

Drivers of Interpersonal and Inter-unit Relational Social Capital in Multinational Corporations

Abstract

In this paper, we explore the determinants of the relational dimension of social capital, specifically trust, between interaction partners in multinational corporations. To the best of our knowledge, this is the first empirical study on the drivers of relational social capital at two different levels of analysis: inter-unit and interpersonal. Our results indicate that the drivers of the relational dimension of social capital exhibit similar patterns across both levels of analysis. At both the individual and the unit levels, the relational dimension of social capital was significantly and positively related to the length of the relationship between the two individuals or units, and to the frequency of the communication between them whereas it was found to be unrelated with cultural distance.

Key words: relational social capital, trust, multinational corporations.

Introduction

A key contribution of social capital theory (Bourdieu 1986, Coleman 1988, Burt 1992, Putnam 1995) is the observation that a social actor's actual or latent connections to other actors constitute a type of potentially valuable 'capital', implying that networks which have emerged for one purpose can become assets which can also be used for other purposes. Consequently, a number of scholars have adopted social capital theory as an intellectual framework for examining different aspects of corporate life (e.g., Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998; Leana and Van Buren, 1999; Adler and Kwon, 2002; Bolino, Turnley and Bloodgood, 2002; McFayden and Cannella, 2004; Inkpen and Tsang, 2005; Oh, Labianca and Chung, 2006). For example, Nahapiet and Ghoshal (1998) and Tsai and Ghoshal (1998) have examined how the structural, relational and cognitive dimensions of social capital influence the creation of intellectual capital and consequently competitive advantage of multinational corporations (MNCs).

While the growing use of social-capital-based frameworks has broadened the understanding of intra-MNC relationships, we still have a less than complete picture of the drivers and dynamics of particularly the relational and cognitive dimensions of social capital. First, while MNCs have provided the context for key empirical work on social capital (e.g., Kostova and Roth, 2002; Tsai and Ghoshal, 1998), there is only limited large-scale research on factors that are associated with social capital within the MNC. Second, previous research has typically examined social capital either between MNC units or alternatively between individual managers and empirical evidence on how these two levels of analysis relate to each other is extremely limited. Theoretical contributions include studies by Bolino et al. (2002) and Kostova and Roth (2003), but we are not aware of any empirical work explicitly addressing this issue. As it has been forcefully argued that inter-unit relationships are a function of interpersonal relationships (Brass et al., 2004; Kostova and Roth, 2003), and the centrality of a given MNC unit may vary as a result of the connections individual managers hold to other units (Brass et al. 2004), this constitutes a significant gap in the literature. The lack of research concerning factors associated with relational social capital across different levels of analysis has also been noted in recent reviews (Schoorman, Mayer and Davis, 2007).

In this study, we address the above discussed gap in the literature and examine key drivers of the relational dimension of social capital both (i) between individual managers working in the different units of the same MNC, and (ii) between two units belonging to the same MNC. Our focus is on the relational aspect of social capital (Nahapiet and Ghoshal, 1998), as it has both been suggested to bear particular importance for knowledge exchange and combination within firms (Tsai and Ghoshal,

1998), and because MNCs are under strong pressure to learn how to systematically manage and promote it (Kostova and Roth, 2003, Inkpen and Tsang, 2005).

The paper is structured as follows. First, we briefly review the concept of social capital as treated in the management literature, and develop hypotheses on factors that may facilitate or hinder the emergence of relational social capital between units and individuals within MNCs. We then describe our two samples and the statistical methods used to test our hypotheses. Finally, we present our results and discuss their relevance for both theory and practice.

Frame of reference

Social capital and its dimensions

The concept of social capital (Bourdieu, 1986; Burt, 1992; Coleman, 1988; Putnam, 1995), in broad terms referring to assets embedded in relationships, has recently attracted considerable attention in the social sciences. Within the bounds of this general idea, social capital has been defined and conceptualized in a number of ways (for a review and discussion, see e.g., Adler and Kwon, 2002). In this paper, we adopt Nahapiet and Ghoshal's (1998: 243; based on Bourdieu, 1986, 1993; and Putnam, 1995) definition of "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit".

Within the field of management, the conceptualization by Nahapiet and Ghoshal (1998) has been argued to be particularly useful as it integrates many previously divergent strands of the literature (Adler and Know, 2002; Bolino, Turnley and Bloodgood, 2002; Inkpen and Tsang, 2005). They view social capital as having three overlapping and interlinked, yet distinct dimensions. The structural dimension is

mainly concerned with physical linkages between people or units, such as network ties between actors; the pattern of ties in terms of their density, connectivity, or hierarchy; and the existence of networks created for one purpose that may be used for another (these have been the key focus of social network research, see e.g., Kildruff and Tsai, 2003; Lin, 2001). The relational dimension focuses on personal relationships and relations of mutual respect that individuals have developed through a history of interactions. It includes aspects such as trust and trustworthiness, norms and sanctions, obligations and expectations, and identity and identification (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998). Finally, the cognitive dimension encompasses organizational phenomena such as shared representations, interpretations, language, codes, narratives, and systems of meaning among parties (Nahapiet and Ghoshal, 1998).

A key contribution of the Nahapiet and Ghoshal (1998) approach in the context of international management research is to highlight the importance of the relational and cognitive dimensions. In earlier research, relational and cognitive linkages were largely inferred from the more easily quantifiable structural linkages, which have repeatedly been examined under headings such as 'inter-unit interaction' or 'mechanisms of control and coordination' (see e.g., Ghoshal et al., 1994; Gupta and Govindarajan, 2000; O'Donnell, 2000). In this paper, we focus on the relational dimension, and operationalize it in terms of trust, following Tsai and Ghoshal (1998).¹ While the results of previous studies are not completely unambiguous (see Barner-Rasmussen and Björkman, 2007), empirical research (e.g., Tsai and Ghoshal, 1998) suggests that the relational dimension of social capital may be particularly relevant for knowledge exchange and combination, which in turn has been forcefully argued to

¹ The terms 'trust' and 'relational dimension of social capital' are used in parallel in the analysis that follows.

play a key role for the competitiveness of the modern-day MNC (Grant, 1996; Kogut and Zander, 1992, 1993; Doz et al., 2001).

Tsai and Ghoshal (1998) were the first to apply the Nahapiet and Ghoshal (1998) framework to the empirical context of multinational corporations. They examined relationships between the three dimensions and the patterns of resource exchange and combination inside 15 units of a large MNC with results indicating that intra-MNC resource exchange and combination indeed increased as the levels of social capital rose. Of particular relevance for the present study is that they found a significant positive relationship between the relational dimension of social capital and resource exchange and combination. Other studies have also found evidence that high levels of relational social capital – or the closely associated concepts of trust or perceived trustworthiness – facilitate collaboration, coordination of tasks and knowledge flows in various contexts (Jones and George, 1998; McEvily, Perrone and Zaheer, 2003; Uzzi, 1997; Uzzi and Lancaster, 2003; Zaheer, McEvily and Perrone, 1998). Based on this discussion, we can now proceed to develop hypotheses concerning the drivers of relational social capital in the MNC context, considering both inter-unit and interpersonal levels of analysis.

Relational social capital and relationship length

As noted above, the relational dimension of social capital includes concepts such as trust and trustworthiness, norms and sanctions, obligations and expectations, and identity and identification (Nahapiet and Ghoshal, 1998). Trust being a central component of this dimension, research on relational social capital naturally interfaces with the rich body of research on trust in organizational settings. In this literature there is a general agreement that relational social capital tends to develop between

two parties over time through social interactions (Gulati, 1995; Tsai and Ghoshal, 1998). Sources of trust include, for example, “familiarity, shared experience... fulfilled promises, and demonstrations of non-exploitation of vulnerability” (Meyerson, Weick and Kramer, 1996: 167), all of which take relatively long to grow. Coming to see another actor as trustworthy normally requires the ability to look back upon a lengthy relationship history between the actors, free from disappointments and breaches of trust (Meyerson, Weick and Kramer, 1996).

One may argue that in inter-unit relationships, formal organisational structure may force an MNC unit to continue a relationship with another unit belonging to the same corporation even in the absence of trust, implying that the relation between relationship length and trust might be weaker than between more independent actors such as the partners in alliances (Gulati, 1995). However, as this argument has also been proposed at the individual level (Kostova and Roth, 2003), we refrain at this point from discussing variations in relative strength of the effect across levels of analysis. We simply hypothesize a positive relationship between the duration of a relationship – whether individual-level or unit-level – and the level of the relational dimension of social capital in that relationship. The following hypotheses are put forth:

- H1a: The longer the relationship between two managers working in two different units of the same MNC, the higher the level of the relational dimension of social capital between them.
- H1b: The longer the relationship between two MNC units, the higher the level of the relational dimension of social capital between them.

Relational social capital and communication frequency

Although a certain level of trust is typically viewed as a prerequisite for an actor to be willing to engage in exchange with another, interaction in itself is necessary for such trust to develop between the actors. Initial impressions of trustworthiness may also be reinforced by further interaction, permitting the parties to identify and develop increasing levels of commonalities (Das and Teng, 1998). In a number of previous studies, communication frequency and the level of social interaction have indeed been shown to be positively associated with evaluations of trustworthiness (Tsai and Ghoshal, 1998; Govindarajan and Gupta, 2001; Becerra and Gupta, 2003), therefore facilitating affect-based trust (McAllister, 1995).

Frequency being well established as a quality of communication relationships (see e.g. Jablin, 1979), it is logical to assume that communication frequency will be positively associated with the level of relational social capital at both interpersonal and inter-unit relationships. Along similar lines, but specifically addressing social capital within the MNC and the interaction between the interpersonal and inter-unit levels, Kostova and Roth (2003) theoretically propose that the extent of interaction – i.e., the number of contacts and interactions, and the frequency and intensity of these – will be positively related to the social capital of individual ‘boundary spanners’, which will in turn be positively related to the social capital possessed by the MNC units in which they work (Kostova and Roth, 2003). Further, McAllister (1995) found a positive relationship between interpersonal interaction frequency and affect-based trust, and Becerra and Gupta (2003) between interpersonal communication frequency and perceived trustworthiness of the other person. We consequently advance the following hypotheses:

- H2a: The higher the communication frequency between two managers working in two different units of the same MNC, the higher the level of the relational dimension of social capital between them.
- H2b: The higher the communication frequency between two MNC units, the higher the level of the relational dimension of social capital between them.

Relational social capital and cultural distance

The MNC is characterized by multiple internal geographical, cultural and linguistic boundaries (Westney, 2001), which constrain interaction and may influence the opportunities to build social capital in important ways (Kostova and Roth, 2003). Cultural distance, defined as the degree to which values, norms and practices differ from one country to another (Kogut and Singh, 1988; Manev and Stevenson, 2001; House et al., 2002) has been suggested in previous research to act as constraint to the efficiency of various transactions within the MNC (Kedia and Bhagat, 1988; Bhagat et al., 2002; Leung et al., 2005). Cultural similarity can be a powerful driver of homophily, i.e. the tendency of similar people to flock together, facilitating trust among the members of the same cultural cluster (Mäkelä, Kalla and Piekkari, 2007). Inversely, as culture influences ways of thinking, behaving and communicating (Adler and Graham, 1989; Hofstede, 1980; House et al., 2004), national cultural differences may also become a potent 'source of friction' (Shenkar, 2001) in interaction among members of different cultures. Furthermore, although there is significant intra-cultural variation among the members of a culture (Au, 2000), driven by individual personal and professional experiences among other factors (Ronen and Shenkar, 1985; Takeuchi, Tesluk, Yun and Lepak, 2005), Manev and Stevenson (2001) found that national cultural distance had a negative impact also on the interpersonal level, i.e., on

the strength of interpersonal ties between MNC managers. We therefore put forward the following hypotheses:

- H3a: The higher the national cultural distance between the nationalities of two managers working in two different units within the same MNC, the lower the level of the relational dimension of social capital between them.
- H3b: The higher the national cultural distance between two MNC units, the lower the level of the relational dimension of social capital between them.

A graphical summary of our hypotheses is presented in Figure 1 below.

- Insert Figure 1 approximately here -

Data and Methods

Our study is based on two data sets collected during 2004-2005, one at the individual level and one at the unit level. While the two sets of data were collected separately, both were obtained from Finnish subsidiaries of foreign MNCs and used the same questions adapted for the two levels of analysis, to achieve a high level of comparability. This research design provided a unique combination of similar data across both interpersonal-level and unit-level relationships within the MNC. The data collection method used in both data sets was that of structured face-to-face interviews, yielding a high level of validity. The respondents and the researchers went through a pre-tested questionnaire together. The language in which the questionnaires were administered was English, as this was the language typically used in cross-border intra-MNC interactions. The researchers were prepared to clarify any term respondents might have difficulty in understanding, but this was necessary only in

very few instances as the respondents were highly fluent in the English language (the mother tongues of the respondents were Finnish, Swedish or English). Both the sampling procedures and the two data sets are described in more detail as follows.

The individual-level data set

The individual level data set consists of 265 observations concerning interpersonal interaction relationships between two managers working in two different units within the same MNC. The data was collected by structured interviews with 31 MNC managers working in wholly-owned subsidiaries of foreign MNC's located in Finland. The respondents were obtained through a two-stage sampling procedure as a part of a larger research project. In the first phase, the 500 largest companies operating in Finland were identified and this list was grouped into Finnish MNCs and subsidiaries of foreign MNCs. At the second step, the largest MNCs in the list were contacted and individual managers fulfilling the criteria of being involved in frequent internal cross-border interaction were identified. A maximum of three interviewees were sought in one MNC to avoid company bias. Through this procedure, we contacted 59 individuals in total, of whom no-one declined but two later cancelled the interview due to pressing work priorities. For the purpose of this analysis, we chose only those individuals who worked for the Finnish subsidiary of a foreign MNC.

Each respondent was asked to identify up to 12 colleagues abroad with whom he or she had been in interaction during the previous 12 months, using the following name generator question (Wasserman and Faust, 1994): *“Think about all your colleagues who work within your company but outside your country. I would like you to indicate three colleagues with whom you have interacted during the last 12 months through each of the following means [four categories given].* This name generator

question was designed to provide a maximum variety of relationship contexts, ranging from non-face-to-face, to meeting, project and team contexts, thereby avoiding the problem of only identifying strong relationships, which has been recognized as a typical risk involved in using the name generator technique (Lin, 2001). The respondents were then asked a series of questions concerning the identified relationships. The resulting sample consisted of 265 interpersonal cross-border relationships derived from 31 managers in 23 MNCs (the identities of the individuals and companies are concealed for confidentiality reasons).² 12 industries were covered. The relationships bridged 27 countries in five continents. The countries featuring the most individual relationships were Sweden, UK, Denmark, the Netherlands, Switzerland and the US, and the geographical spread of the examined relationships are summarized in Table 1 below.

- Insert Table 1 approximately here -

The unit-level data set

The unit-level data set consists of 102 observations concerning inter-unit relationships, obtained as follows. The data was collected by structured interviews in 61 wholly-owned subsidiaries of foreign MNC's located in Finland. We targeted 89 of the 150 largest foreign-owned units in Finland, which were chosen because we had already sampled them once in 2000 for a previous iteration of the same research project. 61 of them agreed. The remaining 28 declined participation either due to lack of time on behalf of the intended respondents or due to organizational changes as compared to the original sampling frame.

² Relationships to nationalities for which GLOBE data (House et al., 2004; see the operationalization of cultural distance below) was unavailable were excluded from the analysis.

Data collection took the form of structured interviews with subsidiary top managers, i.e., people in positions such as CEO or country manager. The respondents were asked a series of questions concerning the relationship of the focal subsidiary with (i) the unit's headquarters and (ii) other units within the MNC (such as a unit in the Nordic countries, a unit in some other part of Europe or a non-European unit). The data collection yielded information on a total of 130 bilateral relations between the focal Finnish subsidiaries and other units belonging to the same parent MNC. However, this included a number of relations to units in countries for which GLOBE data on cultural distance were not available (see the operationalization of cultural distance below) and some cases of missing data. These were excluded, resulting in a final sample of 53 subsidiaries with 102 bilateral relations to headquarters and sister units elsewhere in the world. Statistics on this sample are presented in Table 2 below.

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Measures

The measures used are detailed below. All variables were standardized in order to further assist full comparability between the two data sets.

Dependent variable

Relational social capital. We followed Tsai and Ghoshal (1998) in using trust as a proxy for relational social capital, with measures accordingly adopted from Tsai and Ghoshal (1998). At the individual level, respondents were asked to respond to the following two questions on 7-point Likert-type scales: (i) I can rely on this colleague without any fear of him or her taking advantage of me, even if the opportunity arises, and (ii) I can trust this colleague always keeps the promises he or she makes. For the

Commento [Wilhelm B1]: Similar approach also in Dirks and Ferrin (2001)? CHECK!

unit level, we reworded the questions to adapt to the level of analysis. Furthermore, in order to ensure that the unit-level measure captured organizational level relational social capital with a satisfactory Cronbach's alpha, we complemented these two questions with two additional items (cf. Cortina, 1993): (iii) People from the two units have a sharing relationship; they both freely share ideas, feelings and hopes about their operations, and (iv) People from the two units have made considerable emotional investments in their working relationship. The mean of these two items were used as the dependent variable (individual-level Alpha=.811; unit-level Alpha=.718).

Independent variables

Length of relationship. At the individual level, the length of the relationship was first measured in months and then recoded into years to account for the typically shorter time perspective associated with interpersonal work-related relationships. At the unit level, relationship length was operationalized as the number of years since knowledge transfer between the subsidiary and the other unit began.

Communication frequency. This variable was measured as the sum of three items covering each of the following means of interaction: (i) e-mail, (ii) telephone, and (iii) face-to-face interaction. Sums were used instead of averages because the different forms of communication arguably are complementary. At the individual level, respondents were asked to rate on a 6-point scale (1=daily, 2=weekly, 3=monthly, 4=3-4 times a year, 5=once a year or less, 6=never) how often they interacted with the other person by, respectively, e-mail, telephone and face-to-face. This scale, adapted from Ghoshal et al. (1994) and Hansen (1999), was reverse coded for the analysis. At the unit level, respondents were asked to rate on 7-point Likert-type scales (ranging

from 'low'=1 to 'high'=7) how often e-mail, telephone and face-to-face communication, respectively, were used as communication channels to transfer knowledge between their subsidiary and the other unit (the scale being adapted from Gupta and Govindarajan, 2000).

Cultural distance. This variable was measured as the cultural difference between the nationalities of the two interaction partners in the individual-level data, and the cultural difference between the nationalities of the two units in the unit-level data. We computed the differences using the Kogut and Singh (1988) cultural distance index on nine cultural dimensions identified by the GLOBE study (House et al., 2002, 2004), which provides scales for 62 societies on nine cultural dimensions.³ We used regression predicted (response bias corrected) scores for societal cultural practices scales (House et al., 2004, 742-744), and a composite index was formed by adapting the Kogut and Singh formula (1988) for the nine GLOBE dimensions. The formula is based on the deviation of each of the nine cultural dimensions associated with the nationality of the interaction partner from the score of the respondent's nationality. Algebraically, it can be presented as follows.

$$CD_{ij} = \sum_{i=1}^9 \{ (I_{ij} - I_{ir})^2 / V_i \} / 9$$

In the formula, CD_{ij} stands for the cultural distance of the j th interaction partner's nationality from the respondent's nationality. I_{ij} indicates the GLOBE score for the i th cultural dimension and j th nationality and I_{ir} stands for the GLOBE score for the i th

³ These cultural dimensions include assertiveness, institutional collectivism, in-group collectivism, future orientation, gender egalitarianism, humane orientation, performance orientation, power distance and uncertainty avoidance (House et al., 2004).

cultural dimension and the nationality of the respondent or unit. V_i is the variation of the scores in the i th dimension (adapted from Kogut and Singh, 1988).⁴

Control variables

HQ relationship. Previous research in MNC contexts (e.g., Barner-Rasmussen and Björkman, 2007) suggests that levels of relational social capital in inter-unit relationships may be higher in HQ-subsidary relationships than in relationships between two subsidiaries. We therefore need to control for HQ relationships. At the individual level, the question was worded to ascertain whether the interaction partner was located at headquarters (=1) or in another unit belonging to the same parent MNC (=0). Similar, at the unit level we used a dummy variable to indicate whether the communication was taking place with the focal unit's headquarters (=1) or another subsidiary unit belonging to the same parent MNC (=0).

Geographical distance. Proximity of location may be another important driver of trust in interpersonal relationships (Monge and Contractor, 2003; Williams and O'Reilly, 1998), and inversely, geographical distance may complicate the relational bond. Given our argumentation above, it is therefore motivated to control for the possible impact of geographical distance. To measure geographical distance, we used the distance in air miles between the locations of the interaction partners (individual-level data) or units (unit-level data). These distances were obtained from Meridian World

⁴ Other cultural distance measures used in previous research include the Kogut and Singh (1998) distance based on Hofstede's (1980) four cultural dimensions, and Euclidean distance, also based on Hofstede's (1980) dimensions (Manev and Stevenson, 2001). The obvious reason for choosing the GLOBE dimensions over Hofstede's is that while building on Hofstede's work (Leung et al., 2005), the GLOBE scores are both more recent, as well as cover a larger cross-sectional sample and more aspects of culture, responding to the criticism directed towards Hofstede's measures (see e.g., Shenkar, 2001). For the sake of rigorously, we tested the Euclidean distance on the nine GLOBE dimensions for the individual-level data set; this produced similar results as the Kogut and Singh (1988) method.

Data (www.meridianworlddata.com). The distance measures in air miles were recorded as thousands of air miles.

Subsidiary size. For the unit-level data, subsidiary size was used as an additional control variable to ensure that more frequent communication would not simply be a product of a larger number of people being involved in interaction. Subsidiary size was operationalised as the log of the subsidiary's number of employees.

Results

The correlations of the studied variables are provided in Table 3 below, together with descriptive statistics. Although there are some significant correlations between the independent variables, neither data set suffers from multicollinearity, as indicated with low VIF values.

- Insert Table 3 approximately here -

Our hypotheses were tested using ordinary least squares regression analysis. Two separate groups of analyses were performed: one for the individual-level data set and one for the unit-level one. The results of these analyses are presented in Table 4.

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Both models used to test the hypotheses were statistically significant. Hypothesis 1a concerning the association between interpersonal relationship length and relational social capital was strongly supported while the corresponding Hypothesis 1b at the inter-unit level of analysis was only marginally supported (at $<.1$). This suggests that while the length of the relationship is an important driver of both interpersonal-level

and unit-level relational social capital, its effect is stronger at the interpersonal level. Hypotheses 2a and 2b both received support at the .05 level of significance. This finding indicates that communication frequency is positively related with relational social capital on both levels of analysis. The data did, however, not support the hypothesized positive relationship between the cultural distance between individuals (Hypothesis 3a) and units (Hypothesis 3b) respectively, and the level of relational social capital. Therefore, Hypotheses 3a and 3b will have to be rejected. Among the control variables, only unit size was significantly related with relational social capital in the unit-level data set.

Discussion

In this study we set out to explore factors associated with social capital within MNCs, both within interpersonal and inter-unit cross-border relationships. Our results show that the drivers of the relational social capital are similar across both levels of analysis. The relational dimension of social capital was found to be significantly and positively related to the length of the relationship between the two individuals or units, and the frequency of the communication between them. The finding that this holds true across both levels of analysis is consistent with Kostova and Roth's (2003) model of how social capital emerges within the MNC, and also with Mayer et al.'s (1995) proposal that similar mechanisms can explain trust both at the interpersonal and inter-unit levels of analysis (see also Schoorman et al., 2007). However, our empirical results, which are among the very few that address both levels within one study, suggest that the relationship may be stronger at the interpersonal level than the unit one. This finding is not surprising as there are likely to be a multitude of additional factors affecting the relational dimensions of social capital between MNC

units, such as issues related to resource flows or power relationships between subsidiaries. While we were not able to test these issues within the present research design, they represent a fruitful avenue for further empirical research.

Contrary to our hypotheses, cultural distance was not found to be significantly related with relational social capital on either the interpersonal or the inter-unit level. Following most studies of cultural distance in international business research we used the Kogut and Singh (1988) cultural distance index as a measure of cultural distance between the nationalities of the interacting managers or unit. Although we addressed some of the criticism directed to the index by using data GLOBE data rather than Hofstede's dimensions (see e.g. Shenkar, 2001), the obvious weakness of these measures is that they are based on data at the average national rather than at the interpersonal or –unit level (Au, 2000; Ronen and Shenkar, 1985; Takeuchi, Tesluk, Yun and Lepak, 2005). In future research, scholars may collect data on cultural distance at focal levels of analysis, the challenge remains how these constructs can be conceptualized and operationalized.

This study suffers from some limitations which at the same time suggest avenues for future research. First, the samples at both the interpersonal and inter-unit levels were relatively small, a factor that may partly explain why some of the statistical relationships were relatively weak in our study. Second, the study was carried out in one location only, Finland. As there may be systematic cross-cultural differences in how relational social capital develops (cf. Schoorman et al., 2007), our findings need to be corroborated in other settings. Third, we only examined the level of social capital from one side of the dyad. Fourth, data on inter-unit relational social capital was obtained from one person, the general manager or president of the subsidiary. Although this person is likely to be the best individual source of this

information, especially in large subsidiaries he or she may not be knowledgeable about the relationships with other MNC units existing in different parts of the focal subsidiary. Finally, while the fact that both of our data sets replicated similar questions in two levels within the same context was a key contribution beginning to address multilevel issues, the obvious next major research challenge is to empirically test Kostova and Roth's (2003) model of the mechanisms through which interpersonal social capital over time may evolve into inter-unit social capital. While there exists some evidence of a positive relationship between interpersonal and inter-unit relational social capital (trust) in buyer-supplier relationships (Zaheer, McEvily and Perrone, 1998), more research is called for concerning MNC-internal social capital using research designs that better addresses the issue of causality. Such research should ideally be longitudinal with data being collected on social capital at different levels of analysis. The propositions presented by Kostova and Roth (2003) provide an excellent starting point for such research.

Managerial Implications

The findings of the study carry noteworthy implications for both individual managers as well as for the MNC as a whole. As the importance of relational social capital has been well recognized in previous research (e.g., Kostova and Roth, 2003; Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998) for knowledge and resource exchange, intellectual capital and value creation within firm – and consequently competitive advantage - its facilitation is key for organizational success.

For practising managers, the main message from our research is that communication frequency and the length of the relationship matter for the relational social capital that exists within MNCs – both at the interpersonal and unit levels.

Therefore, ideal types of interpersonal and inter-unit cross-border relationships are ones in which communication remains frequent for a period of time. The means of initiating such relationships include corporate meetings and symposia with participants from geographically dispersed units, investments in training and development programs with international participation, cross-national and possibly also cross-functional projects and committees, and short- as well as long-term transfers of individuals between units. All of these provide contexts which create interaction and strong relationships between managers from different MNC units (Evans, Pucik and Barsoux, 2002; Mäkelä, 2007). Although such practices obviously carry a cost, the benefits in terms of enhanced social capital may clearly exceed these expenses. Furthermore, for interpersonal social capital to not only remain a private good of individuals but also become a public good, it is important that boundary spanners both share their experiences (Kostova and Roth, 2003) and help other members of their units to develop relationships with other MNC units.

Not all individuals are likely to be equally adept at building relational social capital in international contexts. Therefore, one central question is how to choose people with the skills and attitudes that increase the likelihood of them being able to play the role of boundary-spanners; this will also help organizations to develop social capital at the unit level. Language and communication skills, social skills and intercultural competence are among the qualities that MNC managers may look for in potentially boundary-spanning individuals. MNCs may also want to invest in the development of such skills for its employees. Another personal characteristic likely to contribute to interpersonal relational social capital is an individual's propensity to trust (Mayer et al., 1995). Without such a propensity, individuals are unlikely to place themselves in a situation where they take the risk of beginning to interact with a

stranger and possibly also expose themselves to the risk of opportunistic behaviour on the part of the other person. Individuals with a low propensity to trust others are thus less likely to develop a high level of relational social capital than those with a higher propensity. Finally, and as already suggested, more relational social capital may not always necessarily be better (Portes, 2003). If relationship building has a cost for the individual manager, the cost is multiplied for the organization. The organization must therefore create strong ties (Burt, 1992; Hansen, 1999; Krackhardt, 1992) where it matters most, which is a strategic question for each individual organization.

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Table 1: Key sample characteristics, individual-level data

Respondents within the sample	31
Relationships within the sample	265
Average number of relationships per respondent	8.5
Industries within the sample	12
MNCs within the sample	23
Managers within the sample	31
- male	74.3%
- female	25.7%
Number of countries with relationships to	27

Table 2: Key sample characteristics, unit-level data

No. of subsidiaries in the sample	53
Average no. of employees/subsidiary	555 (s.d.=1,148)
Average annual sales/subsidiary	127 million US dollars (s.d.=191)
Parent MNC nationality	Nordic n=16 (30% of sample) European n=19 (36% of sample) U.S. n=18 (34% of sample)
No. of inter-unit relations	102

Table 3. Means, standard deviations and Pearson correlation coefficients of the studied variables

Variable	Individual-level data		1	2	3	4	5	6	7	Unit-level data	
	Mean	Std								Mean	Std
1 Trust	5.1	1.4	-	15	24*	-10	01	-08	23*	4.9	1.0
2 Relationship length (years)	2.8	2.9	21**	-	12	-03	21*	-05	-04	18.7	21.1
3 Communication frequency	8.0	2.9	29**	06	-	-16	00	-31**	-05	13.9	3.4
4 Cultural distance	1.0	0.6	-07	-11	-11	-	03	-00	04	1.0	0.5
5 HQ relationship (1=yes, 0=no)	0.3	0.3	-02	-11	04	-02	-	11	17	0.5	0.5
6 Geographical distance (1,000 miles)	1.2	1.3	-04	23**	-07	01	-08	-	-12	1.0	1.2
7 Subsidiary size (log)									-	2.3	0.6

*p<.05, **p<.01, two-tailed.

Note: Lower diagonal represents individual-level data, upper diagonal unit-level data. Decimal points omitted from correlation coefficients due to space constraints.

Table 4: Regression analyses

Multiple regression analysis		
	Individual-level data	Unit-level data
Relationship length	.209***	.148+
Communication frequency	.268***	.235*
Cultural distance	-.016	-.064
HQ relationship	-.010	-.053
Geographical distance	-.071	.017
Subsidiary size		.254**
R	.355	.374
R ²	.126	.140
Adjusted R ²	.109	.085
F	7.452***	2.542*

+one-tail p<0.1; * one-tail p<0.05; **one-tail p< 0.01; ***one-tail p< 0.001 for the hypotheses.
Data in the table present standardized regression coefficients.

Figure 1 Hypotheses

