

The Competition - Cooperation Interplay within MNEs for Knowledge Development and Innovation

ABSTRACT

While prior research has recognized the importance of intra-firm competition or cooperation for innovation and performance, we know little how competition and cooperation should be internally organized by firms. This paper aims to address this critical gap by focusing on the following questions: (a) what conditions drive cooperation and competition within the multinational? and (b) how does competition and cooperation dynamically change over time? To answer our research questions a single case study of SKF – a manufacturing MNE with headquarters in Sweden - is performed on two analytical levels (headquarters/subsidiaries). Our preliminary analysis shows that organizing for cooperation and competition depends on the environmental, organizational and object-related conditions. Such conditions, however, are not limited to HQ's initiatives but it may also be a subsidiary-led process. Thus, the cooperation and competition interplay is an outcome of the HQ's strategic orientation as well as subsidiary's autonomy, local responsiveness and its ability to innovate.

Keywords: *Competition, cooperation, innovation, performance, headquarters, subsidiaries, MNEs.*

1. INTRODUCTION

Competition is a central concept in economic theory and it is often stressed that it leads to innovativeness and efficiency (see e.g. Stigler 1957). However, there is still limited knowledge about how competition affects firms, and especially what happens within firms when subunits are organized and governed as to achieve competition. This is of specific interest since belonging to the same firm also implies that the units have common goals as well as expectations to cooperate and share knowledge. Hence, both competition and cooperation can be argued to enhance firms' performance. Research on cooperation has, however, developed quite independently from research on competition which implies that there is a need to study the interplay between these contradicting forces. An important exception is insights from research on cooptition (see e.g. Nalebuff, Brandenburger, & Maulana, 1996; Luo, 2007; Bengtsson & Kock, 2000) but while cooptition research mainly focuses on simultaneous competition and cooperation between competitors or between actors in a business network, we are interested in the competition – cooperation interplay *within* firms, i.e. focus is on headquarters-subsidary processes within multinational enterprises.

Parent-subsidary relationships have been examined for decades in international business and management literature. Substantial amount of research has been done on the understanding of how headquarters manage subsidiaries (see Birkinshaw & Morrison, 1995). According to Birkinshaw et al., (2005) MNEs can be seen as an internal competitive market arena with different forces shaping the competitiveness of the units. While from one side, subunits need to cooperate by sharing knowledge and contributing to the overall performance of the MNE, on the other side many MNEs have internally adopted a profit center system leading therefore to an intrafirm competitive process. Moreover, intra-firm competition is associated with the trend of organizing large MNEs along global product divisions that emphasize on economies of scale and standardization of processes and routines (see for example, Humes, 1993).

Intra-firm competition refers to the competition of subsidiaries for headquarters' attention, position, resources, mandates and customers (see e.g. Birkinshaw, 2000; Luo, 2005; Cerrato, 2006). According to Bouquet and Birkinshaw (2008), such competition creates a potential for internal conflicts. Conflicts can also be related to how subsidiaries develop and keep their influence and reputation within the overall organization. An interesting aspect is that key subsidiary managers, whose careers depend on their performance, play an important role in such a conflictive process. In a study of intra-firm competition in multinationals, Becker-Ritterspach and Dörrenbächer (2011) stress that key subsidiary managers' actively negotiate

with headquarters' managers; when necessary they cooperate with internal and/or external partners, as well as they try to explore new business opportunities. Such a strategy is pretty much linked to their career path, position and ambitions. All this is done under the assumption, anchored on economic theory, that competition increases efficiency and innovativeness (Stigler, 1957) and therefore encourage managers to deliver better results.

Despite the growing scholarly interest on competition and cooperation, less attention has been paid to how competition and cooperation should be internally organized by firms. This paper aims to address this critical gap by focusing on the following questions: (a) what conditions drive cooperation and competition within the multinational? and (b) how does competition and cooperation dynamically change over time? In specific, we focus on the strategies MNEs consider for different configurations of competition and cooperation. Considering that interunit cooperation and/or competition may have an impact on knowledge development and technology transfer, Li et al. (2010) state that managing cooperation and competition may have an impact on how managers align strategy, internal structure and social relationships to achieve their final ends. Therefore, the study of the complex relationship between globally dispersed subunits deserves attention and may inform decision makers of the strategic options related to subunits' relationships. Hence, the study of competition and cooperation within multinational has both theoretical and practical relevance.

To answer our research questions a single case study is performed on two analytical levels (headquarters/subsidiaries). The case is based on interviews and secondary data from SKF, an MNE with headquarters in Sweden, selling products within five technology platforms. The case shows how foreign subsidiaries initially compete for customer responsibilities and subsequently cooperate by contributing with their particular expertise to the MNE's overall global projects. We illustrate and discuss the strategies considered for different configurations of competition and cooperation and provide a discussion of the implications for organizational performance.

2. EARLIER STUDIES

According to Johanson and Mattson (1987) a relationship emerges through *exchange processes* among parties. Interaction, therefore, constitutes the dynamic aspect of relationships. In this study competition and cooperation can be considered as two fundamental types of intrafirm relationships.

2.1 Competition

In general terms, competition is a concept used to describe a situation in which firms maximize their outcome at the expense of other firms (Bengtsson & Kock, 1999). Hence, competition is a zero-sum game where firms try to get a relative advantage over others. Competition between firms is associated with the opportunity to be the first and only beneficiary through the exploitation of internal resources (Oliver, 2004) and by securing these resources a firm has the potential to improve its performance (Morgan & Hunt, 1994). Relatedly, the rationality behind competition is that firms are under constant pressure to improve their resources and capabilities. Therefore, competition is considered to be a source of innovation that consequently leads to growth and expansion in a market.

In specific the phenomenon in focus in this study refers to competition between the subsidiaries of an MNE rather than competition between firms. Birkinshaw and Lingblad (2005) highlight that the MNE can be seen as an internal competitive environment with several forces shaping the competitiveness of the units. Such an environment is rarely local in a geographical sense and the intrafirm transactions are mostly organized by transfer pricing policies that generate a type of internal market which encourages units to compete for resources and business with each other. Headquarters' resources involve capital, technology, machinery, training, human resources, knowledge, information, etc. Since resources are scarce, competition arises among subsidiaries to get such resources. However, intra-firm competition is not limited to the resource dimension. Legitimacy and/or status can be other sources of competition among subsidiaries. This aspect is intrinsically linked to the ability of subsidiaries to influence headquarters' decision making. Pfeffer (1981) defines legitimacy and power as a "relationship among social actors in which one social actor A can get another social actor B, to do something that B would not otherwise do". One way of doing that is when, for instance, headquarters' attention is associated with subsidiary ability of selling its image of being credible, reputable and a high performer. Hence, in the MNE the exercise of power and legitimacy is socially constructed and highly context specific. According to Dörrenbächer and Gammerlgaard (2016), subsidiary's power and legitimacy are originated from market size, access to key customers and control of R&D processes.

The intrafirm competitive process can be headquarter-led or subsidiary-led. In the headquarter-led type, headquarters can leave the choice of competing or cooperating completely up to the subsidiary or they can encourage, support or promote a type of relationship they consider to be better. Strategies will depend on the kind of structure or process that impact cooperation and/or competition (Luo, 2005). Put differently, to activate an

internal market mechanism by implanting a pricing system, headquarters need to encourage not only a certain degree of autonomy from its subsidiaries but also uniformity in mandates among them. Cerrato (2006) explains that the more decentralized decision making is in an MNE, the higher is the subsidiary degree of autonomy. This leads subsidiaries to have the freedom to choose or refuse the mandates from fellow subsidiaries. Phelps and Fuller (2000) emphasize that large overlaps in terms of products, markets and technologies commonly existent among subsidiaries, create an environment of high competition. Headquarters may want to transfer resources in a way that create uniformity or equality among subsidiaries. However, equality may not only lead to competition but cooperation among subsidiaries also becomes possible (Luo, 2005; Mudambi and Navarra, 2004). A similar argument is put forward by Schmid and Maurer (2008, pg.10) who stress that the introduction of performance reward system as well as the specification of certain rules, responsibilities and routines constitute important factors that sometimes may encourage cooperation and sometimes competition. This is also in line with Becker-Ritterspach and Dörrenbächer (2011)'s argument that organizational conditions can lead subunits to be in cooperation or competition.

In the subsidiary-led type, it depends on subsidiary rather than on headquarters initiative. Again, this is an outcome of the subsidiary autonomy, their local responsiveness as well as their competitiveness and know-how. Luo (2005) affirms that subsidiaries with high local responsiveness face intra-firm competition. The main reason for that is that they strongly depend on headquarters' scarce resources to help them to overcome their liability of foreignness. Another factor also mentioned by Luo (2005) is tied to knowledge held by a subsidiary which may become an important asset for the MNE as a whole. In line with him, Mudambi and Navarra (2004) assert that subsidiaries that monopolize certain assets needed by other subsidiaries are expected to have higher bargaining power, and will be more successful in the internal competition for resources. Thus, subsidiaries that dominate certain activities, leverage knowledge and become Centers of Excellence certainly increase their power, influence and status within the overall organization. In brief, if one considers that subsidiaries are fairly autonomous and have the freedom to choose how they will interact with their peers within the organizational structure, they will sometimes behave as cooperators and sometimes as competitors (Luo, 2005).

In terms of determinants of intra-firm competition, Becker-Ritterspach and Dörrenbächer (2011) in their review of the IB literature on this subject identify three main conditions that may encourage competition among subsidiaries. They are: i) environmental, ii) organizational and iii) object-related conditions. *Environmental condition* is closely linked to the market

conditions. Cerrato (2006) suggests that uncertainty with respect to market changes can lead to competition while Luo (2005) adds that in high growth and prosperous markets, competition within units are expected to be high since headquarters may allow overlaps among subsidiaries as a means to increase performance. *Organizational condition* is related to the overall organizational aspects as stated earlier which are related to control, structures, systems and processes implemented by the headquarters and therefore are expected to influence subsidiaries' behavior. Examples include autonomy, promotion system, overlaps and equality. Finally, *Object-related condition* is considered to be factors that are beyond the organizational and environmental conditions. According to Cerrato (2006) intra-firm competition is less likely to occur when charters are location-bounded and therefore associated with tacit knowledge and context-specific.

2.2 Cooperation

Intrafirm competition does not necessarily rule out intra-firm cooperation (Walley, 2007; Luo, 2005; 2006). Contrary to competition, cooperation is defined as a process in which the main goal is to maximize the outcome of a collective. In such a case, firms' reward is strengthened by helping or supporting each other to achieve mutual benefits. Literature on cooperation is divided in two wider streams. They are the external cooperation and the internal cooperation. Intrafirm cooperation has been much more in focus in IB literature in comparison to the intrafirm competition. The substantial body of the literature has been dedicated to understand knowledge exchange within the MNE (see for example Zhao & Luo, 2005). Other groups of researchers have analyzed more specifically knowledge sharing (e.g., Zander & Kogut, 1995; Tsai, 2001). It is noticeable that in an increasingly complex business environment where the MNE is in constant pressure to innovate and update competences to stay competitive, cooperation among units becomes a cornerstone. However, it is important to highlight that subunits are heterogeneous, with different skills and capabilities, thus, many MNEs strive to combine knowledge from different parts of the firm in the innovation and development process.

According to Luo (2005) cooperation arises in four areas: technological, organizational, operational and financial. Technological activities derive from new invention and know-how, research facilities, procedures in product development, etc. For him, technological is closely linked to knowledge sharing while operational and achieving joint financial optimization are related to resource sharing. In addition to that, cooperation can also be observed between individuals and this is linked to the organizational area. For instance, when a subsidiary face

difficulties to expand in a certain market, managers from different units may share best practices or information as a means to outperform a competitor. In such a case, subsidiaries can cooperate by pooling resources, leverage knowledge through R&D or by contributing to the overall growth of the local industry infrastructure (Luo, 2005). In a similar vein, Schmid and Maurer (2008, page 11) highlight a key aspect of the corporate performance reward system. I.e., they affirm that: “subsidiaries need to know who they are expected to cooperate with in which way and how they are rewarded or their collaboration”. Further, operational activities are very much related to cooperation in developing, sharing and transferring managerial knowledge. Examples include team-work programs, training programs, practices in how to overcome liabilities of foreignness, etc. Finally, Luo (2005) also points to the financial area. Some activities may be linked to sharing experiences in managing cash flow, transfer pricing, currency swaps among others. Thus, factors explaining different configurations of cooperation might be related to the business environment and organizational response to that. Adding to that, Schmid and Maurer (2008) also discuss subsidiary motivations for cooperation and refer to aspects of trust and legitimacy as important antecedents for relationship building which facilitate cooperation.

It is important to stress that cooperation is connected with the concept of exchange or sharing. According to Easton and Araujo (1992), resources are not merely transferred from headquarters to subsidiaries or between subsidiaries but they can also be used cooperatively among subsidiaries. In other words, it is a socially constructed process that requires interactions among subsidiaries. Furthermore, when subsidiaries exploit resources collectively such cooperation creates interdependencies and synergy. This may positively affect the overall performance of the organization. In a study of cooperation when Centers of Excellence are established by an MNE, Adenfelt and Lagerström (2006) have evaluated the impact of cooperative organizing mechanisms in transnational teams. In their research, transnational teams seem to play an important role to facilitate cooperation within the MNEs.

Luo (2005) claims that complexity, hostility, instability and uncertainty in the business environment encourage internal cooperation. In such a context, it seems that the pursuit of collective rather than localized objectives become relevant and a predominant strategy used by the headquarters. In summary, the use of internal competition as well as cooperation as a way to organize and govern internally in large firms has not sufficiently problematized such relationships between units. We, therefore, still do not know much about how competition may affect the unit’s possibility to cooperation and how cooperation may affect competition.

3. METHOD

This paper utilizes a longitudinal case methodology (Eisenhardt, 1989) in a nested case study (Gibbert & Ruigrok 2010) in a global manufacturing MNE. This allows for an in-depth study of how the complex and dynamic processes of competition and cooperation dynamically change over time in and across MNE units. The inductive case study is further considered suitable for theory development in areas that are less researched (Edmondson & McManus, 2007; Gibbert et al., 2008) as is the case of how governance structures support competition and/or cooperation and their impact on knowledge development and sharing. The design is thus a good fit with the aim to contribute to an understanding of the phenomena empirically (Yin, 2009) as well as to develop theories via establishing links among the case data, emerging theory, and later, extant literature (Gehman et al., 2017).

3.1 Research setting and data collection

The setting of the nested case study is a global manufacturing MNE named SKF. SKF Group is a leading global supplier of products, solutions and services within rolling bearings, seals, mechatronics, services and lubrication systems. Services include technical support, maintenance services, condition monitoring and training. The company has a complex structure organized by geographical divisions for three product areas and by global product divisions for the remaining two. All divisions are strategically autonomous, but also share some common corporate agendas such as becoming a complete solution provider by adding services to the products and by establishing R&D facilities globally, some with global and some with regional responsibility. Such an approach indicates the complex interrelationship between the processes along the lines of competition and cooperation (cf. Merriam, 1989).

The point of departure of the longitudinal study was the decision taken by headquarters to establish R&D facilities i.e., centers of excellence, in a few designated locations whereof one was India. The intent of the center in India was to not only function as a supplier of R&D to the manufacturing units in the region, but also to the rest of the globally dispersed manufacturing units. For the data gathering both primary and secondary were collected, but the most important source is the in total 25 in-depth interviews.

The first round of interviews took place at SKF headquarters in 2012 with five global top managers including the CEO and the senior vice president of R&D, followed by managers at divisional level. These initial interviews helped us to understand SKF's overall strategic approach and governance structure as well as their view on the role of the centre of excellence units and the main agenda for the R&D activities locally and globally. Interviews were then

conducted at the Indian Center of Excellence unit between 2013 and 2016, including the country managing director and the managing director of R&D. The latter we met once a year during four years. In total 19 interviews were carried out over the years at the Centre of Excellence unit. All interviews were made face-to-face and lasted approximately for 90 minutes. They were all taped and transcribed which resulted in more than 100 transcribed pages. The overall focus in the interviews was simply a request to the interviewees to ‘tell their story’ of the evolution of the unit and its role in the MNE. Secondary data were collected from media articles covering the development of SKF, but also corporate internal documents were accessed during the study period (approximately 100 pages).

Important to note is that parts of the study are retrospective in nature i.e., activities related to the establishment of Center of Excellence units in SKF had already begun when the study was initiated in 2011. Triangulation of the data and the possibility to perform multiple interviews focusing on the same processes reduced the risk of post-rationalization of previous actions, thoughts, and decisions as well as problems of memory (cf. Yin 1994; Easton 2010). Important to note also is that this particular paper and the data used for it is part of a larger study that focuses on the issue of how SKF leverage the business opportunities in emerging markets. Hence, whereas in this paper, a rich description is provided of how competition and cooperation is played out in SKF, it is also central to clarify that a good understanding of the overall history of this MNE helped in creating a wider and deeper understanding.

3.2 Data Analysis

The aim of the analysis is to develop a more in-depth and theoretical understanding of the study object by summarizing the data into a narrative case description following a designated timeline to reconstruct the historical development (Eisenhardt, 1989; Miles & Huberman, 1994) which comprised both the interview data and secondary data. Besides the chronology of the story we sorted and organized the data to capture insights on 1) the SKF governance structure in terms of activities that encourage cooperation and/or competition; 2) activities built on cooperative actions, 3) activities built on competition, 4) measures taken in order to build and develop Centers of Excellence and 5) knowledge development and sharing locally and globally.

The core strength of this study is the longitudinal data collected as it made it possible not only to capture how the center of excellence units were developed, organized and governed at one point in time, but also how it changed over time. Moreover, the validity was in this study supported by a number of measures taken as part of the analysis process. First, the data were

collected in interviews personally by the authors and the same interviewees have been interviewed at several occasions. Second, interviews have been made with informants on three different levels in the case; MNE headquarters, divisional headquarters and at the unit in India, who therefore potentially experience the study subject differently – which reduces the risk of retrospective sense-making and impression management (Eisenhardt & Graebner, 2007; Gibbert et al., 2008; Yin, 2009). Interviewing members from different hierarchical levels as well as the secondary data from media and company internal documents allow for triangulating answers and therefore improve construct validity (Gibbert et al., 2008; Yin, 2009).

3.3 Case description -The SKF Group

SKF was founded in 1907 and grew at a rapid rate to become a global company. As early as 1920, the company was well established in Europe, North and Latin America, Asia and Africa. When studying the case, at the time of the interviews, SKF was represented in more than 130 countries and had more than 100 manufacturing sites and sales companies supported by about 15,000 distributor locations. The company has its technologies grouped in five platforms: bearings and units, seals, mechatronics, services, and lubrication systems. By utilizing capabilities from all or some of the platforms, SKF develops tailor-made offers for each customer segment, helping customers improve performance, reduce energy use and lower total costs, while bringing increased added value to the overall organization. SKF serves its customers mainly through three divisions: i) industrial, ii) service and iii) automotive. While the industrial and service division goals is to servicing industrial original equipment manufacturers (OEMs) and aftermarket customers respectively, the automotive division focuses on the automotive OEMs and aftermarket customers. SKF operates in around 40 customer segments, whereof examples include cars and light trucks, wind energy, railway, machine tool, medical, food and beverage and paper industries.

In India, SKF started trading operations in Kolkata in 1923, and since then, operations have been consolidated into SKF India Limited and SKF Technologies Limited. At the time of the case study, SKF in India had six manufacturing sites, located in Pune, Ahmedabad, Bangalore, and Haridwar. In 2000, SKF had a local R&D unit to serve the local market. However, in 2004 a global R&D center started to develop and the main idea was to serve units globally. The starting point was when SKF launched an application development center (ADC) for one of its business areas, i.e., the two-wheelers and the automotive area. The main reason was that the Indian two-wheeler market was the largest in the world and therefore

became an important market to SKF. In addition, the automotive market at that time was experiencing high growth rates. Therefore, investment in the unit became strategically relevant. In 2009, SKF inaugurated a Global Testing Center for design, process and supplier validation and thereby generating greater support for local and global customers in a faster and cost-effective manner. The SKF group interests and its investment in India continued to grow and in 2011, the MNE opened its Global Tech Center India (GTCI) incorporating both the existing global testing center and the ADC.

In 2013, GTCI focused on testing and providing advanced technical knowledge for design, process, product, and supplier validation. In addition, the center conducted bearing analysis and had a fully equipped laboratory for metallurgy and chemistry, mechatronics, and product investigation in order to (1) develop a significant critical mass in engineering knowledge, (2) develop the ability to quickly analyze and support the Indian market's needs, and (3) design of components for the local market. In the same year, the GTCI in India also succeeded to have R&D competence for all SKF's five platforms: Bearings and Units, Lubrication systems, Mechatronics, Seals, Services. All this was done under the headquarters initiative and it became a corporate strategy. In the beginning of 2013, SKF GTCI – thanks to headquarters' support – the center increased its engagement levels with its stakeholders; among others by conducting quarterly executive reviews.

4. CASE ANALYSIS

In this section provides preliminary analyses of the cooperation-competition interplay within SKF is described and analyzed. Specifically it focuses on SKF's R&D unit in Bangalore and its expansion from being a local R&D site to a global R&D center. As will be described the center was an initiative of the headquarters and lead to specific configurations of cooperation and competition.

Below, we analyze the conditions leading the SKF group to engage in the cooperation and competition. These conditions will be discussed on the headquarter level (HQ) and subsidiary level (SUB) of analysis. We argue, in line with Becker-Ritterspach and Dörrenbäcker (2011), that environmental conditions, organizational conditions and object-related conditions are determinant factors influencing not only intra-firm competition but also can facilitate cooperation among units. Hence, we have categorized our research findings into these three main conditions and explain how cooperation and competition evolves over time. Table 1 summarizes the conditions influencing competition and cooperation in SKF.

TABLE 1 ABOUT HERE

4.1 Environmental conditions

What motivate the SKF group to build an R&D center in India? Our study shows that the business environmental conditions have changed in India and required a prompt response by the SKF group. The turning point was in 2001 when the overall headquarters' perception about the Indian market changed. Such a change was in line with SKF's overall corporate aspiration to create a global product development and engineering organization. Before this period, SKF's R&D activities mainly provided support for limited product development for the local market. A manager at SKF's HQ explained: *"We had some small technical activities in India associated directly with factories doing relatively straightforward factory support and some level of product development for the market."* However, changes in the market condition clearly showed that the SKF group could no longer sell 'outdated western products' in the local market.

The CEO summarized the changes in India at that time: *"India has changed from being an importer of knowledge to being a developer of knowledge. We work together with customers, developing products with them, specifically for that market."* SKF further realized that in order to take part of the growth in India, local Indian managers - who understood the context, the customers, and the market – should be in charge. The CEO highlighted the following: *"In 2002, we made a conscious decision – if we want to develop SKF in India, we need to go for local managers. We gave the authority to the locals. We gave them the keys. We, however, also expected them to come to us and tell us what was needed – how we should assist them – in order to be successful in India."* The CEO, however, clearly stresses, *"We do not run India differently from other operations. What is different is that the need for change is faster. That is why it is absolutely vital that management is close to the market; that is why I visit them regularly. We also benefit from having an Indian on the Board. If you are not exposed to India, you would not respond in the right way."*

The above statements illustrate what Luo (2005) asserts with respect to prospering markets and its effect on intra-firm competition. According to him, the competition among units tends to be high due to the fact that headquarters allow a lot of overlap among subsidiaries. By choosing to build a research center in a growing Indian market, the HQ was encouraging a competitive environment between its European subsidiaries and also the India subsidiary. As a consequence all of them will be competing for future HQ mandates, charters and resources.

Given the local Indian market, in 2004, SKF launched an Application Development Center (ADC) for one of its business areas in India. The main business focus was on the two-wheelers and the automotive market. The main goal was to put its engineering solutions closer to its customers. The reason for setting up the ADC in India was that the local two-wheeler market was the largest in the world and the automotive segment experienced a high growth rate. The CEO explains, *“Out of the 24 million two-wheelers produced globally every year, 20 million come from Asia. This almost amounts to 83% of the total production. [With the ADC] SKF aims to strengthen its role as a global partner to its customers in all segments of the industry as well as its commitment to the Asian market and India in particular.”*

The decision to set up the ADC in Bangalore (and not in Pune, which also was discussed) was that Bangalore had developed into the IT hub of the country with a large pool of educated engineers. The senior vice president for R&D argues in 2012, partly reflecting on past decisions: *“We will evolve over time- our vision is to have everything covered in India- from basic research to applications engineering to specific business units all done for local markets coordinate with research that we will not be doing in other parts of the world. India will become our center of excellence in some particular field. If you ask me to guess, it will be in simulation and computation. Bangalore is extremely good at that.”*

It is quite clear that the environmental condition of the market and the support made by the HQ exemplifies a situation that the subsidiary in India was on the spotlight. That is, HQ's attention and resources were being allocated to the subunit. Resources is a scarce asset that many subsidiaries compete for and at that moment India was having a chance for a long term upgrading of its technological know-how and more strategic interaction with the headquarters. According to Becker-Ritterspach and Dörrenbächer (2011), HQ's attention to a specific subunit can encourage a conflictive relationship among subsidiaries. Bouquet and Birkinshaw (2008) explain that such an environment creates a kind of race among key subsidiaries managers whose career depends on their performance.

4.2 Organizational conditions

How have coordination and control processes been emphasized by the headquarters in order to support SKF and its subsidiary in India? Our data analysis indicates that the decision behind the transformation of SKF's Indian R&D unit into a Global R&D Center (i.e. the ADC) was made solely by HQ, giving the Indian unit a mandate to function as a global application development center for one of its business areas. As mentioned by the CEO: *“We needed to give them a technology center. You need to be able to develop things locally [...]*

you cannot expect that you can develop things in Europe and to sell it in India. If we would not have had a technology center in India; we would not have taken part in the market growth; we would not have had the right resources to meet our customers' demands. They have become more demanding."

The ADC's focus was on the development of completely new technologies and optimization of the existing product range, thereby supporting SKF's global customers within the business area with competencies and services. In addition to that, in 2009, SKF inaugurated a Global Testing Center for design, process, and supplier validation, thereby generating greater support for local and global customers for processes in a faster and more cost-effective manner. The center was, for instance, applying global test standards that adapt to local customer specific requirements. As pointed out by the CEO, *"We are putting a knowledge infrastructure in place in India that allows us to provide state of the art technology solutions. The new testing center will significantly reduce lead time for our customers and ensure a speedy response to their requirements for new products."*

The data show how HQ intervened and created the organizational conditions in India. HQ allocation of resources, mandates was helping its Indian subsidiary to develop technological knowledge and competences. At the same time the HQ was also creating overlaps since other research centers located in Europe develop similar products, market and technologies.

In 2011, SKF inaugurated its Global Tech Centre India (GTCI) in India, incorporating the existing Global Testing Centre and the ADC and adding various specialized laboratories for investigations related to the materials used in manufacturing. The opening of the GTCI was again driven by HQ as part of SKF's technology strategy to create a global product development and engineering organization. As mentioned by the head of GTCI: *"With the launch of GTCI, our customers in India benefit from closer-to-home availability of SKF's global knowledge and expertise to address the growing need in India for newer technology development at a faster pace."* Indeed, local knowledge is essential especially when changing design rules (e.g. developing a new product for the Indian market), but also when trying to adapt an existing design in order to reduce the costs. An important decision taken at SKF headquarters was that the new global R&D unit in India should have all R&D activities, which historically in Europe were located at different units. Furthermore, in a press release, in 2014, SKF highlights its plan to build two new Global Technical Centers - one in Gothenburg, Sweden and one in Nieuwegein, The Netherlands. SKF already has a Global Technical Centre India (GTCI) in Bengaluru and is expanding its Global Technical Centre China (GTCC) and moving it to the new campus at Jiading, Shanghai. It seems that the

company has overlaps in terms of products, markets and technologies. Becker-Ritterspach and Dörrenbächer (2011) assert that ‘charter overlaps’ is a common strategy used by HQ to organize for competition. This finding is also in line with Phelps and Fuller (2000) who argue that organizing for competition by inserting overlaps is high mainly in multi-domestic MNEs.

4.3 Object-related conditions

Guided by the chief executive officer’s strong vision and the need to increase its Indian R&D capabilities, SKF began to successfully collaborate with a local Indian external consultancy firm, thereby kick-starting the plan to increase efforts to not only exploit, but also augment India’s innovation potential. The senior vice president for R&D explains the choice of the consultancy firm of suggesting India’s innovativeness capability. *“Looked at some top universities and institutes; we visited our own sites and a number of potential engineering consultancies [among others the eventually chosen partner]. We were extremely impressed with what they could do... not just by the quality and quantity of their engineers, but their processes and methodologies, how they managed and dealt with the tasks very professionally.”*

SKF became even more determined to build up Indian R&D capabilities in-house, and the GTCI head explains, *“India’s market growth, SKF India’s customers, and the venture with the consultancy firm created a positive story for having a captive center in India.”* Another positive aspect was that previously challenging confidentiality and IP issues when working together with local customers were solved. However, not everybody was pleased with the creation of the GTCI. There was some initial resistance and doubts as the senior vice president recalls, *“There was probably some resistance from people in Europe; ‘my job just went to India.’ We told them that this was not the case; rather, it was to get extra work done. We are expanding in Asia, we have to be able to work in Asia and train people there.”*

Despite the positive experiences, parts of the global organization still doubted if tasks given to GTCI indeed would be delivered on time and to the right quality. An interesting aspect observed here is linked to the organizational conditions within the SKF as a group. Put differently, the HQ allows its subsidiaries to have a certain degree of autonomy. By doing that, the MNE strategically permits that its subsidiaries can refuse mandates or charters allocated to other subsidiaries. This can be observed in the moment when the Indian subsidiary was facing resistance due to its still low level of reputation among fellow subsidiaries. Some subunits were not interested to cooperate with India, and not even to engage in any resource exchange relationships.

GTCI key managers understood the importance of building credibility among other parts of the global organization. The head of GTCI explains, *“proving credibility takes time, one should have patience [...] you push them enough to get them to give you work and then you leave them to judge.”* The global management comprehended that to develop even further the India subsidiary needed a critical mass of projects via GTCI. The corporate message to leverage the R&D capability in Bangalore was driven through committees at various levels. Clearly India needed to cooperate with other subunits in order to develop. One way to improve trust was through developing a robust system for customer feedback in order to learn and develop. As pointed out by the head of GTCI, *“When you prove your worth by robust processes – repeatability is guaranteed – you get more. [...] Recommendation cannot be a long-term engagement. If that is the route they take, they will always try to find fault.”* Appropriate training – through in-house video based learning and three months’ training that stays abroad at other SKF units – were seen as important mechanisms to reach credibility.

The situation stated above illustrates the HQ’s behavior by intervening and helping India subunit to increase reputation and credibility. Communication channels were implemented at several levels as a means to create an environment for cooperation and knowledge sharing. Here the HQ is perceived as a key actor with the legitimacy to place its subsidiaries sometimes in competition and sometimes in cooperation. By implementing structures and processes such as common training the HQ together with the Indian key managers tried to create relationships between Indian engineers and other engineers. The main goal was to facilitate information and knowledge sharing from GTCI to other parts of the global organization and vice versa. This observation is in accordance with Luo (2005) who states that organizational infrastructure allows the stimulation of cooperation and competition within the organization.

The head of GTCI explains, *“The Indian engineers, when the relationship is still being established, do not openly express their opinions on new and better ways of doing a task to their global colleagues. This is due to the Indian culture of being obedient and polite. As the relationship progresses, rapport is built and these engineers become more confident and comfortable with their global colleagues and lose their initial shyness. They start expressing their opinions. We are only now entering that phase when they start to give suggestions. The global colleagues find this as an excellent value proposition. We have knowledge sharing sessions as part of the appraisal process.”*

The cooperative relationship between the GTCI and the other SKF units in India also had to be developed. The head of GTCI expressed it as follows: *“One of the value propositions of*

GTCI to our SKF colleagues in India is to bring global SKF knowledge home which will enable them to please their customers. One of the key elements towards achieving this is firstly for GTCI to build credibility through acquisition of knowledge, and secondly to work with them to learn how GTCI can be leveraged appropriately."

The strategy seemed to work well and GTCI's utilization rate was 75%, in 2012 with 0% dissatisfied stakeholders. The GTCI head pointed out that the unit now was accepted as a credible and reliable engineering community. Thereby, expectations have gone up and tolerance for exceptions down as acknowledged by the senior vice president for R&D in 2012: *"by now, India is doing pretty much the same as Europe and is developing rapidly."*

In 2013, GTCI was still in a phase of building its resources and competences, engaging in learning through cooperation with other R&D units in SKF. At this time, 60% of GTCII's work was linked to SKF's global R&D activities, whereas the remaining 40% were related to work with Indian and South East Asian customers. The decision regarding what global projects GTCII should focus on was done based on priorities and work load leveling by various committees comprising of senior executives at the global level. The head of GTCII described it in the following way: *"if there are ten projects, six global and four local, we have to prioritize. It's an allocation process. The HQ's committees have the bigger picture on how these ten projects will affect SKF globally, including India, and decide how we should prioritize."*

After its implementation, the GTCI in India also succeeded to have R&D competence for all SKF's five platforms: bearings and units, lubrication systems, mechatronics, seals, services. Such an achievement implies overlaps in terms of products, market and technologies since India had the same capability as its European counterparts.

In the beginning of 2013, GTCI also made a change in its development of competence. As pointed out by the head of GTCI: *"In 2013 I tasked my team to create depth within each of these, we already had width. In that connection, we spent lot of initiatives on how to create knowledge within GTCI. There are two ways of doing knowledge transfer—one is to send our engineers there, and we have people from Europe to visit us to teach people here. The other approach was to start taking the help of external academic experts to do what we call finishing schools. FEA is a classic example. The topic is there but depth is missing. In India people are aware of how to do a FEA analysis but not sure of how to interpret it. What are the mechanics, what is the strength, what is the material behavior etc., what is this result telling me- that is missing. We want to create that. I do not want my engineers to send across*

a FEA report to my global stakeholders and ask them to analyze it. I want them to not only do it but also propose a solution to fix it.”

At the subsidiary level of analysis, the behavior and strategies implemented by the key manager at GTCI suggests local responsiveness behavior to attend the local and global costumers’ needs. Moreover it also suggests competitiveness and the need to increase its subunit capability. It implies a competitive behavior or a searching for status, reputation and of course the HQ’s attention. This is so, due to the fact that mandates and/or charters are temporary (in both time and content), and require a continuous necessity for performance. Such a structure developed by HQ shows how the organization as a whole is organized by competition. Responsibilities allocated by the HQ and won by an individual subsidiary, as noticed by Birkinshaw and Fuller (2000) leads to intra-firm competition.

Other examples of capability building and cooperation among subsidiaries can be observed in the organization. Another head of a department describes his unit’s journey over time: *“At my department it was a journey, and we realized that the stakeholders, meaning our colleagues from the Netherlands who gives us small work package in India as a kind of pilot, they started appreciating on the initial projects, started appreciating more with the next projects because we not just did a normal job but also came up with recommendations. That is showing that the knowledge bar is rising for individuals here. Thus we received some cases because they were convinced we could handle it, we have done a good job in the past. It is never a single point of time that you realize; for my department I can say 2014 was the transition and consolidation period. Before that it was more of development, training etc. 2014 mid onwards I can say that people went into a delivery mode and they are continuing the great job so far.”*

Interestingly, as a corporate strategy more centers of excellence will be established- among others an Asia specific trucks group has been formed within GTCI- and these will help to add more domain knowledge, which will enhance the competence of the engineers. In addition, the small unit COE and lubrication is now in GTCI. The head of GTCI explains the positions of the COEs in the global R&D network: *“The uniqueness of the COE is that it is very strongly linked with the global organization. The knowledge flows through that. We are sure that once it goes into the COE the knowledge part will be taken care of. The knowledge is therefore coming globally; the needs are coming through sales and application engineering.”* The stakeholder manager adds: *“The COEs in India are more for supporting the local markets though they are very close in action to their global organizations”.*

Based on the above observation, we put forward that the Indian subsidiary is both developing local and global competences. Hence, there is what Becker-Ritterspach and Dörrenbächer (2011) call as object-related conditions as a strategy to increase subsidiaries competitiveness. This may lead to an intra-firm competition mainly if the subsidiary receives mandates that are based on non-location based resources. Following Cerrato (2006), competition is expected to occur among subsidiaries if the knowledge at stake can be used globally. In other words, competition reduces when resources allocated from HQ to the subunit will be utilized to attend a local demand or will be utilized for a specific local purpose. In such a case, the influence of the subsidiary over HQ is high since the knowledge developed by the subsidiary is tacit or context-specific and therefore can be utilized only in specific circumstances. In such a case the subsidiary will face lower competition for resources.

In summary both HQ and the subsidiary constitute key actors to explain how cooperation and competition evolve over time. The SKF case illustrates that India became an important market to the SKF group (environmental condition) and therefore the subsidiary at certain moment was at the center of HQ's attention and allocation of resources (organizational condition). By developing a new R&D center and helping the subsidiary to gain a status of a global Center of Excellence (object-related conditions), an environment for competition was created among fellow subsidiary, mainly the ones located in Europe. However, for the India subsidiary to grow and develop competences, the HQ created process and structure to facilitate cooperation and knowledge sharing (organizational conditions). This elucidates the HQ's intention to have an initial internal competitive structure that later on was shifted towards a more cooperative internal structure. But its different configurations as well as when HQ will be more prone to organize for competition or more prone to organize for cooperation is a dynamic process and depends on the situation. In other words, it will depend on the combination of environmental, organizational and object-related conditions faced by the organization (Becker-Ritterspach and Dörrenbächer, 2011). Such conditions, however, are not an outcome solely of the HQ's initiatives but it may also be a subsidiary-led process.

5. CONCLUSION

We still do not know much about how competition and cooperation should be internally organized by firms. Our preliminary analysis shows that while the MNE has organized for competition as a way to achieve high performance, cooperation seems to be an important element to take into consideration for knowledge sharing and learning among subunits. In

addition to that, our in-depth case study demonstrated that organizing for cooperation and competition is a dynamic process and it depends on the environmental, organizational and object-related conditions (Becker-Ritterspach and Dörrenbächer, 2011). Such conditions, however, are not limited to HQ's initiatives but it may also be a subsidiary-led process. Thus, the cooperation and competition interplay is an outcome of the HQ's strategic orientation as well as subsidiary's autonomy, local responsiveness, competitiveness and its ability to develop its own capabilities.

Our case, specifically, illustrates HQ's focus and activities towards creating an environment for competition or cooperation. This is linked to some of the above conditions stated by Becker-Ritterspach and Dörrenbächer (2011). For instance, the HQ's initiative for cooperation in the beginning was related to the market initial *environmental conditions*. In other words, HQ changed its perception about the India market, i.e., from being considered as a market for local opportunities and local tech initiatives towards a market for global initiatives. The main reasons for the increasing interests were associated with the local growth rate and therefore HQ envisioned the development of a global tech center to attend both local and global demands. Such a process is illustrated in figure 1.

The red circle displays a slow and incremental process in which the HQ pushed its internal way of organizing from competition among its subsidiaries to cooperation. By encouraging cooperation the HQ's intention was to build up the necessary R&D competence in India to leverage on the local market business opportunity. It was clear that HQ was strategically motivated to introduce temporarily a culture of cooperation among different R&D units around the world to help the Indian unit. This phase is illustrated (see figure 1) in the green circle. The green circle coincides with the time that mandates and resources were allocated by HQ to the Indian subunit. Hence, the global tech center creation and therefore, the interplay between cooperation and competition, was a combination of both the local market external *environmental conditions and internal organizational conditions*. In addition to that, the subsidiary itself also contributed to the whole process by developing its own capabilities, autonomy and local response to the Indian market while serving to the MNE global market. This final stage represents what Becker-Ritterspach and Dörrenbächer (2011) name as "*object-related condition*". At the end, when the subsidiary has already achieved its level of autonomy and tech competences, the headquarters pushed back the overall internal organization for competition.

FIGURE 1 ABOUT HERE

In conclusion, we have in this study taken a step towards a better understanding of the cooperation and competition interplay within multinationals. While prior research has recognized the importance of intra-firm competition for technological innovation (e.g. Bouquet & Birkinshaw, 2008; Becker-Ritterspach and Dörrenbächer; 2011, Luo, 2005; Birkinshaw, & Lingblad, 2005), we know little about what promotes cooperation and/or competition, how it evolves, and how it might generate positive and/ or negative outcomes. Further, cooperation, competition and cooptition research has not examined when cooperation or when competition should be encouraged. The case has provided knowledge on the HQ-subsidiary relationship and HQ' initiative influencing the internal organization for competition and for cooperation. However, in order to enable generalization, this study calls for future research covering additional cases as well as statistical measures for validation of the theoretical findings. We hope that our examination of both competition and cooperation will provide a foundation for future conceptual and empirical research on this very important and evolving topic.

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APPENDIX

Table 1 Conditions, facts and activities that led to the cooperation-completion interplay.

Conditions	Facts	Activities: HQ's level	Activities: SUB's level	Outcome
Environmental	India high growth market.	HQ invested in the local R&D center. HQ gave autonomy and assistance for the R&D center to build competences.	India-SUB gained HQ's attention due to the market conditions.	Intra-firm competition
	Bangalore, India had developed into IT hub.	HQ's decision was based on the potential pool of educated engineers.		
Organizational	Application Development center (ADC) was built in 2004.	HQ transferred resources/ charters as a means to help India-subsidary to function as a global application development center.	India-SUB faced resistance and lack of credibility.	Intra-firm competition
	Global Tech Center India (GTCI) was built in 2011.	HQ continues to allocate charters and mandates to make India to transform the R&D activities of the unit similarly to the ones in Europe.	India-Sub created communication channels and increased customer's feedback strategy to increase awareness and trust.	Intra-firm competition
Object-related	Non-location bounded resources were allocated to India.	HQ mandates/ charters for testing steel supplier.	Key managers at India-SUB in cooperation with the HQ developed training system to increase interaction with local engineers and engineers working in other units.	Intra-firm cooperation
			Training system implemented had facilitated knowledge sharing and awareness.	Intra-firm cooperation

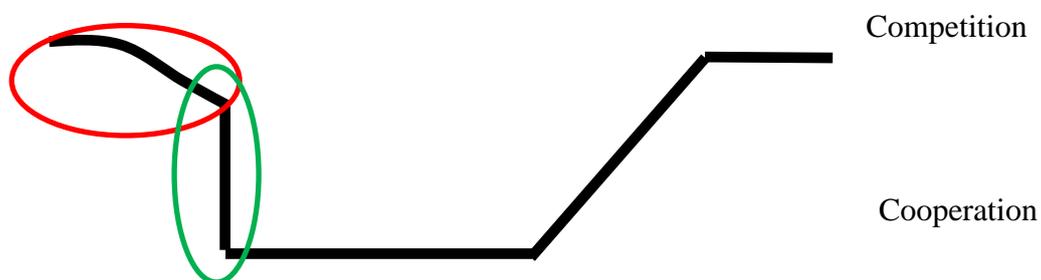


Figure 1. The Competition-Cooperation Interplay – A HQ's initiative taking.