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MNC subsidiary channel relationships as extended links: Implications of global strategies

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Abstract
Foreign subsidiaries of multinational corporations (MNCs) rely on external partners, such as channel partners, to achieve global objectives. We conceptualize the subsidiary's channel partner as an *extended link* of the MNC's internal network: thus, the subsidiary's adaptation and execution of the MNC's global strategies should influence the subsidiary's channel relationship and performance. Building on the strategy–environment alignment framework, we study the influence of MNC global strategies (global efficiency, multinational flexibility, and worldwide learning) on a subsidiary's channel commitment and the moderating influence of the host-country environment. Survey data from German and Japanese MNCs in the United States indicate the importance of global strategies to a channel relationship. For example, we find that an emphasis on multinational flexibility is detrimental, but worldwide learning benefits the subsidiary's channel commitment. We also find that the host-country environment plays a contingent role: for example, a global efficiency strategy is beneficial for channel commitment in a stable environment, but detrimental in a dynamic environment. Our research offers key implications for MNCs; we suggest that when MNCs decide to lay emphases on global strategies the MNCs should consider not just their internal subsidiary network, but also their extended channel partner links that function in foreign markets.
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> Our new international relationships [with distribution partners] are part and parcel to RTI's future growth in sales globally. (Remote Technologies Incorporated, 2007: 1)
>
> [We] enhanced channels to market for small- and medium-sized businesses by expanding distributor agreements in North America and accelerating recruitment and development of new resellers in Europe. (Nortel Networks Corporation, 2006: 4)

INTRODUCTION

Multinational corporations (MNCs) rely on external relationships with other firms to accomplish their global objectives; as the opening quotes highlight, one such important relationship of the MNC is with its distribution or channel partners. Channel partners perform critical functions to bring the MNC's products to market, which makes them an important part of the organizational value-creation process (Wu, Sinkovics, Cavusgil, & Roath, 2007). Research

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in international business also shows that channel relationships in foreign markets can offer enduring sources of competitive advantage (e.g., Skarmeas & Katsikeas, 2001), and a lack of focus on channel partners can be detrimental (e.g., Dyer & Chu, 2000). For example, London & Hart (2004: 10) note that an MNC's product launch targeted at lower-income market segments failed because existing channel partners were not trained or incentivized to sell the product outside their standard markets, and thus "didn't go to the secondary cities or the more rural areas." Given the importance of channel partners for MNCs, we focus on this key external relationship of an MNC – the subsidiary's relationship with its channel partner.

As the bridge between the MNC and its external partners in a foreign market (Almeida & Phene, 2004), an MNC subsidiary is responsible for managing these channel relationships and ensuring that channel partners fulfill the MNC's objectives. Thus, "the legal boundary of the subsidiary does not define its limits," because the subsidiary maintains relationships with external partners, and these partners "belong to the network in which the subsidiaries constitute the bridging links" (Holm, Holmström, & Sharma, 2005: 203). In this sense, the MNC subsidiary's channel partner represents a continuation or extension of the MNC and its subsidiary, and we refer to this relationship as an *extended link* of the MNC.

Considering the subsidiary–channel-partner link as an extended link emphasizes that the subsidiary's channel relationship, similar to any subsidiary strategic action, functions under the umbrella of the MNC's global objectives. As Lassar and Kerr (1996) note, a firm's overall strategic perspective influences its channel management and relationships; accordingly, an MNC's global strategies, which are the primary tools it uses to achieve global objectives (e.g., Bartlett & Ghoshal, 1995; Zou & Cavusgil, 1996), should influence the subsidiary's channel relationship too. As an MNC subsidiary and its channel partner function and strive to achieve their objectives in the host-country environment, the influence of global strategies on the subsidiary's channel relationship should be contingent on the alignment between the global strategies and the host-country environment. Therefore, we adopt the strategy–environment alignment framework (Bourgeois III, 1980) to study the subsidiary's channel relationships.

In line with Bartlett and Ghoshal (1995), we conceptualize an MNC's global strategy as emphases on global efficiency, multinational flexibility, and worldwide learning. Anecdotal evidence supports the influence of these global strategies on subsidiary channel relationships: Komatsu emphasizes a global efficiency strategy, and leverages economies of scale and scope by concentrating its research, manufacturing, and marketing functions in Japan (Bartlett & Rangan, 1985). This focus is reflected in Komatsu's consolidation of brands and channel partners in the United States, a strategy that, according to Komatsu's president, "will result in increased efficiencies and cost savings and represents the better strategy for achieving long-term growth and profitability" (Modern Materials Handling, 2010: 1).

To investigate how an MNC's global strategies influence its subsidiary's relationship with external channel partners, we study the effect of these three global strategies on the subsidiary's commitment to its channel relationship (i.e., channel commitment). Using the strategy–environment alignment framework, we posit that the influence of global strategies on the subsidiary's channel commitment depends on the host-country environment, that is, environmental dynamism and munificence. To test our conceptual framework, we use survey data from 252 German and Japanese MNC subsidiaries in the United States and estimate a regression model that accounts for selection bias and corrects for heteroskedasticity.

We find that MNC global strategies directly influence the subsidiary's channel commitment; multinational flexibility has a negative effect on the subsidiary's channel commitment, whereas worldwide learning has a positive effect. In line with the strategy–environment alignment framework, the effect of global strategies depends on the host-country environment. For example, as environmental dynamism increases, so does the magnitude of the negative effect of global efficiency on channel commitment. Our finding that the alignment between MNC global strategy and host-country environment influences the subsidiary's channel relationship supports our conception of the subsidiary's channel partner as an MNC's extended link.

We thus contribute to research on MNCs and their subsidiaries on two fronts. First, we respond to calls to study the subsidiaries' external partners (e.g., Almeida & Phene, 2004). We consider how MNC global strategies, not just subsidiary or exporter strategies, affect an MNC subsidiary's external relationships in foreign markets. By conceptualizing the subsidiary's channel relationship as an extended link, we recommend that the subsidiary's external relationships be viewed in concert with the MNC's

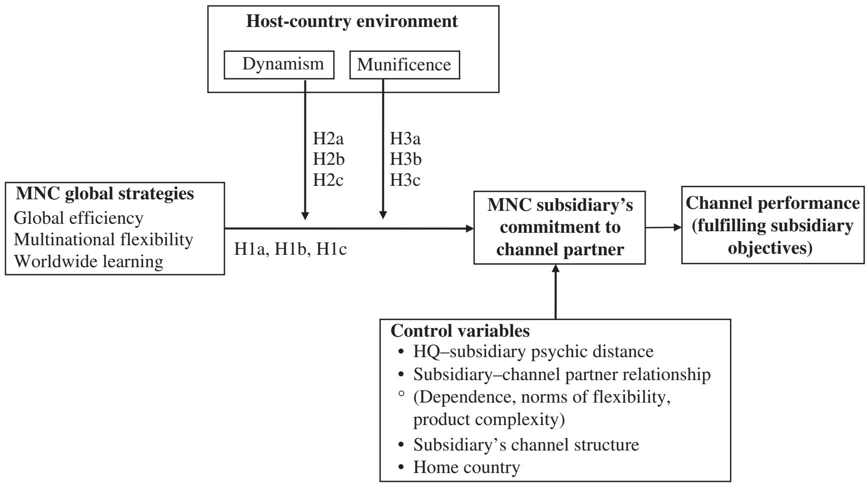

Figure 1 Conceptual model.

internal network and global strategies. Second, most research on how firms use downstream business partners in foreign markets focuses on export channels, in which a firm resides in the home market and exports to a foreign market through a channel partner (e.g., Styles, Patterson, & Ahmed, 2008). A subsidiary's channel relationship is just as important for achieving objectives in the foreign market as is an export channel relationship; but it differs from that relationship, because the subsidiary, unlike an independent exporting firm, functions under the MNC's strategic umbrella. We investigate this interesting but largely overlooked relationship.

THEORETICAL DEVELOPMENT

We rely on the strategy–environment alignment framework to study the effect of global strategies, contingent on the host-country environment, on the subsidiary's channel relationship outcomes (Figure 1). To begin, we expand on the subsidiary's channel relationship outcomes, before we detail the strategy–environment alignment framework and its application to the MNC subsidiary's channel relationship.

The MNC Subsidiary's Channel Relationship

An emergent perspective in MNC subsidiary research considers the subsidiary "embedded in specific business relationships," such that it "deals with the impact of specific relationships" (Holm et al., 2005: 198). Therefore, we study the specific relationship between a subsidiary and its external channel partner (i.e., the channel relationship).[1] Channel partners provide various critical functions for an MNC, such as carrying inventory, demand generation, selling, physical distribution, after-sales service, and extending credit to customers, and are considered especially influential for MNC success in foreign markets (Klein, Frazier, & Roth, 1990).

A key aspect that defines the MNC subsidiary's channel relationship with its external channel partners is the subsidiary's sharing of residual profits with the channel partner (John & Weitz, 1988).[2] As the MNCsubsidiary reaches the foreign market through the external channel partner, and has to share profits with the partner, the extent to which the subsidiary fulfills the MNC's economic and strategic objectives in the foreign market is dependent on the external channel partner. Channel partners' activities that add value to the MNC subsidiary's offerings in the foreign market can further the subsidiary's objectives. For example, the extent to which the channel partner develops relationships with customers can impede or further the subsidiary's performance in the foreign market. Therefore, the subsidiary's channel relationship is a key external relationship, and the responsibility to ensure that channel partners further the MNC's objectives in the foreign market lies with the subsidiary.

Channel commitment and its importance

Extant research emphasizes that the relational dimension of inter-firm relationships (such as commitment) is necessary to exploit the full potential of relationships, and is a critical outcome of organizational strategies (Beamish & Banks, 1987; Madhok, 1995; Matanda & Freeman, 2009). Lane and Lubatkin (1998) emphasize that a subsidiary's ability to acquire and benefit from new information depends on the closeness of its existing relationships with different business partners. The extent to which a subsidiary works closely with its channel partners should therefore provide a competitive edge to the MNC, because the subsidiary can gain a better understanding of, and respond better to, customers' requirements and competitor's actions. To build a close relationship, the MNC subsidiary and channel partner should invest in building the relationship through mutually oriented outlays that improve the quality of the channel relationship (e.g., Kim, 1999). To assess the outcome of these actions for both the subsidiary and the channel partner, we study the subsidiary's *commitment towards the channel partner*.

Commitment between partners is widely studied, especially in relation to inter-firm relationships such as buyer–seller relationships (e.g., Jap & Ganesan, 2000; Siguaw, Simpson, & Baker, 1998), domestic channel relationships (e.g., Geyskens, Steenkamp, Scheer, & Kumar, 1996; Ross, Anderson, & Barton, 1997), or importer–exporter relationships (e.g., Leonidou, Barnes, & Talias, 2006; Skarmeas, Katsikeas, & Schlegelmilch, 2002). We adopt our definition of channel commitment from this stream of research; it is the subsidiary's intention to continue the channel relationship because of its positive affect toward and identification with its channel partner (Kumar, Scheer, & Steenkamp, 1995). By considering the subsidiary's intention to continue with the channel relationship, channel commitment accounts for the subsidiary's long-term orientation toward the channel partner, which requires that the subsidiary invest in the channel relationship (e.g., to train partners to sell the MNC's products; Skarmeas et al., 2002). Channel commitment thus goes beyond evaluations of the channel partner based solely on current benefits or costs (e.g., Dyer & Chu, 2000). Furthermore, Kim and Frazier (1996) emphasize that a firm's commitment toward its channel partners is characterized by the value added by the channel member to achieve the firm's, that is, the subsidiary's goals.[3] Therefore, the subsidiary is likely to commit to the channel partner if the subsidiary perceives that the channel partner is committed to the subsidiary (e.g., Katsikeas, Skarmeas, & Bello, 2009). Commitment also facilitates the smooth organization and coordination of economic activities between the partners (Morgan & Hunt, 1994). Thus, commitment within a channel relationship is an essential facet of successful business relationships (Gundlach, Achrol, & Mentzer, 1995), and the subsidiary's channel commitment provides a critical assessment of the channel relationship's outcome.

Implications of channel commitment

The subsidiary should reap the benefits of investing in a channel relationship when the channel partner engages in behaviors that contribute to the fulfillment of the MNC's objectives in a foreign market – that is, when the channel partner performs according to the subsidiary's expectations. To achieve this channel performance, the partners invest in the relationship (Gilliland & Bello, 2001); commitment indicates the subsidiary's past and current investments and future willingness to invest in the channel relationship, which should enhance channel performance. When commitment in the channel relationship increases, the subsidiary likely evaluates the channel partner's performance with a long-term perspective, such that it is more likely to forgive minor transgressions (Jap & Ganesan, 2000). In addition, MNC subsidiaries committed to their channel partners are less inclined to exit the relationship; Skarmeas et al. (2002) argue that commitment in international inter-firm relationships is critical to their longevity, which then affects their performance. Thus, channel commitment should lead to improved channel performance (Katsikeas et al., 2009).

Prior research has confirmed the positive effect of channel commitment on performance in domestic channel relationships (Siguaw et al., 1998) and exporting relationships (Matanda & Freeman, 2009; Skarmeas et al., 2002).[4] From the MNC subsidiary's perspective, because channel commitment improves channel performance (i.e., the channel partner is fulfilling the MNC's strategic, sales, and economic objectives), improving channel commitment increases the likelihood that the subsidiary will achieve its own objectives in the foreign market. We study the influence of these MNC global objectives, which the subsidiary strives to achieve in the host-country environment, as we elaborate next.

The Strategy–Environment Alignment Framework

The strategy–environment alignment framework contends that the fit between an organizational strategy and the external environment has significant implications for organizational outcomes (e.g., Venkatraman & Prescott, 1990). Extant research has found that the alignment of the MNC subsidiary with its host-country environment aids business growth in the foreign market (Luo & Tan, 1998); in turn, the host-country environment has a significant influence on the subsidiary's strategic choices (Kotabe, 1990; Zahra, Dharwadkar, & George, 2000). To study the MNC subsidiary's channel relationship, we build on the strategy–alignment framework, and extend the framework to study a specific business relationship, the subsidiary's channel relationship and outcomes related to that relationship, that is, channel commitment.

A firm's overall strategic perspective and objectives influence its channel management, and thus the outcome of individual channel relationships (Lassar & Kerr, 1996). As the subsidiary's strategic perspective is within the purview of the MNC (Doz & Prahalad, 1991), MNC global strategies are likely to influence the subsidiary's channel relationship outcome. Typically, scholars using the strategy–environment framework have not considered specific business relationships; rather, organizational outcomes are viewed as stemming from interactions between organizational strategies and the environment, where the environment is seen as an aggregate force concerning competitive behaviors and change in demand and product preferences (e.g., Venkatraman & Prescott, 1990). Thus, in the "aggregate force" view of the environment, the subsidiary's channel partners (as well as competitors and customers) are subsumed as part of the aggregate environment. However, as we conceptualize the subsidiary's external channel relationships as an extended link of the MNC, we isolate and study this *specific* external relationship. In doing so, we rely on extant research that emphasizes the importance of the subsidiary's relationship with its partners, and has isolated a relationship from the aggregate environment (Holm et al., 2005). This emergent perspective on MNCs' business relationships emphasizes that MNCs function within a network of business relationships, and that organizational outcomes also depend on the functioning of these relationships (Andersson, Björkman, & Forsgren, 2005). Thus, we integrate the strategy–environment alignment framework with the perspective that relationships between firms are critical for a firm's organizational outcomes (Holm et al., 2005), and rely on the strategy–environment alignment framework to assess the influence of global strategies on the subsidiary's channel commitment.

Furthermore, the strategy–environment alignment framework views the environment as a contingency factor that should affect the outcome of a specific strategy (Venkatraman & Prescott, 1990). Extant research has shown that the external environment directly influences the channel relationship (e.g., Kim, 1999; Matanda & Freeman, 2009), and the nature of this influence depends on how the subsidiary and the channel partner respond to the nvironment – that is, the host-country environment. The strategy–environment alignment framework contends that this response to the host-country environment is, in turn, dependent on the global strategy that the subsidiary is emphasizing (and thus alignment between the strategy and the environment is critical). Furthermore, the host-country environment also influences the channel partner's actions in the foreign market (e.g., in a munificent environment channel partners seek to customize the marketing mix to take advantage of the profit opportunities; Achrol & Etzel, 2003), which may or may not be aligned with the subsidiary's strategic emphasis. As channel commitment encapsulates the subsidiary's desire to continue to work with the channel partner, actions of both the subsidiary and the channel partner influence the subsidiary's channel commitment. Therefore, the effect of an MNC global strategy on subsidiary's channel commitment should be contingent on the manner in which the subsidiary and channel partner respond to the host-country environment. Thus, building on the strategy–environment alignment framework, we study the contingent role of the host country's environment on the influence of MNC global strategies on the subsidiary's channel commitment (Figure 1).

MNC global strategies

A global strategy, or the way an MNC competes in the global market, articulates the MNC's response to the interdependent nature of global markets. Competition among MNCs is not market by market, but rather plays out across foreign markets as they leverage their resources in one host country to gain competitive advantages in another (Zou & Cavusgil, 1996). Global strategies incorporate MNCs' broad strategic motives while also specifying how to coordinate activities such as research and development, manufacturing, distribution, and marketing worldwide (Collins, 1991). As the MNC subsidiary is not autonomous, its strategic choices reflect the MNC's global strategies (Doz & Prahalad, 1991), and the HQ monitors and evaluates its operations to ensure their consistency with the MNC's global objectives. Thus, MNC subsidiaries typically adapt global strategies to fit the host-country environment.[5] By capturing the subsidiary's perspective on MNC global strategies (e.g., its view of the MNC's focus on extracting benefits from wage differences across countries), we can assess the influence of the alignment between global strategy and host-country environment on channel commitment.

Using the relative emphasis that MNCs adopt to achieve their global competitive advantage, Bartlett and Ghoshal (1995) identify three global strategies: global efficiency, multinational flexibility, and worldwide learning. MNCs that emphasize global efficiency strive to benefit from cost differences across countries (e.g., wages, cost of capital), and gain scale and scope economies across diverse business processes (e.g., research, manufacturing, sales; Bartlett & Ghoshal, 1995). To compete at a global level, these MNCs consider it necessary to benefit from scale economies in production and sales, which results in emphases on achievement of volume through integration across national borders and standardized products across host-country markets (e.g., Kobrin, 1991). An emphasis on global efficiency makes it feasible for MNCs to attain scale economies in production and marketing, but it also impairs the ability of subsidiaries to adapt to changing market needs (Bartlett & Ghoshal, 1995), often leading to the MNC becoming overtly dependent on operations in a single foreign market (Lenway & Murtha, 1994).

MNCs that emphasize multinational flexibility focus on creating strategic options that enable them to adapt to and benefit from the diversity in foreign markets. Such MNCs focus on their inherent advantages over domestic firms; operating flexibility enables these MNCs to gain arbitrage in markets by transferring resources across borders and within their subsidiary networks (Allen & Pantzalis, 1996). An emphasis on multinational flexibility thus enables the MNC to respond to diverse environmental conditions by being adaptive; however, managing widespread investments and operations while keeping options open imposes higher coordination costs and associated inefficiencies (Lu & Beamish, 2004).

MNCs that emphasize worldwide learning aim to create knowledge about foreign markets, and then use that knowledge worldwide. Such MNCs leverage the knowledge and innovation that occur within their subsidiaries to meet global needs (Zahra et al., 2000). An emphasis on worldwide learning enables MNCs to assimilate, synthesize, disseminate, and utilize learning on a global scale (Ghoshal, Korine, & Szulanski, 1994), which can run counter to MNCs' need for control to integrate their worldwide operations.

Thus, a relative emphasis on each global strategy has both advantages and disadvantages, and affects how the MNC subsidiary functions in the host-country environment.[6]

Facets of the environment

The strategy–environment alignment framework implies that the decision about how to compete globally depends on managers' perceptions of the external environment (Bourgeois III, 1980; Holmström, 2010).[7] Consistent with extant perspectives on organizational environment (Bello, Chelariu, & Zhang, 2003; Duncan, 1972), we also theorize that the host-country environment provides a source of both information, which raises the issue of managing *uncertainty*, and resources, which raises the issue of organizational *dependence*. We use dynamism to capture uncertainty and munificence to capture resource dependence (Achrol & Etzel, 2003).

Specifically, environmental dynamism increases with uncertain changes in demand, diversity of competitor actions, and shifting consumer preferences (e.g., Fang & Zou, 2009). Such environments heighten the uncertainty that firms perceive, which increases their information requirements and processing needs (Dess & Beard, 1984). In turn, environmental munificence refers to the availability and abundance of critical resources in the environment (Pfeffer & Salancik, 1978). Munificence captures the concept of environmental capacity (i.e., level of resources available) and growth (i.e., relative changes in environmental capacity; Castrogiovanni, 1991; Zammuto & Cameron, 1985). As munificence increases, so do the prospects of achieving profits and growth in foreign markets; as munificence decreases, resource acquisition becomes difficult and competition for resources intensifies (Park & Mezias, 2005).

HYPOTHESES

Global Strategies

Global efficiency

An MNC's global efficiency strategy emphasizes performance based on the worldwide integration of operations across subsidiaries and host-country markets (Kobrin, 1991), exploitation of differences in wages across countries, and scale economies in distribution and marketing (e.g., Bartlett & Ghoshal, 1995). To achieve scale economies for their integrated marketing operations, MNC subsidiaries emphasizing global efficiency implement standardized marketing mixes, and avoid customized versions. For example, an MNC emphasizing global efficiency is more likely to develop global brands and sell them in all foreign markets, as opposed to developing local brands for a specific host-country market (Chabowski, Samiee, & Hult, 2013). Therefore, a subsidiary should encourage its channel partners to achieve required sales volumes using globally standardized marketing programs, instead of developing customized programs. As a result, an increased emphasis on global efficiency should lead a subsidiary to reduce its idiosyncratic investment (such as creating customized programs with a channel partner) in a specific channel relationship. Idiosyncratic investments create an incentive for the subsidiary to maintain the relationship with the channel partner (as Anderson & Weitz, 1992 show in the context of a domestic channel relationship). The lack of such relationship-specific idiosyncratic investments often leads to dysfunctional channel relationships (e.g., Benito et al., 2005). Thus, the subsidiary's reduced idiosyncratic investments in the channel relationship imply that the subsidiary should expend less effort to maintain the channel relationship, reducing positive affect in the relationship. As the subsidiary's channel commitment is a measure of its desire to renew the relationship due to positive affect in the relationship, reduced positive affect should reduce channel commitment. Furthermore, in support of this argument, Katsikeas et al. (2009) find that in an exporting relationship with reduced idiosyncratic investments, the exporter's perceived dependence on its channel partner reduces. As the subsidiary's dependence on the channel partner reduces, the subsidiary should expend less effort in maintaining the channel relationship, which should reduce the positive affect in the channel relationship – that is, reduce the subsidiary's channel commitment. In summary, we argue that the subsidiary's reduced idiosyncratic investment in the channel relationship, due to its emphasis on global efficiency, leads to reduced channel commitment.

Hypothesis 1a: As the MNC's emphasis on global efficiency increases, the MNC subsidiary's channel commitment decreases.

Multinational flexibility

A multinational flexibility strategy focuses on creating strategic options to develop an adaptable approach to managing host-country operations, and thus benefit from diversity across foreign markets (e.g., Bartlett & Ghoshal, 1995). These MNCs focus on developing capabilities to respond effectively to host-country-specific environmental shocks and fluctuations, as well as exploit anticipated opportunities by shifting resources across markets (Lee & Makhija, 2008). Mascarenhas (1982) finds that MNCs often incorporate short-notice termination clauses in their partnership agreements, to avoid long-term commitments and to remain flexible. The MNC subsidiary emphasizing multinational flexibility seeks investments that can be reallocated as needed; in contrast, investments in a channel partner, such as time, effort, and resources to train the channel partner's sales force, are not deployable to other partners in the same host-country market or across countries (Bello et al., 2003). Thus, the subsidiary should resist deploying resources to a specific channel relationship, because, if it did so, it would suffer from higher switching costs and perceive a stronger need to maintain and continue the channel relationship (Katsikeas et al., 2009). The subsidiary's resistance in deploying resources to a specific channel relationship should reduce its need to maintain the relationship, reducing the positive affect in the channel relationship, and therefore reducing channel commitment. Overall, we predict that as a subsidiary's emphasis on multinational flexibility increases, its perceived need to maintain and continue the channel relationship will decrease, lowering channel commitment.

Hypothesis 1b: As the MNC's emphasis on multinational flexibility increases, the MNC subsidiary's channel commitment decreases.

Worldwide learning

A worldwide learning strategy focuses on acquiring knowledge from subsidiaries in foreign markets, and using that knowledge across subsidiaries to gain a global competitive advantage (e.g., Ghoshal, 1987). Subsidiaries of an MNC that emphasizes this strategy should focus on innovation, and develop products and processes that can be transferred to other subsidiaries. Recent studies of knowledge transfers within MNCs indicate that socialization and relational approaches to knowledge transfer, as compared with hierarchical and centralized approaches, are more likely to lead to knowledge sharing within the MNC (e.g., Andersson et al., 2005; Yamin, Tsai, & Holm, 2011). Holm et al. (2005) argue that to learn from external relationships, an MNC subsidiary should invest in knowledge-sharing routines with partners: thus, when an MNC places an emphasis on achieving a competitive advantage through learning and acquiring knowledge, the subsidiary should focus on learning from channel partners. The channel partner is closer to the market than the subsidiary (Zhang, Cavusgil, & Roath, 2003), so to learn from the channel relationship, the subsidiary similarly invests in building knowledge-sharing routines with its channel partner. Such an investment in the channel relationship should improve the channel relationship quality, and increase the subsidiary's likelihood of renewing the channel relationship due to a desire to continue with the relationship. In summary, because the subsidiary should expend effort to build and maintain the channel relationship by investing in knowledge-sharing routines, an increased emphasis on worldwide learning should increase channel commitment.

Hypothesis 1c: As the MNC's emphasis on worldwide learning increases, the MNC subsidiary's channel commitment increases.

Contingent Role of Host-Country Environmental dynamism

Increase in environmental dynamism in host-country markets indicates new competitive moves or changing customer needs and, as a result, increase in uncertainty for the subsidiary. As uncertainty increases, on one hand, friction and conflict increase between inter-firm partners, which harms their relationship (Leonidou et al., 2006); while, on the other hand, the need for partners to work together to manage the uncertainty also increases, which should have a positive effect on the subsidiary's channel commitment (Matanda & Freeman, 2009). Building on the strategy–environment alignment framework, we argue that the effect of host-country environmental dynamism on the subsidiary's channel commitment is contingent on how the subsidiary and the channel partner respond to environmental dynamism, which is influenced by the subsidiary's execution of MNC global strategies through the channel partner.

Global efficiency

Environmental uncertainty hinders the firm's ability to respond to situations through a predefined set of routines, which creates difficulties for coordinating and implementing marketing strategies (Madhok, 1995): thus, changing environmental conditions create problems for efficient coordination of and trading between channel partners. In the context of an exporting relationship, Katsikeas et al. (2009) argue that the problems in efficient coordination and trading between channel partners reduce the firm's confidence in the efficiency of its relationship. In an MNC subsidiary channel relationship context, the influence of this reduced confidence depends on the extent to which the subsidiary values efficiency. An MNC subsidiary emphasizing a global efficiency strategy focuses on achieving scale economies in an efficient manner within the channel relationship. Thus, increasing host-country environmental dynamism should significantly reduce the MNC subsidiary's confidence in the efficiency in the channel relationship, and thus the subsidiary should reduce efforts to maintain the relationship. The subsidiary's reduced efforts to maintain the relationship should harm the channel relationship, reducing channel commitment. Therefore, as environmental dynamism increases, the magnitude of the negative effect of global efficiency on the subsidiary's channel commitment should increase.

Hypothesis 2a: As environmental dynamism increases, the negative effect of global efficiency on the MNC subsidiary's channel commitment also increases.

Multinational flexibility

A subsidiary emphasizing a multinational flexibility strategy strives to obtain benefits from the changing conditions (e.g., Buckley & Carter, 2004). Thus, as environmental dynamism increases, a subsidiary emphasizing multinational flexibility responds to the host-country environment by increasing its focus on benefiting from the changes in the environment. As the downstream channel partner is closer to customers than the subsidiary (e.g., Zhang et al., 2003), increasing environmental dynamism prompts the subsidiary to recognize its need to leverage the partner's resources and access information to benefit from changes in the host-country market. This recognition likely increases the subsidiary's perceived dependence on its channel partner; as this dependence arises from the channel partner aiding the subsidiary in a dynamic environment, the subsidiary's desire to continue working with the channel partner likely increases. Thus, as environmental dynamism increases, we suggest that an emphasis on a multinational flexibility strategy increases the subsidiary's channel commitment.

Hypothesis 2b: As environmental dynamism increases, the negative effect of multinational flexibility on the MNC subsidiary's channel commitment decreases.

Worldwide learning

With a worldwide learning emphasis, subsidiaries facing competitive host-country environments increase their knowledge acquisition efforts from the external environment (Holm et al., 2005). As environmental dynamism increases, the changing customer demands should increase the subsidiary's focus on learning from the changing conditions and acquiring knowledge to develop internal competences, such as new products or processes. Such acquired knowledge and competences should be attractive to other MNC units, and improve the subsidiary's position within the MNC that emphasizes worldwide learning. Thus, the value of learning from external partners should increase with greater environmental dynamism (Holm et al., 2005). Again, as the channel partner is closer to the market than the subsidiary (Zhang et al., 2003), a subsidiary that embraces worldwide learning should aim to learn more from the channel partner when environmental dynamism increases. This increased effort to maintain the channel relationship should lead to the subsidiary's increased desire to continue the channel relationship, and thus increased channel commitment.

Hypothesis 2c: As environmental dynamism increases, the positive effect of worldwide learning on the MNC subsidiary's channel commitment also increases.

Contingent Role of Host-Country Environmental Munificence

As munificence increases, the growth prospects and profit opportunities in a foreign market also increase (e.g., Jobs & Carr, 2006). Extant research shows that as environmental munificence increases, cooperation between a firm and its domestic channel partner increases (Dwyer & Oh, 1987), which enhances channel commitment (Kim, 1999). However, in alliances between firms, the value of an external partner diminishes with greater environmental munificence, because firms no longer need to rely on their partners to generate demand (Park & Mezias, 2005); this reduction in partner value should reduce channel commitment. We argue that the effect of host-country environmental munificence on the subsidiary's channel commitment ultimately depends on how the subsidiary responds to the host-country environment (i.e., its global strategies), as well as how the channel partner does so.

Global efficiency

As environmental munificence decreases, the available resources in the environment decrease too, and thus firms strive to achieve an efficient use of resources. To implement a global efficiency strategy, the MNC subsidiary focuses on rents at a global level by emphasizing efficiency and economies of scale across its functions: thus, as environmental munificence decreases, a strategy of global efficiency provides benefits to the munificence subsidiary. In contrast, increased munificence supports the accumulation of slack resources, and reduces the need for a greater focus on cost arbitrage or scale economies. As environmental munificence increases, channel partners should want to take advantage of the increased opportunities, because they function only in the host-country market, and thus are dependent on its resources (Kim, 2001). Therefore, as environmental munificence increases, firms are less interested in efficiency goals (Buenger, Austin, Daft, & Conlon, 1987), and channel partners do not focus on achieving efficiency (e.g., Achrol & Etzel, 2003, for domestic channels): thus, the goals of an MNC subsidiary that emphasizes global efficiency come increasingly into conflict with the channel partner's goals. Such conflict should reduce the subsidiary's desire to continue working with the channel partner. Thus, the magnitude of the negative effect of a global efficiency strategy on the subsidiary's channel commitment should increase as environmental munificence increases.

Hypothesis 3a: As environmental munificence increases, the negative effect of global efficiency on the MNC subsidiary's channel commitment also increases.

Multinational flexibility

Growth and profit opportunities in the host country increase as environmental munificence increases (e.g., Jobs & Carr, 2006), which suggests the need for flexibility to enable subsidiary managers to respond quickly to new market conditions, and exploit the available opportunities better. Thus, as environmental munificence increases, the value of a multinational flexibility strategy increases (e.g., Luo, 2003): therefore, an emphasis on multinational flexibility is likely to increase the MNC subsidiary's focus on creating options, and on being flexible and adaptive to reap benefits from the foreign market. The subsidiary's increased emphasis on multinational flexibility implies a reduced investment in a specific channel relationship to facilitate the reallocation of resources as required. Such a reduced investment indicates that the subsidiary does not need to expend effort in that channel relationship, which would negatively affect the state of the channel relationship, further reducing the subsidiary's desire to continue with that channel relationship. Therefore, as munificence increases, the magnitude of the negative effect of an MNC subsidiary's multinational flexibility on channel commitment should also increase.

Hypothesis 3b: As environmental munificence increases, the negative effect of multinational flexibility on the MNC subsidiary's channel commitment also increases.

Worldwide learning

By providing slack resources, munificent markets provide potential for knowledge creation (Mudambi & Navarra, 2004); so a subsidiary emphasizing worldwide learning should respond to greater munificence by increasing its efforts to learn from the host-country environment and its channel partner. This increased effort in learning from the channel partner should improve the subsidiary's channel relationship, and increase channel commitment. Furthermore, greater environmental munificence creates more opportunities for profits in the host country, which should make adaptations to the host-country market more prominent (Buenger et al., 1987). To benefit from a munificent market, the channel partner should also want to work closely with customers to satisfy their requirements, such as by customizing and optimizing the product mix and customer services (see Achrol & Etzel, 2003, for the domestic channel context). By emphasizing learning from the host-country market and its customers, a worldwide learning strategy should help subsidiaries recognize the benefits of customization, such that they invest in channel partners' marketing mix customization efforts. As subsidiaries increasingly invest in the channel relationship with increasing environmental munificence, positive affect in the channel relationship should increase, increasing channel commitment. Therefore, as munificence increases, the magnitude of the positive effect of worldwide learning on channel commitment should increase.

Hypothesis 3c: As environmental munificence increases, the positive effect of worldwide learning on the MNC subsidiary's channel commitment also increases.

METHODOLOGY

Empirical Context

To test our hypotheses empirically, we sought MNC subsidiaries for which the host country and MNC country of origin both satisfy certain criteria. The host country should be (1) an important foreign market, such that the HQ must pay attention to the subsidiary and application of global strategies, (2) not overly regulated, to the extent that regulations constrain the execution of global strategies, and (3) an existing open market, which gives the MNCs an opportunity to establish subsidiaries and develop channel relationships. The United States satisfies these criteria: it is one of the most important markets for MNCs from Europe and Asia, has relatively low market regulations, and historically has been open to MNCs. For the home countries, we require that they have significant foreign direct investments (FDI) in the United States, because FDI signals subsidiaries. Germany and Japan satisfy these criteria, as the highest proportion of US FDI comes from Japan (17%), followed by Germany (14%) (Ferris, 2007). Thus, the two home–host-country combinations (Germany–USA, Japan–USA) provide appropriate contexts for our study.

Data Collection

We conducted a mail survey. With German and Japanese subsidiaries in the United States as our empirical context, we sampled German subsidiaries from the *Directory of German Firms in the USA* and Japanese subsidiaries from the *Directory of Japanese-Affiliated Companies in the USA & Canada*. These directories include approximately 1800 German and 2000 Japanese manufacturing firms across various industries. To conduct this organizational research, we needed key informants who were knowledgeable about the phenomenon (Kumar, Stern, & Anderson, 1993). Because, in the MNC subsidiary context, subsidiary managers represent the focal point for balancing the interests of headquarters and host-country operations (e.g., Gregersen & Black, 1992), we targeted them as our key informants.

We conducted two pretests. First, we interviewed two US MNC subsidiary managers, who appraised the content and order of items in the survey. Second, we pretested the survey with a random sample of 400 firms (200 from each list) to ensure the construct validity of the questionnaire items. Prior to sending the survey, we established telephone contact with the MNC subsidiaries to identify subsidiary managers who would serve as our key informants; whenever possible, we talked with the informants about the study and survey. In cases of unsuccessful contact, we called the subsidiary again within a week. We then mailed the survey to the subsidiary managers, including a cover letter on university letterhead that provided details of the study, and asked respondents to attach their business cards if they desired a copy of the report. We also included a self-addressed, prepaid envelope and a US$1 bill to increase the response rate. In the survey packet, we provided a redirecting form that respondents could return to us if they believed someone else in the subsidiary was better suited to respond. When we

Table 1 Sample details ($n = 252$)

	Sample mean (SD) or percentage of respondents
MNC subsidiary size (number of employees)[a]	1003 (4234)
MNC subsidiary age[a]	19.87 (20)
Form of US subsidiary[b]	
Wholly owned	80%
Joint venture	5%
Exporting	9%
Licensing	1.5%
SIC codes (53 responses)[c]	
Industrial and commercial machinery	15%
Machine tools	13%
Electronic and other electrical equipment and components (non-computer)	13%
Wholesale trade-durable goods	11%
Industrial chemicals	7%
Fabricated metal products	7%

[a]Sample size for MNC subsidiary size and age was 232 respondents.
[b]Not all respondents (~5%) answered the question, so the total does not add up to 100%.
[c]The other industries were transportation, plastic products, abrasive and stone products, hard surface floor coverings, and hardware.

received such forms, we forwarded the survey to the identified alternate key respondents. After two weeks, we mailed follow-up postcards. For the pretest, we received 91 responses and 16 redirection forms, which produced six additional responses. Thus, we achieved an acceptable response rate of 24.25%. Of the 97 responses, 90 were complete and displayed good psychometric properties; as a result, we made no changes to the survey for the main data collection.

For the final step of the data collection, we repeated the survey process with 1000 randomly chosen firms (500 from each list). We received 201 responses and 50 redirection forms that led to 20 additional responses, for an acceptable response rate of 22.1%. Of these responses, 162 were complete and usable. Because we did not change the survey after the pretest, we combined the pretest and final responses, for 252 complete and usable responses. We compared early and late respondents across the pretest and the final study, and found no evidence of nonresponse bias.

We present the sample details in Table 1. We asked the respondents to indicate which manufacturing industry (four-digit standard industrial classification (SIC) codes) their firm represented; 53 respondents answered this question. We provide the broad categories of SIC codes in Table 1. Subsidiaries can function in the host-country market using different operational modes (Benito, Petersen, & Welch, 2009); 80% of our respondents identified themselves as wholly owned subsidiaries, 5% were joint ventures, 9% were exporting firms, and 1.5% were licensing firms. Of the 252 complete responses, 50% of the MNC subsidiaries were German, and 50% were Japanese.

In addition, 141 MNC subsidiaries indicated that they used only internal channels (own sales force or marketing directly to host country using home-country personnel). Of the remaining 111 subsidiaries, 46.8% used merchant distributors, 21.6% used commission agents, 5.4% used joint ventures, 3.6% specified “others,” and 22.5% used multiple channel types (excluding internal channels).

The responses were confidential, so we cannot determine further details about the subsidiaries' activities (e.g., manufacturing, or research and development). However, 47 respondents enclosed their business cards (although, in accordance with the confidentiality agreement, they were not connected to their responses), so we can infer that 48% of these subsidiaries were involved in manufacturing, 31% imported products from other firms and then sold through channel partners in the United States, 9% engaged in research and development and manufacturing, 2% were corporate offices, and we could not reliably identify the activities of the remaining subsidiaries.

Measures

We adapted existing scale items to our MNC subsidiary context, and asked the respondents to answer the questions in relation to a channel relationship with a “typical” channel partner (see the Appendix for details). To assess the extent to which the MNC emphasized a particular global strategy, we adopted measures developed by Grewal, Chandrashekaran, and Dwyer (2008). These measures assess the extent to which the MNC emphasizes a specific strategy from subsidiary managers' perspective. Thus, we asked subsidiary managers to rate "aspects of your organization's worldwide strategy" which enables us to capture the MNC's global strategies, and not just the subsidiary's foreign market specific strategies. The global efficiency measure pertained to the MNC's emphasis on exploiting scale economies across countries and sharing costs across businesses; the multinational flexibility measure assessed the MNC's emphasis on deriving benefits from opportunities across countries, flexibility in allocating resources, and versatility in human capital; and the worldwide learning measure assessed the MNC's emphasis on gaining knowledge from differences across countries and sharing it across the MNC.

To assess the host-country environment, we asked subsidiary managers about their perceptions regarding the US market (the subsidiary's host-country market). Our dynamism measure assessed variability in customer needs, product and brand features, price/quality, and uncertainty due to customer actions in the US market (Dwyer & Welsh, 1985). The munificence measure assessed the growth and profit potential of the US market and the subsidiary in the United States, as well as opportunities for profit (Dwyer & Oh, 1987). To measure channel commitment, we need to capture the subsidiary's long-term orientation toward the channel relationship, such that the subsidiary intents to renew the channel relationship due to positive feelings toward the partner (as opposed to renewing the relationship as part of a contractual agreement or purely because of financial reasons). We adopted Kumar et al.'s (1995) measure, and assess channel commitment with three items that emphasize the subsidiary's likelihood of renewing the channel relationship because of the positive affect in the relationship.

As research has emphasized that channel performance should be assessed according to the perspective of the supplier (Kumar, Stern, & Achrol, 1992), we measure channel performance based on the extent to which the channel partner fulfills the subsidiary's objectives. We measured channel performance on three dimensions – strategic performance (marketing, strategy, pricing, and promotion), selling performance (contacts with customers and after-sales service), and economic performance (sales, profit, growth, and return on investment) – that reflected the MNC subsidiary's perception of channel partners' performance (e.g., Bello & Gilliland, 1997).

Control variables

We also controlled for three categories of variables that could influence the effect of MNC global strategies on channel commitment: (1) problems in communication or mechanism transfers due to the psychic distance between the home and the host country, (2) aspects of the relationship between the subsidiary and the channel partner, and (3) the type of external channel, and whether the subsidiary used multiple channels. First, home and host countries may differ greatly in their cultures, languages, business practices, and other country-level factors. The *psychic distance* construct captures the extent of these differences between the MNC home country and the subsidiary's host country (Klein & Roth, 1990). Psychic distance creates communication and coordination problems, increases the costs and difficulty of transferring organizational practices (e.g., Roth & O'Donnell, 1996), and affects learning in international ventures (e.g., Prashantham & Floyd, 2012). Holm and Sharma (2006) also suggest that the subsidiary's acquisition of competences and routines from the HQ reflects the national culture that surrounds the subsidiary, and its working style is based on cultural differences.[8] Thus, the extent to which the subsidiary fails to implement the MNC's global strategies can be captured by the interaction of the global strategy with psychic distance. We control for the main effect of psychic distance and its interactions with global strategies. The psychic distance measure assessed problems between the HQ and the subsidiary due to differences in language or culture, as well as differences in customs and values (Bello & Gilliland, 1997).

Second, extant research on international, interfirm relationships suggests that the antecedents of channel relationship outcomes arise from specific actions of the firm, related mainly to three broad categories of variables (e.g., Bello et al., 2003; Bello & Gilliland, 1997): (1) the dependence of the firm on its channel partner, (2) relational governance in the channel relationship, and (3) the characteristics of the product being sold.

We control for each category by measuring (1) the subsidiary's dependence on its channel partner, (2) norms of flexibility in the channel relationship, and (3) the complexity of the primary product sold by the subsidiary. The subsidiary's dependence on the channel partner, or the extent to which it relies on

Table 2 Descriptive statistics[a]

Construct	GE	MF	WL	MUN	DYN	PD	DEP	PCM	FLX	CM	CPER	MTR
Global efficiency (GE)												
Multinational flexibility (MF)	0.57**											
Worldwide learning (WL)	0.49**	0.71**										
Munificence (MUN)	0.14	–0.06	–0.04									
Dynamism (DYN)	0.04	–0.01	0.12	0.14								
Psychic distance (PD)	–0.15	–0.38**	–0.32**	0.06	0.11							
Dependence (DEP)	0.01	–0.05	–0.20	0.03	–0.06	0.01						
Product complexity (PCM)	0.16	0.04	0.08	0.28**	0.15	0.04	0.10					
Norms of flexibility (FLX)	0.17*	–0.04	0.15	0.07	0.08	–0.06	–0.03	0.13				
Commitment (CM)	–0.06	–0.11	0.12	0.14	0.13	–0.08	0.16	0.14	0.34**			
Channel performance (CPER)	0.18*	0.05	0.16	0.34**	–0.08	–0.17*	0.02	0.28**	0.34**	0.46**		
Manager's traits (MTR)[a]	–0.03	–0.05	0.04	0.10	–0.04	–0.01	–0.00	–0.02	0.00	0.01	–0.03	
Mean	3.90	3.92	3.95	4.59	4.28	4.05	3.98	4.81	5.15	4.89	4.75	4.10
Standard deviation	1.11	1.11	1.25	1.15	0.99	1.35	0.88	1.56	1.05	1.31	0.85	1.94

[a]The sample size for the descriptive statistics was 111 (external channels only). The sample size for the manager's traits marker variable correlation was 98.
*$p<0.05$; **$p<0.01$; (all two-tailed tests).
Note: We report descriptive statistics with average scores as indicators of the latent variables.

its channel partner to perform joint functions and gain access to resources, influences its channel commitment (Skarmeas et al., 2002). Norms of flexibility in the channel relationship indicate the extent to which the subsidiary and channel partner accommodate each other's needs and requests (e.g., Heide, 1994) and influence the subsidiary's channel commitment (e.g., Jap & Ganesan, 2000). The product complexity measure determines whether a product has technical or other distinctive characteristics that distinguish it from competitive options (Kim & Hwang, 1992). Bello et al. (2003) find that the nature of the product significantly influences an importer–exporter relationship; product complexity can also increase the interdependence of two partners.

Third, we control for the type of channel the MNC subsidiary uses in the foreign market; specifically, we use binary variables that identify the channel type (i.e., three dummy variables for four channel types: joint venture, commission agents, merchant distributors, and others). We also control for the subsidiary's use of a multichannel strategy with a binary variable.

Fourth, we control for the home country with a binary variable, because country-specific differences likely exist in areas such as governance, human resources, and financial structures (e.g., Rosenzweig & Singh, 1991), and they might influence both channel commitment and performance.

Measure Validation and Measurement Error

We used confirmatory factor analysis to assess the validity of our measures. The χ^2 goodness-of-fit index was statistically significant for the model, as is usually the case for large samples; the fit statistics – comparative fit index (0.915), Tucker–Lewis index (0.904), root mean square error of approximation (0.051), and standardized root mean square residual (0.050) – also met the criteria for a good fit (e.g., Browne & Cudeck, 1992). In terms of measure reliability, all factor loadings for the multi-items scales were statistically significant. The composite reliabilities, ranging from 0.68 to 0.95, indicated acceptable construct fit levels (see the Appendix). In support of discriminant validity, the correlations of the constructs were statistically less than 1, and the average variance extracted was greater than the squared correlations of the latent variables (Fornell & Larcker, 1981). We present the descriptive statistics in Table 2.

Because we used a single survey to collect our data, we took several precautions to alleviate the threat of common method bias. First, we divided the questionnaire into distinct subsections for global strategies, channel relationships, external environment variables, subsidiary-specific variables, and performance. We also applied different anchors for the predictor and outcome variables (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For example, the anchors for the global strategy variables were "disagree" and "agree," whereas those for channel performance were "unsatisfactory" and "satisfactory." Second, our hypothesized model included interaction effects, which are less likely to reflect artifacts of common method variance than are models with only main effects. Third, we applied the marker variable technique (e.g., Podsakoff et al., 2003), using “manager traits” (“I am conservative,” “I am a risk-taker”) as items that were theoretically unrelated to our focal constructs. For the sample with only external channels, we obtained manager trait data from 98 respondents, which we used to assess the partial correlation. There was no significant correlation between manager traits and our theoretical variables ($p > 0.10$) (see Table 2). Thus, common method variance does not seem to be a concern for our study.

Model Specification

Effect of global strategies on the subsidiary’s channel commitment

We hypothesized that global strategies influence the subsidiary’s channel commitment to an external channel partner, but prior to estimating the regression equation, we acknowledge that subsidiaries self-select into the use of internal or external channels (i.e., self-selection bias; Dastidar, 2009). This selection could reflect omitted variables, such as the extent of resources a subsidiary possesses, which then might influence channel commitment. To account for potential biases, we used Heckman’s (1979) two-stage selection procedure (Bascle, 2008).

In the first step, the selection equation, we analyzed the probability that the subsidiary would select internal or external channels using a probit model. The dependent variable is a dummy, equal to 0 for internal channels and 1 for external channels. The purpose of this first step was to compute the inverse Mills ratio for each observation, which we then used in the second step, the estimation regression equation, to control for self-selection bias (Heckman, 1979). The estimation regression equation also accounts for heteroskedasticity in observations across subsidiary managers. Thus, we derive two equations for subsidiary *i*:

$$Z_i^* = \gamma X_i + u_i \tag{1}$$

where, $Z_i = 1$ if $Z_i^* > 1$ and 0 otherwise; and

$$\mathrm{CM}_i = \beta X_i + \rho \times \mathrm{IMR}_i + \varepsilon_i \tag{2}$$

which is observed only when $Z_i = 1$; where Z_i denotes whether the channel type is internal ($Z_i = 0$) or external ($Z_i = 1$), CM_i denotes channel commitment, and IMR_i stands for the inverse Mills ratio obtained from the first stage. Thus, Eq. (1) estimates the probit equation for the effect of the predictors (X) on the probability of the subsidiary selecting an external channel, and Eq. (2) estimates the effect of X on channel commitment for external channels only. Both and indicate vectors of estimated coefficients, for the probit and the regression model, respectively. The error terms u_i and $_i$ are assumed to have a bivariate normal distribution with zero mean and correlation . Further estimation details are available from Greene (2003).

We control for multicollinearity by using residual centering for the interaction effects in our model e.g., Lance, 1988). We estimate the residual for these interaction effects as follows:

$$X_{1i} \times X_{2i} = \lambda_0 + \lambda_1 X_{1i} + \lambda_2 X_{2i} + \zeta_i \tag{3}$$

Where ζ_i captures the interaction effect of X_1 and X_2, independent of the individual effects (λ) of each variable. Therefore, we use ζ_i as the X_i variable in Eq. (2) to estimate the effects of the interaction of two independent variables on channel commitment.

Model selection

To test for heteroskedasticity, we conducted a Lagrange multiplier or White test to compare our heteroskedastic model with a homoskedastic specification; the hypothesized heteroskedastic model accounted for a significant amount of variance ($\chi^2_{27} = 44.218$; $p<0.05$). Thus, we used a heteroskedastic model specification to test our hypotheses.

Channel performance

To determine the effect of channel commitment on channel performance (CPER), we estimated the following model:

$$\mathrm{CPER}_i = \gamma_0 + \gamma_{\mathrm{cm}} \mathrm{CM}_i + \gamma_{\mathrm{ctrl}} (\text{Control Variables}) + \xi_i \tag{4}$$

Where γ indicates the effect of the independent variable on channel performance, and ξ indicates the error.

RESULTS

Effect of MNC Global Strategies on the Subsidiary’s Channel Commitment

We present the results from our hypothesized model in Table 3. We represent the contingent effects by plotting the partial derivative of Eq. (2), as Schoonhoven (1981) recommends. For example, in Figure 2a we plot the partial derivative of Eq. (2) with respect to global efficiency (∂CM/∂GE) against the contingent factors (dynamism and munificence) as they increase from low (mean–1.96 × standard deviation) to high (mean+1.96×standard deviation). The ∂CM/∂GE chart shows that the negative effect of global efficiency on commitment increases as dynamism increases from a low to a high level. Similarly, we plot the effects of multinational flexibility (Figure 2b) and worldwide learning (Figure 2c) on channel commitment.

Global efficiency (Figure 2a)

We did not find support for Hypothesis 1a, because the main effect of global efficiency on commitment is statistically not significant. In support of Hypothesis 2a though, as DYN increased, the negative effect of global efficiency on commitment increased in magnitude ($\beta = -0.10$, $p < 0.05$). As munificence increased, the negative effect of global efficiency on commitment also increased in magnitude ($\beta = -0.08$, $p < 0.05$), in line with Hypothesis 3a.

Multinational flexibility (Figure 2b)

The main effect of multinational flexibility on commitment was negative ($\beta = -0.32$, $p < 0.05$), as we predicted in Hypothesis 1b. We did not find statistically significant support for Hypothesis 2b, but a Wald test showed that at high environmental dynamism, multinational flexibility exerted a significant negative effect on channel commitment (Wald test $\beta = -0.69$, $p < 0.10$),[9] in general support of our reasoning. Also in support of Hypothesis 3b, as munificence increased, the magnitude of the negative effect of multinational flexibility on channel commitment increased as well ($\beta = -0.159$, $p < 0.05$).

Worldwide learning (Figure 2c)

The results supported Hypothesis 1c; the main effect of worldwide learning on commitment was positive ($\beta = 0.33$, $p < 0.01$). We did not find statistical significant support for Hypothesis 2c, although again the Wald test showed that, at high environmental dynamism, worldwide learning had a positive effect on channel commitment (Wald test $\beta = 0.74$, $p < 0.10$), in support of our reasoning. We did not find support for Hypothesis 3c, because the interaction coefficient for worldwide learning and munificence was not statistically significant. In Figure 2c, we depict the positive effect of worldwide learning on the subsidiary's channel commitment at both low (Wald test $\beta = 0.35$, $p < 0.05$) and high (Wald test $\beta = 0.30$, $p < 0.01$) levels of munificence. Perhaps the positive effect of worldwide learning did not increase with greater munificence because the subsidiary's learning from its channel partner was subject to saturation effects (e.g., Yeniyurt, Townsend, Cavusgil, & Ghauri, 2009), in which case environmental munificence would not alter the effect of worldwide learning on channel commitment.

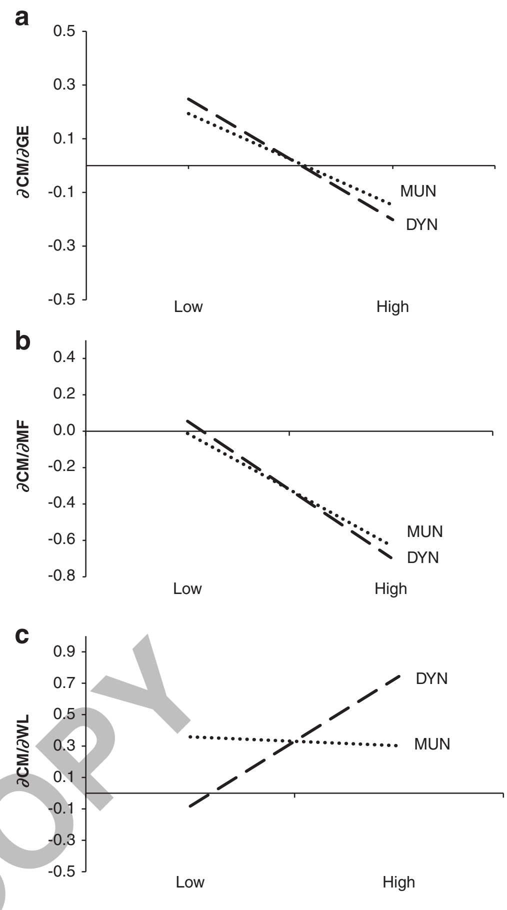

Figure 2 Effect of MNC global strategies on subsidiary's channel commitment, contingent on environmental dynamism (DYN) and munificence (MUN).

Note: We plot the partial derivative of commitment relative to global strategies, against DYN and MUN at low (mean −1.96×SD) and high (mean+1.96×SD) levels. For example, the DYN line in Figure 2a shows that, as DYN increases, ∂CM/∂GE (effect of global efficiency on commitment) becomes more negative.

Channel Performance

We estimated the effect of a subsidiary's channel commitment on channel performance using Eq. (4) (external channel sample only). The independent variables explained a significant amount of variance (adjusted $R^2 = 0.30$). As expected, a subsidiary's channel commitment had a significant, positive effect on channel performance ($\gamma_{cm} = 0.26$, $p < 0.001$).[10]

Table 3 Results

Class of independent variables	Parameter estimates	Hypothesis (results)
Dependent variable: Subsidiary's channel commitment[a]		
Constant	0.79***	
Direct effects of global strategic emphases		
Global efficiency	0.023	H1a (Not supported)
Multinational flexibility	–0.32*	H1b (Supported)
Worldwide learning	0.33**	H1c (Supported)
Effect of host-country environmental dynamism		
Dynamism	0.06	
Global efficiency×Dynamism	–0.10*	H2a (Supported)
Multinational flexibility×Dynamism	–0.16	H2b (Not supported)
Worldwide learning×Dynamism	0.18	H2c (Not supported)
Effect of host-country environmental Munificence		
Munificence	0.06	
Global efficiency×Munificence	–0.08*	H3a (Supported)
Multinational flexibility×Munificence	–0.15*	H3b (Supported)
Worldwide learning×Munificence	–0.01	H3c (Not supported)
Control variables		
MNC–subsidiary psychic distance		
Psychic Distance	0.03	
Global efficiency×Psychic Distance	–0.18**	
Multinational flexibility×Psychic Distance	–0.11	
Worldwide learning×Psychic Distance	0.26**	
Variables affecting subsidiary–channel partner relationship		
Product complexity	0.05	
Subsidiary's dependence on channel partner	0.33***	
Norms of flexibility in the channel relationship	0.47***	
Channel structure controls ("Other" = 0)		
Joint venture	–0.92***	
Commission agents	–0.57**	
Merchant distributors	–0.21	
Use of multiple channels (single channel = 0)	0.01	
Home country (Germany = 1, Japan = 0)	–0.01	
Controlling for correlation between MNC global strategies		
Global efficiency×Multinational flexibility	0.04	
Global efficiency×Worldwide learning	–0.27**	
Multinational flexibility×Worldwide learning	0.19**	
Dependent variable: channel performance[b]		
Constant	0.79***	
Channel commitment		
Channel commitment	0.26***	
Control variables		
Norms of flexibility	0.31***	
Product complexity	0.09*	
Dependence	–0.03	
HQ country (Germany = 1)	–0.06	
Joint venture	–0.15	
Commission agents	–0.42	
Merchant distributors	–0.24	
Use of multiple channels (single channel = 0)	–0.22	

[a]The coefficient of the inverse Mills ratio from the probit external channel selection model was 0.63, at $p > 0.1$.
[b]The adjusted R^2 for the channel performance regression model is 0.30.
*$p<0.05$; **$p<0.01$; ***$p<0.001$ (all two-tailed tests).

Robustness Tests

Conceptual model

Because we tested our hypothesis with cross-sectional data, we must assess the direction of the hypothesized relations in our conceptual model. Global efficiency, multinational flexibility, and worldwide learning did not have statistically significant effects on channel performance. This non-significant result provided support for our conceptual model: that is, global strategies influence the subsidiary's channel commitment, which influences channel performance. It did not support an alternative conceptual model, in which global strategies influence channel performance, which influences the subsidiary's channel commitment.

Subsidiary-specific variables

Subsidiary size (number of employees) and length of operations in the foreign market (subsidiary age) (the main organizational demography variables; see Carroll & Hannan, 2004) could indicate the extent of resources that the subsidiary has available to invest in the channel relationship, which should influence both channel commitment and channel performance. We did not have these data for all MNC subsidiaries, so we conducted this robustness test using the reduced sample for which such data were available ($N=231$ for the Heckman selection model). Including the two variables did not affect our results, though.

DISCUSSION AND IMPLICATIONS

We have posited that a subsidiary's key external relationships, such as its channel relationships, are an extension of the MNC's internal links, and thus represent an extended link of the MNC. Relying on the strategy–environment alignment framework, we have examined how MNC global strategies – global efficiency, multinational flexibility, and worldwide learning – affect the subsidiary's channel relationship outcomes (channel commitment and performance), contingent on the host-country environment. Our results thus offer important implications for research on the subsidiary's important external relationships.

First, MNC global strategies directly influence the subsidiary's channel commitment, in support of our conceptualization of the subsidiary's relationship with a key external partner as an extended link of the MNC's internal links. In particular, an MNC's emphasis on multinational flexibility exerts a negative main effect on the subsidiary's channel commitment. In contrast, domestic channels research suggests a positive relationship between a firm's flexibility and channel commitment (e.g., Anderson & Narus, 1990). We did not find this effect, probably because a domestic firm's strategic flexibility is manifested in its adaptation to one local market; an MNC's multinational flexibility strategy applies across multiple foreign markets. Our results reveal that MNCs that emphasize multinational flexibility place more value on operational and financial flexibility, and the creation of options (Lee & Makhija, 2008), even at the expense of their channel relationships. Thus, we show that an MNC's competitive global strategies might not be optimal for its subsidiaries and their external channel relationships. On the positive side, an MNC's emphasis on worldwide learning has a positive effect on the subsidiary's channel commitment. As subsidiaries gain knowledge from their channel partners, and convert that knowledge into resources to invest in the foreign market, both the subsidiary and the channel partner benefit, leading to increased channel commitment and thus improved channel performance. This positive effect of worldwide learning aligns with research that shows that a subsidiary's knowledge creation and transfer roles in an MNC network improve its position within the MNC, and encourage better performance (e.g., Almeida & Phene, 2004).

In a related sense, our research also speaks to the broader trade-offs that MNCs make with regard to their global strategies (Grewal et al., 2008). We suggest that MNCs should consider their external channel partners when making such trade-offs. For example, global efficiency is detrimental to the subsidiary's channel commitment in dynamic and munificent markets, which reduces channel performance, and increases the costs of implementing a global efficiency strategy. This thinking appears in recent research as well; Wu et al. (2007) find that contractual enforcement might increase the MNC's market competence, but it also reduces the level of trust between the subsidiary and its distributor. Our findings thus highlight the importance of accounting for an MNC's global strategic agendas when studying a subsidiary's external relationships (and not just the subsidiary's strategic actions in relation to the channel relationship).

Second, in line with the strategy–environment alignment framework, we show that the host-country market environment, in which the extended link functions, should be taken into account. The alignment between the MNC's emphasis on a specific global strategy and the host country's market dynamism and munificence influences the subsidiary's

Table 4 Effect of MNC's global strategies on channel commitment, contingent on host-country environment

	Stable host-country environment	Dynamic host-country environment	Lean host-country environment	Munificent host-country environment
Global efficiency	0.25*	–0.20†	0.19*	–0.15†
Multinational flexibility	0.05	–0.69*	–0.01	–0.62**
Worldwide learning	–0.08	0.74†	0.35*	0.30**

†$p<0.10$; *$p<0.05$; **$p<0.01$ (all two-tailed tests).
Notes: The values indicate the effect of emphasizing a global strategy, contingent on the environment, and on the subsidiary's channel commitment, as tested by Wald tests (calculated as described in the text). For example, emphasizing global efficiency in a stable host-country market has a positive effect on channel commitment, and emphasizing global efficiency in a dynamic host-country market has a negative effect on channel commitment.

channel commitment, which affects channel performance. In Table 4, we represent these contingent effects in stable (low dynamism), dynamic, lean (low munificence) and munificent host-country markets.

Host-country environmental dynamism plays a critical contingent role related to the influence of MNC global strategies on a subsidiary's channel commitment. As we mentioned, the negative effect of global efficiency on channel commitment increases with environmental dynamism. Table 4 shows that, in dynamic environments, multinational flexibility has a negative effect on channel commitment, whereas worldwide learning has a positive effect. Thus, the effect of environmental dynamism on the subsidiary's channel commitment is contingent on the MNC's global strategies, in that strategic motives influence how the subsidiary and channel partner respond to the dynamic environment. These findings have important implications for research into the influence of a changing environment on international inter-firm relationships (Matanda & Freeman, 2009). Skarmeas et al. (2002) find that a rapidly changing environment has no significant main effect on the commitment between an importer and exporter, and Skarmeas, Katsikeas, Spyropoulou and Salehi-Sangari (2008) find that a rapidly changing environment did not affect relationship quality directly. Our findings (i.e., the significant contingent effects of environmental DYN) reveal that the effect of the host-country environment on channel relationships is influenced by how the partners respond to the environment, which is governed by the strategic motives under which the channel relationship functions. Thus, our findings emphasize the need to study environmental forces as a contingent factor in international channel relationships.

Extant research on international channel relationships has focused more on the effect of environmental uncertainty (conceptualized with dynamism) than the effect of environmental munificence (e.g., Kim & Frazier, 1996). However, the level of environmental MUN affects the firm's strategic responses, in that abundant resources enable firms to pursue their goals and constitute a key facet of the external environment (Castrogiovanni, 1991). Host-country environmental munificence plays a contingent role in the relationship between an MNC's global strategies and its subsidiary's channel commitment. On one hand, research in domestic channels shows that munificence has a positive main effect on cooperation among channel partners (Geyskens, Steenkamp, & Kumar, 1999); on the other hand, as munificence decreases, the value of partners in inter-firm relationships increases, because the relationships give firms access to resources that are lacking in the external environment (Park & Mezias, 2005). We add to this debate by showing that an emphasis on global efficiency and multinational flexibility has a negative effect on a subsidiary's channel commitment in munificent markets (Table 4). Further, Park and Mezias (2005) suggest that resource scarcity increases the need for firms to coordinate strategic actions; we similarly find that, in lean host-country environments, an emphasis on global efficiency exerts a positive effect on the subsidiary's channel commitment (Table 4).

Third, we add to the stream of research on inter-firm relationship commitment. Extant research on commitment between channel partners has focused largely on the dyadic factors between partners as antecedents to channel commitment (Kim, 2001; Skarmeas et al., 2008). The effect of strategic motives in the context of external channel relationships has largely been restricted to the selection of the external partner (e.g., Murray & Kotabe, 2005). We show that MNC global strategies also significantly influence a subsidiary's commitment to its channel partner, which influences channel performance. Furthermore, unlike exporters, MNC subsidiaries maintain a presence in the foreign market and perform several functions (e.g., inventory management, customer contacts); in an exporting relationship, those actions would be performed by the channel partner. Our results show that even when the subsidiary is not unduly dependent on the channel partner for all activities (as compared with an exporting relationship), the subsidiary's commitment toward the channel partner has a significant positive effect on channel performance. This result underscores the importance of a relational view of channels (Madhok, 1995); and how having a long-term orientation toward a channel partner can help a firm achieve its objectives in foreign markets.

Limitations and Future Research

Because we used a cross-sectional survey design, the limitations of this method are applicable to our research too. One of these limitations is the threat of common method bias, although we carefully tested for and did not find any evidence for such bias in our study. In addition, we could not empirically impute the causal nature of the hypothesized relationships with our data. However, our conceptual model is theoretically grounded, and the robustness tests of the conceptual model provide further support. Now that these linkages have been established with cross-sectional data, further research should adopt longitudinal research designs to confirm their causality, and assess channel commitment and channel performance over time.

In our data collection procedure, we considered only the subsidiary's perspective. The subsidiary is responsible for executing and adapting global strategies in foreign markets, so this perspective is appropriate for assessing the emphasis on global strategies in each host country (e.g., Grewal et al., 2008). Furthermore, MNCs build channel relationships to achieve their global objectives, and it is the subsidiary's responsibility to maintain these relationships and ensure that channel partners achieve objectives. Therefore, the subsidiary's perspective clearly is pertinent (e.g., Kumar et al., 1992), but studies from other perspectives could be insightful. We also used subjective measures of channel and subsidiary performance, because MNC subsidiaries and channel partners have different sizes, target markets, and customers, so objective measures of performance would not be comparable (Hult et al., 2008). Nor do MNCs generally report on the individual performance of their subsidiaries and channel partners, so we could not collect performance data from secondary sources. However, with the grounding of our finding that channel partners are extended links for MNCs, additional research should take the channel partner's perspective to assess the channel relationship and performance. Furthermore, we treat the subsidiary's external channel partners similarly (as we study joint ventures, distributors and commission agents together). Although, as we discuss, there is a significant theoretical basis for treating external channel partners similarly (John & Weitz, 1988; Kim & Frazier, 1996), future research could consider studying channel commitment toward each external partner.

As we study the influence of the MNC's global strategies on the subsidiary's channel relationship, we implicitly assume that the subsidiary is aligning itself, to some extent, with the MNCs' overall global emphasis. However, a stream of research has highlighted how some subsidiaries are completely autonomous from the MNC, and set strategy themselves (e.g., Birkinshaw & Morrison, 1995; Roth & Morrison, 1992). In such a case, the subsidiaries likely function as domestic firms, and the research pertaining to channel relationships of domestic firms (e.g., Anderson & Narus, 1990) would be applicable. However, facets of the MNC's functions (e.g., structure, worldwide processes) other than global strategies might influence an autonomous subsidiary's external relationships, and subsequent research can take this perspective for studying MNC subsidiaries' channel relationships.

We conducted our empirical study with the United States as the foreign market. Although we included two different home countries, our empirical results might not generalize to other foreign markets or HQ–host-country combinations. For example, US subsidiaries and channel partners might respond more positively to a knowledge-sharing strategy because of the strong emphasis on technological innovation in the United States (e.g., Almeida & Phene, 2004). And Japanese MNCs are known to rely on expatriates to achieve global integration among their subsidiaries (Goerzen, Asmussen, & Nielsen, 2013), which would affect subsidiary managers' management of the channel relationship. Future research should consider how MNCs' global strategies influence subsidiaries' channel commitment and performance across multiple foreign markets.

Our results, as shown in Table 4, also provide interesting avenues for future research. For example, we find that an emphasis on global efficiency can improve channel commitment, provided global efficiency is emphasized in stable or lean host-country environments, and not in dynamic or munificent host-country environments. This finding raises further research questions on the kind of relationship-specific investments or mechanisms the MNC subsidiary is implementing to align with the host-country environment that lead to an increase in channel commitment. In addition, the significant positive effect of worldwide learning on channel commitment in lean and munificent host-country environments could indicate either saturation effects in learning or the reliance of worldwide learning mechanisms on internal resources of the MNC, as opposed to external resources of the environment.

Conclusion

Multinational corporations rely on their channel partners to achieve global objectives in foreign markets. We view this important external relationship – the subsidiary's channel relationship – as an extended link of the MNC's internal network. Accordingly, we show that MNC global strategies, contingent on the host-country environment, influence the subsidiary's channel commitment, which in turn influences channel performance. Recognizing that commitment toward the channel partner leads to increased performance, it would be beneficial for the subsidiary manager to have a long-term orientation toward the channel partner. However, even this straightforward implication can pose challenges for subsidiary managers.

The subsidiary manager operates at the interface between the MNC (where the objective is to optimize global performance) and the channel partner (where the objective is to optimize performance in that foreign market). Therefore, the subsidiary manager has to balance between these two objectives (of MNC and channel partner) that can often oppose each other. For example, our findings indicate that an emphasis on global efficiency and multinational flexibility, perhaps beneficial for MNC global performance (e.g., Harzing, 2000; Lee & Makhija, 2008), can be detrimental to the subsidiary's channel relationship. Furthermore, as the interface between the MNC and the foreign market, the subsidiary manager also needs to balance between the subsidiary's response to the host-country environment, and the channel partners' response. As our results show, implementing MNC global strategies in specific host-country environments can harm the channel relationship: for example, a global efficiency strategy is beneficial for channel commitment in a stable environment, but detrimental in a dynamic environment. Given the important role that channel partners play in achieving an MNC's objectives in the foreign market, aiding subsidiary managers to maintain channel relationships would be beneficial for MNCs. Thus, our research offers a key implication for MNCs when making trade-offs among global strategies; MNCs should consider not just their internal subsidiary network, but also their extended channel partner links which function in foreign markets.

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NOTES

[1]The subsidiary can sell in the host country through its own sales force (internal channel) or through external channel partners. External channel relationships typically take three forms: joint venture, commission agents, and merchant distributors. When the subsidiary creates a joint venture with its channel partner, they distribute and sell products cooperatively in the host country; Komatsu's manufacturing subsidiary in Thailand distributes its products through Bangkok Komatsu Sales Co. Ltd, a joint venture formed with Bangkok Motor Works Ltd (Komatsu, 2009). When the subsidiary uses commission agents, they act as intermediaries and sell products on behalf of the subsidiary, while the subsidiary holds the inventory. Finally, when the subsidiary uses distributors, the independent dealer takes title to the products and sells them in the host country.

[2]Owing to this splitting of residual profits, extant research (e.g., Anderson & Narus, 1990; Klein & Roth, 1990) inform us that a firm's (in our case an MNC subsidiary's) treatment of external channels is driven by similar factors. One such factor is idiosyncratic investments – such as the time and effort required to train and disseminate firm-specific know-how – in external channel partners for activities such as marketing, selling and managing customers (often called *ex post* relationship-specific investments; Benito, Pedersen, & Petersen, 2005). Although each channel type has different levels of idiosyncratic investments required while the relationship is being established (such as setup costs, which would typically be highest for a joint venture, next for a distributor, and the least for an agent), the relationship-specific investments are

independent of the channel type. A second key factor is that the relationship between a subsidiary and its external channel partner is put in place by the contract between them, and environmental uncertainty necessitates that all contracts be incomplete. The influence of environmental uncertainty on a subsidiary's marketing and residual profit-sharing activities is applicable to all external channels. And third, all external channel relationships have the potential for agency problems (Anderson & Coughlan, 1987), which influences the subsidiary's desire to have its own sales function (Petersen, Benito, & Pedersen, 2000), affecting channel commitment. Therefore, we treat all external channels similarly.

[3]Thus, Kim and Frazier (1996) emphasize that the extent of value-added is specific to a channel partner, and can vary within the different types of external channel partners (such as joint ventures, distributors, and commission agents). For example, Benito et al. (2005: 163) highlight the case of agents who "incur added expenses, over and above those needed to develop the market" to strengthen customer bonds, increasing value-added to the channel relationship.

[4]We expect that, in an MNC subsidiary context, channel commitment offers a reliable indicator of channel performance with regard to the MNC's objectives in the foreign market. Extant research has confirmed a positive effect of commitment on performance (e.g., Skarmeas et al., 2002), so we do not formally hypothesize on this effect, but rather show empirically that it holds in our data.

[5]The notion of adaptation implies that subsidiaries exercise their limited autonomy to adapt the MNC's global strategies. By taking the subsidiary's perspective, we can capture the range of autonomy that subsidiaries gain. However, even adapted global strategies are probably not perfectly aligned with the host-country environment (cf. domestic firms, for which the strategy–environment alignment principle emphasizes that the firm's strategy is formed to fit the external environment; Bourgeois III, 1980).

[6]To develop competitive advantages, MNCs might emphasize all three global strategies. In Bartlett and Ghoshal's (1995) typology, such MNCs are called "transnational." However, empirical research indicates that few MNCs are truly transnational (e.g., Harzing, 2000; Leong & Tan, 1993); instead, they tend to focus on one or two global strategies (e.g., Rugman, 2008). Therefore, we do not empirically classify MNCs into different types, but rather focus on their relative emphasis on each global strategy (e.g., Grewal et al., 2008; Kim & Mauborgne, 1993).

[7]An MNC's global strategy is likely to be established with the MNC managers' perception of the global environment. As there should be differences between the global environment and a specific host-country environment, the notion of the "fit" between the global strategy and the host-country environment becomes pertinent for a subsidiary. There could be differences in the level of fit between global strategies and the subsidiary's host-country environment, affecting the subsidiary's channel relationship.

[8]As a robustness test, we included MNC–subsidiary cultural distance as a moderating variable (instead of psychic distance). Using Hofstede's (1980) classification of countries, Kogut and Singh (1988) developed a composite measure of cultural distance (see Shenkar, 2001), which we used to calculate the cultural distances of Germany–USA and Japan–USA. Cultural distance did not contribute significantly to our model (the likelihood ratio test supports our hypothesized model), probably because the control variable for the home-country effects already accounted for the variance due to cultural distance. To estimate a model with the cultural distance variable, we would need to remove this control variable, because it was perfectly collinear with cultural distance.

[9]The Wald tests indicated the effect of the global strategy at low or high levels of the environmental variable, such as the effect of global efficiency on commitment in a low munificence environment, which would be equal to $\beta_{GE}+\beta_{GEMun}\times$(low munificence) where the low value is the mean$-1.96\times$SD and the high value is the mean$+1.96\times$SD. The reported p-values are for one-tailed tests, as we are testing whether only one direction (low/high) is significantly different from zero. See Table 4 for the results of these Wald tests.

[10]We found statistically similar results when we treated the three performance subconstructs (strategic performance, economic performance, and sales performance) as three distinct dependent variables.

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APPENDIX

Table A1 Scale items used

Measures[a]	Loadings
Global efficiency ($\rho_c = 0.89$): Aspects of your organization's worldwide strategy (Grewal et al., 2008)	
Our worldwide strategy emphasizes extracting benefits from differences in wages across countries.	0.78
We emphasize scale economies in distribution and marketing.	0.94
We seek to exploit potential scale economies in manufacturing and R&D.	0.87
Multinational flexibility ($\rho_c = 0.83$): Aspects of your organization's worldwide strategy (Grewal et al., 2008)	
We seek to derive benefits from diversity in environments across countries.	0.65
Our worldwide strategy exploits opportunities arising due to variability in the environment across countries.	0.69
Our global strategy reflects high level of flexibility in managing political risk due to differences between nations.	0.67
We seek a high level of flexibility in allocating key resources.	0.76
Worldwide learning ($\rho_c = 0.81$): Aspects of your organization's worldwide strategy (Grewal et al., 2008)	
We put emphasis on learning from differences in managerial systems across countries.	0.68
We stress learning from differences in organizational processes across subsidiaries.	0.71
We stress shared learning across subsidiaries.	0.88
We share innovations in products and organizational processes across subsidiaries.	0.65
Psychic distance ($\rho_c = 0.84$): Differences between MNC and subsidiary[b] (Bello & Gilliland, 1997)	
Customs and values of headquarters and subsidiary employees.	0.86
Culture of the countries.	0.98
Language of the countries.	0.86
MUN ($\rho_c = 0.89$): Aspects of the US market (Dwyer & Oh, 1987)	
The market in the United States is growing at a faster rate than the rest of the world.	0.62
The general business climate in the United States provides outstanding opportunities for profits.	0.83
Our industry has good profit potential in the United States.	0.86
Our industry has good growth potential in the United States.	0.87
The growth potential of our US subsidiary operations is good.	0.78
DYN ($\rho_c = 0.68$): Aspects concerning competitors and customers of your US market (Dwyer & Welsh, 1985)	
In our industry, the product and brand features vary a lot.	0.58
In our industry, the price/quality demanded by customers vary a lot.	0.68
In our industry, customers often take unpredictable actions.	0.75
Product complexity ($\rho_c = 0.81$): Aspects of product or process marketed in the United States (Kim & Hwang, 1992)	
The product or process has good reputation in the world market.	0.93
The perceived quality of the product or process is high.	0.90
The product is perceived as being stylish.	0.58
Subsidiary performance ($\rho_c = 0.89$): Performance of the US subsidiary for the major product/process involved in the US operations[c] (Kotabe, 1990)	
Profit goals	0.76
Sales goals	0.95
Growth rate objectives	0.85
Subsidiary's channel relationship: "Typical distributor" in this questionnaire refers to one of the following: The largest (in terms of sales) distribution partner, if this partner accounts for more than 75% of sales *and* the second largest distribution partner accounts for less than 10% of sales. The second or third largest distribution partner if you have fewer than five distributors. The third or fourth largest distribution partner if you have five or more distributors.	
Dependence ($\rho_c = 0.78$): Relationship with your typical distributor (Kumar et al., 1995).	
There are other firms besides this distributor who could provide us with comparable distribution (reverse-coded).	0.60
Our costs of shifting to a competing distributor would be prohibitive.	0.70
It will be difficult for our firm to replace the sales and profits the distributor generates for our business.	0.83
Flexibility ($\rho_c = 0.87$): Relationship with your typical distributor (Zhang et al., 2003)	
In our relationship with the distributor, both parties are generally flexible in responses to requests from each other.	0.86
In our relationship with the distributor, both parties are open to each other's request to modify a prior agreement.	0.88
If unexpected situations arise, we and the distributor would rather work out a deal than hold each other to original terms.	0.77

Table A1 *Continued*

Measures[a]	Loadings
Commitment ($\rho_c = 0.89$): Relationship with your typical distributor (Kumar et al., 1995)	
We would continue doing business with the distributor because we like being associated with him/her.	0.81
We want to remain a member of the distributor's network because we genuinely enjoy our relationship with him/her.	0.96
Our positive feelings toward the distributor are a major reason we continue working with it.	0.81
Channel performance ($\rho_c = 0.94$): Performance of distributor in pursuing strategy[c] (Bello & Gilliland, 1997)	
Strategic performance ($\rho_c = 0.95$)	
Marketing strategy for the US market.	0.93
Distribution strategy for the US market.	0.89
Pricing strategy for the US market.	0.82
Promotion strategy for the US market.	0.87
Sales performance ($\rho_c = 0.89$)	
Maintaining contacts with customers.	0.88
Calling on customers in person.	0.87
After-sales servicing of customers.	0.83
Economic performance ($\rho_c = 0.94$)	
Return on investment goals for US markets.	0.82
Sales goals for US markets.	0.94
Profit goals for US markets.	0.92
Growth goals for US markets.	0.90

[a]All items measured on a 7-point semantic differential scale, with 1 = disagree and 7 = agree, unless otherwise indicated.
[b]Items measured on a 7-point semantic differential scale, with 1 = no problem and 7 = major problem.
[c]Items measured on a 7-point semantic differential scale, with 1 = unsatisfactory and 7 = satisfactory.

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