Consequences of perception gaps in the headquarters–subsidiary relationship

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Abstract

This paper is built on two premises: (1) that HQ and subsidiary managers often have different perceptions about the role of the subsidiary in the multinational corporation, and (2) that such differences have important implications for the management of the HQ–subsidiary relationship. Using data collected from 89 HQ–subsidiary dyads, we test and find support for a LISREL model, in which subsidiary managers’ overestimation of their roles is associated with greater HQ control of the subsidiary, which in turn is associated with a lower level of HQ–subsidiary cooperation. © 2000 Elsevier Science Ltd. All rights reserved.

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One of the core issues in the study of multinational corporations (MNCs) is how to structure and manage the relationship between the headquarters and its foreign subsidiaries. During the last 10 years it has become more and more prevalent to talk about the MNC as an interorganizational network (Ghoshal & Bartlett, 1990), and to think in terms of the web of relationships that the subsidiary has with other actors in its corporate network. Within this perspective, it should not be forgotten that although resources and competencies are distributed among several foreign subsi-
aries, the headquarters–subsidiary relationship remains crucial as subsidiaries are organized through interdependent exchange. Thus, co-ordination within the inter-organizational MNC is a main issue and consequently elements like control and cooperation in the headquarters–subsidiary relationship (Ghoshal & Bartlett, 1988).

But the headquarters–subsidiary relationship is never a simple one. In essence, the relationship can be modeled as a ‘mixed motive dyad’ in which the interests and perceptions of the two parties are frequently not aligned with one another (Ghoshal & Nohria, 1989). Where the subsidiary desires autonomy, headquarters prefers control; where subsidiary managers see entrepreneurial endeavour, headquarters sees opportunism; and where the subsidiary is acting primarily in the interests of the local business, headquarters is far more concerned about the MNC’s worldwide profitability.

While it is widely understood that headquarters and subsidiary managers have different perceptions about the subsidiary’s activities, there has been very little research that looks explicitly at this issue (recent exceptions are Asakawa, 1996; Arvidsson, 1997). Indeed, there appears to be an implicit assumption in much MNC subsidiary research that HQ and subsidiary managers’ perceptions should converge on one another—witness the attempts of many researchers to poll both HQ and subsidiary managers as a means of enhancing the validity of their subsidiary-level constructs (e.g. Birkinshaw, 1997; Ghoshal & Nohria, 1989).

Our argument, in contrast, is first that we would expect to see significant differences in opinions between HQ and subsidiary managers on just about everything. Of course, factual questions (e.g. what is the subsidiary’s market share?) should in theory yield the same answer from both parties plus error, but any questions relating to attitudes or perceptions could be expected to differ widely, for the simple reason that the two parties have such different sets of experiences, reference points, and world-views. But the second and more critical part of our argument is that we would expect to see the perception gaps between headquarters and subsidiary managers varying in a systematic manner—that is, the magnitude of the perception gaps should be to some degree predictable. Viewed in this way, HQ–subsidiary perception gaps shift from being measurement error to being an operationalizable construct, one that has potentially important consequences.

The purpose of this paper, then, is to operationalize the concept of HQ–subsidiary perception gaps, and then to empirically examine some of its consequences. Perception gap is operationalized as the extent to which subsidiary managers overestimate the strategic role of their subsidiary vis-à-vis HQ managers (subsidiary role overestimation for short). This is an unavoidably complex operationalization that we will return to in detail later. In terms of its consequences, we focus on two—HQ control of the subsidiary and HQ–subsidiary cooperation. The results of the research, in short, are that subsidiary role overestimation appears to lead to greater HQ control over the subsidiary, which in turn reduces the level of HQ–subsidiary cooperation. However, we find no direct path between subsidiary role overestimation and HQ–subsidiary cooperation.

As a secondary objective, this paper also plays out the implications of HQ–subsidiary perception gaps for the theory of the MNC. Specifically, Hedlund’s (1986) con-
cept of a Holographic corporation, in which information about the whole is stored in every part, would seem to tie in very nicely to our study of perception gaps, in that the lower the perception gap, the more holographic the firm. By providing some solid empirical data on the issue of shared information between HQ and subsidiary, we hope to be able to contribute to the Holographic model.

The paper is organized into four sections. In the following section we provide some background on the theory of the MNC before specifying our research model and laying out the hypotheses. In the second section we describe our research methodology. In the third section we describe the findings. And in the final section we discuss the implications of the study for theory and for practise.

1. Theoretical background

1.1. Theory of the MNC

The purpose of the theory of the multinational corporation is to explain the level and pattern of the foreign value-added activities of firms (Dunning, 1993). This involves an understanding of the original decision to invest internationally, but also an understanding of how international activities have subsequently developed (Kogut, 1983). There are two dominant perspectives. The longer-established of the two is the ‘economic’ theory of foreign production, which centres around the insight that imperfections in intermediate markets provide the opportunity for the foreign firm to build competitive advantage over its domestic counterpart (Buckley & Casson, 1976; Dunning, 1980; Hymer, 1976; Rugman, 1981). While providing a comprehensive explanation for why firms internationalize in the first place, there has been little effort made in applying the theory to the configuration of activities in already-international firms (exceptions are Dunning (1993) and Rugman & Verbeke (1992)).

The second theory can best be termed the ‘network’ approach, in that it models the MNC as a geographically-dispersed set of value-adding activities, each activity of which can be viewed as a semi-autonomous entity, with ownership ties, normative links and certain obligations to head office. This theoretical approach has its roots in the work of Prahalad (1976), Bartlett (1979), Hedlund (1986) and White and Poynter (1984), and others. It has recently been invigorated through the application of network principles from other disciplines (e.g. Axelsson & Easton, 1992; Forsgren & Johanson, 1992; Ghoshal & Bartlett, 1990; Nohria & Eccles, 1992). The strength of the network approach is in its ability to deal with complex, large MNCs where multinationality is already a given. As such, it is used as the foundation for this study.

Two characteristics of the network model are particularly salient for the current paper. One is the observation that subsidiary companies are taking on an ever-increasing variety of roles. Whereas subsidiaries began as ‘market access’ operations for selling the MNC’s products in the host country, most now also perform higher value-added activities such as manufacturing and R&D (Forsgren, Holm & Johanson, 1992). This differentiation of roles makes it increasingly difficult for HQ to control their subsidiaries by traditional means, so they increasingly resort to other, more
informal systems to retain control (Prahalad & Doz, 1981). The second important
observation is that the flow of information within the MNC is far from perfect.
Subsidiary operations are differentiated according to the needs of their local market-
place, and as such they are often only imperfectly integrated into their corporate
network (Ghoshal & Nohria, 1989). Knowledge is a ‘sticky’ asset (Szulanski, 1996;
Von Hippel, 1994; Zander, 1991) that does not flow easily between locations;
humans have limited rationality; and MNCs are extremely large, complex, and geo-
graphically dispersed. Hedlund (1986) coined the term ‘holographic corporation’ to
represent the MNC in which information about the whole was stored in every part,
but the reality—as Hedlund acknowledged—is that in most MNCs there is a rather
limited level of shared understanding between the disparate parts, so the Holographic
concept is still a ‘distant ideal’.

1.2. Subsidiary role: a negotiated construct

The literature on subsidiary roles has three different perspectives on what deter-
mines the subsidiary’s role (Birkinshaw & Hood, 1998): Head office assignment,
Subsidiary choice, and Local environment determinism. Head office assignment
assumes that the role of the subsidiary is defined by head office managers, and is
controlled through a variety of formal and informal mechanisms (e.g. Bartlett &
Ghoshal, 1989; Prahalad & Doz, 1981). Subsidiary choice assumes that the subsidi-
ary has sufficient degrees of freedom that it can define its own role (Birkinshaw,
1997). Local environment determinism assumes that the subsidiary’s role is strongly
influenced by the specific characteristics of the host country (Forsgren, Holm &
Thilenius, 1997; Ghoshal & Nohria, 1989).

This categorization is based on the academic literature, but it is possible to see a
similar split in the real world. While head office managers think in terms of assigning
roles to their subsidiary companies and how to control them, subsidiary managers
frequently think in terms of autonomy and strategic choice. This is a natural conse-
quence of the different perspectives these two groups of managers have on the world.
Furthermore, while academic studies have put names on subsidiary roles—strategic
leader, contributor, implementer etc.—such names are rarely used in the real world
and even if they are, they are not defined according to clear objective criteria. As a
result, there appears to be great potential for ‘perception gaps’ to emerge in the
definition of subsidiary roles.

The role of the subsidiary, then, is actually a negotiated position that is to some
degree understood jointly between HQ and subsidiary managers1. By negotiated we

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1 There is an enormous literature that looks explicitly at the question of ‘social construction’ of reality
(Berger & Luckmann, 1966) along the basic lines that there is no objective reality because all we are
aware of is our own social construction of that reality. Our intention in this paper is not to get ‘bogged
down’ in the debate about what is objective and subjective, because it seems to be irrelevant to our
argument. There is ample evidence in the management literature that perceptions at the individual, group
or firm level are what drive action (Dougherty, 1992; Prahalad & Bettis, 1986; Grinyer & Spender, 1979),
so it is a small step forward to argue that the extent to which perceptions are shared between HQ and
subsidiary is also a driver of action.
do not mean that the two sides sat down together and formally worked out a mutually agreed position (though this could indeed happen). Rather, we see the subsidiary’s role as emerging from a give-and-take process between the two sides. If the subsidiary general manager puts forward a proposal to export some spare capacity to neighbouring countries for example, the response she gets from HQ—whether yes or no—will send a strong signal about what role they think her subsidiary should be playing. Moreover, if the subsidiary general manager gets the answer no, but then goes ahead and exports anyway, then she is sending HQ management a strong signal about what role she believes the subsidiary should have. Of course, it should be obvious that HQ tends to have the final word in such negotiations, but particularly in cases where the subsidiary has built up valuable resources of its own, the balance of power is much more equal.

On the basis of this discussion, we suggest that the perception gap between subsidiary and HQ managers regarding the subsidiary’s role has important implications for the management of the MNC. Preliminary support for this assertion comes from three recent studies. Asakawa (1996) studied perception gaps between foreign R&D managers and their Japanese HQ managers, with a focus on the level of autonomy and information sharing; Arvidsson (1997) studied perception gaps between sales and marketing subsidiary managers and their HQ managers, with a focus on the capabilities of the subsidiary; and Holm, Johanson and Thilenius (1995) studied the perception gap between the divisional HQs and subsidiary managers view on the importance of local business networks for subsidiary development of technology and business knowledge.

What forms do perception gaps take? Three scenarios can be envisaged, as depicted in Fig. 1 (for similar frameworks to this, see Asakawa, 1996; Birkinshaw, 1995; Burgelman, 1983)—(1) Subsidiary overestimation in which subsidiary management perceive their MNC role as more strategic than headquarters management perceive it, (2) a small or non-existent perception gap, in which subsidiary and HQ management have the same perception of the subsidiary’s role, and (3) HQ overestimation, in which subsidiary management see their role as less strategic than headquarters management do.

Where there is subsidiary overestimation (scenario 1), past research suggests that subsidiary managers will waste considerable time in putting forward proposals to HQ management that get consistently rejected research (Birkinshaw 1995, 1997), and they may be negatively evaluated when their local initiatives are condemned by HQ managers as opportunistic empire-building. Such incidents can create ill feeling between the two sides, resulting in disillusionment among subsidiary employees and possibly the departure of able subsidiary managers. Where there is HQ overestimation (scenario 3), the HQ–subsidiary relationship is likely to be characterized by missed opportunities. Any frustrations in the relationships will be felt predominantly
by HQ management, because they see subsidiary management as unduly passive and not prepared to take on their full scope of responsibility. But overall, the relationship is likely to be relatively harmonious, even if sub-optimal. Finally, when the perception gap is small or non-existent (scenario 2), the relationship is likely to be very effective. The subsidiary’s proposals will generally be accepted, they are likely to receive a favourable evaluation from HQ because they are doing as expected, and efforts can be directed towards value-adding activity rather than political in-fighting. There is one caveat here; namely that too much HQ–subsidiary agreement (i.e. no perception gap at all) could potentially be detrimental. Sometimes differences in perception can be the seeds of a new understanding. Thus, if a new opportunity opens up in the local market that neither HQ or subsidiary had anticipated, it is important that the subsidiary manager bring this to the attention of her superiors at HQ, and perhaps argue that this necessitates a re-evaluation of the subsidiary’s role.

The focus in the empirical part of this paper is on subsidiary role overestimation (scenario 1), for the simple reason that it appears to have the most deleterious consequences for the management of the MNC. However HQ overestimation is also an important issue that should be addressed in subsequent research.

1.3. Related theories from social psychology

The HQ–subsidiary relationship is a particular case of the generic superior–subordinate relationship that exists throughout organizations. For that reason, it is valuable to briefly review and incorporate some of the social psychology research that has looked at perception, motivation, and decision-making processes in such relation-
ships. Two areas in particular appear relevant: (1) theories of perception, including cognitive limitations and interpretation of perception; and (2) the theory of procedural justice.

Theories of perception are concerned with the way individuals screen, select, organize and interpret stimuli to give them meaning (Levine & Shefner, 1981). It is generally accepted that each of us to some degree perceives the world around us differently, and that we base our action on our perceptions. One important stream of research has therefore focused on the causes of perception differences between individuals. In part such differences can be explained through the limited information processing capacity of the mind and the need to develop simplifying heuristics (Tversky & Kahneman, 1974; Simon, 1979). But how such heuristics arise is itself a function of an individual’s own experiences, interests and ‘worldview’ (e.g. Dearborn & Simon, 1958). In the context of the MNC, this research can help us to understand why HQ and subsidiary managers can have such different perceptions of reality.

The second relevant stream of research uses Attribution Theory to explain how individuals interpret and act on their perceptions of others (Heider, 1944; Kelley & Michela, 1980). In the context of the current paper, attribution theory argues that HQ managers will interpret the action of subsidiary managers, and deduct why they acted in such a way. Under certain circumstances the action will be attributed to internal causes (i.e. through the efforts of the manager), and under other circumstances it will be attributed to external causes (environmental factors, luck etc.). This attribution will then form the basis of subsequent action by the HQ manager. Strickland’s (1958) study of supervisor–subordinate relationships provides a very relevant example of this—he showed that supervisors who had limited information about their subordinates tended to attribute task compliance to external factors, which resulted in a higher level of monitoring. The knowledge that HQ managers have about the subsidiary, in other words, is likely to have a significant impact on its approach to control.

The final area of social psychology to mention here is Procedural Justice Theory (Lind & Tyler, 1988; Thibaut & Walker, 1975), which is concerned with the impact of the decision process (not its content) on human cognition and behaviour. Kim and Mauborgne (1991, 1993) have provided a systematic and effective translation of procedural justice theory into the context of the multinational corporation. Their definition of procedural justice is the extent to which the dynamics of the MNC’s strategy making process is judged to be fair by the top managers of the foreign subsidiary (1993: 503). The relevant characteristics of procedural justice in this context are: (1) HQ management knowledge about the local subsidiary, (2) two-way communication, (3) HQ consistency in decision making across subsidiaries, (4) subsidiaries can legitimately challenge the views of HQ, and (5) subsidiaries receive an

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3 Note that Kim and Mauborgne were explicitly concerned with the strategic planning process in the MNC. This study is concerned with all aspects of the relationship between HQ and subsidiary, but intuitively the same list of characteristics would seem to apply.
account of the final decisions of HQ. Procedural justice theory has obvious relevance for the current study, in that the perception gap is likely to be greatest in cases where procedural justice is low (see point 1 above). Rather than get into specifics here, we will pick up on this issue and all others related to social psychology theories in the development of the hypotheses.

1.4. Organizing framework: antecedent conditions and consequences of perception gaps

We have so far argued that there will be perception gaps between HQ and subsidiary regarding the subsidiary’s role, and that the magnitude of that gap has implications for the effective management of the MNC. In the next section we formally develop three hypotheses to examine the consequences of perception gaps, but before doing that we should first discuss some of the reasons why we would expect perception gaps to emerge in the first place.

Three sets of factors appear to cause perception gaps between HQ and subsidiary to emerge. The first is that subsidiary and HQ managers have very different experiences, which effects not only the level of information they have about the subsidiary but also the way they interpret that information. In terms of network theory, the argument is that over time the subsidiary builds up a set of relationships in the local environment that cause it to adapt and learn. Because that set of relationships is only shared with HQ to a limited degree, the adaptation the subsidiary undergoes is not well understood by managers in HQ (Forsgren & Johanson, 1992; Johanson & Mattsson, 1992). The second factor is the imperfect flow of information inside the MNC, caused by bounded rationality and the stickiness of knowledge (Cyert & March, 1963; Szulanski, 1996; Von Hippel, 1994). If information flowed efficiently, the world-view differences discussed above would still arise, but they would also be dissipated relatively quickly through the sharing of information, cross-border learning and knowledge-transfer. The third factor causing perception gaps to emerge is decreasing subsidiary dependence on HQ. We alluded to this earlier, arguing that as subsidiaries develop their own resources, their dependence on HQ goes down and their degrees of freedom for undertaking autonomous action increase (Prahalad & Doz, 1981). The key point here is that the potential for real perception gaps to arise is greatest when the subsidiary is pursuing autonomous initiatives. When the subsidiary has to seek funding or sanction from HQ for everything it does, the mutual adjustment in the relationship is kept fairly tight. But when the subsidiary has the capacity for autonomous action—as many large and strategically important ones do—HQ may easily find itself unaware of what the subsidiary is doing, which can result in considerable perception gaps.

Taken together these sets of factors help us to understand why perception gaps arise in the first place. But the empirical focus of the paper is on the consequences of perception gaps, or more accurately on the consequences of subsidiary role overestimation. Two constructs in particular are considered. Headquarters control of the subsidiary (HQ control) and the extent of cooperation and shared interests between the headquarters and the subsidiary (HQ–subsidiary cooperation). Issues of control
and cooperation have been studied for decades, both in the MNC literature and in the general organization theory literature. However, our belief is that by studying perception gaps and their consequences, we can shed new light on an old problem. Three relationships are thus hypothesized, as indicated in Fig. 2 and elaborated on in the next section.

One caveat is in order here, namely that the causal relationships between variables are seldom as straightforward as suggested. Our argument is stated in terms of the consequences of perception gaps, and the LISREL model is built around this argument. However, we could equally make the case that performance, HQ-control, and HQ–subsidiary cooperation were antecedent conditions to the perception gap regarding the subsidiary’s role. The reality, we suspect, is one of reciprocal causality between constructs. Structural equation modelling provides some insights into likely causal relationships (e.g. Bollen, 1989: 40–79), but given the cross-sectional nature of the data we cannot provide a definitive test. This is a limitation to the current research, which must be borne in mind in both the hypothesis development and results.

1.5. Hypothesis development

The first hypothesis concerns the relationship between subsidiary role overestimation and HQ Control. The term control has been used in multiple ways in the literature. Our definition is taken from Etzioni (1965): A process that brings about adherence to a goal or target through the exercise of power or authority. This is a relatively narrow definition, because it involves the explicit use of power and/or authority by the HQ over the subsidiary unit. Control is also used more broadly to refer to the

![Fig. 2. The hypothesized model.](image)
various systems through which the subsidiary unit’s activities are shaped—such as socialization mechanisms (Hedlund, 1986; Ouchi, 1977; Van Maanen & Schein, 1979), boundary and belief systems (Simons, 1995), and organizational context definition (Bartlett & Ghoshal, 1989; Prahalad & Doz, 1981)—but in this paper the focus on the dyadic relationship (rather than the system) makes the narrow definition more appropriate.

When defined in this way, control can have both positive and negative connotations. On the positive side, certain subsidiaries undertake strategically critical activities, or activities that are highly interdependent with others, in which case case active HQ control is essential to ensure that global coordination is achieved. On the negative side, active HQ control can be interpreted as a lack of trust in the ability of subsidiary managers to make sound judgements on their own. Given our focus on subsidiary role overestimation, it is the negative dimensions of HQ control that are most relevant here. As we have already argued, when subsidiary managers overestimate their unit’s role relative to HQ managers, they are prone to act in accordance with that perceived role, and HQ managers in turn are likely to increase their involvement in subsidiary decisions—through participation in subsidiary meetings or through outright veto. In both cases, HQ control will have increased.

Attribution theory offers an alternative perspective on this issue. When HQ managers have limited knowledge of the subsidiary (manifested in a large perception gap), they are likely to attribute the ‘causal locus’ of the subsidiary managers’ results as being outside them. This restricts the development of trust on the part of the HQ managers and encourages them to increase the level of control over the subsidiary (Strickland, 1958: 201). Assuming this higher level of control achieves reasonable results, the original attribution is confirmed, and control efforts increase further. By contrast, a higher level of knowledge on the part of HQ managers about what the subsidiary is doing (i.e. a lower perception gap) should be associated with an internal attribution of success (Jones & Nisbett, 1972), and a tendency to let subsidiary management do things their way. This leads to the following formal hypothesis:

Hypothesis 1. The greater the level of subsidiary role overestimation, the greater the level of HQ control of the subsidiary.

The second hypothesis argues that subsidiary role overestimation will be negatively associated with the level of HQ–subsidiary cooperation. Cooperation is defined as “working together towards a common end” (Funk and Wagnall’s standard desk dictionary), to which we would add, ‘based on shared interests’ to emphasize that cooperation by the subsidiary is not being mandated by HQ. The idea of cooperation

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4 It is interesting to observe that a broad definition of control would potentially lead to a negative correlation between subsidiary role overestimation and HQ control. Here the argument would be that subsidiary managers actions are, by definition, controlled if they are consistent with the priorities and expectations of HQ managers, simply because control covers all the boundary systems and belief systems that shape—however subtly—attitudes and behaviours. Such a relationship, however, would also flow in the opposite direction, i.e. control would reduce perception gaps, not vice versa.
is central to our understanding of why firms exist (Barnard, 1938), but is has not received explicit attention in the HQ–subsidiary literature. Instead, most research has focused on coordination, which is seen as “...the enabling process which provides the appropriate linking between different task units within the organization” (Tuggle, 1978: 150; Cray, 1984; Van de Ven, Delbecq & Koenig, 1976). Coordination is of course central to the functioning of multi-unit organization (Ghoshal & Bartlett, 1990), but we would argue that it is most effectively achieved through the alignment of the interests of the various units, i.e. through cooperation.

The proposed relationship is in many ways self-explanatory. A high level of subsidiary role overestimation is indicative of different expectations among subsidiary and HQ managers. This is likely to result in a misalignment of interests between the two parties, and a relatively low level of cooperation.

Again, theories of social psychology add some extra nuance to the proposed relationship. Perceptual congruence between people (i.e. the inverse of a gap) is argued by Wexley, Alexander, Greenawalt and Couch (1980) to be a form of accurate communication that is associated with feelings of interpersonal satisfaction (Dansereau, Green & Haga, 1975; Graen & Ginsburgh, 1977; Newcomb, 1956). To the extent that individuals attempt to minimize cognitive dissonance through changes in behaviour, such feelings of interpersonal satisfaction are likely to be associated with a cooperative relationship (cf. Kahn’s Episode Role Model, Katz & Kahn, 1978). This leads to the following hypothesis:

Hypothesis 2. The greater the level of subsidiary role overestimation, the lower the level of HQ–subsidiary cooperation.

Note, though, that we are not simply equating a gap in perceptions with a low level of cooperation. As will become clear in the next section, the subsidiary role overestimation measure is calculated by subtracting the HQ score from the subsidiary score on a number of items. Consider Table 1, which lays out the three scenarios from earlier in terms of this hypothesis. What this implies is that we anticipate seeing a high level of HQ–subsidiary cooperation in the case where the HQ managers perceive the subsidiary’s role as greater than subsidiary managers do. The argument here is that such subsidiary managers are, colloquially speaking, ‘under the thumb’ of HQ management and are cooperative despite the fact that they may have different perceptions about their unit’s role. This is very different from saying that gaps in

<table>
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<th>Scenario</th>
<th>Subsidiary role overestimation</th>
<th>HQ–subsidiary cooperation</th>
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<tr>
<td>1</td>
<td>Positive</td>
<td>Low</td>
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<tr>
<td>2</td>
<td>Zero</td>
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<td>3</td>
<td>Negative</td>
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perception *regardless of direction* will be associated with low cooperation, which would be something of a tautology.

The third hypothesis relates HQ control of the subsidiary to HQ–subsidiary cooperation. Our expectation is that there will be a negative correlation between these two constructs, i.e. high control will be associated with low cooperation. However, the causality in this relationship could flow in either direction. Consider first the effect of HQ control on HQ–subsidiary cooperation. For subsidiary management, high levels of control are likely to be perceived negatively. They have been charged with responsibility for managing the subsidiary’s activities and delivering on the subsidiary’s goals, and as a result they are likely to feel strongly that they should have freedom to make whatever decisions they deem appropriate. HQ control, from this perspective, looks like ‘interference’, and it is potentially rather demoralizing for subsidiary management. More critically, HQ control is likely to also result in conflict between HQ and subsidiary management, because the two parties have different points of view. As result, high levels of HQ control will probably result in a lower level of HQ–subsidiary cooperation, again with the important caveat that this is control narrowly-defined.

The opposite causality is equally likely. If there is a high level of cooperation between HQ and subsidiary management, it should create a relatively harmonious relationship, and HQ management’s will ‘attribute’ the results of the subsidiary to the abilities of subsidiary management rather than to their own controlling efforts. This should induce HQ management to believe that they can reduce their level of control. A non-cooperative relationship, by contrast, is likely to be interpreted by HQ management as a sign of trouble, and evidence that they need to intervene more closely in the affairs of the subsidiary. Thus, poor cooperation will lead to a higher level of HQ control. In sum:

**Hypothesis 3.** The greater the level of HQ control of the subsidiary, the lower the level of HQ–subsidiary cooperation. Causality between the two constructs is reciprocal.

Fig. 2 summarizes the hypotheses and presents the model to be tested.

### 2. Research methodology

#### 2.1. The sample and the collection of data

To test the hypotheses we needed to collect detailed and comparable information from both sides of the HQ–subsidiary relationship\(^5\). Accordingly, a research design

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\(^5\) The empirical data for this study was gathered in cooperation with researchers within the so-called MIN project (Managing International Networks). For more information about methods, see Pahlberg (1996), Andersson (1997) and Thilenius (1997).
was chosen in which we first solicited the participation of the HQ manager. That individual then provided access to between 3 and 10 of the subsidiaries that he/she was responsible for. In-person interviews were held with all HQ and subsidiary managers, during which they were asked to fill out a questionnaire which asked specific questions about perceived role, HQ control and cooperation. Data was collected on a total of 100 HQ–subsidiary dyads.

2.1.1. Choice of MNCs

For practical reasons our sampling frame was Swedish MNCs. These firms operate in a wide variety of industries, though with an emphasis on manufacturing (hard materials, paper, power, retailing, transportation services and telecommunications). Our initial contact with these firms was at the divisional headquarters level, rather than the corporate level. This was for two reasons. First, the divisional level of the firm is closer to the subsidiary operations and division headquarters have a direct management relationship with the subsidiaries. Second, control and cooperation issues are primarily intra-divisional matters, since the divisionalization of the MNC separates different businesses from each other (Egelhoff, 1988; Stopford & Wells, 1972). A total of 19 MNC divisions participated in the study, all but one of which were headquartered in Sweden.

2.1.2. Choice of subsidiaries

The sample of subsidiaries was selected through discussion with HQ managers in the 19 MNC divisions. Our criteria for including subsidiaries in the analysis were threefold. First, they had to be relatively important subsidiaries, with production as well as sales activities. Second they had to have been part of the division for at least a year, to ensure that the relationship between HQ and subsidiary was relatively well established. These criteria reduced the sample of subsidiaries in our analysis to 89. Third, they had to be geographically accessible for in-person interviews, which meant Europe or (in five cases) USA. On this basis we ended up with between 3 and 10 subsidiaries in each MNC division. For seven of the 19 divisions the subsidiaries polled represented more than 80% of total operations. In the other 12, the subsidiaries polled accounted for between 6 and 68% of total operations. Subsidiary size ranged from 50 to over 5000 employees.

2.1.3. Choice of respondents

Our decision to administer the questionnaire in-person meant that we had much greater control over who would fill it out than is usually the case. Our initial contact was typically the Vice President of international operations or equivalent, and the

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6 The main reason for the low coverage of some MNC divisions was that many had large numbers of operations outside Europe, which made it impractical to research them. US subsidiaries were included in five divisions, so the geographical area covered represented more than 80% of worldwide establishments controlled by Swedish industry (Braunerhjelm, Ekholm, Grundberg & Karpaty, 1996; Swedenborg, Johanson-Grahn & Kinnwall, 1988). But inevitably many divisions also had significant Asian and Latin American operations, which were not covered.
subsidiary contact was either the general manager or one of his/her closest colleagues. By working through the questionnaire with them, we are able to have much greater confidence in their responses than if the data had been collected through a blind mail-out. However, the obvious corollary of this point is that we ended up with a single key-informant for each side of the HQ–subsidiary dyad, rather than multiple informants. Of the HQ informants all but one were Swedish, and of the 100 subsidiary informants, 21 were Swedish. Note that in the analysis we used both HQ and subsidiary responses for the perception gap measure, and just the HQ responses for the measures of HQ control and cooperation. Indeed, the choice of subsidiary respondents for measuring control and cooperation was an option. For control, the choice was a matter of either getting data from the unit that receives more or less control (the subsidiary) or the one that is exercising it (HQ). Our aim here is primarily to get data on the degree that HQ has an attitude about controlling subsidiary behavior, rather than its full ability to carry it out. Therefore HQ respondents were chosen. Also, it was an advantage that HQ respondents could compare control between different subsidiaries, whereas subsidiary respondents would not have the same possibility. In order to get data on cooperation, based on the same conditions, we also chose to measure cooperation by using HQ respondents.

The result of this design is that we end up comparing subsidiaries over several MNC divisions. This could potentially be a problem in that HQ managers may have different frames of reference when assessing their subsidiaries’ roles. However, one should not overestimate this problem. First, we have increased the similarity of the frame of reference among the respondents by using highly standardized questions related to rather well-defined problem areas. Second, several studies indicate a rather high internal consistency among different sources when reputational measures are used (Brass, 1984; Krackhardt, 1990). Nevertheless, this limitation must be kept in mind in the further discussion.

2.2. Questionnaire development

The questionnaire covered a large number of constructs relating to the role of the subsidiary in the MNC and to its relationship with headquarters. For each construct we developed multi-item scales, based on existing measures in the literature and our own research. In the course of the LISREL analysis, the number of items used was subsequently reduced to enhance the overall model fit. The final model had three constructs, with two or three items per construct. Next we describe the specific measures used for each construct.

2.2.1. Subsidiary role overestimation

The raw data for this measure is three questions regarding the role of the subsidiary that were answered by both subsidiary and HQ managers. These questions are: To what extent is the subsidiary important to other divisional units concerning (1) their sales volume? (2) their information about market activities? (3) maintaining important relations to other corporate units? (1=not at all, 2=low, 3=to some extent, 4=high, 5=very high). The first two indicators capture the subsidiary role vis-à-vis
other MNC units concerning their market activities, i.e. sales and information, while the third reflects the subsidiary’s role for creating an integrated corporate network. Together, the indicators provide a picture of the subsidiary having a global responsibility within the MNC, beyond its local undertakings. For each question we first subtracted the HQ response from the subsidiary response, and then we re-coded the resulting 9-grade ordinal scale into a 3-grade ordinal scale where ‘1’ is all negative differences, ‘2’ is non-differences, and ‘3’ is all positive differences. Stated slightly differently:

\[ V_0 = I_s - I_m \]

\[ V_0 = \{-4,-3,-2,-1\},\{0\},\{1,2,3,4\} \rightarrow V_i = \{1,2,3\} \]

where

- \( I_s \) Answer given by subsidiary \{1,2,3,4,5\}
- \( I_m \) Answer given by headquarters management \{1,2,3,4,5\}
- \( V_i \) Bipolar perception gap

2.2.2. HQ control

There were seven measures of HQ control over the subsidiary in the questionnaire. The LISREL model used two of these: (1) The subsidiary can choose its suppliers without consulting the global divisional management, and (2) The subsidiary can change its organization without consulting the global divisional management. The scale was: 1=totally disagree, 2=partially disagree, 3=neither nor, 4=partially agree, 5=totally agree, but this was then reverse coded to represent control.

2.2.3. HQ–subsidiary cooperation

There were eight measures of HQ–subsidiary cooperation on the questionnaire. Three of these were used by the LISREL analysis: (1) The global divisional management’s and subsidiary’s interests are usually identical when it concerns size and direction of subsidiary investments, (2) The global divisional management’s and subsidiary’s interests are usually identical when it concerns purchasing, (3) the subsidiary and the global divisional management fully agree about the subsidiary role in the relationship. The scale was: 1=totally disagree, 2=partially disagree, 3=neither nor, 4=partially agree, 5=totally agree.

One observation should be made about the operationalization of HQ–subsidiary cooperation, namely that the individual items are perhaps closer to a concept of ‘shared interests’ between HQ and subsidiary, which we see as being antecedent to the act of cooperation. Because of this, we were careful in our derivation of Hypotheses 1 and 3 to suggest the causal link to cooperation through shared interests. Our reason for not calling the construct shared interests is simply that the term cooperation is more widely used and understood in the literature.
2.3. LISREL analysis

To analyze causal relations between the variables we used the structural modelling technique called LISREL (Jöreskog & Sörbom, 1993). LISREL, like PLS, is one of the so-called second-generation multivariate techniques that are increasingly being used to estimate causal models with multiple independent and dependent constructs. The analysis was conducted in a two step procedure. The first step was that the observable indicators used for measuring the three constructs were run in a so-called measurement model in order to assess convergent validity. Convergent validity is assessed by how well a construct represents its indicators, which is estimated by a test for $t$-values, factor-loadings and $R^2$-values between the construct and each indicator. $t$-Values should be higher than 1.96 (5% level) and $R^2$-values should be higher than 0.20, thus significantly explaining at least 20% of the variation of the observable indicator. The procedure also involves a test for discriminant validity, which is a matter of ensuring that constructs are empirically separate from each other. Discriminant validity is confirmed by the fact that two constructs do not measure the same indicators. For example, if more than one construct has high factor loadings and significant $t$-values in relation to one or several observable indicators, the discriminant validity is negatively affected.

The validity of the three constructs was found to be good, as factor loadings and $R^2$-values between the constructs and indicators were relatively high and $t$-values were significant (see Table 2). The correlation matrix of indicators in the measurement model (Table 3) also shows that the three constructs were not equal to one another and therefore that the model had discriminant validity.

The second step in the analysis was to form the structural model by specifying the causal relations in accordance with the three hypotheses. In the following analysis, $t$-values, factor-loadings and $R^2$-values represent tests of single causal relations between the constructs in the model. The validation of the entire structural model is assessed by chi-squares and degrees of freedom and a probability estimate ($P$-value), which is a test of a non-significant distance between data and model (Jöreskog & Sörbom, 1993).

3. Research findings

LISREL analysis frequently proceeds through several iterations, with the model being fine-tuned on each successive iteration to be a more coherent representation of the empirical data. For the model under consideration here, the first step was to test all three hypothesized causal relationships simultaneously. The resulting statistics revealed a significant positive path between subsidiary role overestimation and HQ control with a factor loading of 0.46 and $t$-value of 3.12, while the other two relationships were insignificant. The overall model was not significant ($\chi^2_{(17)}=52.86$, $P=0.000015$). However, the statistics indicated that an adjustment of the causal paths could lead to a significant model. Thus, in a second iteration we tested Hypotheses 1 and 2 but not Hypothesis 3. The statistical output was still not significant
Table 2
The constructs and the indicators

<table>
<thead>
<tr>
<th>Constructs and indicators</th>
<th>Abbreviation</th>
<th>Factor loading</th>
<th>t-Value</th>
<th>R²-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perception gap</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ and subsidiary gap in perception about the subsidiary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>importance for other corporate units:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales volume</td>
<td>SalVol</td>
<td>0.87</td>
<td>8.01</td>
<td>0.76</td>
</tr>
<tr>
<td>Information about market activities</td>
<td>MaInf</td>
<td>0.74</td>
<td>6.85</td>
<td>0.55</td>
</tr>
<tr>
<td>Maintenance of important corporate relationships</td>
<td>CorpRel</td>
<td>0.54</td>
<td>4.99</td>
<td>0.30</td>
</tr>
<tr>
<td><strong>HQ-control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ restrictions on subsidiary business conduct:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The subsidiary autonomy in choice of suppliers</td>
<td>SupCho</td>
<td>0.83</td>
<td>5.63</td>
<td>0.69</td>
</tr>
<tr>
<td>The subsidiary autonomy in changing its organization</td>
<td>ChaOrg</td>
<td>0.66</td>
<td>5.26</td>
<td>0.41</td>
</tr>
<tr>
<td><strong>HQ–subsidiary cooperation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ and subsidiary degree of shared interests when it concerns:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size and direction of investments</td>
<td>Invest</td>
<td>0.47</td>
<td>4.00</td>
<td>0.20</td>
</tr>
<tr>
<td>Purchasing activities</td>
<td>Purch</td>
<td>0.74</td>
<td>4.81</td>
<td>0.55</td>
</tr>
<tr>
<td>The subsidiary role in their relationship</td>
<td>SubRole</td>
<td>0.56</td>
<td>4.20</td>
<td>0.31</td>
</tr>
</tbody>
</table>

($\chi^2_{(18)}=56.41, P=0.0000077$). However, in this test the error covariance between ‘..size and direction of investments’ (one of the cooperation indicators) and ‘..changing subsidiary organization’ (one of the control indicators) affected the significance of the model and a modification was suggested. This error covariance indicates that besides the direct correlation between latent constructs (control and cooperation) the two indicators could be captured in another latent construct not represented in the model. Thus, it is reasonable to expect that large investments in the subsidiary relate to changes in its organization. However, as the initial measurement model test showed discriminant and convergent validity we chose to proceed. In the following test the error covariance between these two indicators was set free. The statistical output now revealed a stronger fit for the overall model but still not quite significant ($\chi^2_{(17)}=28.01, P=0.045$). In terms of the individual paths, subsidiary role overestimation to HQ–subsidiary cooperation increased significantly, while subsidiary role overestimation to HQ-control went down. However, with this model a path between the control construct and cooperation was suggested.

Therefore, the third and final iteration involved dropping the direct path from
Table 3
The correlation among the indicators

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub overestimation of its importance to other MNC units</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Info. on market activities</td>
<td>0.65</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Corporate relations</td>
<td>0.46</td>
<td>0.44</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Choice of suppliers</td>
<td>0.27</td>
<td>0.13</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ restrictions on subsidiary regarding</td>
<td>5. Changing organization</td>
<td>0.44</td>
<td>0.28</td>
<td>0.29</td>
<td>0.49</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HQ and subsidiary degree of shared interests concerning</td>
<td>6. Subsidiary investments</td>
<td>0.30</td>
<td>0.26</td>
<td>0.19</td>
<td>0.08</td>
<td>0.52</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Purchasing activities</td>
<td>0.14</td>
<td>0.16</td>
<td>0.13</td>
<td>0.25</td>
<td>0.08</td>
<td>0.23</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>8. Sub. role in relationship</td>
<td>-0.07</td>
<td>-0.21</td>
<td>-0.12</td>
<td>-0.22</td>
<td>-0.03</td>
<td>0.17</td>
<td>0.40</td>
</tr>
</tbody>
</table>

subsidiary role overestimation to HQ–subsidiary cooperation (Hypothesis 2) and including the direct path between HQ–subsidiary control to HQ–subsidiary cooperation (Hypothesis 3). This gave us an acceptable structural model with a chi-square of 27.34 with 17 degrees of freedom and $P$-value for the model of 0.053. The model is therefore based on two relationships. The first is a positive path from subsidiary role overestimation to HQ control with a factor loading of 0.40 and $t$-value of 2.84. This supports Hypothesis 1. Second, there is a significant and negative path from HQ control to HQ–subsidiary cooperation with a factor loading of $-0.41$ and $t$-value of $-2.53$. Thus, Hypothesis 3 is also supported. Hypothesis 2 is not supported. One possible reason for this is that there are many reasons for perception gaps to arise, and while some of these will reduce the level of cooperation (asymmetric information) others might actually increase it (e.g. a high level of ambition in the subsidiary). Note, however, that there is an indirect link from subsidiary role overestimation to HQ–subsidiary cooperation via HQ control with a factor loading of $-0.17$ and a $t$-value of $-1.97$. Fig. 3 presents the final structural model. Dotted arrows indicate hypotheses not verified.

4. Discussion and conclusions

This paper began by suggesting that the perception gap between HQ and subsidiary could have some important implications for the management of HQ–subsidiary relationships. The LISREL analysis provided us with a powerful tool for investigating this assertion, and suggested the following findings: (1) subsidiary role overestimation leads to a higher level of control of the subsidiary by HQ managers, presumably
because HQ managers are attempting to ‘enforce’ their view of the role that the subsidiary should be playing; (2) high levels of HQ control leads to a lower level of cooperation between HQ and subsidiary (or more strictly, a lower level of shared interests). The suggestion is of a vicious circle, in which perception gaps lead to tight control, which leads to cooperation problems, which in turn leads to ever greater perception gaps. Equally likely, though, is a virtuous circle, whereby lowered perception gaps can actually lead to a decrease in HQ control and enhanced HQ–subsidiary cooperation, which in turn leads to a further reduction in perception gaps. It is worth noting that these scenarios transpire equally well if the causal relationships between constructs are reversed, i.e. with cooperation leading to less control leading to lower perception gap. Further research using longitudinal data will be needed if we are to be able to be more specific about this process, e.g. in terms of how a vicious circle is turned into a virtuous circle. Nonetheless, we can still speculate about some of the likely implications of the findings for management.

The first, and most obvious, point is that perception gaps appear to create problems. Poor cooperation between HQ and subsidiary creates unnecessary friction and is likely to result in suboptimal decisions being made. The evidence presented here suggests that cooperation problems can be attributed in large part to the perception...
gaps between the two parties. Which in turn suggests that working much harder to eliminate perception gaps can reduce problems. Many ways can be suggested, including focused discussions around the subsidiary’s role, selection of subsidiary managers whose personal characteristics match the HQ managers’ ambitions for the subsidiary, and more effective socialization mechanisms (i.e. broadly-defined control systems). Another possible remedy would be that HQ managers give subsidiary managers more slack. Rather than increasing their control as a result of perception gaps, it would be possible for HQ managers to give subsidiary managers a free hand to act according to their beliefs. By providing that freedom, cooperation would increase, which would enhance the possibility for HQ and subsidiary managers to resolve their perception gaps amicably.

A second issue, which was hinted at earlier, is that perception gaps are not altogether bad. Consider for a moment what an MNC with no perception gaps at all would look like—it would arise either through totally-dominant central control and subservient subsidiary managers, or through a system in complete equilibrium. Neither scenario fits with our contemporary thinking on the business environment and the form of the MNC. Rather, the idealized model sees perception gaps emerging all the time, as subsidiaries experiment with new ideas and identify previously unrecognized opportunities (cf. Burgelman, 1991). These gaps then become the raw material for an evaluation of the strategic role of the subsidiary, and through a process of analysis and discussion, a mutually-agreed vision of the subsidiary’s role can be achieved. Note though, that for this sequence of events to transpire, a perception gap would actually lead in the short term to less control and more cooperation. Such a sequence represents the mechanism for turning a vicious circle into a virtuous circle. It is attractive in principle, but we know from the data presented here that it is not seen in the aggregate. Again, a field-based and/or longitudinal study would be needed to shed light on how this occurs in practice.

This discussion brings us back to Hedlund’s (1986) concept of the Holographic corporation. The hologram metaphor is actually quite a clever one. It suggests first that information about the whole is stored in every part. But it also underlines that the information in each part of the MNC is not identical. Just like the hologram, there is a unique ‘image’ stored in each location, but in order to get a complete three-dimensional picture one has to bring together all of the separate images. Perception gaps, in other words, represent the slight variations between images of the whole that are stored in each part of the MNC. These gaps are necessary to avoid getting a one-dimensional view of the world (i.e. the headquarters view), but they must be explicitly brought together for the complete picture to come into perspective.

How does all this relate back to the theory of the MNC? An issue of emerging importance in MNC research is how to leverage and transfer dispersed knowledge (Kogut & Zander, 1995; Szulanski, 1996) to gain advantages from multinationality, or in managerial parlance, how to ‘transfer best practises’. While the stickiness of knowledge often obstructs such transfers, an equally important issue is the identifi-
cation of the appropriate knowledge to transfer in the first place. The current study highlights that HQ and subsidiary often have very different perceptions about the abilities of the subsidiary, which in turn suggests that the identification of the ‘best practise’ in any given area will not be without problems. Indeed, as research by Arvidsson (1997) shows, inaccurate perceptions by HQ managers can actually lead to the ‘transfer of mediocre practises’. The implication is that effective knowledge management in the MNC rests first on a shared understanding of where the valuable knowledge is, and only then on systems for leveraging and transferring that knowledge.

Much remains to be done in the study of HQ–subsidiary perception gaps. How such gaps change over time is a fascinating issue for future research, as is the question of whether there is an ‘optimum’ level of perception gap. Also, the current study focused on only one form of gap (subsidiary overestimation of its role) and on two sets of consequences (HQ control and HQ–subsidiary coordination), leaving plenty of scope to examine other forms of gap as well as different antecedents and consequences. In particular, the implications of the processes presented herein for the performance of the subsidiary would be worth studying. It is hoped that the current study provides sufficient conceptual foundations and empirical evidence that others will be stimulated to follow some of these important avenues of future research.

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References


8 Though it should be pointed out that subsidiary performance would need to be measured in an objective fashion, because a subjective measure runs the risk of being too close conceptually and empirically to the perception gap construct.


Graen, G., & Ginsburgh, S. (1977). Job resignation as a function of role orientation and leader acceptance:


