SOCIETAL EMBEDDEDNESS OF INTERNATIONALIZATION STRATEGIES AND CORPORATE CONTROL IN MULTINATIONAL ENTERPRISES:

WORLD-WIDE AND EUROPEAN PERSPECTIVES

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ABSTRACT

We examine the importance of societal embeddedness and universal contingencies in the organizational practices at the international level of multinational enterprises, based on a study comparing European (Finnish, French, German, Dutch, Swiss, Swedish, British), American and Japanese multinational enterprises. Although multinationals are highly internationalized by definition, our study shows their organizational control practices at the international level to be more than anything else explained by their country of origin. Universal contingencies such as size and industry are on the other hand more related to internationalization strategy. Internationalization strategy and organizational control are associated with different sets of variables; to this extent they appear more de-coupled with regard to each other than the literature suggests. Multinationals appear to follow tracks of co-ordination and control in which they have become embedded in their country-of-origin. Nationally specific institutions and culture have to be interpreted as particularistic but universally practicable facilitators of internationally competing organizational practices.

INTRODUCTION

One of the recurrent themes in international organization studies is what happens to organizational practices as enterprises are increasingly exposed to internationalizing influences. Such influences can be divided into two main parts:

(1) On the one hand, enterprise activities are internationalized, through exposition to customers, suppliers or alliances outside a society or domestic economy of origin, regulated by common and relatively homogeneous institutions. This kind of internationalization culminates in the formation of a **multinational enterprise** if and when non-marginal enterprise functions are localized in subsidiaries outside the country of origin.

(2) In addition, even enterprises which are not internationalized or multinational are subject to competitive pressures and regulatory norms, and they imitate or learn from each other. There is an international search for good or best organizational practices.

This debate continues, under partly new auspices, along a more established track. It is about the extent and explanation of **convergence and divergence**. The literature has used these notions in different ways. An authoritative definition by reputed scholars is: "The subject of organizational convergence is concerned with how far organizations in different countries have traveled along a path to global convergence in operations and management, and conversely how far the influence of specific cultural factors must be understood and planned for if the manager is to be effective in cross-cultural situations" (Pugh and Hickson 1996: 3899).

This may imply a longitudinal argument or research design demonstrating convergence or divergence as happening over time. But it need not necessarily, and in fact many publications debating the extent of convergence versus divergence have limited themselves to comparing and evaluating the extent of convergence or divergence as **results** that enterprise development has achieved at a given moment. Divergence is co-terminous with the embeddedness of organizations and other actors in regionally or nationally different societies. Societies have characteristic and specific elements such as a normative institutional order, cultural dispositions of types of actors in types of situations or across the board, and economic and industrial structures. Convergence implies a relative degree of disembeddedness of practices or structures, overriding more regionally or nationally specific institutions or behavioral predispositions.

Following Gooderham et al. (1999) we use convergence and divergence in the sense of the **intra**temporal prevalence of either tendency, measured by results achieved so far. But different from these authors, convergence may not only be the result of responding to 'rational' contingencies, in their sense denoting supposedly universally present and variant factors such as size, industry, environmental complexity or variability. Convergence may also result as a response to institutional harmonization through, e.g., supra-national government and rule-making. And divergence may result from divergent contextual developments, in line with some specialization of economies and societies; contingency theory then predicts matching responses, that are ‘congruent’ with, or ‘fit’, context. This leads to predict divergent (internal co-ordination and control) responses.

Pugh and Hickson (1996: 3903) pointed out: "Size and dependence are not in themselves convergence factors. Only if they change everywhere in the same direction will this be so". For the purpose of this paper, sources of divergence will mainly be found in characteristics of national economies and societies. This opens a very wide field, which ranges, as Pugh and Hickson mention from industrial structures, via education and training institutions, social mobility patterns, industrial relations structures and practices, to normative or quasi-normative organizational structures and practices. We do not intend to open this box and dissect its contents here. Doing this requires a different paradigm, study design and above all a great deal more space (see chapters by the editors in Maurice and Sorge 2000). However, everything that enters into this box shows a **country-of-origin** effect. Where this effect is preponderant, divergence is larger than convergence, at least for the time being or with regard to the time horizon of a study.

More recently, the ‘sharp end’ of the convergence-divergence debate, where the issue of divergence versus convergence is most acute, has come to lie where internationalization is suggested to be most pervasive, in the functioning of the multinational enterprise. Here, internationalization attaches to all of the ‘hooks’ of Porter’s diamond: factor conditions, firm strategy, structure and rivalry, demand conditions and related and supporting industries (Porter 1990: 72). Internationalization in the multinational enterprise therefore attaches to all the fields governing its structure and functioning: task and general environment, internal structure and process, and generic strategies that establish meaningful relations between environment, context and internal structure and process.

This is the field on which our treatment is focused. More specifically, we focus on that part of the multinational enterprise that is its most international and potentially most de-contextualized one: internationalization strategy and international corporate control. There is nothing in organizational life that is, by exposition to an international environment, more removed from potentially more divergent national or societal contexts than this. Note that we do not examine divergence between national subsidiaries. We focus on the international level in multinational enterprises, above the level of national subsidiaries and their internal organizational patterns, their own specific strategy and their immediate task and general environment within the country in which they are located. We therefore examine that terrain on which the forces working towards convergence are potentially strongest. For the debate about convergence and divergence to be focused in a meaningful way, it has to address a wider and contextually varied population of organizations. To point out that a specific policy or practice is being adopted and implemented in a few multinational organizations would be a limited observation. It would not present any results about a wider population of organizations. The wider and more contextually diverse the population is, the more robust are statements about convergence or divergence on this basis. In order to provide a reliable test, we try to maximize the amount of contexts represented in the population of organizations to be studied, going for more countries of origin and countries of subsidiary location (of multinationals) than other known studies. The test of the hypothesis of convergence with regard to multinationals is therefore more stringent by focussing on where convergence is most plausible according to the literature. The reliability of the result is comparatively high, in view of the breadth of contexts covered, compared to other studies.

We do not aim to explain how and why convergence or divergence is obtained and under which circumstances. As we will show, the literature with regard to the internationalization strategy and international control in multinationals is not even far enough to make reasonably reliable and valid statements about the existence or non-existence of convergence in the field of multinationals. The first step to take, before more detailed explanations are possible, is a more valid and reliable account of the state of play between tendencies of convergence and divergence *per se*. It is this step that we limit ourselves to in this paper. On the other hand, we will not refrain from drawing some theoretical lessons that appear appropriate, given our findings. These will be prepared through the conceptualization in the next section. We examine possible convergence and divergence on the basis of both universalization of contextual conditions through globalization of markets (the 'rational' root of convergence following Gooderham et al.) and harmonization of law and rules in the European Union and the European Economic Area (the institutionalist root of convergence). The first angle of attack leads us to examine multinationals from, and represented in, as many parts of the world as possible, whereas the second angle is more specific, pointing to the study of a sufficiently large population of multinationals active in Europe.

The paper is divided into four sections. In the first section, we discuss our concepts and conceptual background, identify the gaps in previous research and derive alternative hypotheses. This section concludes with two research questions that deal with convergence and divergence effects at the levels put forward: The world and Europe. A methodology section discusses the data collection, sample and measures used in the empirical study, while the results section present answers to our two research questions. In the final discussion and conclusion section, we argue that not only the view of the role of country-of-origin effects needs to be changed, but also our view of how institutions develop and which role they play under internationalization.

CONCEPTS, FINDINGS AND OPEN QUESTIONS

Concepts

Multinationals by definition operate across the borders of nation states and societies. From other enterprises, they are therefore distinguished by having two major sets of business and management phenomena that other organizations do not have:

- They have **internationalization strategies** as overall concepts and patterns of extending operations from a domestic base to other countries. Virtually all the multinationals in ex-

istence have come about, through extension from a national domestic base, or the merger or acquisition of enterprises in different countries.
- They have practices of **corporate control** geared to face up to the specific problem that their subsidiaries in different societies are embedded in different societal contexts and, in the case of acquisitions or mergers, different enterprise traditions.

This conceptual pair is a specific variant on one of the classical themes in the management and organization literature: the nexus between 'strategy and structure'. 'Structure' is like a coin with two sides (Mintzberg 1979): on the one side, there is structural differentiation, i.e. a specific way of dividing an organization into separate organizational components, careers, occupations and jobs. The other side can be termed 'coordination and control' or, for short, corporate control. This comprises all the mechanisms instituted to tie the operations and decisions within and across components into a larger whole and establish coherence of meaning and purpose within the larger enterprise. We do not address structural subdivision directly, here. We do focus, however, on the classical theme of strategy and structure in an area that is specific for multinationals, by dealing with internationalization strategies and corporate control at the international level.

Internationalization strategies refer to the way multinationals fashion relations between headquarters, subsidiaries and the diverse markets and institutional contexts they operate in. The main structuring dimensions of this concept are, following Bartlett and Ghoshal (1989), interdependence of subsidiaries and headquarters (or global integration) and responsiveness to local markets and other situational specificities. Corporate control is a large concept. But following a synthesis of authors such as March & Simon (1958), Lawrence & Lorsch (1967), Child (1973, 1984), Galbraith (1973), Ouchi (1977, 1979, 1980), Mintzberg (1979, 1983), Merchant (1985), Kenter (1985), Bartlett and Ghoshal (1989), Martinez and Jarillo (1991) and Hennart (1991), it is mainly structured along two dimensions: directness and explicitness of control on the one axis, and impersonality of control on the other (see Table 2 below).

Research Gaps

Curiously, although the sharp end of the internationalization and convergence/divergence debate as identified above is appreciated as such, empirical reality at this end is under-investigated or researched with a distorting bias. Earlier studies of internationalization strategy and corporate control in multinationals are characterized by small sample sizes, a restricted number of countries (both in terms of country-of-origin and in terms of country of subsidiary location) and/or a restricted focus in terms of the variables under investigation. Most studies in the area of corporate control tend to focus only on autonomy versus centralization of decision-making (see e.g. Daniels and Arpan, 1977; Otterbeck, 1981; Garnier, 1982; Kriger and Solomon, 1992) rather than on a more comprehensive range of control mechanisms. Those studies that did look at a wider control portfolio (see e.g. Egelhoff, 1984; Negandhi, 1987; Birnberg and Snodgrass, 1988; Bartlett & Goshal, 1989; Calori, Lubatkin and Very, 1994; Wolf, 1994) are characterized by small sample sizes, typically well below 50, and/or a limited number of countries under investigation, typically two or three. Of these studies, the one by Calori et al. (1994) is by far the most comprehensive and sophisticated. Calori et al. compared control mechanisms in cross-border acquisitions, with the USA, France and the UK as countries-of-origin and France and the UK as the countries in which the acquisition took place. They investigated a total of 70 acquisitions and included a number of control variables. Control was shown to be influenced by national 'administrative heritage'. However, they were only able to compare two countries at a time (US vs. France and US vs. UK) and were unable to control for industry effects.

Studies with regard to convergence/divergence and internationalization strategies are extremely scarce. Bartlett and Ghoshal's classic study includes a comparison of American, Japanese and European MNCs. However, the study only included nine MNCs in total and of the three European companies, two were Dutch (Philips) or partly Dutch (Unilever), while the third was Swedish (Ericson), hardly a representative group of European MNCs. They defined the European model as one of high local responsiveness and low interdependence, while the Japanese model had the opposite characteristics. American MNCs would fall between these two extremes. Lane's (1998) study of internationalization strategies of six British and four German MNCs focuses mostly on FDI patterns and contains only limited and tentative statements about interdependence and local responsiveness. This is not surprising since the study is based on secondary data provided by the companies in question. To our best knowledge, no other studies have investigated country-of-origin effects with regard to internationalization strategies.

Although some of the studies discussed above included MNCs from European countries in their research design, the number of European countries is always limited to one or two. The focus of these studies is usually on a comparison with or between MNCs from the US and Japan. If more European countries are included in the research design they are simply lumped together as 'European countries'. A closer consideration of European multinationals is, however, called for, to take proper account of more transnational multinationals. Following the influential work of Bartlett and Ghoshal (1989), transnational enterprises are stylized as a type which has been becoming ever more important and is likely to be even more important in the future. Transnational multinationals are both 'globally integrated' and 'locally responsive', and they are less clearly tied into only one context of origin (less ethnocentric) by share ownership, human and capital resources, and their strategic centre of gravity. Transnationality, on the basis of a ratio of invested capital and human resources inside to those outside the country-of-origin, very much depends on the country-of-origin itself. Of the world top ten transnational multinationals according to this criterion, only two are North American, none of them US, and the rest are European, mainly Swedish, Swiss and Dutch, sometimes in combination (Dowling, Welch and Schuler 1999: 18). The largest multinationals of the world are North American and notably US, to be sure, but they are less transnational than others in view of greater preponderance of resources in the country-of-origin.

To examine divergence and convergence more systematically, we need a design that covers more countries and multinationals and allows a comparison of country-of-origin and other effects. We also need a design that gives due importance in sampling to those countries that breed more transnational enterprises. This study will therefore try to maximize the amount of contexts represented in the population of organizations to be studied, going for more countries of origin and countries of subsidiary location than other known studies. However, before discussing our sample design, we will elaborate on the conceptual background and the hypotheses and research questions of this study.

Conceptual background

Although our focus is on the international level of the multinational enterprise, the conceptual background of possible hypotheses is very much rooted in the wider comparative organization and management literature. Gooderham et al. (1999) yielded the unequivocal result that cultural-institutional determinants arising in the country in which firms were located, were more influential than determinants arising through a firm's context (size, industry/sector etc.). The over-riding influence of institutional settings in their study is however not surprising. The study focussed on purely national companies, i.e. multinational enterprises were not considered. Studies investigating business systems in different European countries (see e.g. Whitley

1992, Whitley and Kristensen 1996) also found consistent and lasting differences between European countries. Similar results attesting to the persistence of embedded institutions in corporate governance under globalization have been presented by Pauly and Reich (1997) and Guillén (2000), focusing respectively on multinational and domestic enterprises, as identified under (1) and (2) in the beginning of this article. More hypothetically than on the basis of specific results, but addressing our field (1), the multinational enterprise, Westney (1993) saw this enterprise as exposed to contradicting influences:

- Regional diversity of subsidiaries, their contexts, markets and environments, making for persistent organizational divergence (isomorphic pull exerted by regional or national environments);
- International or global terms of competition in markets, and of regulation, making for institutional convergence (isomorphic pull exerted by an international environment);
- Consistency and integration, notably in the transnational enterprise, exerting an isomorphic pull towards an enterprise model that may lie between national models and represent a sort of international practice.

Extending this reasoning, one would hypothesize that multinational enterprises (with substantial production and marketing subsidiaries outside their country of origin) would show a more pronounced influence of internationalized organizational concepts, as a form of convergence on an international template that varies according to universalistic determinants. International level practices would presumably be analogous to influences resulting from received contingencies such as size, sector/industry and other environmental factors, and the industry recipes (Spender 1989) and strategies they imply.

Similarly, Mueller (1994) had argued that divergence between countries as depicted by, for instance, the societal effect approach (Maurice and Sorge 2000) may have been overemphasized. He distinguished three separate effects on organizational structures and processes: the societal effect, the organizational effect and the globalization effect. The organizational effect focuses on convergence through learning across borders in multinational enterprises, while the globalization effect is supposed to feature convergence across borders through the globalization of the world economy. Multinationals thus are hypothesized to show a more universalizing influence of both the organizational and the globalization effect. The globalization and the organizational effects are thus taken to override the societal effect. This argument is a more specific and topical rendering of earlier convergence theory, first put forward in the late fifties by Harbison & Myers (1959:44): '…organization building has its logic which rests on the development of management and there is a general logic of management development which has applicability both to advanced and industrializing countries in the modern world.' The only thing that national or cultural factors could do was slow down this inevitable process.

Mueller's approach is however more refined than earlier convergence theory, since the effect of globalization would be different from the organizational effect: Globalization would lead to convergence more or less across the board, on a more universal template of good practice, whereas the organizational effect might lead to convergence on an enterprise specific norm, which might even be that of its country-of-origin. Convergence on an enterprise specific norm would then not be convergence within a larger population of multinationals. It might be termed 'more internationally clustered divergence'. Whilst Mueller's treatment thus allows for more differentiated pictures of effects, the empirical foundation for the argument in favour of increasing organizational and globalization effects is restricted. It is founded on specific cases, rather than a methodologically controlled comparison of numbers of multinationals from different countries.

Hypotheses and Research Questions

The discussion above shows the relative empirical openness of the question which way the balance with regard to convergence and divergence in internationalization strategy and control of multinationals tilts. This openness allows us to formulate two opposed and alternative hypotheses:

(1) Internationalization of activities reduces the salience of embeddedness in countries-of-origin, relative to globalization and organization effects. Multinationals will therefore exhibit greater importance of factors that are not embedded in societies or national economic orders.

(2) Internationalization of activities evokes reproduction of specific institutions and cultural habitus at the international level. Multinationals will therefore exhibit a strong influence of institutions and predispositions arising in the country-of-origin, even at the international level.

The argument about divergence versus convergence in multinationals can be developed at different geographic levels. The most aggregate level is the world level, where we find studies on multinationals the world over. This level is above all convenient for examining the 'globalization effect'. The next salient level is the world region or continent, for our purposes the European level. This level allows us to examine an effect that is likely to contain both, globalization and institutional isomorphism through supra-national government and rule-making. Another one is inherent to bi-national or tri-national comparisons. But we cannot pursue this comparison here, in order not to lose focus. For whilst globalization and institutional isomorphism are two major possibilities following from a convergence hypothesis, a bi-national comparison is less meaningful given the terms of this paper. It restricts rather than expands the breadth of the organizational population studied; our point of departure was that convergence should be investigated with regard to a broader rather than a more restricted organizational population.

At the world level, we will investigate the relative weight of embeddedness in the country-of-origin (its institutional order, cultural repertoire and industrial structures) versus task contingencies that are apprehended as universalistic, i.e. as variables characterizing supra-national markets and other segments of the task environment. To repeat, we are concerned with this relative weight above all, which is still a contentious matter. Therefore, we did not advance or use any substantive framework of variables to compare national institutional settings. This would have overburdened the paper. In view of the paucity and methodological limitations attached to research on organizational practices in multinational enterprises in different continents, a broad assessment of relative weights and their implications is sufficiently novel. We then deal with the relative importance of intra-European variety compared to worldwide variety in internationalization strategies and control. This is methodologically analogous to the analysis at the world level. But it will exhibit effects of institutional isomorphism through supra-national government to an extent that might be as great or greater than any globalization effect.

In conclusion, there are different measures of support for our alternative hypotheses regarding the effect of universal variables versus institutionally specific contexts. There is, however, a lack of systematic empirical research investigating this effect for the international level of multinationals, where the globalization and organizational effect proponents could be expected to have a stronger argument. Differentiated according to geographical levels, our hypotheses lead to two research questions that deal with the country-of-origin effect:

1. Which weight does the country-of-origin effect carry compared to more universalistic factors?

2. Do European multinationals exhibit any institutional or cultural isomorphism and concomitant convergence that allows them to be treated as a more homogeneous group?

SAMPLE AND METHODOLOGY

Data Collection and Sample Description

Data for the study were collected by means of a large-scale international mail survey. Questionnaires were mailed to the managing directors of some 1650 wholly owned subsidiaries of 122 multinationals in 22 different countries. The selection of the 122 multinationals was based on the 1994 Fortune Global 500 list. Eight manufacturing industries with a good representation of multinationals from different countries were selected and the largest multinationals in these industries were included in our sample.

A pilot mailing was sent to 96 subsidiaries in 12 different countries at the beginning of June 1995. Questionnaires for the final mailing were mailed in two batches: one in October 1995 and one in January 1996. Incentives to increase response rates included an announcement postcard, a reminder, an offer of the results, an international committee of recommendation, and several methods of making the relation between researcher and respondents less anonymous and more interactive than in the usual mail questionnaire approach. The overall response rate at subsidiary level was 20%, varying from 7.1% in Hong Kong to 42.1% in Denmark. Since this variance in response rates across countries might introduce a response bias, the country of subsidiary location will be included as a control variable in our analysis.

Table 1 summarizes the response rates and number of respondents by industry, country of location of headquarters and subsidiary country. The total number of 287 subsidiary responses represents 104 different headquarters and the number of responses per headquarters varied from one to eleven.

Insert Table 1 about here

Variables and Measures

Our aim is to assess the case for and against embeddedness versus universal contingencies. In terms of specific variables this means that we are comparing the relative impact of the country-of-origin of the MNE versus industry and organizational size and age on the MNE's internationalization strategy and approach to corporate control. Country-of-origin and industry for each MNE were identified from the 1994 Fortune Global 500 list. Information about the age and size (number of employees) of the MNE were gathered from the Directory of Corporate Affiliations. Size and age were also measured at subsidiary level through the same questionnaire that measured our dependent variables. Since the variable size at both levels (headquarters and subsidiary) was badly skewed, the natural logarithm of this variable was used as the final measurement of size at headquarters and subsidiary level.

Our questionnaire data were collected at subsidiary level and the operationalization of internationalization strategy addressed this level. This may raise doubts about the adequacy of the level of data collection, since we conceptually aim at the international level of strategy, coordination and control. However, the practicalities of obtaining data that are detailed and conform to accepted operationalizations of international strategy and control, dictate gathering of data at subsidiary level, although the level of conceptual inference is international. In line with Bartlett and Ghoshal (1989), we used two variables: the subsidiary's level of local responsiveness and its level of interdependence with headquarters and other subsidiaries. Both local responsiveness and interdependence can be directly linked to internationalization strategies. In Bartlett and Ghoshal's terms, global multinationals would combine a high level of interdependence (and particularly headquarters-subsidiary interdependence) with a low level of local responsiveness, while multidomestic multinationals would show the reverse pattern. Transnational multinationals would combine a high level of interdependence (and particularly interdependence between subsidiaries) with a high level of local responsiveness. Local responsiveness was measured with four items asking for the percentage of local R&D and local production incorporated in products sold by the subsidiary and the percentage of products and marketing that was substantially modified for the local markets (see appendix). As respondents would not be likely to know the exact percentages, six answer categories were included: 0%, 1-25%, 26-50%, 51-75%, 76-99% and 100%. Interdependence was operationalized using the percentage of intra-company sales and purchases. Respondents were to differentiate between their purchases from or sales to headquarters and subsidiaries. As for local responsiveness, six answer categories were created.

Such measures had to be expected to vary, not only between multinationals as comprehensive entities but also between subsidiaries. Furthermore, headquarters of the larger entities had to be expected to be at pains to find more aggregate and precise figures. This would have gone against a satisfactory response rate. For these reasons, a desegregated collection of data was required. But using subsidiaries as a unit of analysis in no way implies that structures and practices thereby exhibited do not characterize strategic intentions and policies of the more comprehensive multinational entity. The actual picture of interdependence and responsiveness may deliberately vary within the larger concern, and this variance may help to characterize it more truthfully than a concern-wide average with very wide variance.

Corporate control mechanisms can be defined as the instruments that are used to make sure that all units of the organization strive towards common organizational goals. Numerous control mechanisms have been identified. However, an extensive literature review resulted in a synthesis of four major types of control mechanisms as summarized in Table 2. Based on the literature review, several constituent elements were defined for each of the four control mechanisms. Expatriate control was added to the direct personal control category, since for multinationals this will be an important way to realize direct supervision or centralization of decision-making by creating mini-headquarters at subsidiary level.

Insert Table 2 about here

To measure the various constituent elements of the different control mechanisms, we adapted and supplemented the questions that were used by Martinez & Jarillo (1991) and subjected them to a factor analysis. An oblique rotation, direct oblimin, was used instead of one of the more common orthogonal rotations, (equamax, quartimax, varimax) since correlation between the different control mechanisms could be expected. Bartlett's test of sphericity was highly significant (609.778, $p = .00000$). KMO's measure of sampling adequacy was .69, which is considered acceptable for the application of factor analysis. Three factors were extracted that had an eigenvalue of larger than 1. These three factors explained 58.7% of the variance.

Insert Table 3 about here

The factor analysis clearly distinguished the indirect and direct personal categories with high loadings on its constituent elements and loadings below .30 on the other items. Questions for the two impersonal control mechanisms, however, all loaded on the same factor, so the first factor was identified as impersonal control.

Actual expatriate presence is a more direct way to measure expatriate control as identified above. Three questions were used to assess the presence of expatriates in a given subsidiary. These questions asked respectively for the nationality of the managing director, the number of top five jobs held by expatriates and the total number of expatriates working in the subsidiary. The latter was subsequently divided by the total number of employees to arrive at the share of expatriates in the subsidiary's workforce. The nationality of the managing director was re-coded into 0 if the managing director was a local and 1 if the managing director was a parent country national. The small number of third country nationals was disregarded.

Table 4 presents the means, standard deviations, minimum and maximum value for each of the variables. Since there were some cases that had missing values, the number of observations varies between 282 and 287. Since we excluded third country nationals, the variable managing director PCN has only 245 observations.

Insert Table 4 about here

The study used a key-informant approach and our results are therefore based on the information of a single respondent in each organization. This is a limitation that this study shares with virtually all large-scale studies of multinationals. The prevalent response rates in international mail surveys make another approach practically infeasible. Second, although every care was taken to formulate questions as unambiguously as possible, our study used perceptual measures to operationalize some of the constructs. This was done first because of the not immediately quantifiable nature of concepts such as control mechanisms. The result is that the answers to our questions might contain an element of perception, which might reduce the validity of our findings. However, questions elicited information on actual practices and policies, rather than opinions on such practices that might be personally colored and depend on the person of the respondent instead of on the organization. Finally, although our sample was relatively large compared to other studies, the sample size for the individual countries was still relatively small, which means that peculiarities of individual multinationals might influence the results.

EMPIRICAL RESULTS

To test the relative impact of country-of-origin versus the universal factors SPSS's General Linear Model Factorial procedure was used. The GLM procedure is a relatively new statistical technique that provides regression analysis and analysis of variance for one dependent variable by one or more factors and/or variables. In contrast to linear regression analysis, this technique allows a combination of categorical and continuous independent variables, without the necessity to recode categorical data into individual dummy variables. One-way ANOVA was used to test differences between groups of countries. Since the variable Managing Director PCN is a categorical variable, logistic regression was used for the overall analysis and Kruskal Wallis tests were used to test the difference between groups of countries.

How important are country-of-origin Effects?

We first analyzed the impact of country-of-origin in isolation using a GLM General Factorial analysis with the country-of-origin as the only independent variable (this is similar to doing a one-way ANOVA analysis). The results of this analysis can be found in the first column of Table 5 and show that country-of-origin does indeed have significant explanatory power for most variables. For nearly 80% of the variables the country-of-origin effect is significant at a 0.05 level of significance.

However, in order to assess the relative importance of the country-of-origin effect versus universal factors, all variables should be included in a single analysis. Since we are interested in the country-of-origin effect rather than the country-of-location effect, the country of location of individual subsidiaries was included as a control variable in this analysis. Furthermore, since differences between home countries might simply be a reflection of their stage of internationalization, the percentage of foreign sales to total sales was also included as a control variable for each multinational. A second GLM General Factorial analysis was then conducted that included country-of-origin, industry, HQ and subsidiary size and HQ and subsidiary age and the control variables country of location and level of foreign sales as explanatory variables. Columns three till eight of Table 5 show the results of this analysis.

With regard to local responsiveness, including the universal factors and the control variables in the analysis removes any trace of the country-of-origin effect. This effect appears to have simply been caused by a differential distribution of the universalistic determinants and control variables across countries. Differences in the level of local responsiveness appear to be caused more than anything else by the size of the subsidiary, with larger subsidiaries showing a higher level of local manufacturing, local product modification and local R&D. The type of industry also has an impact with the computer and automobile industry showing a low level of local production and product modification, while the opposite is true for the food & beverages industry. To that extent, responsiveness appears to be associated with universalistically conceived variables. But a different picture appears with regard to interdependence measures. The country-of-origin has a clear impact on the level of purchases by subsidiaries from either headquarters or other subsidiaries, even when all the universalistic determinants and control variables are taken into account. On the other hand and not surprisingly, there is also an industry effect with regard to purchases from HQ with the industries that were shown above to have a low level of local manufacturing, portraying a high level of purchases from HQ and vica versa. Whether a subsidiary sells a large proportion of their output to either HQ or other subsidiaries appears to be determined mostly by its size and age, with larger and older subsidiaries more likely to sell a large proportion of their output internally.

With regard to control mechanisms, the balance between convergence and divergence, between country-of-origin and universalistic variables, is tilted more clearly in one direction. But first, the level of direct personal control does not seem to be explained by either the country-of-origin or any of the universalistic determinants. Country-of-origin, however, has the largest impact on the other two types of control: impersonal control and indirect personal control. Subsidiary size also influences the level of indirect personal control. Larger subsidiaries are more likely to experience a high level of indirect personal control from HQ. Although direct personal control did not seem to vary with the country-of-origin or the universalistic determinants, a specific type of direct personal control in multinationals, the level of expatriation, is more than anything else influenced by the country-of-origin of the multinational.[1] This is true for all three measures of expatriate presence in subsidiaries.

[1] Although the overall level of direct personal control did not vary with the country-of-origin, one of its elements: the level of direct expatriate control was strongly ($p = 0.001$) influenced by the country-of-origin of the MNE.

In addition, three of the universalistic determinants have an impact on three different measures of expatriate presence. The fact that larger subsidiaries have a smaller proportion of expatriates in their workforce can be seen as an artifact of this measure: the *percentage* of expatriates will naturally be smaller in larger subsidiaries, even though the absolute level is larger. The managing director is more likely to be a parent country national in the automobile industry and more likely to be a host country national in the food & beverages industry. Finally, subsidiaries of larger multinationals are more likely to have a large number of expatriates in top-5 positions. However, since all of these universalistic determinants influence only one measure of the same concept and all of them influence a different measure, we can safely conclude that overall the country-of-origin effect is much stronger. There is one other universal contingency though that does have an impact on both the percentage of expatriates in the total workforce and the nationality of the managing director: subsidiary age. The older the subsidiary, the lower the expatriate presence, which reflects the tendency of multinationals to use expatriates to set up new subsidiaries.

Insert Table 5 about here

In summary, we can say that the country-of-origin has a significant impact on more variables than all of the universalistic determinants, except for subsidiary size that has an impact on an equal number of variables. Interestingly, the variables that are influenced by universal contingencies are mostly variables that are not influenced by the country-of-origin and vica versa. Concepts that are related in one way or another to control from HQ towards their subsidiaries seem to be heavily influenced by the country-of-origin of the larger concern. This is true for both the control mechanisms and for expatriate presence, which is a special type of control in multinationals. It is also true, however, for dependence of subsidiaries on either HQ or other subsidiaries in terms of purchases, which can also be seen as a way to control subsidiaries. Variables that are influenced by the universalistic determinants, mostly subsidiary size and industry, are first of all those that are reflective of the subsidiary's local presence. In addition, the subsidiary's position in the corporate network in terms of being – through a high level of sales to either HQ or subsidiaries - an important node in the corporate production network does seem to be impacted more by universal contingencies than by the country-of-origin.

At this stage, it is important to note that this country-of-origin effect cannot be explained as a response effect, i.e. because respondents from different nationalities respond in different ways. Since respondents were located at subsidiary level, responses for each country were given by 14-20 different nationalities. It is also important to note that the country-of-origin effect is not likely to be caused by differences within the parent company – rather than country - characteristics. We already included three important parent company characteristics: size, age and level of internationalization in the analysis. However, since some multinationals in our sample were represented by a large number of subsidiaries, this might have influenced our results. We therefore repeated the analysis, excluding all multinationals that were represented by more than 4 subsidiaries, which excludes 16 of the 104 concerns in our sample. This did not result in substantial changes in the level of significance for the country-of-origin effects.

Is there institutional or cultural isomorphism within the European countries?

Our second question was whether multinationals from European countries exhibit any institutional or cultural isomorphism and concomitant convergence that would allow them to be treated as a homogeneous group. To answer this question, we proceeded in two steps. First, if multinationals from European countries were indeed a homogeneous group, the country-of-origin effect should be more significant when we compare American multinationals, Japanese multinationals and multinationals from European countries as three distinct groups than when we compare multinationals from the nine individual countries as we did earlier. Second, if multinationals from European countries were indeed a homogeneous group, the country-of-origin effect should be insignificant if we compare multinationals from European countries alone. Table 6 sets out the results of these tests. The first column reproduces the results we have seen earlier. The second column compares multinationals from European countries with their US and Japanese counterparts and the third column compares multinationals from the seven European countries alone. If multinationals from European countries were indeed a homogeneous group, significance levels should be higher in column two than in column one and column three should show insignificant results. Columns four and five indicate whether this is indeed the case.

Insert Table 6 about here

In only two of the fourteen variables is the significance level of the US/Japan/Europe comparison higher than that of the comparison of the nine countries separately. However, for one of these variables, marketing modification, the country-of-origin effect is insignificant in *all three* comparisons. For the second variable, sales to subsidiaries, the significance level improved from 0.019 to 0.007. For five out of the fourteen variables, differences *between* multinationals from European countries are insignificant at the 0.05 level. For three of these variables, however, the country-of-origin effect is insignificant in *all three* comparisons. Furthermore, for three of the five variables, the difference between multinationals from European countries *is* significant at the 0.10 level and for two of these the difference between Europe/US/Japan is *not* significant. In fact there is only one variable, sales to subsidiaries, for which the difference between Europe/US/Japan *is* significant at the 0.05 level, while the difference between multinationals from European countries is *not*, while the reverse is true in three cases. We can therefore safely conclude that multinationals from European countries can *not* be treated as a more homogeneous group. At least to that extent, there is no visible isomorphism in Europe in internationalization strategies or control mechanisms.

DISCUSSION AND CONCLUSIONS

The balance of convergence versus divergence that results from this study is differentiated but clear. On the whole, internationalization strategy is visibly related to universalistically conceived variables, above all industry and size. In this case, country-of-origin effects are mostly explained by industrial structures, so that it has less of an effect apart from them. On this basis, it is possible to say that universal patterns appear to work with respect to internationalization strategy. However, this is different from the notion of convergence as it is commonly used. For the working of universal strategic regularities linked to size and industrial structure does not imply convergence of specific strategies; where size and structure developments diverge between countries, strategies will therefore also become different, as was pointed out by Pugh and Hickson (1996: 3903). Since some amount of specialization in the international division of labour, by countries, has to be taken into account, notably specialization of its multinationals on the global scene, the spread of universalistic regularities may by that token even imply divergence. This finding therefore implies a mixture of universal regularity and divergence that the literature does not face up to.

On the other hand, with regard to control mechanisms, these are more clearly and directly related to country-of-origin. They are not mediated by size and industrial structures. But we hasten to add that, since the concept is rich in content and we did not dissect it into different elements, it may again include characteristics of industrial structure different from those taken into account directly here. Of course one can wonder whether the country-of-origin effect is an explanatory variable in its own right or whether it is simply a proxy for other causal factors that happen to differ between countries (see also Ferner 1997). However, we have included some of these variables: industry and host country distribution, enterprise and subsidiary size and age and level of internationalization, as control variables. This did only have a partial impact on the extent or significance of the country-of-origin effect. Further, as Ferner (1997) indicates, trying to reason away this effect in this way may miss much of the point, since some of these differences may themselves be the typical result of differences in national business systems. The latter promote for instance the prevalence of sectors and sub-sectors in national enterprise populations.

It is striking and counterintuitive, to the intuition influenced by widespread speculation about the corporation that by internationalization becomes footloose and de-contextualized, that control mechanisms remain firmly and above all impregnated by the country-of-origin. These results provide further support for the existence of unique country patterns, even for the most internationalized companies in the world in their most supra-national corner. This extends and even requires the application, of societal analysis, to multinationals. We therefore find a strong counter-argument against Ohmae’s (1990) suggestion of nationless corporations. Following Hu (1992) we think it would be better to describe multinationals as national firms with international operations instead. With respect to mechanisms of control, therefore, whereas there may be some convergence of control practice across countries within individual multinationals (a Mueller type organization effect), the opposite appears to be the case across multinationals from different countries: There is divergence. We are therefore observing clustered divergence, in which globalization appears to promote organization effects in the terminology of Mueller, but this organization effect is rooted in the country-of-origin and thus a result of societal effects, much as societal analysis would claim.

Another aspect of these findings is that there appears to be a gap between internationalization strategy and mechanisms of control which was not to be expected: Strategy is related to industrial structures and size, and only through these to country-of-origin, whereas control is first and foremost directly related to country-of-origin. Strategy and control could not, on the basis of more general literature, be expected to almost consistently relate to different variables. It might be, and further research could examine this hypothesis, that multinationality of enterprises requires this break to occur. Multinationals may be led to conduct strategy, as something that has strong commercial and financial elements, in a way which although bearing regard to the specificities of national markets and financial conditions, is more de-contextualized with respect to conditions prevailing in the home country. But on the other hand, in the choice of co-ordination and control of the enterprise at an international level, it would appear that the enterprise is internally shot through much more intensively with social, socio-political, socio-cultural and socio-economic specificity. This would lead to the diversity of templates in internal governance.

One is led to infer that the language of international control in multinationals can never be a de-contextualized sort of esperanto. For co-ordination and control to happen consistently and in legitimate form, it might have to be more firmly based on a more parsimonious choice of a cultural repertoire, institutional background and, possibly, industrial-structural background. In this perspective, a multinational with a truly footloose strategic apex will experience the fate of the tower of Babel: It will fall apart. Whilst this is speculation, it may be useful by leading to further research which could examine the viability of truly 'polycentric' and even 'geocentric' entities.

Another important conclusion of our study is that there are large differences in virtually every field investigated *between European countries*. The emergence of supra-national government and rule-making has not led to a convergence within Europe that is more significant than at a world level. Although Europe gets more economically and politically integrated, this has not resulted in a similarity of management practices, not even for the most internationalized companies. Indeed, the question is why it should. If political and economic integration takes place, it may very well lead to sectoral, product and product/market combination specialization of multinationals from different nations. To the extent that this occurs, an institutional isomorphism in the European population of multinationals and their subsidiaries is therefore not to be expected, probably not because it does not exist at all, but because it is overcompensated by specialization. Accordingly, there is no confirmation here for a 'net' convergence due to supra-national government and rule-making. This is consistent with societal analysis as expressed in the conclusions chapter of Maurice and Sorge (2000). Supra-national government need not be deprived of convergence effects through isomorphism on some scores; but it will be counteracted by isomorphism through institutional and socio-economic specialization in the underlying nations. As a result, both effects taken together, on balance divergence remains in place. This may mean that it is a qualitatively different kind of divergence from that which may have been observable in the past.

Finally, on the basis of our findings and their interpretation, we extend a strong plea for more empirical research into the country-of-origin effect for multinationals in general and the study of previously neglected multinationals of European origin in particular. A lack of systematic empirical research in international management has created several myths (see e.g. Harzing 1995). The field of international management is, alas, full of partial insights being blown up into conclusions that exceed the methodological foundation on which they stand. Divergence between multinationals from different countries-of-origin appears to be stronger than suggested, and it may be rooted in both industrial structure and in a nexus of factors interacting in the country-of-origin. To open this nexus through more detailed research could be on the agenda for the future.

This changes the picture of how institutions and culture should be interpreted. And this lesson has to be applied in the explanation of variety on a world scale. There is poor support for 'net' convergence on the basis of responses to universal contingencies converging. Country-of-origin comes forward as one of the most important predictors of organizational practices at international levels of multinationals. The nature of internationalization strategy appears to be possibly more de-coupled from organizational control than would be the case in a nationally homogeneous enterprise context. This more general finding, which of course needs more research and corroboration, lends more weight to the view that societal institutions constitute ‘different but equal’ practices. From this picture, a notion of universal state-of-the-art practice is absent. It cannot be ascertained and demonstrated. Societal context and domestic economic strengths appear to define a particular ‘rationale’ of international organizational practice.

This rationale could imply more independence between strategy and structure than the familiar strategy-structure nexus suggests, whether it is structure following strategy or the other way round. Local institutions and culture may operate as universally applicable facilitators of international organizational practice even at the international level of multinationals. We would add that convergence may only be a realistic prospect within enterprise specific templates that differ, rather than on a universal template. The overall picture would thus be one of 'net' divergence remaining between societies, not remaining **against** convergence but being **spurred on by** its occurrence. The divergence of, e.g., European business systems had emerged through very different adoption, application and further development of a potentially and originally more convergent force, such as American business, management and organization practices (see Djelic 1998; Sorge 1999). In a similar vein, the unifying forces of supra-national orders, more global competition or multinational enterprises may again spur on different local transformations. It is the interdependency between divergence and convergence that sticks out, rather than shifts from one to the other over time and across places.

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APPENDIX

Construct: local responsiveness

(Six point scale 0%, 1-25%, 26-50%, 51-75%, 76-99%, 100%)

- Please give your best estimate of the % of R&D incorporated into products sold by this subsidiary that is actually performed by this subsidiary.
- Please give your best estimate of the % of company products sold by this subsidiary that have been manufactured (to any degree) by this subsidiary.
- Please give your best estimate of the % of company products sold by this subsidiary that have been created or substantially modified for this market.
- Please give your best estimate of the % of marketing for company products sold by this subsidiary that is consciously adapted to local circumstances.

Construct: interdependence

(Six point scale 0%, 1-25%, 26-50%, 51-75%, 76-99%, 100%)

- Please give your best estimate of the percentage of purchases (incl. parts/semi-manufactured articles) from headquarters in relation to the total amount of purchases of this subsidiary.
- Please give your best estimate of the percentage of purchases (incl. parts/semi-manufactured articles) from other subsidiaries of the group in relation to the total amount of purchases of this subsidiary.
- Please give your best estimate of the percentage of the yearly output (incl. parts/semi-manufactured articles) of this subsidiary that is sold or delivered to headquarters.
- Please give your best estimate of the percentage of the yearly output (incl. parts/semi-manufactured articles) of this subsidiary that is sold or delivered to other subsidiaries of the group.

Construct: control mechanisms

(Likert scale 1-7)

Direct personal control

- **Centralization** (reversed scored): In some multinational firms, (strategic) decision-making is largely centralized at headquarters, in other firms subsidiaries have a large amount of autonomy. In general, what is this subsidiary's autonomy to decide its own strategies and policies? (scale anchors: very little autonomy-very high autonomy)
- **Direct supervision**: In some multinational firms headquarters' managers strive for a close personal surveillance on the behavior of their subsidiaries. Other firms do not use this kind of direct personal supervision. Please indicate the degree of personal surveillance that headquarters' managers execute towards this subsidiary. (scale anchors: very little surveillance-very high surveillance)
- **Expatriate control**: In some multinational firms, parent country nationals are assigned to subsidiaries to ensure that headquarters' policies are carried out. Others do not send out expatriates or do this for other reasons. Please indicate the degree to which headquarters uses expatriates to directly control this subsidiary's operations. (Likert scale 1-7, scale anchors: very little expat control-very high expat control)

Direct impersonal control

- **Standardization**: In some multinational firms, all subsidiaries are supposed to operate in more or less the same way. In other firms, such standardized policies are not required. In general, what is the degree of standardization that headquarters requires from this subsidiary? (scale anchors: very low standardization-very high standardization)

- **Formalization**: Some multinational firms have written rules and procedures for everything and employees are expected to follow these procedures accurately. Other firms do not have such strict rules and procedures, or if they have, there is some leniency towards following them. Please indicate the kind of rules and procedures that headquarters exerts towards this subsidiary. (scale anchors: very loose / no procedures-very strict procedures)

Indirect impersonal control

- **Output evaluation**: Some multinational firms exert a high degree of output control, by means of a continuous evaluation of the results of subsidiaries. Other firms exert very little output control beyond the requirement of occasional financial reports. Please indicate the degree of output control that headquarters exerts towards this subsidiary. (scale anchors: very little output control-very high output control)
- **Planning**: Some multinational firms have a very detailed planning, goal setting and budgeting system, that includes clear-cut (often quantitative) objectives to be achieved at both strategic and operational level. Other firms have less developed systems. Please indicate the type of planning / goal setting / budgeting that headquarters uses towards this subsidiary. (scale anchors: very simple / no planning-very detailed planning)

Indirect personal control

- **Socialization**: Some multinational firms attach a lot of value to a strong 'corporate culture' and try to ensure that all subsidiaries share the main values of the firm. Others do not make these efforts (or, having made it, have had no success). To which extent do the executives in this subsidiary share the company's main values? (scale anchors: no shared values at all-fully shared values)
- **Informal communication**: Some multinational firms have a very high degree of informal communication among executives of the different subsidiaries and headquarters. Other firms do not foster that kind of informal communication and rely exclusively on formal communication channels. Please indicate the level of informal communication between this subsidiary and headquarters / other subsidiaries of the group. (scale anchors: no informal communication at all-daily informal communication)
- **International management training**: Some multinational firms make extensive use of international (as opposed to purely national) management training programs. In these programs executives from different subsidiaries and headquarters follow courses that deal mostly with the transfer of company-specific knowledge. What has been the participation of this subsidiary's executives in these kinds of training programs in the past couple of years? (scale anchors: no participation at all – very high participation)

Construct: expatriation

Expatriate presence

- How many of the top five jobs in this subsidiary are held by expatriates (employees on temporary assignment from either headquarters or other subsidiaries)? Tick boxes 0-5.
- What is the nationality of the managing director of this subsidiary? Tick boxes: nationality of parent / headquarters country, nationality of subsidiary country, other (third country) nationality
- Please indicate the number of expatriates currently working in this subsidiary.

TABLE 1:
Number of Respondents by Industry, Subsidiary Country and Headquarters Country

Industry	Number of respondents	Response rate	Subsidiary country	Number of respondents	Response rate
Electronics	41	17.1%	Argentina	4	12.9%
Computers, office equipment	26	16.2%	Austria	8	19.0%
Motor vehicles and parts	30	20.4%	Belgium	14	20.3%
Petroleum (products)	20	21.4%	Brazil	15	22.1%
Food & Beverages	34	18.4%	Denmark	16	42.1%
Pharmaceutical	46	23.8%	Finland	8	32.0%
Paper (products)	25	20.6%	France	14	13.6%
Chemical (products)	55	21.3%	Germany	16	15.5%
Various	10	17.1%	Hong Kong	5	7.1%
			Ireland	11	30.6%
Country of location of headquarters	**Number of Respondents**		Italy	21	24.4%
			Japan	16	28.6%
			Mexico	10	15.2%
Finland	23	24.0%	Netherlands	25	26.6%
France	26	18.6%	Norway	13	40.6%
Germany	32	21.8%	Singapore	10	13.6%
Japan	38	16.7%	Spain	14	15.9%
Netherlands	16	31.5%	Sweden	11	20.4%
Sweden	41	24.6%	Switzerland	14	29.8%
Switzerland	31	30.4%	UK	25	18.8%
UK	25	19.7%	USA	13	11.4%
USA	55	14.3%	Venezuela	4	13.8%

TABLE 2:
Classification of control mechanisms on two dimensions

	Personal/Cultural (founded on social interaction)	**Impersonal/Bureaucratic/Technocratic (founded on instrumental artifacts)**
Direct/Explicit	Centralization, Direct Supervision, Expatriate control	Standardization, Formalization
Indirect/Implicit	Socialization, Informal communication, Management Training	Output control, Planning

TABLE 3:
Factor analysis of 10 questions measuring control mechanisms

Variable	Impersonal	Indirect Personal	Direct Personal
Output contol	**.766**	-.043	-.081
Planning	**.727**	.134	-.124
Procedures	**.702**	.065	.199
Standardization	**.647**	.029	.270
Informal communication	-.226	**.792**	.078
Shared values	.196	**.777**	-.000
International training	.246	**.688**	-.114
Centralization	.234	-.075	**.744**
Personal surveillance	.185	-.141	**.717**
Expatriate control	-.249	.164	**.657**

TABLE 4:
Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
HQ size (log)	283	8.30	13.45	10.87	1.06
Subsidiary size (log)	285	1.39	9.39	5.59	1.55
HQ age	277	5	708	92	62
Subsidiary age	275	2	285	41	32
Local manufacturing	283	1	6	3.31	1.71
Marketing modification	283	1	6	3.49	1.56
Product modification	283	1	6	2.61	1.38
Local R&D	282	1	6	2.26	1.24
Purchases from HQ	285	1	6	2.56	1.56
Sales to HQ	284	1	6	1.39	.78
Purchases from subsidiaries	285	1	6	2.40	1.26
Sales to subsidiaries	284	1	6	2.03	1.13
Output control	285	1	7	5.05	1.42
Planning	285	2	7	5.52	1.21
Procedures	285	1	7	3.98	1.45
Standardisation	285	1	7	4.44	1.63
Informal communication	285	1	7	4.74	1.27
Shared values	285	1	7	5.17	1.31
International training	285	1	7	4.05	1.69
Centralisation	286	1	7	3.55	1.58
Personal Surveillance	286	1	7	3.41	1.53
Direct expatriate control	285	1	7	2.50	1.79
% Expats in workforce	287	.00	.67	.03	.08
Managing Director PCN (HCN = 0, PCN = 1)	245	0	1	.38	.49
Number of expats in top-5 positions	287	0	5	1.33	1.35

TABLE 5:
Significance of country-of-origin as an explanatory variable when compared with five universal variables

Variable	Country-of-origin, **excluding** control variables	Significance levels for individual variables using a General Linear Model that includes all individual variables and the two control variables country of location and foreign sales					
		Country-of origin	Industry	HQ size	Subsidiary size	HQ age	Subsidiary age
Local responsiveness							
Local manufacturing	.002	.236	.001	.270	.000	.931	.588
Marketing modification	.910	.869	.590	.854	.376	.189	.627
Product modification	.007	.379	.002	.821	.000	.134	.087
Local R&D	.048	.215	.978	.819	.002	.101	.698
Interdependence							
Purchases from HQ	.000	.000	.007	.254	.178	.597	.499
Sales to HQ	.321	.535	.100	.271	.001	.364	.048
Purchases from subsidiaries	.000	.004	.651	.291	.212	.713	.640
Sales to subsidiaries	.019	.293	.411	.542	.033	.211	.057
Control mechanisms							
Impersonal control	.000	.001	.302	.682	.112	.796	.838
Direct personal control	.037	.471	.823	.381	.381	.194	.232
Indirect personal control	.084	.004	.076	.111	.008	.626	.255
Expatriate presence							
% expatriates in workforce	.000	.007	.481	.993	.002	.330	.021
Managing director PCN	.001	.030	.020	.115	.292	.295	.025
Number of expatriates in top-5	.000	.006	.076	.025	.112	.479	.716
Analysis of sign. differences							
Differences significant at 0.01	8/14 (57%)	6/14 (43%)	3/14 (21%)	0/14 (7%)	6/14 (50%)	0/14 (7%)	0/14 (0%)
Differences significant at 0.05	11/14 (79%)	7/14 (50%)	4/14 (29%)	1/14 (21%)	7/14 (50%)	0/14 (7%)	3/14 (21%)

TABLE 6:
Significance of country-of-origin as an explanatory variable in three sets of comparisons

Variable	Significance of difference between MNEs from all 9 countries	Significance of difference between European, Japanese and American MNEs	Significance of difference between European MNEs	Is 2 is more significant than 1?	Is 3 non-significant at 0.05 level of significance?
Local responsiveness					
Local manufacturing	.002	.158	.002	No	No
Marketing modification	.910	.607	.880	[Yes]	[Yes]
Product modification	.007	.874	.002	No	No
Local R&D	.048	.142	.088	No	Yes
Interdependence					
Purchases from HQ	.000	.000	.000	No	No
Sales to HQ	.321	.571	.161	No	[Yes]
Purchases from subsidiaries	.000	.000	.017	No	No
Sales to subsidiaries	.019	.007	.089	Yes	Yes
Control mechanisms					
Impersonal control	.000	.000	.018	No	No
Direct personal control	.037	.300	.027	No	No
Indirect personal control	.084	.466	.057	No	[Yes]
Expatriate presence					
% expatriates in workforce	.000	.047	.000	No	No
Managing director PCN	.001	.003	.026	No	No
Number of expatriates in top-5	.000	.000	.009	No	No

[...] Differences are not significant in any of the three comparisons