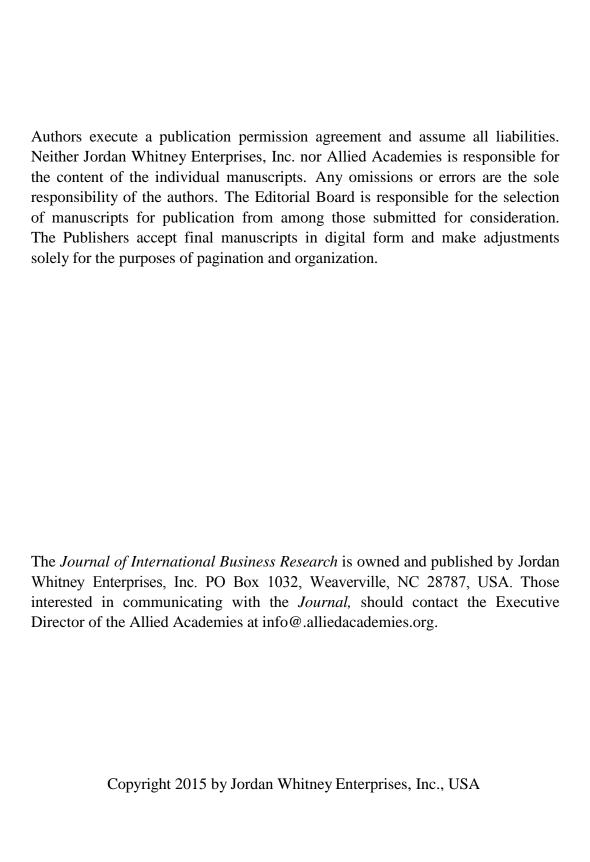
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STRUCTURE AND THE MULTINATIONAL CORPORATION: HOLDING ON, OR LETTING GO?

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ABSTRACT

The 21st century has seen important changes in the strategies of multinational corporations (MNCs), especially as they have become adept at configuring their value chains to extract benefits from their diversified structures. This has raised very important issues relating to the mechanisms by which they can be controlled. The problem of MNC control in the current scenario is intensified by an important paradox: while most empirical research suggests that diversified firms need decentralized control systems, some studies also contend that singular strategies need to be developed to exploit synergies in the homogenizing world market. In this paper, we attempt to resolve this paradox by studying contingencies such as level of centralization, reward systems, transfer pricing, and the geographic and technological contiguities within MNCs. These contingencies will hopefully assist us in developing a new paradigm of MNC control.

INTRODUCTION

The issue of structure in multinational corporations (MNCs) has gained resurgence in the recent past, both in the academic literature (Purdy & Wei, 2014; Zhu & Hao, 2013; Jiao Anken & Beasley, 2012; Huang, Rode & Schroeder, 2011) and in the popular press (Duhigg & Bradsher, 2012). In the current era of globalization as well as global economic crisis (Wilson & Eilertsen, 2010), theories of the MNC are beginning to see a profound upheaval. Companies like Apple, Walmart, Proctor & Gamble and Toyota through the clever reconfiguration of their supply chains, are producing structural innovations at a dizzying pace, with theories from academics struggling to keep up with ground realities. As academic researchers, we need to understand as well as critique these arrangements. For instance, is the recent decision by Apple to use the services of an external watchdog organization like the Fair Labor Association to monitor its business practices related to structural issues? MNCs are coming under closer scrutiny by activist organizations seeking to monitor not just structural, but social, ethical and environmental issues (Erhemjamts, Li & Venkateswaran, 2013; Laud and Schepers, 2009). Very clearly, conscious decisions made by Apple to structure itself in a particular way through specific

relationships with suppliers, and being cognizant of social as well as economic consequences, mandate such strategic decisions. As theorists, we need to pay attention to the impact of structural matters, especially as they relate to the efficacy of MNC corporations in a rapidly changing global environment. It is perhaps for such reasons that theorists have begun to discuss MNC structure anew.

From issues of global strategy (Rugman, 2008; Peng & Pleggenkuhle-Miles, 2008) to that of the role of knowledge (Hong & Nguyen, 2009), and from the role of IT systems in MNC operations (Rangan & Sengul, 2009) to issues of the international supply chain (Ghemawat, 2008), the structure of MNCs operations has been continuously problematized. However, the greatest problem that MNCs currently face is that of *control*, be it on the accounting front (Cools, Emmanuel and Jorissen, 2008), operations (Dong, Zou & Taylor, 2008), headquarter-subsidiary relationship (Costello & Costello, 2008), relationships at the political level (Ambos & Schlegelmilch, 2007), or of aligning multiple control systems (Muralidharan & Hamilton, 1999). Researchers in the field of international business continue to grapple with the issue of control of the multinational corporation (MNC) (Birkinshaw, Toulan & Arnold, 2001; Earley & Mosakowski, 2000; Hamilton & Kashlak, 1999). This field of inquiry has an organic link with much of the 'content' research in strategic management. In particular, it draws substantially from prior research on the relationship between diversification and performance (Hill, 1994; Rumelt, 1974, 1982; Wernerfelt & Montgomery, 1988).

Typically, the issue of control in a MNC may be defined in terms of the paradox of having to design newer and tighter control systems in an atmosphere which celebrates decentralization (Simons, 1995). Many studies have posited that as the firm increases in size and diversity, the relationship between the corporate headquarters and the subsidiary needs to be decentralized (Jones & Hill, 1988; Vittorio, 2000). However, it is also true that the increased globalization of firm operations necessitate the development of a coherent, singular corporate strategy treating the world market as a single entity with globally interchangeable production and marketing operations (Drucker, 1986; Hout, Porter & Ridden, 1982). It therefore appears that the MNC is stuck in a paradox of having to *hold tight* and to *let go* at the same time.

In this paper, we attempt to resolve this paradox by discussing a number of contingencies associated with the control of the MNC. We begin by drawing from the literature on diversification of the multibusiness firm to develop a better theoretical sense of the control issues faced by MNCs. We then suggest four sets of contingencies that need to be taken into account while designing control systems for MNCs. These contingencies include whether or not the subsidiaries of the MNC are interdependent of each other, whether or not they transfer goods from each other on a regular basis, whether or not the headquarters possess the ability to monitor their actions, and whether or not these subsidiaries are geographically and technologically linked to each other. Based on these contingencies, we advance a series of propositions about the control of the MNC. We conclude with a discussion on the implications for *implementing* control systems based on these conclusions.

Readers of this paper will doubtless be familiar with the theories of the MNC. Inconsistencies in the international trade theory models of the MNC eventually led, by way of the investment theories of Hymer (1960), to the internalization hypothesis (Buckley & Casson, 1976). In this special case of the transaction cost thesis, the emergence and success of MNCs is linked to their ability to internalize operations across national boundaries. This in turn allows them to reduce risk, enhance economies of scale and scope, manage externalities and reap the arbitrage-advantages of international heterogeneities (see Hennart, 2001, for a succinct review). Several other theories of the MNC have come to the fore, such as the eclectic paradigm (Dunning, 1977), financial theories (Choi & Levich, 1990), knowledge-based approaches (Steiger, Hammou & Galib, 2014; Varzaru & Varzaru, 2013; Hislop, 2009, Kogut & Zander, 1993), and recently, institutional examinations of isomorphic and divergent trends within MNCs (Morgan & Kristensen, 2006).

Current research on the control of MNCs has always tended to focus on *contingencies* that make MNCs different from domestic corporations (Dicken, 2007). For example, theorists have discussed that MNCs need different control systems because of their deployment of technology (Vittorio, 2000), of the level of task complexity within the firm (Muralidharan & Hamilton, 1999), of diversities of national culture (Hamilton & Kashlak, 1999) and of accounting systems (Birkinshaw, Toulan & Arnold, 2001). Sometimes they have critiqued the confusing plethora of contingencies and contradictory findings on the issue (Taggart & Hood, 1999).

While these discussions are important, we feel that instead of proceeding directly to the issues that face the MNC, it would be more profitable to engage in a more general theoretical discourse. In other words, we would benefit by first examining the theoretical issues that underpin the control of *any* corporation, and then gradually build in the issues that make MNCs special.

When studying the general issue of the control of the multibusiness firm, we can see that it is closely related to studies of diversification as a strategy, especially the impact of structural diversification on organizational processes and systems (Bettis and Hall, 1981; Pitts, 1977). While some theorists saw *related* diversification as the key to better organizational control (Rumelt, 1974), others found similar support for *unrelated* diversification as well (Michel and Shaked, 1984).

Theorists studying control relationships in the multibusiness firm often focused on headquarter-subsidiary relationship in diversified corporations as the crux of the control issue. They tended to follow three distinct, if inter-related directions, which we have chosen to name the *structural control* school, the *intra-corporate* school, and the *transnational* school respectively.

The structural control school predominantly concentrated on the relationship between strategic business units (SBUs) that the headquarters of a corporation could foster (Hill, Hitt & Hoskisson, 1992). These theorists were inspired by the structural contingency models adopted in traditional organizational theory (Lawrence & Lorsch, 1967), and also by the writings of the early business historians (Chandler, 1962; Sloan, 1963), who observed the need for a balance between functional specialization by the SBU and "centralized oversight" by the headquarters as

the key to the management of the diversified firm. The primary conclusion reached by this strand of research was that *related* diversified organizations, which seek to exploit corporate economies of scope, would be better served by cooperative arrangements between SBUs, while *unrelated* diversified firms, in their quest for internal governance advantages, would profit more from inter-SBU competition.

The structural control theorists have been responsible for introducing the concept of refocusing or "downscoping" (Hoskisson & Hitt, 1994), whereby the over-diversified firm is seen as being potentially suboptimal. The theorists of downscoping then argue for a return to the "dominant business approach" (Hoskisson & Hitt, 1994, p. 197). Past, empirical research has suggested that there is an optimal level of diversification for each firm, beyond which the synergies associated with size and scope cannot be exploited (Markides, 1995). However, more recent studies have provided evidence that industry sector and related needs, in addition to size, may also mandate MNC structure (Kasper, 2009). For example, service organizations have evolved highly competitive and profitable structures appropriate for certain transnational concerns that require high levels of global integration and local responsiveness (Hislop, 2009; Laud, 2004).

The *intra-corporate school* was more concerned with evaluating the level of openness, subjectivity and trust that could be incorporated into the corporate-SBU relationship without loss of control. Drawing from Porter (1980), Rothschild (1979) and the Miles and Snow typology, this strand of research focused on a variety of control-related factors deployed by the corporate headquarters, such as incentive systems (Govindarajan, 1988), inter-SBU resource sharing systems (Gupta & Govindarajan, 1986), corporate-SBU relations (Gupta, 1987), socialization of new entrants (Goold & Quinn, 1990) and the choice between behavior based and outcome based control mechanisms (Govindarajan & Fisher, 1990). According to this school, depending upon the environment that various organizations operate in, they can be classified either as *open* or *closed* systems. The primary conclusion of this school is that open systems profit more from subjective, cooperative and trust-based inter-SBU relations, while closed systems are better served by objective, competitive and contractual inter-SBU relations. Table 1 depicts various characteristics, generic strategies and preferred organizational arrangements within open and closed systems:

Table 1 SYSTEM CHARACTERISTICS		
OPEN SYSTEMS	CLOSED SYSTEMS	
Miles and Snow strategy: Prospectors	Miles and Snow strategy: Defenders	
Porter's generic strategy: Differentiation	Porter's generic strategy: Cost leadership	
Open inter-SBU relationships	Competitive inter-SBU relations	
Incentives linked to corporate performance	Incentives linked to SBU performance	
Distributed information systems	Centralized information systems	
Loose control systems	Tight control systems	

The *transnational school* is the one that takes these conclusions that are generic to all businesses and locates them in MNCs. Scholars of this tradition contend that the structure of the diversified MNC is fundamentally influenced by its size and its level of diversity. MNCs operate

in conditions of great complexity, with respect to their product range, geographic spread and market demands. Thus, they need to experiment with a hybrid mixture of structures, including functionally specialized sub-units, matrix organizations, divisionalization, and occasionally, centralization (Taggart, 1998). At the level of human resources, transnational scholars stress the need to create "hybrid cultures" which may also be viewed as proxy control mechanisms (Earley & Mosakowski, 2000).

Despite their distinctness, the three approaches to organizational control identified above share some basic assumptions, which may be directly linked to agency theory. In all of these three schools, the relationship between headquarters and the foreign SBU levels mirrors the relationship between the shareholders (residual claimants) and managers. The entire control system may be viewed as an attempt by the residual claimants (headquarters) to retain control over agents (subsidiaries) despite informational disadvantages (Hill, 1988). Control systems ensure task programmability and outcome measurability as a means of finding "optimum, profitmaximizing forms of control" (Baiman, 1982). The setting up of behavior based or outcome based controls represents an attempt to preempt risk-averse behavior on the part of the agent (Eisenhardt, 1985), either by aligning the goals of the agent in the direction of the principal, or by ensuring access of the principal to the decision making processes used by the agent. An interesting sidelight associated with the agency argument relates to the role played by "influence costs", whereby lower level employees (agents) may wield disproportionate power over their superiors (principals) on account of their ability to withhold vital information. This has also been referred to as "the gatekeeper phenomenon" (Hill, 1994). However, a growing number of sophisticated organizations such as IBM, McKinsey, Hewlett-Packard, Ericsson, and Accenture and have structured highly advanced knowledge-sharing systems between HQ operations and SBUs driving the organization's overall competitiveness (Laud, 2009).

CONTINGENCIES OF CONTROL IN MNC'S

One of the fundamental paradoxes associated with control of the diversified corporation is that of the tension between size and complexity. On one hand, we have to deal with the perceived globalization and the ensuing homogenization of large markets (Drucker, 1986, Ohmae, 1990), which demand that global organizations need to develop coherent and singular strategies (Hout, Porter and Ridden, 1982). On the other hand, the growing heterogeneity and independence of consumer preferences need to be matched by creating autonomous and flexible subsidiaries. Studies have shown that centralized structures will render organizations unresponsive, overloaded at the top and demoralized at the bottom (Birkinshaw and Morrrison, 1995). Partially centralized structures, geographic divisionalization and product-market based divisionalization are all inadequate responses to this double-bind. To be sure, the M-form organization, with its emphasis on functional specialization, represents a catch-all structure for all modern firms, but we need to explore the finer aspects of control within the M-form structure.

Evidently, the problem of the control of the multibusiness firm is not likely to be solved by a singular approach. A number of diverse relationships, structures, and organizational relationships need to be taken into account while determining an optimal control system for the multi-business firm. In this paper, we present four different sets of contingencies and suggest ways in which we can achieve optimal control of the MNC. Each one of these contingencies represents a challenge to the information processing capacity of the firm, and the control systems suggested therein are primarily conceptualized as facilitating the flow of information across the hierarchies and the functional divides of the multi-business organization.

Centralized vs. Decentralized Structures

There are four major disadvantages associated with excessive centralization in an MNC (Egelhoff, 1988):

- 1. Overloading of the decision-making capacity of the top management team.
- 2. Time lost in moving information up and down the hierarchical structure.
- 3. Negative impact on SBU-level motivation, responsiveness and local competitiveness.
- 4. The unavailability of specific information at the top level.

On the other hand, it has been argued that greater interdependence between national subsidiaries may require greater dependence on the top management team as a coordinator in inter-SBU transactions (Govindarajan, 1988). The notion of the top management as a policeman gives way in such a case to the notion of top management as a resource allocator or facilitator, along with the associated cost for these overseer operations. Multinational corporations have been making unique adjustments in order to address this paradox. For instance, in the field of international business, scholars have theorized the manner in which multinational corporations (MNCs) are moving from centralized to network-based structures (Malknight, 1996). The logic that guides such innovative approaches in the MNC may be represented in the following two propositions:

- P1 MNCs characterized by low interdependence among SBUs are likely to perform better when using decentralized control systems than those using centralized control systems.
- P2 MNCs characterized by high interdependence among SBUs are likely to perform better when using centralized control systems than those using decentralized control systems.

However, both of these propositions are dependent upon how the MNC parent and SBU perceive their individual needs or degree of interdependence. Each may hold their own opinion based upon their personal bias for control or autonomy, interest in synergistic outcomes across the entire MNC, understanding and buy-in to the corporate strategy, and strength of the corporate culture and leadership. A dynamic tension may provide a useful introspective learning, but perceived mutually exclusive goals can cause seriously contentious behaviors.

Behavior-based versus Outcome-based reward systems

One of the challenges of multinational firms concerns reward systems. Should reward systems for national subsidiaries be based totally upon the performance of the subsidiary

(outcome-based), or should the also be rewarded for cooperating with corporate initiatives and sharing resources with other subsidiaries (behavior-based)? It must be kept in mind that reward systems are powerful tools of task programming and can also be used to render SBU performance visible to the headquarters (Govindarajan and Fisher, 1990).

As Eisenhardt (1989) points out, in an agency relationship, behavior-rewarding incentives work better in the case of high task complexity, while outcome-rewarding incentives work better when tasks are less complex. In other words, if the subsidiary is distant from the headquarters, or if it is engaged in activities that are unfamiliar to the headquarters, then an outcome-based reward system would be a better choice for the organization. However, if the subsidiary is close to the headquarters, and if it is engaging in tasks that are easily monitorable by the headquarters, a behavior-based reward system may be more appropriate.

Based on the above argument, we may derive the following propositions;

- P3 In MNCs characterized by information insufficiency at the HQ level regarding the actions of foreign subsidiaries, outcome-based reward systems are likely to lead to better performance than behavior-based reward systems.
- P4 In MNCs characterized by information availability at the HQ level regarding the actions of foreign subsidiaries, behavior-based reward systems are likely to lead to better performance than outcome-based reward systems.

Transfer pricing

Transfer pricing works as a control system by ensuring that when two or more profit centers participate in the development of the same product, the revenue they generate is fairly shared between them (Cools, Emmanuel & Jorissen, 2008; Eccles, 1985). In MNCs, transfer pricing also defines a pseudo-commercial transaction within the organization, the normative principle of such an exchange being that the price of the product should be similar or comparable to the price that would be charged, were the product to be purchased from or sold to external sources (Anthony and Govindarajan, 1995).

Transfer pricing is an area of great potential conflict between subsidiaries, for example, when agreements are unclear, contributions are perceived as not equivalent to returns, or the corporate strategy is either not understood or not accepted, often leading to a need for mediation by corporate headquarters. The challenge for the corporate mechanism in such a situation therefore, is to determine the correct balance between overall corporate optimization, SBU revenue distribution and SBU contribution. The SBU contribution may be a complex scenario involving issues of financial achievement, as well as intangibles of knowledge development and capital, image, and executive career interests.

If the transactions between subsidiaries are going to be conducted over a long term, formal negotiations between subsidiaries would work best. However in the case of once-off transactions between two subsidiaries, the relationship has to be situationally negotiated with both sides by the corporate arbitrator in the face of imperfect information. Both subsidiaries are then pulling toward a different equilibrium point, and the informational asymmetries in once-off

transactions may often be so great that corporate interests would be best served by decentralizing the decision at the subsidiary level.

It may be proposed that the headquarters of an MNC should mediate the transfer pricing process only when large, multiple or long term orders are being negotiated. For routine and once-off transfers, it would be best to relegate the decision to the SBU level, where they would follow a market-based course.

Based on the above reasoning, we propose the following propositions with respect to transfer pricing:

- When negotiating inter-subsidiary transfer on a long term basis, corporate mediation is more likely to lead to better performance than market-based transactions.
- When negotiating inter-subsidiary transfer on an ad hoc basis, market based transactions are more likely to lead to better performance than corporate mediation.

Contingencies of Technologies and Geographies

The diversified firm exists in the context of two important dimensional heterogeneities. It may operate in markets that are either geographically contiguous or geographically disparate, and in markets that are technologically contiguous or disparate. Consider for example a large diversified organization like General Electric. GE is likely to use different monitoring systems for a plant in Sao Paolo than for a similar plant in Seattle. Similarly, the control systems are going to be different in GE's Medical Imaging division in comparison with NBC. Such differing control arrangements are a result of the geographical and technological distances between various subsidiaries of GE.

Table 2 depicts the geographic and technological issues that an MNC faces.

Table 2 GEOGRAPHIC AND TECHNICAL ISSUES		
	CONTIGUOUS	DISPARATE
	GEOGRAPHICAL MARKETS	GEOGRAPHICAL MARKETS
CONTIGUOUS	Global Firm	"Technoscape"
TECHNOLOGIES	(Interdependent SBUs)	(Shared upstream-know-how)
SEPARATE	"Supermarket"	Conglomerate
TECHNOLOGIES	(Shared downstream know-how)	(Cash-Flow Based Controls)

When an MNC is characterized by the presence of SBUs sharing geographical as well as technological commonalties, it obviously needs to develop highly singular control systems. This is true because the headquarters has the ability to oversee the subsidiaries in a direct manner. In other words, all SBUs in such a firm may be governed by similar and even joint control systems.

However, such contiguities are not always available to the corporation. Sometime, despite operating in a very contiguous technology market (i.e. selling similar products); the MNC may have subsidiaries scattered across the globe. Such an organization may be termed a "technoscape". In a technoscape situation, the firm would be better suited to centralize many of

its upstream activities to achieve better economies of scope. For example, Ford Corporation has centralized all its R&D facilities into four global centers, from where all its cars are designed. However, it has completely decentralized its downstream activities such as marketing, sales and distribution.

The third situation involves a corporation that operates in a geographically limited (contiguous) zone but sells a whole range of products. Such corporations may be referred to as "supermarkets", for different technologies of the SBUs may be seen as products in a store, all awaiting perhaps the same consumer's attention. The supermarket types of MNCs are predominantly seen in the Asia-Pacific region, and sell a whole range of diverse products. Such corporations would be best served by control systems that emphasize *downstream* control. They need to explore common sales outlets, distribution channels and service contracts, and decentralize their upstream activities.

Finally, corporations that are characterized by disparity in both geographical and technological markets may be termed "conglomerates". In the case of conglomerates the best strategy would be one where each SBU can be treated as a local innovator and subjected only to financial control. The advantage of the conglomerate is that by exercising cash-flow based controls, the headquarters can create "internal stock markets" and improve internal allocative efficiency within the organization.

Based on the above discussion, we advance the following propositions:

- P7 MNCs whose subsidiaries are geographically and technologically contiguous are more likely to benefit from control systems that stress high inter-SBU interaction and common management goals.
- P8 MNCs whose subsidiaries are geographically disparate but technologically contiguous are more likely to benefit from control systems that emphasize centralized upstream activities.
- P9 MNCs whose subsidiaries are geographically contiguous but technologically disparate are more likely to benefit from control systems that emphasize centralized downstream activities.
- P10 MNCs characterized by disparities in technological as well as geographical markets are most likely to benefit from control systems such as cash flow based controls and conglomerate-oriented approaches.

CONCLUSION

Be it Apple through its innovative relationships with Chinese manufacturers or Walmart through its globally mobile logistics, MNCs have made structural innovations in the recent past that need to be addressed by theorists who seek to avoid getting dated in their formulations. In this paper, we have identified the fundamental control issue facing the MNC as a paradox: it has to *hold on* and *let go* at the same time. The issue is, when should it hold on (centralize its control systems) and when should it let go (treat each of its sub-units as autonomous companies in their own right)?

We addressed this issue first by examining the general literature on the diversified multibusiness corporation. We concluded from that analysis that the fundamental issues in the control of the diversified corporation pertain to the relationship between the headquarters and the SBU, which could be seen as a quasi-agency relationship. Based on these findings, we examined several contingencies faced by the MNC, which in turn suggested a variety of different control arrangements. For example, when the SBUs (subsidiaries) of an MNC are interdependent, control systems need to be centralized, to foster the maximization of overall corporate performance.. When the SBUs operate relatively independently, control systems need to be decentralized. Similarly, at the level of incentive and reward systems, we argued that when a subsidiary is engaged in tasks that are not clearly observable by the headquarters, it would be better for the headquarters to reward the subsidiary on the basis of outcomes. However, when the subsidiary is clearly visible to the headquarters, and when its actions have potential implications for other subsidiaries, behavior-based reward systems would be more suitable. We also suggested that the headquarters of a corporation should mediate in transfer pricing issues between subsidiaries only when the transaction between subsidiaries has a longer time horizon. For once-off transactions, it would be best to let the subsidiaries treat it as a market transaction. Finally, we suggested that the control systems devised by an MNC should be a function of whether or not the subsidiaries are geographically and technologically contiguous.

Such control systems are already being implemented across MNCs. Many successful MNCs have begun to move from geocentric control systems towards a more transnational and multidomestic federated structures, which involves greater autonomy within the subsidiaries. In addition, they are also moving from a two- tier control (headquarter-subsidiary) to a more regional system where there is a three-tier hierarchy (corporate headquarter-regional headquarters-subsidiary). For example, the Malaysian subsidiary of a corporation may report to its US headquarter only with respect to important financial information, but rely on day to day controls on its Asia-Pacific regional headquarter (which may be located in Singapore, Australia, or some regionally close country).

The motto of the MNC also appears to be to achieve total control of all subsidiaries at the financial level (financial control in MNCs is being centralized to a great extent), while making more and more concessions to decentralization in other spheres (such as brand management, distribution and even manufacturing). This dual policy of simultaneous centralization and decentralization is rendered possible due to the vast improvements in information technology that make it possible to store vast quantities of data, transfer it in split seconds across continents and engage in continuous feedback. For instance, at a pre-determined time, all subsidiaries of an MNC will transfer their raw financial data to the headquarters. The headquarter will in turn process the data; develop a variety of consolidated indicators (such as corporate-level return on sales data, for example). However, it will also be able to develop more decentralized indicators (such as regional and country level ROS figures), compare them against one another and against budget, determine which regions and countries are performing well or under-performing, and develop monitoring systems to make sure that performance does not stray from projections. Such centralized indicators are extremely useful at the level of financial data, but do not necessarily work at the level of other data such as market share of productivity due to inherent

heterogeneities (the products might be mature in one market and just being introduced in others, some plants may be better equipped to take advantage of economies of scale than others etc.). Thus, the paradigms of centralization and decentralization have to be deployed selectively across the subsidiaries of MNCs for optimal performance.

REFERENCES

- Ambos, B. & B. Schlegelmilch (2007). Innovation and control in the multinational firm: A comparison of political and contingency approaches. *Strategic Management Journal*. 28(5), 473-493.
- Anken, F. & J. Beasley (2012). Corporate structure optimisation for multinational companies. *Omega*, 40(2), 230-243.
- Anthony, R. N. & V. Govindarajan (1995). Management Control Systems. Chicago, IL: Irwin.
- Baiman, S. (1982). Agency structure in managerial accounting. Journal of Accounting Literature 1, 124-153.
- Bettis, R. A. & W. K. Hall (1981). Strategic portfolio management in the multibusiness firm. *California Management Review* 23(1), 24-38.
- Birkinshaw, J. M. & A. J. Morrison (1995). Configurations of strategy and structure in subsidiaries of multinational corporations. *Journal of International Business Studies*, 26(4), 729-753.
- Birkinshaw, J., O. Toulan & D. Arnold (2001). Global account management in multinational corporations: Theory and evidence. *Journal of International Business Studies*, 32(2), 231-248.
- Buckley, P.J. & M.C. Casson (1976). The Future of the Multinational Enterprise. Homes & Meier: London.
- Chandler, A. D. (1962). Strategy and Structure: Chapters in the History of the American Industrial Enterprise. Cambridge, MA: The MIT Press.
- Cools, M., C. Emmanuel, & A. Jorissen (2008). Management control in the transfer pricing tax compliant multinational enterprise. *Accounting, Organizations and Society*, 33(6), 603-621.
- Costello, A. & T. Costello (2009). Aligning the interests of subsidiaries and headquarters in multinational corporations: empirical evidence. *Multinational Business Review*, 17(4), 163-204.
- Dicken, P. (2007). Global Shift: Reshaping the Global Economic Map in the 21st Century (Fifth Edition). London: Guilford Publications, Inc.
- Dong, B., S. Zou & C. Taylor (2008). Factors that influence multinational corporations' control of their operations in foreign markets: an empirical investigation. *Journal of International Marketing*, 16(1), 98-119.
- Drucker, P. (1986). The changed world economy. Foreign Affairs, 64, 768-791.
- Duhigg, C. & K. Bradsher (2012). How the U.S. lost out on iPhone work. *New York Times*. January 21, 2012. Archived at http://www.nytimes.com/2012/01/22/business/apple-america-and-a-squeezed-middle-class.html (Accessed March 1, 2012).
- Dunning, J. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. In B. Ohlin, P. Hesselborn & P. M. Wijkman (Eds.) *The international allocation of economic activity: Proceedings of a Nobel symposium* (pp. 395-418). Macmillan, London.

- Earley, C. P. & E. Mosakowski (2000). Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of Management Journal*, 43(1), 26-49.
- Eccles, R. G. (1985). The Transfer Pricing Problem: A Theory for Practice. Lexington, MA: Lexington Books.
- Egelhoff, W. G. (1988). Organizing the Multinational Enterprise. Cambridge, MA: Ballinger Publishing Company.
- Eisenhardt, K. M. (1989). Agency theory: an assessment and review. Academy of Management Review, 14, 57-74.
- Erhemjamts, O., Q. Li, & A. Venkateswaran (2013). Corporate social responsibility and its impact on firms' investment policy, organizational structure, and performance. *Journal of Business Ethics*, 118(2), 395-412.
- Ghemawat, P. (2008). The world is still round like a soccer ball: redefining global strategy. *Strategic Direction*. 24(3), 3-7.
- Goold, M. & J. J. Quinn. (1990). The paradox of strategic controls. Strategic Management Journal, 11, 43-57.
- Govindarajan V. (1986). Decentralization, strategy, and the effectiveness of strategic business units in multi-business organizations. *Academy of Management Review*, 11, 844-856.
- Govindarajan, V. & J. Fisher (1990). Strategy, control systems and resource sharing: effects on business unit performance. *Academy of Management Journal*, 33(2), 259-285.
- Govindarajan, V. (1988). A contingency approach to strategy implementation at the business unit level: integrating administrative mechanisms with strategy. *Academy of Management Journal*, 31(4), 828-853.
- Gupta, A. K. (1987). SBU strategies, corporate-SBU relations, and SBU effectiveness in strategy implementation." *Academy of Management Journal*, 30(2), 477-500.
- Gupta, A. K. & V. Govindarajan. (1986). Resource sharing among SBUs: strategic antecedents and administrative implications." *Academy of Management Journal*, 29(4), 695-714.
- Hamilton, R. D. & R. J. Kashlak (1999). National influences on multinational corporation control system selection. *Management International Review*, 39(2), 167-189.
- Hennart, J.F. (2001). Theories of the multinational enterprise. In Rugman. A. & T. Brewer (Eds.) *The Oxford Handbook of International Business* (pp. 127-150). London: Oxford University Press.
- Hill, C. W. L. & R. E. Hoskisson (1987). Strategy and structure in the multiproduct firm. *Academy of Management Review*, 12(2), 331-341.
- Hill, C. W. L., M. A. Hitt & R. E. Hoskisson (1992). Cooperative versus competitive studies in related and unrelated diversified firms. *Organization Science*, 3(4), 501-521.
- Hislop, D. (2009). Knowledge Management in Organizations 2e, New York, Oxford University Press.
- Hong, J, & T. Nguyen (2009). Knowledge embeddedness and the transfer mechanisms in multinational corporations. *Journal of World Business*, 44(4), 347-368.
- Hout, T., M. E. Porter & E. Rudden (1982). How global companies win out. *Harvard Business Review*, 60(5), 98-108.
- Huang, X., J. Rode & R. Schroeder (2011). Organizational structure and continuous improvement and learning: Moderating effects of cultural endorsement of participative leadership. *Journal of International Business Studies*, 42(9), 1103-1120.

- Hymer, S. H. (1960). *The International Operations of National Firms: A Study of Direct Foreign Investment*. Cambridge, MA: MIT Press.
- Jensen, M. C. & W. H. Meckling (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jones, G. R. & C. W. L. Hill (1988). Transaction cost analysis of strategy-structure choice." *Strategic Management Journal*, 9, 159-172.
- Kasper, H., M. Lehrer, J. Muhlbacher & B. Muller (2009). Integration-responsiveness and knowledge-management perspectives on the mnc: a typology and field study of cross-site knowledge-sharing practices. *Journal of Leadership and Organizational Studies*, 15(3), 287-303.
- Kogut, B. and U. Zander (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24, 625-645.
- Laud, R. (2004). Innovation: the growth engine of consulting. In Charles Fombrun (ed). *The Advice Business: Essential Tools and Models for Mangement Consulting (pp.* 42-55). New Jersey: Pearson Prentice Hall.
- Laud, R. (2009). Gaining advantage through global learning hubs. *Journal of Practical Global Business*, 3(1), 19-41.
- Laud, R. & D. Schepers (2009). Beyond transparency: Information overload and a model for intelligibility. *Business and Society Review*, 114(3), 365-391.
- Lawrence, P. R. & J. W. Lorsch (1967). Organization and environment. Cambridge, MA: Harvard University Press.
- Malnight, T. W. (1996). The Transition from decentralized to network based MNC structures: an evolutionary perspective. *Journal of International Business Studies*, 27(1), 43-65.
- Markides, C. C. (1995). Diversification, restructuring and economic performance. *Strategic Management Journal*, 16(2), 101-118.
- Morgan, G. & P. Kristensen, (2006). The contested space of multinationals: varieties of institutionalism, varieties of capitalism. *Human relations*, 59(11), 1467-1490.
- Muralidharan, R. & R. Hamilton (1999). Aligning multinational control system. *Long Range Planning*, 32(3), 352-361.
- Ohmae, K. (1990). *The Borderless World: Power and Strategy in the Interlinked Economy*. New York: HarperCollins Publishing.
- Peng, M. & E. Pleggenkuhle-Miles (2009). Current debates in global strategy. *International Journal of Management*, 11(1), 51-79.
- Pitts, R. A. (1977). Strategies and structures for diversification. Academy of Management Journal, 20, 197-208.
- Porter, M. E. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors. New York: The Free Press.
- Purdy, M. J. & K. Wei (2014). Another look at the case for international diversification. *Business Economics*, 49(2), 104-113.
- Ramanujam, V. & P. Varadarajan. (1989). Research on corporate diversification: a synthesis. *Strategic Management Journal*, 10, 523-551.

- Rangan, S. & M. Sengul (2009). Information technology and transnational integration: Theory and evidence on the evolution of the modern multinational enterprise. *Journal of International Business Studies*, 40(9), 1496-1514.
- Rothschild, W. E. (1976). Putting it All Together: A Guide to Strategic Thinking. New York: AMACOM.
- Rugman, A. (2008). Redefining global strategy: crossing borders in a world where differences still matter. *Journal of International Business Studies*, 39(6), 1091-1093.
- Rumelt, R. P. (1974). Strategy, Structure, and Economic Performance. Boston: Harvard Business School.
- Rumelt, R. P. (1982). Diversification strategy and profitability. Strategic Management Journal, 3, 359-369.
- Sanchez, R. & J. T. Mahoney (1996). Modular flexibility and knowledge management in product and organization design. *Strategic Management Journal*, 17 (Winter), 63-76.
- Simon, H.A. (1957). Administrative Behavior. New York: The MacMillan Company.
- Simons, R. (1995). Control in an age of empowerment. Harvard Business Review, 73(2), 80-89.
- Sloan, A. P. (1963). My Years with General Motors. New York: Doubleday.
- Starkey, K. (1995). Opening up corporate governance. Human Relations, 48(8), 837-844.
- Steiger, J. S., K. A. Hammou & M. H. Galib (2014). An examination of the influence of organizational structure types and management levels on knowledge management practices in organizations. *International Journal of Business and Management*, 9(6), 43-57.
- Stopford, J. M. & L. T. Wells (1972). Managing the Multinational Enterprise. New York: Basic Books
- Taggart, J. & N. Hood (1999). Determinants of autonomy in multinational corporation subsidiaries. *European Management Journal*, 17(2), 226-236.
- Teece, D. J. (1992). Toward an economic theory of the multi-product firm. *Journal of Economic Behavior and Organization*, 3, 39-63.
- Varzaru, M., & A. A. Varzaru, (2013). Knowledge management and organisational structure design process. Annales Universitatis Apulensis: Series Oeconomica, 15(2), 716-724.
- Vittorio, C. (2000). Global R&D project management and organization: A taxonomy. *The Journal of Product Innovation Management*, 17(5), 341-359.
- Wernerfelt, B. & C. A. Montgomery (1989). Tobin's q and the importance of focus in firm performance. *The American Economic Review*, 78(1), 246-250.
- Wilson, J. & S. Eilertsen (2010). How did strategic planning help during the economic crisis? *Strategy & Leadership*, 38(2), 5-24.
- Zhu, S., & H. Jiao (2013). Organizational structure and corporate performance: Insights from 6,065 listed corporations. *Chinese Management Studies*, 7(4), 535-556.