EXAMINING VARIETY OF CAPITALISM PERSPECTIVE ON THE GLOBALISATION OF BUSINESS OPERATION

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Abstract

This paper analyses links between intra-organizational adaptation and institutional variation across countries. Using the varieties of capitalism viewpoint, we examine strategic options open to multinational firms operating simultaneously in liberal market economies and coordinated market economies. A holistic perspective is achieved by implementing an original 'index of institutional impact.' Data are drawn from a survey of the subsidiaries of German firms in the UK in 2007. The results suggest that pressure towards accepting local practices for multinational firms varies across the dimensions in which firms resolve coordination problems, inciting speedy convergence in some, but allowing for maintaining distinctive practices in other.

Keywords: convergence/divergence; institutional context; globalization, MNC-host country relations

INTRODUCTION

The last decade witnessed the emergence of a new influential approach to the examination of international business that emphasises the role of the so-called social system of production incorporating such institutions as the educational system, the system of industrial relation, work organization and other socio-political factors contributing to the synergies between associations, groups and strata, constituting the modern industrial society (Hall and Soskice, 2001; Hollingsworth and Boyer 1997; Sabel and Zeitlin, 1997).

The important contribution of this concept is in stressing dissimilarities between different types of national economic systems (national capitalisms) and arguing that this distinction has important consequences in terms of how firms operate. This claim has serious implications for the debate on globalisation, putting pressure on the convergence thesis that alleges that there is a single best solution for organising labour, raw materials and capital in order to manufacture and distribute goods. The variety of capitalism (VoC) theory points at multiple institutional forces that perpetuate the diversity of business systems and the forms of business organization (Hall and Soskice, 2001; Hollingsworth, 1997; Whitley, 1992). It is argued that the pressures for convergence are contravened by idiosyncratic national institutional arrangements which are the outcome of specific historical pathways, interlinked in a complex whole and persistent over time (Hall, 1986; Lane, 1995; Whitley, 1998). It is further maintained that economic openness and international trade reinforce national diversity, by encouraging each country to specialise in what it does best (Streeck, 1999).

VoC approach offers a perspective on globalisation that goes beyond the standard set of strategic choices considered in business literature which is particularly relevant for firms simultaneously operating in two distinct institutional settings: liberal market economies (LMEs) and coordinated market economies (CMEs). Institutional differences between the two, it is argued, are big enough to influence the production regime in such major aspects as corporate governance and labour relations, organization of skill formation and company finance, the rules of company decision making, and inter-firm relations (for references see Höpner, 2005:333). This is bound to have consequences for multinationals originated in CMEs establishing branches in LMEs and vice-versa. There have been attempts in the literature to investigate these consequences, but so far analysis has been limited to HRM specific topics such as labour relations and employee representation (Ferner and Quintanilla, 1998, 2003; Ferner and Varul, 2000; Tempel, 2001; Ferner *et al.*, 2001; Tregaskis and Brewster, 2006; Tüselmann *et al.*, 2002, 2003, 2006; Von Glinow *et al.*, 2002).

This article goes beyond HRM and introduces a holistic perspective on company adaptation based on a refined set of analytical tools to divulge new nuances in cross-national comparison. Using survey data supplied by subsidiaries of German companies in the UK, we reveal the degree to which subsidiaries are forced to adapt to the host-country's institutional framework across the five key spheres in which firms resolve coordination problems, ranging from industrial relations to corporate governance. Our choice of countries is informed by the fact that Britain and Germany are customarily presented in the VoC literature as two principle archetypes of market economies positioned on the opposite ends of the institutional continuum: Britain is described as a foremost exponent of LME and Germany as the quintessential case of CME (Hall and Soskice, 2001). By choosing to look at parent firms and their subsidiaries we sought to increase the rigour of our analysis because these two categories of firms have a greater inherent potential to be very similar in business practices than any other two groups of firms, thus offering a very demanding test of the contentions implicit in VoC theory.

In order to quantify the findings from our survey we introduce an 'index of institutional impact'. We use it to examine quantitatively how close the behaviour of parent and subsidiary firms, operating in different types of market economy, is to each other and to the 'ideal' theoretical models of LME and CME behavioural patterns. We seek to achieve four main objectives. First, to establish whether companies acting in archetypal LME and CME settings truly exhibit the stereotypical characteristics that VoC literature accredits to them. Second, to gain a clearer picture of how organisational practices in subsidiaries differ from those in parent companies with a view to measuring the impact of business environment on business practices. Third, to unravel the forces and conditions that hinder or promote adaptation processes. Fourth, to identify elements of firm performance that are particularly sensitive to the influence of the host country institutional environment. This approach allows us to develop and test a number of hypotheses relevant to the debate on global conversion.

The paper is organised in the following manner: we begin by summarising the main theoretical arguments presented in literature and link them to our five hypotheses. We describe our data and methodology next, followed by the presentation and discussion of our empirical findings. We conclude in the final section.

CONCEPTUAL BACKGROUND AND HYPOTHESES

Varieties of Capitalism

When dealing with the ultimate effect of globalisation on national production regimes scholars offer a plethora of different predictions ranging from imminent global convergence of business practices (Cerny, 1996; Ohmae, 1995; Strange, 1996; Thatcher, 2004) to the perpetuation of the diversity of social systems of production (Albert, 1991; Berger and Dore, 1996; Craig and Douglas, 1992; Crouch and Streeck, 1997; Hall and Soskice, 2001b; Hollingsworth and Boyer, 1997; Schmidt, 2002; Zysman, 1996). Hall and Soskice's (2001) varieties of capitalism paradigm has established itself as one of the most influential conceptual framework within institutional literature addressing the issue of global convergence. It provides a simple and compelling rationale for the observation by Lange and Garrett (1985) that different political economies have their inherent logic.

Whilst traditional management literature often uses cultural distance as a measure of environmental complexity to examine strategy issues, the VoC approach focuses on national institutional frameworks as factors that incite firms to produce distinct corporate strategies. One of the most established typologies of capitalist systems based on institutional diversity was proposed by Soskice (1989, 1998) and Hall and Soskice (2001). It distinguishes between two systemic equilibria – liberal market economy (LME), such as that of Germany or the Scandinavian countries, and coordinated market economy (CME), such as that of the Anglo-Saxon countries, – on the basis of five ‘coordination dimensions.’ They are the industrial relations system, which determines the regulation of wages, working conditions and organisations representing labour and other employees; the employee relations regime that affects such domains as information sharing and employee representation; the system of training and education that governs the scope and availability of workforce skills and determines incentives to invest in general, industry- and firm-specific skills; the corporate governance system, which conditions firms’ access to different sources of external finance and the time horizon they adopt when planning investments; and finally the system of inter-firm relations, which is crucial for industry standard setting, regulating poaching of workers and technological exchange. These dimensions are interdependent and generate institutional complementarities (see Hall and Gingerich, 2004, for an empirical account of the strength of these complementarities).

Views similar to the VoC paradigm may be found in a large number of studies. Hollingsworth and Boyer (1997) have come the closest to VoC perspective when emphasising the role of the ‘social systems of production’; Esping-Andersen (1990) has made a noticeable contribution through the study of diverse welfare and labour market regimes in advanced capitalist countries whilst Crouch (1993) and Traxler (1995) pioneered the typologies of industrial relations systems.

Implications for Adaptation Processes

VoC theory maintains that institutional variation across nations is an important factor influencing firm behaviour and business practices because institutions are critical in determining the quality of the relationships the firm is able to establish internally (with own employees) and externally (with suppliers, clients, stakeholders, trade unions, business associations and governments) (Hall and Soskice, 2001:6). By introducing the idea of institutional complementarity (i.e., a specific interplay of institutions that create benefits in terms of corporate governance, labour relations, financial regimes, etc. that would not exist if the configuration of the institutional environment were different (Aoki, 2001)) as a powerful formative force, the VoC paradigm potentially adds new depth to the conventional explanations of the external expansion of firms provided by mainstream business literature: it suggests a scenario when the firms internationalise in order to gain from institutional complementarity that exists in a foreign country, but does not exist domestically. In its standard form, however, this paradigm does not deal with this issue explicitly. Rather it scrutinises the impact of national institutions on the organisational behaviour of indigenous firms, but it stops short of drawing definite implications for situations when companies establish branches in an institutional environment that contrasts the environment of their home country.

In principle, foreign branches may either emulate their parent companies, or adopt the behavioural pattern dominant among businesses in the host economy, or implement a model that combines the elements of the two archetypes of the market economy. Hall and Soskice (2001) give no indication as to which pattern may prevail, leaving the issue to be ultimately resolved by empirical enquiry. Yet the basic arguments of VoC theory suggest two important assumptions that may be used to construct a number of hypotheses for comparative analysis.

The first one addresses the issue of *why* foreign firms would be willing to adapt at all. According to VoC theory, prevailing institutional settings shape corporate strategy and, eventually, cost advantages. Accordingly, efficiency-maximising firms will gravitate ‘toward the mode of coordination for which there is institutional support’ (Hall and Soskice, 2001:9; see also DiMaggio and Powell, 1983, and North, 1990). It can be deduced from this that firms, among other reasons, may establish operations in other types of capitalism system in order to benefit from some particular aspect of the production regime that this system offers and that is absent or ineffective in the home-country because of the lack of institutional support. Thus, in CMEs firms from LMEs can be attracted by access to highly skilled labour; in turn, firms from CMEs may seek to benefit from institutional support for radical innovation available in LMEs (Soskice, 1997).

The second assumption deals with a *wider context* of adaptation stimuli faced by foreign companies abroad. This context reflects the fact that ‘countries exhibit distinct, historically determined national institutional equilibria that tie together a number of building blocks (such as the industrial relations, financial, corporate governance and vocational training systems) in a coherent fashion’ (Fioretos, 2001:219; see also: Crouch and Streek, 1997; Hollingsworth and Boyer, 1997; Kostova, 1999; Zysman, 1996). Hence, a foreign company willing to take advantage of certain institutional arrangement in the host country is likely to discover that the efficiency and strategic importance of a particular institution depends in fact on the whole subsystem of complementary institutional arrangements that this company will also have to embrace (Aoki, 1994; Giacobbe-Miller *et al.*, 2003; Kostova and Roth, 2002; North, 1992). VoC theory, therefore, gives a strong prediction that firms originating in CMEs and operating in LMEs (and *vice versa*) will seek to fully adapt to the institutional setting of the host country.

An Alternative Perspective on Adaptation Processes

There is a substantial body of literature that explicitly or implicitly contradicts the strong adaptation hypothesis suggested by the VoC concept. Most writings focus on the comparative institutional analyses of industrial and employee relations and provide evidence that, in fact, country-of-origin and host-country business characteristics blend together when companies operate in foreign institutional settings (Ferner and Quintanilla, 1998, 2003; Ferner and Varul, 2000; Tempel 2001). Studies on employee relations of German-owned subsidiaries in the UK (Beaumont *et al.*, 1990; Rosenzweig and Noria, 1994; Tüselmann *et al.*, 2002) do not discover a distinctive national pattern in their organisational behaviour. Guest and Hoque (1996) conclude that German subsidiaries in the UK differ strongly from the stereotypical German practice. Ferner *et al.*, (2001:107) find that UK-based German subsidiaries indeed adopt many standard ‘Anglo-Saxon’ business practices. At the same time Ferner and Varul (2000) and Tüselmann *et al.* (2002, 2003) demonstrate that German firms in the UK are not free from the influence of the German business system. This includes a management approach based on cooperative and harmonious relations with the workforce and willingness to offer information, consultation and negotiation rights over certain workplace issues.

What makes the evidence that foreign branches adopt a mingled approach to human resource management even more consequential is that this sphere of management is particularly deeply embedded in the national legal and cultural contexts, making it arguably more susceptible to following the adaptation route comparing with the management of, say, technology, finance or marketing. This suggests that multinational corporations are able to preserve organisational behaviour developed under a specific home-country institutional equilibrium by internalising some aspects of their business operation. In so doing, firms appear to be able to build quasi-institutions within the corporate hierarchy when institutions existing in the host-country prove unhelpful. Hence, multinational companies may be in a position to create their own tailor-made quasi-institutional environments, integrating best practice from their home base and the host-country market systems. Or, as Dunning and Bansal (1997) put it, the effect of a subsidiary's national culture is moderated by the unequivocal organisational culture, as evolved from its distinctive home-country setting. Therefore, and in the context of our two-country study,

> **Hypothesis 1:** *Companies expanding their businesses into other capitalisms adopt a mingled business form, comprising adaptation and internalisation elements.*

Drivers of Adaptation Processes

In its strong form VoC theory predicts that efficiency maximising firms will fully integrate into the prevailing institutional setup, suggesting that such parameter as company size, the degree of internationality of the parent company, company age and intra-firm coordination between subsidiary and parent can not be of particular importance for the adaptation process. By contrast, literature in international business studies tends to focus on numerous firm-specific drivers of adaptation processes and their impact on globalisation. Accordingly, in this paper we seek to investigate if the addition of some firm-specific factors can affect the VoC prediction on global convergence dynamics.

Business literature indicates that the size of the subsidiary matters for adaptation processes for at least two reasons. First, subsidiaries with large operation are likely to have a higher profile and as a result come under more severe public scrutiny and attract greater attention from local authorities. This is likely to make them more eager to 'blend' into the local institutional environment (Luo, 2006). Second, in line with Whitley (1998:464) we expect that, other things equal, 'the more a company's key assets and activities are located in a distinctive and different environment from its domestic one, the more likely it will adapt its structures and strategies to the prevalent pattern in that type of business system.' Also, bigger subsidiaries are more likely to have the necessary economies to have their own policies, for example, a subsidiary with its own human resource department is more likely to pursue a self-reliant employment policy. We hypothesise therefore that

Hypothesis 2: *Larger subsidiaries of foreign firms show more alignment with the norms of the host country*

Multinational firms increasingly focus on centrally designed policies to ensure cohesive corporate culture and conduct across international affiliates (Coller and Marginson, 1998). One of the key sources of power that multinational corporations hold is the formal authority to set up company-wide policies and strategies. Empirical studies have shown that MNCs threaten subsidiaries with disinvestments or curtailment of future investments to pressure local management into concessions with respect to work arrangements and organisational practices (Marginson *et al.*, 1995). In turn, intense competition for foreign investment forces national governments to relax local standards to accommodate the desire of the larger of international firms to streamline certain business practices across the corporation (Henisz and Zelner, 2005). Under these circumstances internal co-ordination may help international firms to maintain some degree of independence from local practices. Consequently we content, taking the number of foreign branches as a proxy for the size of the firm[1], that

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[1] At the intuitive level hypotheses 2 and 3 may appear to be somewhat contradictory: both variables are size-related, but predict opposite outcomes. In fact, hypothesis 2 relates to the size of a single subsidiary and therefore is more a reflection on the local conditions under which the subsidiary operates. In turn, hypothesis 3 relates to the multinational firm in general and its ability to build quasi-institutional internal coordination to circumvent local adaptation pressures.

Hypothesis 3: *Subsidiaries of multinational companies with a large number of branches in different countries show more independence from the norms in the host country*

We further seek to establish whether adaptation, other things equal, is a function of the time a subsidiary operates in a foreign institutional environment. This analysis is key to convergence research. It is implicit in the VoC theory that firms sooner or later fully adapt to the local institutional setup in order to maximise the benefits that such a setup provides. With time foreign subsidiaries are likely to become more entwined with indigenous stakeholders such as regional authorities, locally recruited personnel, and the local community and, consequently, show gravitation toward 'local ways of doing things.' If this assumption is correct, then the time factor would contribute to divergence rather than convergence of parent-subsidiary business practices. Hence we test the following hypothesis:

Hypothesis 4: *Branches that were established a long time ago show more conformity with the norms in the host country*

Finally, the convergence thesis suggests that business practices of affiliates, established in contrasting in VoC sense types of capitalism, should be determined predominantly by parameters intrinsic to the firm, necessitating some dominance of internal coordination over coordination via the host country's institutional environment. Internal coordination can take a variety of forms, from appointing subsidiary management to placing parent company representatives among subsidiary staff other than management. Other indicators of the intensity of parent-subsidiary co-ordination are frequent reporting and personal visitation (Egelhoff 1984; Hulbert and Brandt 1980), and the degree of subsidiary's financial dependence on the parent. Accordingly, we postulate that:

> **Hypothesis 5:** *A denser interaction between parent and subsidiary reduces the depth of adaptation to local business pattern on the part of the subsidiaries*

DATA AND METHODOLOGY

The Sample

The empirical foundation of our study is a postal survey of German subsidiaries in the UK based on the March 2006 edition of the database 'German Subsidiary Companies in the United Kingdom' compiled by the German-British Chamber of Commerce & Industry (BGCC). With 1,320 entries this is the most comprehensive database of such type.

The VoC centres on production regimes and mostly ignores governmental organisations, banks and other financial institutions. To align our sample with the conceptual underpinnings of the VoC literature we therefore had to make corrections to the database. Specifically, we excluded form our sample financial firms and firms completely or partially owned by the government (as best as we can identify them), enterprises in public administration, in the defence and compulsory social security sector, in education and health sectors, private households with employed persons, and extra-territorial organisations and bodies. Further one hundred companies had to be taken out at a later stage because their addresses turned out to be invalid. Ultimately the survey target population was set at 1,133.

A pre-tested questionnaire was sent to CEO, COO or Head of Corporate Development of the sampled subsidiary firms and enquired about business characteristics present in both subsidiary and parent firms. Potential respondents were assured of anonymity and confidentiality in treating their responses. A total of 149 usable replies were received, generating the response rate of 13.2%. While this rate is lower than would be desired, it is not unusual for large-scale mail survey research (De Pelsmacker and Janssens, 2007; Dillman, 2000). We were unable to do a follow-up mailing with non-respondents because of the condition of anonymity.

To compensate for a relatively low response rate we paid special attention to verifying the representativeness of the responses we received. We compared the profile of responded firms with the profile of all German subsidiaries in the UK in terms of the number of employees, subsidiary age and the sector of operation. For the first two parameters the profiles proved to be very similar, indicating that the sample was reasonably representative of the whole population. At the same time the share of manufacturing firms among our respondents was lower than in the BGCC database (45.0% against 63.8%). However, consequent analysis showed that the bias from the under-representation of manufacturing firms was such that it worked against our results and therefore only strengthened any significant correlations that we detected. One other limitation of the survey was its reliance exclusively on respondents working in subsidiaries rather than parent companies. This design was chosen because the anonymity provisions that we had to offer to achieve a respectable response rate would not allow us to match parent firms with their subsidiaries. There is evidence that justifies our approach. First, the respondents were employees who, because of their position within the company (COO, CEO, Head of M&A), can be expected with a great degree of certainty to be suitably cognisant of business practices of the parent firm. Second, the fact that some questions related to parent firms were left unanswered suggests that respondents were careful to provide information which they believed to be reliable. Finally, we considered the likelihood that the nationality of the respondents could have affected the feedback due to differences in experience and backgrounds. We found no such evidence for the firms in our sample. Nevertheless, at the stage of analysis, we introduced some additional checks to make sure that our conclusions accounted for the possible consequences of these potential biases.

Index of Institutional Impact

To position our respondents within the reference points of VoC theory we conceived and designed an original ‘index of institutional impact’. Novel in this research field, this index makes it possible to convert the qualitative characteristics of subsidiary and parent companies into a format that can be used in quantitative analysis.

The index of institutional impact (S_INST for subsidiary and P_INST for parent firms) is calculated by attributing the value of one for each of 25 business characteristics (Table 1) that the VoC paradigm sets out as typical for firms in coordinated market economies and therefore has the range from zero to 25. We treated each characteristic as a dependent variable. The 25 variables, each bearing equal weight following the conventions of the VoC theory (Gaur et al 2007), were split into five major operational domains - industrial relations (IR), training & education (TE), employee relations (ER), corporate governance (CG), and inter-firm relations (IFR) - each containing five characteristics. It is important to stress at this stage that the archetypical LME firm as well as the archetypical CME firm is an abstraction. The VoC concept in its description of the archetypical firm synthesises the most typical features of a relevant type of capitalism, which in reality are likely to be spread across a number of firms with the consequence that the maximum institutional impact score is improbable to be shown by any particular company. Every German firm may not quite fit the VoC description of CME and yet on the whole, according to Hall and Soskice, there is no better example of CME in Europe than Germany because in this country certain relations between firms, investors and stakeholders are sufficiently dominant (although not necessarily universal) to distinguish the production regime there from certain other countries in a substantive way. The abstract nature of the LME/CME firm has prompted us to use in this paper maximum theoretical scores of 0 and 1 as descriptors for every coordination dimension rather than finding out the actual score for every characteristic in, for example, UK as a representative of LME by looking at a sample of British companies. Establishing methodology for creating such a sample is a challenging research topic in its own right, which, to our knowledge, has not yet been comprehensively addressed in the literature. Consequently, in this study a score of zero in a particular category signifies that, in terms of this activity, the firm fits perfectly the description of an archetypical LME firm; the score of five portrays an archetypical CME pattern. The overall score of zero implies that the business practices of the firm in question were entirely in harmony with such practices as attributed by the VoC theory to the archetypal LME firm. Respectively, the index of 25 positions the company overall as an archetypal CME firm.

To calculate this index it was necessary to have valid responses covering each of the 25 characteristics. As described earlier, in reality several respondents missed out some of the required characteristics. To address this deficiency we introduced an alternative version of our institutional index called 'institutional impact ratio' (S_INST_RATIO for each subsidiary and P_INST_RATIO for each parent firm). This was formed by adding one for every valid response and then dividing the sum by total number of responses for each of five categories. The range of the impact ratio is from zero to one. For example, if out of five characteristics constituting the category 'industrial relations' a respondent provided information about only three characteristics, which were encoded as 1, 1 and 0, the value of the ratio for 'industrial relations' would equal 2:3=0.67. As with the index of institutional impact, a zero impact ratio indicated that the business practices of the company corresponded to the LME archetype, and five to the CME archetype. The introduction of the impact ratio increased the number of responses which could be used in our quantitative analysis, increasing the statistical power of our findings.

When calculated for an individual firm, both indices can be used as indicators of how close firm behaviour is to the ideal LME or CME type of behaviour and therefore serve as a measure of adaptation by foreign firms to the host-country environment. They also facilitate an in-depth understanding of how organisational practices in subsidiaries differ from those in parent companies. Finally, the indices make it possible to evaluate the degree of adjustment in each of the five categories described above, rather than just industrial and employee relations processes, to which prior research has been constrained.

*** Draw Table 1 about here ***

Explanatory Variables and Controls

Variable and controls are described in Table 2. Hypothesis H2 requires the introduction of firm size as an explanatory parameter. We measure firm size through the natural logarithm of the total number of employees in the parent firm (P_FIRMSIZE) and subsidiary (S_FIRMSIZE) at the time of survey. Our hypotheses further suggest that the dynamics of the adaptation process may be associated with the firm's age and internationality. To proxy for overall firm internationality, we introduce variable P_COUNTRIES that measures the number of countries the respondent company operates in on the day of the survey. For age we establish explanatory variable LOG_S_AGE and control variable LOG_P_AGE measured as the natural logarithm of the number of years since the subsidiary and parent, respectively, were founded. By applying logarithmic transformations we ensure a tighter spread of variables and prevent extreme outliers from distorting our results.

*** Draw Table 2 about here ***

Finally, we use S_REPRESENT as the measure of the relative intensity of representation of parent company individuals in subsidiary management, line management and staff. The index is formed by adding one for each of the following: (a) subsidiary management is not recruited exclusively locally but at least partly installed by the parent firm, (b) parent company representatives can be found on the subsidiary's management board, (c) parent firm representatives hold line management functions in the subsidiary firm, and (d) parent company representatives are among subsidiary staff other than management. A higher index implies stronger parent company involvement in subsidiaries’ day-to-day activities. What is more, we create a dummy for subsidiary’s relative dependence on special purpose financing by the parent firm in the recent past (S_FINNEED). It equals one if in financial years 2004-2006 the subsidiary experienced negative net earnings and/or experienced situations in which it relied on special purpose parent firm financing.

Our literature review also indicated that the dynamics of the adaptation process may be influenced by industry affiliation and the main line of business. To control for the former, we assign the value of one to dummy variable S_MANUF to firms in the manufacturing sector (the reference category was ‘services and other’[2]). To account for the latter, we establish the dummy control variable S_PROD that takes the value of one if the subsidiary acts as a production facility (the reference category is ‘other’).

RESULTS AND ANALYSIS

We introduce the results in four steps. First, we summarise some basic statistics relevant to our hypotheses. Second, we present regressions on the cross-section of 149 subsidiary companies that control for industry, characteristic of establishment, subsidiary and parent company age and size (Tables 6). Third, we test the complementarities pertained to the logic of coordination within parent and subsidiary firms. Finally, we discuss the robustness of our results to various alternative measurement and specification strategies.

Simple Statistics

Tables 3 and 4 provide the statistical foundation for two general observations particularly important to the topic of this paper. First, with the mean institutional impact index of 11.27 (or 0.43 in its ratio specification) German subsidiaries in the UK achieve notably lower scores than their German parents (16.88 impact score or 0.69 ratio). The differences are statistically significant (at $P \leq 0.01$) and consistent across all index categories. These results demonstrate that, in VoC terms, the behavioural pattern of subsidiaries in our sample is closer to the archetypal LME kind of firm than their respective

[2] We decided on having just two categories, manufacturing and service, after tests of various industry dummies in our regressions showed no significant results.

parent firms, thus supporting H1 and suggesting that multinational firms respond to institutional forces existing in the host countries.

Contrary to the implicit prediction of VoC theory, the actual range of individual index scores proved to be surprisingly wide. For German subsidiaries scores varied from 3 to 17 (or 0.12 to 0.79 in the ratio specification). One way of interpreting this spread as suggested by literature (Ferner and Varul, 2000; Tüselmann *et al.*, 2002) is to regard it as the sign of the permissiveness of the contemporary UK institutional arrangements that allows parent companies to mould subsidiary practices relatively freely in the image of their own practices. However, the range of institutional impact indices for the parent firms, from 7 to 22, is equally wide, indicating that even within a home environment business organization may be quite free of institutional pressures. However, we are not inclined to give too much weight to this conclusion because of the limitations of our survey: we had to rely on the responses of the top managers of British subsidiaries, some of whom might not possess full information about their parent companies. In fact, a small standard deviation for the mean score for both parent firms in Germany and their subsidiaries in the UK points at the existence of a prevalent model of behaviour in line with the prediction of the VoC theory.

The second important observation from Tables 3 and 4 is that institutional impact scores vary significantly for each of the five categories of business characteristics set out by the VoC paradigm. This finding emphasises the point made earlier that the study of adaptation processes should not be restricted to just IR/ER area, but requires a comprehensive approach. Our data show that the greatest difference between German firms and their British subsidiaries is in the industrial relations and inter-firm relations categories[3]. This result does not come as a surprise since industrial and inter-firm relations are particularly dependent on such institutions as industry-wide employers associations and trade unions, which historically are more prevalent in Germany than in Britain (Rigby *et al*, 2004). By contrast, parent and subsidiary practices emerge as almost identical in the sphere of employee relations, highlighting the pervasive nature of the co-operative employee relations style typical of CME capitalism as described in HRM literature (Dickmann, 2003; Ferner *et al.*, 2001; Tüselmann *et al.*, 2006).

*** Draw Table 3 about here ***

To address H2 we group subsidiaries according to the number of employees (S_FIRMSIZE) relative to the sample median value (Table 4, Panel A). We classify firms as 'big' if subsidiary size is above the sample median subsidiary size, and as 'small' if otherwise. Across all index categories and for both versions of the institutional impact index, the scores for 'small' subsidiaries are distinctly lower than the scores for 'big' subsidiaries. This is the evidence that contradicts H2 as, other things equal, the business customs of smaller

[3] One of the issues with the inter-firm relations (IFR) category in the context of our research is the validity of parent-subsidiary comparison. Possible doubts reflect the fact that the role of the parent firm is by default significantly different from the role of the subsidiary. To address this concern we surveyed a small control sample of British parent firms and their German subsidiaries. We found that for our control sample IFR scores for parents and subsidiaries were very similar in marked contrast to our results for German parents and subsidiaries. This result increases the likelihood that IFR score differentials are predominantly driven by non role-related factors.

subsidiaries are generally more aligned with the host-country institutional settings than that of bigger subsidiaries. The differences are statistically significant (at $P \leq 0.01$) for the overall index, as well as for industrial relations, training & education, and inter-firm relations categories. There are a number of possible explanations. First, smaller firms could be more dependent on local conditions while bigger firms are likely to be more exposed to supranational public scrutiny and legislation. Thus, European Works Council Directives and other harmonised regulation across the EU are usually mandatory exclusively for companies fulfilling certain minimum size criteria but voluntary for others. Second, subsidiaries of smaller size are more likely to be set up by smaller parent firms which are also likely to lack the scope of internationalisation that allows to derive efficiencies from operating centralised IR, ER, or TE schemes. Consequently there is less resistance on the part of subsidiaries towards adapting local host-country practices.

*** Draw Table 4 about here ***

Calculations in Panel B of Table 4 are similar to those in Panel A, except that now we categorise subsidiary and parent firms according to the overall degree of internationality of the parent measured by P_COUNTRIES. We classify firms as ‘more international’ if the number of countries in which the company operates is greater than the sample median and as ‘less international’ otherwise. For both index specifications and across all index categories except corporate governance subsidiaries of less international companies have lower institutional index scores than subsidiaries of more international companies, other things equal. The difference is statistically significant (at $P \leq 0.01$) for training & education, as well as for the institutional impact ratio overall. This suggests that the subsidiaries of big multinationals are more likely to implement centralised training & education schemes transferred from abroad. The results are supportive of H4 and especially important in respect to our earlier postulation that firms may be able to mediate their exposure to host country institutional pressures through some internally created quasi-institutional frameset in order to cope with a greater variety of distinctive local practices.

In Panel C of Table 4 we examine whether branches that were established for a longer period of time show more conformity with local rules. We classify firms as ‘established’ if the age of the subsidiary (LOG_S_AGE) is above the sample median subsidiary age, and as ‘new’ if otherwise. According to our data, across all index categories except corporate governance and employee relations ‘established’ UK subsidiaries exhibit higher institutional index scores than ‘new’ firms, i.e., ‘established’ subsidiaries are closer to the home (German) model than ‘new’ firms. This result is statistically significant (at $P \leq 0.05$) for the index overall and is supportive of convergence arguments. This finding contradicts H4 because it suggests that the country of origin effect does not weaken over time. We have also compared the institutional indices of the parent companies of ‘established’ and ‘new’ subsidiaries. Interestingly, the parents of ‘established’ subsidiaries turned out to have comparatively higher scores themselves. This refers us to the view expressed in literature (Doellgast and Greer, 2007) that there is a contrast in general business practices between ‘old economy’ German companies and the newer generation of German businesses. The former are seen to be trapped in the rigid routines developed under the strong influence of union movement in the second half of the 20th century; the latter have matured in the period of diminishing union membership and influence and increasing globalisation. Comparison between old and new subsidiaries and their parents reveals one other interesting feature: the distance between the scores of subsidiaries is smaller than the distance between the scores of parent firms. This can be seen as a result that supports H1 as the smaller difference between subsidiaries may be attributed to the mediating effect of the host country institutions.

Regression Analysis

The presence of correlation between firm size, age and internationality (see Appendix 1 for the table of correlations) required that the results of simple statistical tests be tested for ‘omitted variable bias.’ Consequently, we applied multiple regression analysis with subsidiary institutional impact index scores as dependent variable (Table 5). We did two series of calculations: one with the difference between parent and subsidiary institutional index scores as dependent variables and the other with subsidiary institutional impact index scores as dependent variable. The results were broadly similar, so we report the outcomes of the second series (Table 5). For all cumulative index scores and each individual index category we tested for hypotheses H2, H3 and H4 by setting explanatory variables to subsidiary size, subsidiary age, overall company internationality, parent-subsidiary interaction, and the relative power that company internal practices exert over host country institutional forces, as represented by parent institutional impact index scores. We subjected our regressions to a set of control variables as described earlier. It is worth mentioning that in terms of R-squared the explanatory power of our regressions compares favourably with similar research done previously by other authors (Tüselmann *et al*., 2006).

*** Draw Table 5 about here ***

The explanatory variable age (LOG_S_AGE) is statistically significant only in the case of the institutional impact index ratio for industrial relations. In other words, German-owned UK subsidiaries are likely to replace some LME-like industrial relations routines characteristic of the British institutional environment with CME-like routines akin the German pattern as they mature. This finding is in contradiction with H4 and indicates that German subsidiaries tend to gravitate in the long term towards a compound CME/LME industrial relations model rather than the standards of the host country.

The impact of subsidiary size (S_FIRMSIZE) is statistically significant positive for one or both forms of the institutional impact index for all dependent variables except for employee relations and corporate governance. The results are consistent with our earlier findings from Table 3 in that they contradict H2: bigger subsidiaries are farther from the archetypal LME procedures in terms of industrial relations, training & education, and inter-firm relations, other things equal. At the same time, subsidiary size does not meaningfully influence subsidiary approaches to employee relations and corporate governance. Remarkably, internationality of the parent company (P_COUNTRIES) does not add meaningfully to the explanation of subsidiary institutional impact index scores except for the training & education category. The results are cautiously supportive of H3 and confirm our earlier supposition that highly internationalised firms are likely to impose centrally designed policies.

The results for the variable P_INST (parent institutional index) deserve special mention. This index has particularly strong statistical significance in relation to such dependent variables as employee relations, training & education, and corporate governance in subsidiaries, exactly the variables that we previously found least dependent on subsidiary size and age. This confirms our earlier inference that the influence of parent firms' practices is likely to be the strongest in these three categories because of their importance for maintaining coordination within organisations. At the same time the statistical insignificance of P_INST for industrial relations and inter-firm relations may be interpreted as suggesting that in these categories host country institutional determinants prevail over firms internal practices in shaping business routines, although more research needed to arrive at firm conclusions.

Finally, contrary to our expectation expressed in H5, both sets of regressions reveal that intensive interaction between parent firms and their subsidiaries does not seem to reduce the degree to which the latter adopt the local business pattern.

Complementarities across coordination spheres

Some recent publications on VoC seek to make the postulates of this concept more accommodating towards the complexities of the real world by maintaining that VoC approach is more about certain persistent differences in the logic of coordination within national production regimes and not necessarily about the persistence of a particular set of specific institutions. In this interpretation VoC paradigm acquires some dynamism, the capacity to accept, without contradicting itself, changes in specific institutions, or even new combinations of firm-level practices, as long as the overall character of coordination within the systems remains the same (Hall, 2007).

Our results have shown that the impulse towards adaptation reveals itself with varying strength across the five spheres in which, according to VoC theory, firms resolve coordination problems in response to the prevailing institutional setup. Moreover, our study has highlighted the fact that parent firms' own practices may be the dominant influence in some coordination spheres (employee relations, corporate governance, training & education) whilst host country institutional factors in others (industrial relations, inter-firm relations). These differences, however, may have different causes: they may be either explained by changes in existing national institutions or seen as signs of firms' ability to undermine the complementarities in institutional systems by combining home and host country institutional characteristics into a quasi-institutional inter-firm framework. A way to find out is to check the correlation coefficients among the five index categories. High values would imply that complementarities across coordination spheres are high and that firms choose distinct coordination equilibria along the institutional continuum.

Table 6 presents correlation coefficients among institutional index scores across the five coordination dimensions for subsidiary firms in our sample. The correlation coefficients reveal noticeably weak complementarity: for the subsidiary firms only inter-firm relations and industrial relations, and inter-firm relations and training & education are significantly complementary in the VoC sense. Overall our results suggest that MNEs manage to create a multitude of coordination variants at the subsidiary level, which puts in doubt the relaxed VoC contention that firms operating in foreign capitalisms must at least adhere to the inherent logic of coordination of the host country.

Robustness

In this subsection we briefly describe the results from our robustness checks. One major concern was that our size variables S_FIRMSIZE and P_FIRMSIZE could be biased towards just one aspect of firm's operation, the number of employees. It would be beneficial to test the robustness of our results by introducing an indicator that offered a different perspective on company size. We achieved this by using turnover figures as a financial proxy for company size. We established that such substitution did not change our results; in fact with this choice of specification they turned out to be even more statistically significant.

A related point deals with the inherent crudeness in measuring subsidiary-parent interaction, using S_REPRESENT. To compensate we used the frequency with which subsidiaries report financial results to their parent as an alternative means of measuring parent-subsidiary interaction. Reporting frequency takes the value 0, 1, 2, or 3 if reporting is annual, semi-annual, quarterly or more frequent, respectively. Similarly to S_REPRESENT, reporting frequency did not add meaningfully to the explanation of subsidiary institutional impact scores.

To address our concern that the responses might be biased by the nationality of the respondent we looked at correlation between the parent-subsidiary interaction variable (on the assumption that higher scores increases the likelihood that an expatriate is on the board or in a management position and responded to the survey) and the subsidiary institutional index scores. No significant correlated was revealed.

The final check was to see how our results would be affected by the exclusion of small and micro firms from the sample. This was necessary to address the opinion existing in literature that firms with very few employees were likely to behave in an unorthodox manner (Tüselmann *et al.*, 2006). Consequently, we repeated our analysis for the sample that included only firms with the number of employees of 21 and above. Again, the results we obtained were very similar to the ones presented in the previous section.

CONCLUSIONS

This paper investigated the organisational behaviours and strategies of German owned subsidiaries in the UK against the background of the ongoing debates on global convergence and the embeddedness of national institutional frameworks. Our objective was to establish whether business practices across various types of capitalisms really differ as suggested by the VoC paradigm and thus to corroborate the proposition that national institutional systems exert a significant influence on business practices even in today's seemingly globalised world. The VoC theory, by stressing the role of national institutions, puts into question the assertion that the world is drifting into a global equilibrium of business practices. We pursued our objective by comparing the organisational behaviour of parent firms in Germany (CME) and their subsidiaries in the UK (LME) rather than through the comparison of indigenous German and British firms on the assumption that parent firms and their subsidiaries have a greater inherent potential to be similar in business practices than any other two groups of firms. The chosen comparison, therefore, represented a very demanding test of the 'power' of national institutional system in which this 'power' was confronted with the 'power' of intra-organisational quasi institutional set-ups that exist within international firms. To implement our analysis we created an original index of institutional impact that made it possible to scrutinize the adaptation pressures faced by the branches of international firms in all major operational domains (industrial relations, employee relations, training & education, corporate governance, and inter-firm relations) both individually and in their totality.

Our results reveal the existence of two rivalling forces that have unequal influence on the different spheres of firm coordination. First, German affiliates in the UK exhibit significantly different behaviour from their parents across all five domains which we scrutinised, confirming the existence of distinct systemic institutional forces as described by the many contributors to VoC literature. Second, the relative alignment of firm behaviour with institutional practices in the host country is mediated by factors internal to the firm, such as age, size and internationality. We showed that corporate governance, employee relations and training & education in subsidiaries are predominantly driven by parent firm routines and less so by host country institutional setup. By contrast, industrial and inter-firm relations in subsidiaries are profoundly influenced by determinants inherent in host country institutions. The finding that the degree of adaptation is different across the main coordination dimensions is evidence that institutional complementarity may not be as strong a factor as far as adaptation to national conditions is concerned as is suggested in the VoC theory. Kenworthy (2006) already challenged VoC's claims about the consequences of institutional complementarities having examined the macroeconomic performance effects (e.g. GDP growth) attributable to institutional complementarities. Our research, however, is different because it focuses on micro-level effects. We have found that at firm level adaptation to the national institutional setup is not full and not uniform across coordination dimensions. This sheds doubt on the complementarity argument in its strong form and suggests that a less static and more dynamic variant of VoC theory is needed to address the complexities of micro relations.

A tentative interpretation of our results may be that managers seek to achieve, through a varying degree of institutional adaptation, an equilibrium where the marginal cost of adaptation just equals the marginal cost of preservation. Implications for global convergence are twofold. On the one hand, MNEs appear to draw upon the elements of institutional arrangements that belong to different systems of capitalism to build a preferred quasi-institutional setting of their own at the company level. If this is not feasible because of interlocking complementarities in institutional arrangements of the host country, then country specific institutional arrangements will persist. On the other hand, as more and more firms operate internationally it may be assumed that the 'pure' forms of corporate conduct as described by VoC construct will be progressively eroded over time.

This study has thrown some light on factors that influence the choice by MNEs between the adoption of host countries practices and the preservation of home-country routines. However, the complexities and evolution of the interaction between local institutions and foreign firms requires further attention. More research is needed to account for factors that we did not include in our consideration, for example, the influence that the harmonisation of the European and international legislation may have on the adjustment of firms to foreign institutional contexts. Furthermore, the index of institutional impact introduced in this paper opens the perspective of a time-series analysis of behavioural changes revealed by the subsidiaries of multinational corporations operating within different social systems of production – eventually allowing for even more incisive insights into convergence dynamics.

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Table 1
Summary Statistics

	Subsidiary		Parent Firm	
	Yes	No	Yes	No
Industrial relations (IR)				
1. Membership in an employers' or other industry association.	22	123	84	36
2. Union input and/or bargaining at the industry and/or firm-level.	13	129	83	33
3. Unionised workforce.	23	121	83	25
4. Permanent work contracts prevail over fixed-term contracts.	126	17	88	19
5. Employment contracts contain notice periods no shorter than 90 days.	35	108	37	61
Employee relations (ER)				
1. Active works council or comparable employee representation body.	30	115	104	18
2. Co-determination with employee representatives in decision-making.	27	117	58	53
3. Employee share ownership schemes in place.	12	132	32	92
4. Operates performance-related pay schemes.	98	43	87	28
5. Operates employee consultation schemes.	107	39	99	20
Training & education (TE)				
1. Special employee training schemes in place.	88	54	112	10
2. Systematically trains employees in firm-specific skills.	116	28	110	12
3. Systematically trains employees in industry-specific skills.	93	47	101	18
4. Poaching of employees is a significant threat to the business.	73	67	68	43
5. Vocational training schemes are in place.	58	78	104	9
Corporate governance (CG)				
1. More attention is paid to the long term objectives rather than to current earnings.	95	38	82	27
2. Banks rather than capital markets are an important source of financing.	19	121	49	59
3. Investors usually commit on a long-term basis.	82	35	84	17
4. Management agrees key decisions with supervisory boards that include employees and major shareholders.	51	84	89	25
5. At least one of the shareholders holds more than 10% of voting rights.	91	32	98	16
Inter-firm relations (IFR)				
1. Technology transfer with firms other than parent/subsidiary.	49	90	73	37
2. Joint R&D programmes with organizations other than parent/subsidiary.	36	102	78	34
3. Merged with or acquired another firm in the past three years.	26	110	63	51
4. Cross-shareholdings with companies other than parent/subsidiary.	8	126	24	82
5. Co-operation with external organizations in industry standard-setting.	52	84	72	37

Table 2
The Variables

Variable	Description
Central Variables	
S_INST	Index of institutional impact, German subsidiaries in the UK
P_INST	Index of institutional impact, German parent firms
S_INST_RATIO	Ratio of institutional impact, German subsidiaries in the UK
P_INST_RATIO	Ratio of institutional impact, German parent firms
LOG_S_AGE	Natural logarithm of subsidiary company age in 2007.
S_FIRMSIZE	Natural logarithm of the total number of employees at the subsidiary level at the time of survey.
P_COUNTRIES	Interval variable for company internationality 2007: 0 (operations in 0 to 4 countries); 1 (5-10 countries); 2 (11-30 countries); 3 (31+ countries).
S_REPRESENT	Index value measuring the relative intensity of representation of parent company in subsidiary management: 0 (parent company representation is weak to non-existent). The index is formed by adding one when: (1) subsidiary management is at least partly provided by the parent firm, (2) parent company has representatives on the subsidiary's management board, (3) parent firm representatives hold line management functions in the subsidiary firm, and (4) parent company representatives are among subsidiary staff other than management.
S_FINNEED	Equals one if, in financial years 2004-2006, the subsidiary experienced negative net earnings and/or situations in which it relied on special purpose parent firm financing.
Control variables	
LOG_P_AGE	Natural logarithm of subsidiary company age in 2007.
P_FIRMSIZE	Natural logarithm of the total number of employees at the parent firm level at the time of survey.
S_PROD	Equals one if the subsidiary is a production facility for the parent firm and zero otherwise.
S_MANUF	Equals one if the subsidiary's industry classification is "manufacturing" and zero otherwise.

Table 3

Index of Institutional Impact and Ratio of Institutional Impact by Subsidiary/Parent

	Overall	Industrial Relations	Employee Relations	Corporate Governance	Training & Education	Inter-Firm Relations
Panel A: Institutional Impact Scores						
Index of Institutional Impact N	49	79	97	79	100	88
Subsidiary	11.27	1.61	2.38	2.80	3.01	1.40
Parent Firm	16.88	3.33	3.20	3.68	3.92	2.73
Ratio of Institutional Impact						
N	137	127	128	123	122	123
Subsidiary	0.43	0.32	0.48	0.53	0.60	0.27
Parent Firm	0.69	0.69	0.64	0.74	0.80	0.57
Panel B: Differences in Institutional Impact Scores						
Index	-5.61***	-1.72***	-0.82***	-0.88***	-0.91***	-1.33***
Ratio	-0.26***	-0.37***	-0.16***	-0.21***	-0.20***	-0.30***

***, **, and * indicate significance at 1%, 5%, and 10%, levels, respectively.

Table 4
Subsidiary Index of Institutional Impact and Ratio of Institutional Impact by Subsidiary Size, Subsidiary Age and Overall Firm Internationality

	Overall	Industrial Relations	Employee Relations	Corporate Governance	Training & Education	Inter-Firm Relations
Panel A: Institutional Impact Scores by Subsidiary Size						
Index of Institutional Impact						
N	49	78	97	79	99	88
"Small" subsidiary	9.88	1.32	2.31	2.69	2.37	0.89
"Big" subsidiary	12.60	1.90	2.45	2.90	3.62	1.91
Ratio of Institutional Impact						
N	136	126	127	122	121	122
"Small" subsidiary	0.37	0.28	0.46	0.50	0.47	0.18
"Big" subsidiary	0.49	0.37	0.51	0.56	0.72	0.35
Difference (index)	-2.72***	-0.58***	-0.14	-0.21	-1.25***	-1.02***
Difference (ratio)	-0.12***	-0.09***	-0.05	-0.06	-0.25***	-0.17***
Panel B: Institutional Impact Scores by Overall Firm Internationality						
	49	79	97	79	100	88
Index of Institutional Impact						
N						
"Less International"	10.59	1.56	2.37	2.94	2.41	1.38
"More International"	11.81	1.64	2.39	2.68	3.48	1.42
	137	127	128	123	122	123
Ratio of Institutional Impact						
N						
"Less International"	0.40	0.30	0.47	0.53	0.47	0.25
"More International"	0.46	0.34	0.49	0.53	0.70	0.28
Difference (index)	-1.22	-0.08	-0.02	0.26	-1.07***	-0.04
Difference (ratio)	-0.06***	-0.04	-0.02	0.00	-0.23***	-0.03

Panel C: Subsidiary Index of Institutional Impact Scores by Subsidiary Age

Index of Institutional Impact	47	76	94	76	97	86
N						
"New" subsidiary	10.96	1.41	2.35	2.89	2.92	1.28
"Established" subsidiary	11.50	1.85	2.42	2.68	3.04	1.49
	133	123	124	120	119	120
Ratio of Institutional Impact						
N						
"New" subsidiary	0.40	0.29	0.49	0.52	0.56	0.24
"Established" subsidiary	0.47	0.37	0.48	0.54	0.63	0.29
Difference (index)	-0.54	-0.44*	-0.07	0.21	-0.12	-0.21
Difference (ratio)	-0.07**	-0.08**	0.01	-0.02	-0.07	-0.05

***, **, and * indicate significance at 1%, 5%, and 10%, levels, respectively.

Table 5

Regression Results for Subsidiary Institutional Index Scores

Independent Variables	Overall (1)	IR (2)	ER (3)	TE (4)	CG (5)	IFR (6)
Panel A: Index of Institutional Impact						
CONST	6.311***	0.452	1.208**	-1.357*	1.738**	-2.080**
P_INST	-0.020	0.079	0.480***	0.808***	0.506***	0.159
LOG_S_AGE	-0.341	0.235	-0.015	-0.054	-0.167	-0.149
S_FIRMSIZE	1.034***	0.210**	-0.126**	0.378***	0.138	0.693***
P_COUNTRIES	0.275	-0.109	-0.025	0.407***	-0.080	-0.273*
S_REPRESENT	-0.419	-0.141	0.142	0.076	-0.138	-0.064
S_FINNEED	0.850	0.221	0.300	0.526*	0.147	-0.268
N	36	58	73	76	62	71
R^2	0.826	0.496	0.420	0.611	0.313	0.516
Panel B: Ratio of Institutional Impact						
CONST	0.054	0.071	0.285***	-0.310**	0.072	-0.356**
P_INST_RATIO	0.205***	0.036	0.478***	0.716***	0.435***	0.166**
LOG_S_AGE	-0.003	0.052**	-0.037	-0.017	-0.019	-0.020
S_FIRMSIZE	0.047***	0.032**	-0.006	0.075***	0.029*	0.100***
P_COUNTRIES	-0.010	-0.033*	-0.003	0.081***	-0.023	-0.059**
S_REPRESENT	0.012	-0.000	0.032*	0.028	0.013	-0.009
S_FINNEED	0.048**	0.063	0.006	0.125**	0.017	-0.072
N	102	92	94	93	93	92
R^2	0.504	0.394	0.360	0.566	0.250	0.423

***, **, and * indicate significance at 1%, 5%, and 10% level, respectively.

Notes Table 5:

1 All model χ^2 are significant at 1% level, except for (10), which is significant at 5% level, and (5), (9).

2 A negative coefficient indicates that the characteristic adds to the subsidiary's being more akin to the archetypal LME firm.

3 Controls include parent firm age (LOG_P_AGE), parent firm headcount (P_FIRMSIZE), whether subsidiary is in manufacturing sector (S_MANUF), whether subsidiary is a production facility (S_PROD).

Table 6
Sample Institutional Complementarities

This table shows the correlations among the index of institutional impact scores in the 5 coordination dimensions of the firm. All variables are described in Table 2.

	S_IR_Index	S_ER_Index	S_TE_Index	S_IFR_Index
S_ER_Index	.213			
S_TE_Index	.027	-.001		
S_IFR_Index	.313***	-.038	.390***	
S_CG_Index	.144	.002	.017	.106

***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

Appendix

Table of Correlations

This appendix shows the correlations among the independent variables used in the paper. All variables are described in Table 2.

	P_INST	LOG_P_AGE	P_FIRMSIZE	LOG_S_AGE	S_FIRMSIZE	S_RPERESENT	S_FINEED	S_PROD	S_MANUF
LOG_P_AGE	0.2959**								
P_FIRMSIZE	0.4239***	0.2251**							
LOG_S_AGE	0.3672***	0.4081***	0.1884**						
S_FIRMSIZE	0.2079	0.1078	0.6137***	0.2275***					
S_REPRESENT	0.1093	-0.0208	0.2405***	-0.0251	0.4166***				
S_FINEED	-0.0575	-0.0722	-0.0762	-0.0924	-0.0594	0.0442			
S_PROD	0.1267	0.1743**	0.1111	0.2538***	0.2865***	0.0676	-0.1754**		
S_MANUF	0.1836	0.2809***	0.0292	0.0999	-0.0094	-0.0347	-0.1102	0.4400***	
P_COUNTRIES	0.0877	0.2267***	0.6365***	0.2716***	0.5542***	0.2005**	-0.0336	0.0621	-0.1579*

***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.