness of the local institutional context equips actors with resources that they can use to make innovations in HR practices that may be of interest to the rest of the group. In addition, it would allow an examination of the way in which there are compatibilities between certain countries in the diffusion of practices. Thus three key questions for future research are, first, whether the pattern observed here of diffusion being most prevalent in training and development and least common in employee consultation is replicated across countries, second, whether MNCs of a particular nationality are drawn more to some countries than others as the source of new HR practices and, third, whether these patterns are the same or different across various nationalities of MNCs.

## References

- Adenfelt, M. and Lagerstrom, K. 'Knowledge Development and Sharing in Multinational Corporations: The Case of a Centre of Excellence and a Transnational Team', *International Business Review*, 15, 3, 2006, pp. 381-400.
- Almond, P., Muller-Camen, M., Collings, D. and Quintanilla, J. 'Pay and Performance' in P. Almond and A. Ferner (eds) *American Multinationals in Europe: Managing Employment Relations Across National Borders*, Oxford: Oxford University Press 2006, pp. 119-145.
- Ambos, B. and Schlegelmilch, B. 'Innovation in Multinational Firms: Does Cultural Fit Enhance Performance?' *Management International Review*, 48, 2, 2008, pp. 189-206.
- Bartlett, C. and Ghoshal, S. *Managing Across Borders: The Transnational Solution*, Boston: Harvard Business School Press 1998.
- Birkinshaw, J., Hood, N. and Jonsson, S. 'Building Firm-Specific Advantages in Multinational Corporations: The Role of Subsidiary initiative', *Strategic Management Journal*, 19, 2, 1998 pp. 221-241.
- Bossard, A. and Peterson, R. 'The Repatriate Experience as seen by American expatriates', *Journal of World Business*, 40, 1, 2005 pp. 9-28.
- Bresman, H., Birkinshaw, J. and Nobel, R. 'Knowledge Transfer in International Acquisitions', *Journal of International Business Studies*, 30, 3, 1999 pp. 439-452.
- Buck, T., Shahrim, A. and Winter, S. 'Executive Stock Options in Germany: The Diffusion or Translation of US-Style Corporate Governance', *Journal of Management and Governance*, 8, 2, 2004 pp. 173-186.
- Buckley, P. and Ghauri, P. 'Globalization, Economic Geography and the Strategy of Multinational Enterprises', *Journal of International Business Studies*, 35, 1, 2004 pp. 81-98.
- Child, J., Faulkner, D. and Pitkethly, R. 'Foreign Direct Investment in the UK 1985-1994: The Impact on Domestic Management Practice', *Journal of Management Studies*, 37, 1, 2000 pp. 141-166.
- Dedoussis, V. (1995) 'Simply a Question of Cultural Barriers? The Search for New Perspectives in the Transfer of Japanese Management Practices', *Journal of Management Studies*, 32, 6, 1995 pp. 731-746.
- Dicken, P. *Global Shift: Mapping the Changing Contours of the World Economy*, London: Sage 2007.



- Edwards, T. 'Multinationals, International Integration and Employment Practice in Domestic Plants', *Industrial Relations Journal*, 31, 2, 2000 pp. 115-129.
- Edwards, T., Almond, P., Clark, I., Colling, T. and Ferner, A. 'Reverse Diffusion in US Multinationals: Barriers from the American Business System', *Journal of Management Studies*, 42, 6, 2005 pp. 1261-1286.
- Edwards, T., Collings, D., Quintanilla, J. and Tempel, A. 'Innovation and the Diffusion of Organisational Learning' in Almond, P. and Ferner, A. (eds) *American Multinationals in Europe: Managing Employment Relations Across National Borders*, Oxford: Oxford University Press 2006 pp. 223-247.
- Edwards, T., Edwards, P., Ferner, A., Tregaskis, O. and Marginson, P. with Adam, D., Arrowsmith, J., Meyer, M. and Budjanovcanin, A. 'Charting the Contours of Multinationals in Britain', 2007  
[http://www2.warwick.ac.uk/fac/soc/wbs/projects/mncemployment/conference\\_papers/working\\_paper\\_8-10-07a.pdf](http://www2.warwick.ac.uk/fac/soc/wbs/projects/mncemployment/conference_papers/working_paper_8-10-07a.pdf)
- Edwards, T. and Ferner, A. 'Multinationals, Reverse Diffusion and National Business Systems', *Management International Review*, 44, 1, 2004 pp. 49-79.
- Ferner, A., Almond, P., Clark, I., Colling, T., Edwards, T., Holden, L. and Muller-Carmen, M. 'The Dynamics of Central Control and Subsidiary Autonomy in the Management of Human Resources: Case Study Evidence from US MNCs in the UK', *Organisation Studies*, 25, 3, 2004 pp. 363-391.
- Ferner, A. and Varul, M. *The German Way? German Multinationals and the Management of Human Resources in their UK Subsidiaries*, London: Anglo-German Foundation 1999.
- Ferner, A. and Varul, M. 'Vanguard Subsidiaries and the Diffusion of New Practices: A Case Study of German Multinationals', *British Journal of Industrial Relations*, 38, 1, 2000 pp. 115-140.
- Gereffi, G., Humphrey, J. and Sturgeon, T. 'The Governance of Global Value Chains: An Analytical Framework', *Review of International Political Economy*, 12, 1, 2005 pp. 78-104.
- Gupta, A. and Govindarajan, V. 'Knowledge Flows within Multinational Corporations', *Strategic Management Journal*, 21, 4, 2000 pp. 473-496.
- Harzing, A. 'Of Bears, Bumble-bees and Spiders: The Role of Expatriates in Controlling Foreign Subsidiaries', *Journal of World Business*, 36, 4, 2001 pp. 366-379.

- Harzing, A. and Noorderhaven, N. 'Knowledge flows in MNCs: An empirical test and extension of Gupta and Govindarajan's typology of subsidiary roles', *International Business Review*, 15, 2, 2006 pp. 195-214.
- Hayden, A. and Edwards, T. 'The Erosion of the Country of Origin Effect: A Case Study of a Swedish Multinational Company', *Relations Industrielles / Industrial Relations*, 56, 1, 2001 pp. 116-140.
- Hutton, W. 'A Real Loss of Sovereignty', *The Guardian*, June 26<sup>th</sup> 2007.
- Johnson, W. and Medcof, J. 'Motivating Proactive Subsidiary Innovation: Agent-based Theory and Socialisation Models in Global R&D', *Journal of International Management*, 13, 4, 2007 pp. 472-487.
- Kogut, B. and Zander, U. 'A Memoir and Reflection: Knowledge and an Evolutionary Theory of the Multinational Firm 10 Years Later', *Journal of International Business Studies*, 34, 6, 2003 pp. 505-515.
- Kristensen, P. and Zeitlin, J. *Local Players in Global Games: The Strategic Constitution of a Multinational Corporation*, Oxford: Oxford University Press 2005.
- Martin, X. and Salomon, R. 'Knowledge Diffusion Capacity and its Implications for the Theory of the Multinational Corporation', *Journal of International Business Studies*, 34, 4, 2003 pp. 356-373.
- Minbaeva, D. 'Knowledge Transfer in Multinational Corporations', *Management International Review*, 47, 4, 2007 pp. 567-593.
- Mtar, M. *French Multinationals' International Strategy*, PhD Thesis, Warwick University of Warwick 2001.
- Mytelka, L. and Barclay, L. 'Using Foreign Investment Strategically for Innovation', *The European Journal of Development Research*, 16, 4, 2004 pp. 531-560.
- Oliver, N. and Wilkinson, B. *The Japanization of British Industry*, Oxford: Blackwell 1992.
- Podsakoff, P., MacKenzie, S. and Lee, J.-Y. 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, 88, 5, 2003 pp. 879-903.
- Pudelko, M. and Harzing, A. 'Country of Origin, Localization or Dominance Effect? An Empirical Investigation of HRM Practices in Foreign Subsidiaries', *Human Resource Management*, 46, 4, 2007 pp. 535-559.

- Rasiah, R. 'Exports and Technological Capabilities: A Study of Foreign and Local Firms in the Electronics Industry in Malaysia, the Philippines and Thailand', *The European Journal of Development Research*, 16, 4, 2004 pp. 587-623.
- Rui, H. and Yip, G. 'Foreign Acquisitions by Chinese Firms: A Strategic intent Perspective', *Journal of World Business*, 43, 2, 2008 pp. 213-226.
- Schuler, R., Jackson, S. and Luo, Y. *Managing Human Resources in Cross-Border Alliances*, London: Routledge 2003.
- Smith, C. and Meiksins, P. 'System, Society and Dominance Effects in Cross-National Organisational Analysis', *Work, Employment and Society*, 9, 2, 1995 pp. 241-267.
- Streeck, W. 'German Capitalism: Does it Exist? Can it Survive?' in C. Crouch and W. Streeck (eds) *Political Economy of Modern Capitalism*, London: Sage 1997 pp. 33-54.
- Thory, K. 'The Internationalisation of HRM through Reverse Transfer: Two Case Studies of French Multinationals in Scotland', *Human Resource Management Journal*, 18, 1, 2008 pp. 54-71.
- Tregaskis, O., Glover, L. and Ferner, A. *International HR Networks in Multinational Companies*, International Research Report, London: CIPD 2005.
- UN World Investment Report: *Transnational Corporations, Extractive Industries and Development*, New York: United Nations 2007.
- Zhang, M. and Edwards, C. 'Diffusing "Best Practice" in Chinese Multinationals: the Motivation, Facilitation and Limitations', *International Journal of Human Resource Management*, 18, 12, 2007 pp. 2147-2165.
- Zou, H. and Ghauri, P. 'Learning through International Acquisitions@ The Process of Knowledge Acquisition in China', *Management International Review*, 48, 2, 2008 pp. 207-226.

**Table 1. The Incidence of Diffusion from UK Sites across Four Areas of HR**

	No	Yes, in a few parts of the firm	Yes, in major businesses	Yes, taken up globally	N
Pay and Perf Mgt	75%	15%	4%	6%	244
Training and Development	50%	30%	9%	11%	240
Emp Inv and Communication	72%	21%	3%	5%	236
Employee Consultation	82%	12%	4%	2%	238

Weighted data

**Table 2 – Descriptive Statistics of the Independent Variables**

Independent Variables	Number	Percentage / Mean Value
<b>National Origin</b>		
Origin - US	123	48%
Origin - France	24	9%
Origin - Germany	17	7%
Origin - Nordic	21	8%
Origin - Rest of Europe	32	12%
Origin - Japan	21	8%
Origin - Rest of World	20	8%
<b>Structure1</b>		
Int'l Division	171	66%
No int'l division	87	34%
<b>Structure2</b>		
Regional	209	81%
Not Regional	49	19%
<b>Diversification</b>		
Single or Dominant Product	90	35%
Several Products	165	65%
<i>Missing</i>	3	
<b>Standardisation</b>		
Standardised globally	80	32%
Standardised regionally	112	45%
Adapted at national level	55	22%
<i>Missing</i>	11	
<b>Linkages</b>		
Neither	40	16%
Foreign to UK	55	22%
UK to Foreign	12	5%
Both Directions	145	58%
<i>Missing</i>	6	
<b>Acquisitions</b>		
Acquisitions	106	41%
No acquisitions	152	59%
<b>Org Conduit 1</b>		
Info System	126	49%
No Info System	132	51%
<b>Org Conduit 2</b>		
HR Managerial Meets	166	64%
No HR Manager Meets	92	36%
<b>Org Conduit 3</b>		
No Staff sent form UK	100	39%
Staff sent from UK	154	61%
<i>Missing</i>	4	
<b>Org Conduit 4</b>		
Size of UK HR	Continuous	0.99
<b>Size</b>		
UK emp size (1,000 emps)	Continuous	1.59
<i>Missing</i>	3	
<b>Sector</b>		
Sector - Manufacturing	134	52%
Sector - Services	106	41%
Sector – Other	18	7%

N = 258, unweighted data

**Table 3 – Ordinal Regression Model: Pay and Performance Management**

Independent Variables	Beta Coefficients	Beta Coefficients	Beta Coefficients
Intercept – no diffusion	1.409 ***	1.341 **	2.226 ***
Intercept – a few parts	2.457 ***	2.431 ***	3.396 ***
<b>Size</b>			
UK emp size (by 1,000)	-0.008	-0.006	-0.014
<b>Sector</b> ( <i>ref cat – manufacturing</i> )			
Sector - Services	0.285	0.523	0.440
Sector – Other	0.584	0.595	0.581
<b>National Origin</b> ( <i>ref cat – US</i> )			
Origin - France	-0.522	-0.293	-0.165
Origin - Germany	0.103	0.247	0.417
Origin - Nordic	0.391	0.731	1.101 *
Origin - Rest of Europe	0.639	0.818 *	1.287 ***
Origin - Japan	-0.234	-0.108	0.734
Origin - Rest of World	0.877	1.209 **	1.590 ***
<b>Structure1</b> ( <i>ref cat – int'l division</i> )			
No int'l division		-0.264	-0.307
<b>Structure2</b> ( <i>ref cat – regional</i> )			
Not Regional		-0.250	-0.089
<b>Diversification</b> ( <i>ref cat - several Products</i> )			
Single or Dominant Product		-0.380	-0.236
<b>Standardisation</b> ( <i>ref cat - standardised globally</i> )			
Standardised regionally		0.195	-0.008
Adapted Nationally		-0.688	-0.835
<b>Linkages</b> ( <i>ref cat – neither</i> )			
Foreign to UK		-0.394	-0.427
UK to Foreign		-0.324	-0.517
Both Directions		0.203	0.121
<b>Acquisitions</b> ( <i>ref cat - no acquisitions</i> )			
Acquisitions		-0.078	0.019
<b>Org Conduit1</b> ( <i>ref cat - no info system</i> )			
Info System			0.647 *
<b>Org Conduit2</b> ( <i>ref cat - no HR Managerial Meetings</i> )			
HR Managerial Meetings			0.615
<b>Org Conduit3</b> ( <i>ref cat – no staff sent</i> )			
Staff sent from UK			0.505
<b>Org Conduit4</b>			
Size of UK HR			0.214 ***
N	223	223	223
Model Chi-square	7.240	16.948	33.787 **
Step Chi-Square	-	9.708	16.839 ***
Nagelkerke R <sup>2</sup>	4.1%	9.5%	18.3%

Levels of significance denoted by stars: \* = 10% level, \*\* = 5% level, \*\*\* = 1% level

**Table 4 – Ordinal Regression Model: Training and Development**

Independent Variables	Beta Coefficients	Beta Coefficients	Beta Coefficients
Intercept – no diffusion	-0.001	0.253	0.516
Intercept – a few parts	1.360 ***	1.721***	2.105 ***
<b>Size</b>			
UK emp size (by 1,000)	0.004	0.002	-0.018
<b>Sector</b> ( <i>ref cat – manufacturing</i> )			
Sector - Services	-0.080	0.157	0.093
Sector – Other	0.606	0.603	0.460
<b>National Origin</b> ( <i>ref cat – US</i> )			
Origin - France	0.078	0.259	0.377
Origin - Germany	0.295	0.605	0.699
Origin - Nordic	-0.167	0.265	0.336
Origin - Rest of Europe	0.119	0.296	0.502
Origin - Japan	-0.824	-0.787	-0.122
Origin - Rest of World	0.545	0.957 *	1.197 **
<b>Structure1</b> ( <i>ref cat - Int'l Division</i> )			
No int'l division		-0.292	-0.221
<b>Structure2</b> ( <i>ref cat – Regional</i> )			
Not Regional		-0.397	-0.369
<b>Diversification</b> ( <i>ref cat - Several Products</i> )			
Single or Dominant Product		-0.495 *	-0.349
<b>Standardisation</b> ( <i>ref cat - Standardised globally</i> )			
Standardised regionally		0.350	0.111
Adapted Nationally		-0.163	-0.243
<b>Linkages</b> ( <i>ref cat – Neither</i> )			
Foreign to UK		-0.761	-0.936 *
UK to Foreign		0.002	-0.294
Both Directions		0.427	0.158
<b>Acquisitions</b> ( <i>ref cat - No Acquisitions</i> )			
Acquisitions		0.351	0.374
<b>Org Conduit1</b> ( <i>ref cat - No Info System</i> )			
Info System			0.100
<b>Org Conduit2</b> ( <i>ref cat- No HR Managerial Meets</i> )			
HR Managerial Meets			0.898 ***
<b>Org Conduit3</b> ( <i>ref cat – no staff sent</i> )			
Staff sent from UK			0.835 ***
<b>Org Conduit4</b>			
Size of UK HR			0.134 **
N	218	218	218
Model Chi-square	7.008	28.831 **	51.076 ***
Step Chi-square	-	21.823 ***	22.245 ***
Nagelkerke R <sup>2</sup>	3.6%	14.2%	23.9%

Levels of significance denoted by stars: \* = 10% level, \*\* = 5% level, \*\*\* = 1% level

**Table 5 – Ordinal Regression Model: Employee Involvement**

Independent Variables	Beta Coefficients	Beta Coefficients	Beta Coefficients
Intercept – no diffusion	0.430 *	0.574	1.441 *
Intercept – a few parts	2.174 ***	2.355 ***	3.356 ***
<b>Size</b>			
UK emp size (by 1,000)	-0.007	-0.017	-0.029
<b>Sector</b> ( <i>ref cat – Manufacturing</i> )			
Sector - Services	-0.612 **	-0.699 *	-0.872 **
Sector – Other	-0.342	-0.605	-0.696
<b>National Origin</b> ( <i>ref cat – US</i> )			
Origin - France	0.396	0.479	0.435
Origin - Germany	-0.212	-0.075	0.142
Origin - Nordic	-1.017	-1.077	-0.856
Origin - Rest of Europe	-0.178	-0.123	0.138
Origin - Japan	-2.093 **	-2.139 **	-1.384
Origin - Rest of World	-0.442	-0.294	-0.088
<b>Structure1</b> ( <i>ref cat - Int'l Division</i> )			
No int'l division		0.186	0.186
<b>Structure2</b> ( <i>ref cat – Regional</i> )			
Not Regional		-0.200	-0.171
<b>Diversification</b> ( <i>ref cat - Several Products</i> )			
Single or Dominant Product		0.028	0.222
<b>Standardisation</b> ( <i>ref cat - Standardised globally</i> )			
Standardised regionally		-0.029	-0.249
Adapted Nationally		-0.097	-0.233
<b>Linkages</b> ( <i>ref act – Neither</i> )			
Foreign to UK		-0.385	-0.491
UK to Foreign		-1.601	-1.759
Both Directions		0.087	-0.126
<b>Acquisitions</b> ( <i>ref cat - No Acquisitions</i> )			
Acquisitions		0.595 *	0.622 *
<b>Org Conduit1</b> ( <i>ref cat - No Info System</i> )			
Info System			0.808 **
<b>Org Conduit2</b> ( <i>ref cat – No HR Managerial Meetings</i> )			
HR Managerial Meetings			0.779 *
<b>Org Conduit3</b> ( <i>ref cat – no staff sent</i> )			
Staff sent from UK			0.277
<b>Org Conduit4</b>			
Size of UK HR			0.162 ***
N	215	215	215
Model Chi-square	12.831	19.945	38.213 **
Step Chi-square	-	7.114	18.268 ***
Nagelkerke R <sup>2</sup>	7.4%	11.3%	20.8%

Levels of significance denoted by stars: \* = 10% level, \*\* = 5% level, \*\*\* = 1% level



**Table 6 – Ordinal Regression Model: Employee Consultation**

Independent Variables	Beta Coefficients	Beta Coefficients	Beta Coefficients
Intercept – no diffusion	0.840 ***	1.107	2.620 ***
Intercept – a few parts	2.130 ***	2.436 ***	4.086 ***
<b>Size</b>			
UK emp size (by 1,000)	0.009	0.001	-0.015
<b>Sector</b> ( <i>ref cat – Manufacturing</i> )			
Sector - Services	-0.772 **	0.770 *	-1.000 **
Sector – Other	-0.914	-1.176	-1.267
<b>National Origin</b> ( <i>ref cat - US</i> )			
Origin - France	0.091	0.374	0.302
Origin - Germany	-0.674	-0.440	-0.208
Origin - Nordic	-0.574	-0.548	-0.255
Origin - Rest of Europe	-0.018	0.143	0.720
Origin - Japan	-1.746 *	-1.649	-0.408
Origin - Rest of World	-1.526	-1.158	-1.113
<b>Structure1</b> ( <i>ref cat - Int'l Division</i> )			
No int'l division		-0.275	-0.435
<b>Structure2</b> ( <i>ref cat – Regional</i> )			
Not Regional		-0.530	-0.432
<b>Diversification</b> ( <i>ref cat - Several Products</i> )			
Single or Dominant Product		0.085	0.540
<b>Standardisation</b> ( <i>ref cat - Standardised globally</i> )			
Standardised regionally		-0.271	-0.526
Adapted Nationally		-0.246	-0.464
<b>Linkages</b> ( <i>ref cat – Neither</i> )			
Foreign to UK		-0.376	-0.250
UK to Foreign		-0.563	-0.669
Both Directions		0.573	0.561
<b>Acquisitions</b> ( <i>ref cat - No Acquisitions</i> )			
Acquisitions		0.549	0.601
<b>Org Conduit1</b> ( <i>ref cat - No Info System</i> )			
Info System			1.157 ***
<b>Org Conduit2</b> ( <i>ref cat - No HR Managerial Meets</i> )			
HR Managerial Meets			1.012 **
<b>Org Conduit3</b> ( <i>ref cat – no staff sent</i> )			
Staff sent from UK			0.555
<b>Org Conduit4</b>			
Size of UK HR			0.197 ***
N	216	216	216
Model Chi-square	12.002	21.043 **	43.290 ***
Step Chi-square	-	9.041	22.247 ***
Nagelkerke R <sup>2</sup>	7.6%	13.1%	25.6%

Levels of significance denoted by stars: \* = 10% level, \*\* = 5% level, \*\*\* = 1% level

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