A Balancing−Process Approach to Firm Internationalization

Min−Young Kim
University of Illinois at Urbana−Champaign, College of Business

Joseph T. Mahoney
University of Illinois at Urbana−Champaign, College of Business

Danchi Tan
National Chengchi University

Abstract

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Min-Young Kim
Department of Business Administration
College of Business
University of Illinois at Urbana-Champaign
1206 South Sixth Street
Champaign, IL 61820
mkim229@illinois.edu

Joseph T. Mahoney
Professor of Business Administration
Caterpillar Chair in Business &
Director of Graduate Studies
Department of Business Administration
College of Business
University of Illinois at Urbana-Champaign
1206 South Sixth Street
Champaign, IL 61820
josephm@illinois.edu

Danchi Tan
Associate Professor
Department of International Business
National Chengchi University
64, Zhi-nan Rd. Sec. 2, Wenshan Taipei 116, Taiwan
Tel: 886-2-9393091 ext. 81139
dctan@nccu.edu.tw

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Abstract

Drawing on the resource-based view of the firm, this paper develops a balancing-process approach to explain the motivations and location choices of foreign direct investment (FDI). In this approach, FDI is viewed as a means to balance a firm's portfolio of resources and capabilities through utilizing foreign strategic factor markets with the ultimate goal of achieving growth and sustainable competitive advantage. This approach joins exploitative and explorative FDI in a single framework and helps explain why a firm can conduct both types of FDI simultaneously.

Key words: Foreign direct investment, Penrose, balancing process, motivation, location choice, and exploitation-exploration.

INTRODUCTION

Fundamental questions in the field of international business concern firms' motivations to expand into foreign markets and their location choices. The extant research literature provides two contrasting approaches to these questions. The earlier and more dominant approach maintains that firms expand abroad to *exploit* firm-specific advantages that are difficult to transfer through market mechanisms (Buckley & Casson, 1976; Hennart, 1982; Rugman, 1981). This research approach posits that firms expand into markets with lower or similar levels of economic development because their ownership advantages in these markets enable them to overcome the liability of foreignness (Hymer, 1960; Luo, Shenkar & Nyaw, 2002; Zaheer, 1995). A more recent research approach emphasizes an asset-seeking motivation of foreign direct investment (FDI), suggesting that firms expand into more developed countries to *explore* new strategic assets. Thus, firms implement exploratory FDI to redress ownership *dis*advantage (Li, 2007; Luo & Tung, 2007) and augment strategic assets (Dunning, 2000; Lee & Slater, 2007).

These two research approaches are built with the unit of analysis as a single-market entry, which focuses on either *exploitation or exploration* (Li, 2010; March, 1991). In actual business experience, however, a multinational firm typically takes on a series of both exploitative and explorative foreign market entry moves, as well as a mix in their location choice set consisting of both developed and developing countries. As Buckley, Devinney and Louviere point out: "FDI is not a point-of-time 'go/no-go' decision, but a process" (2007a: 1070). Recent research thus calls for developing a framework that joins the two research approaches and explains both exploitative and explorative FDI by the same firm (Makino, Lau & Yeh, 2002).

To respond to this call, the current paper draws from the resource-based view (Barney, 1991; Mahoney, 2001; Penrose, 1959) to develop a ***balancing-process approach*** to firm inter-

nationalization, which is seen as an attempt by firms to balance their resources and capabilities through foreign strategic factor markets [1] to achieve growth and sustainable competitive advantage. This process approach joins both exploitative and explorative FDI in a single framework and helps explain why a firm can conduct both types of FDI simultaneously.

The remainder of the paper is organized as follows. The next section reviews the two streams of research concerning motivations and location choice of FDI and discusses the need for joining these two research approaches. The following section develops the balancing-process approach of firm internationalization and provides testable research propositions. We then show how this theoretically-grounded balancing-process approach can help to explain and predict motivations and location choice of FDI. Finally, discussion and conclusions are provided.

LITERATURE REVIEW

Exploitative and Explorative FDI

Traditionally, theories of FDI have focused on exploitative FDI. These theories are developed along two important lines of reasoning: *transaction costs explanations* and *strategic behavior explanations* (Kogut, 1988; Tallman, 1992). Transaction cost explanations follow Coase (1937) and Williamson's (1975) market imperfections approach (Dunning, 2003), and recommend that multinational enterprises (MNEs) conduct FDI when asset specificity and uncertainty are high (Slangen & Hennart, 2007; Williamson, 1985), and when there is a need to internalize externalities (Hennart, 2003). Strategic behavior explanations posit that MNEs implement FDI to: reduce competition (Bain, 1956); diversify risk (Qian & Li, 1998); possess

[1] In line with Barney's (1986) definition of a strategic factor market [i.e., "a market where the resources necessary to implement a strategy are acquired" (p. 1231)], the current paper defines foreign strategic factor markets as foreign markets from which the resources necessary to implement a strategy are acquired.

monopolistic advantages (Kindleberger, 1969); follow-the-leader (Knickerbocker, 1973); and interact oligopolistically (Graham, 1974).

Joining transaction costs and strategic behavior explanations, Dunning (1977) introduces three types of advantages --- ownership, location, and internalization (the so-called OLI paradigm) --- deemed necessary for an MNE to implement FDI effectively. The OLI paradigm has been remarkably adaptable incorporating critical features of international business activities (Mudambi, 2004) in which FDI is "determined by the configuration of three sets of interrelated variables" (Dunning, 2004: 4).

Recently, the exploitation perspective is complemented by an *exploration* view, which focuses on explorative FDI. This perspective considers explorative FDI as motivated by: sourcing local technology (Kogut & Chang, 1991); augmenting home-base advantages (Kuemmerle, 1999); and searching for new knowledge that is not readily available in home countries (Cantwell, 2009). These motives have been termed: "strategic asset-seeking" (Dunning, 1995), "knowledge-seeking" (Chung & Alcácer, 2002), and "technology-seeking" (Cantwell, Dunning & Janne, 2004).

Wesson provides a succinct contrast of the two research streams: "Asset-seeking FDI is driven by a foreign firm's desire to gain access to valuable assets, which are available on better terms to firms operating in the host nation than in the investing firm's home nation. In contrast the internalization/asset-exploiting model of FDI explains foreign investments as a firm's best mechanism for obtaining the rents that its proprietary assets can earn in the host nations' market" (1999: 2). The current paper builds upon this insight. We next turn to joining the exploitation and exploration approaches.

Joining the Exploitation and Exploration Approaches

While the two research approaches provide important insights into the motivations and location choices of internationalization, they suffer from a few limitations. First, the exploitation approach does not fully explain why firms go abroad instead of expanding in their domestic markets. Transaction costs and internalization theory focus on the *raison d'être* of the firm and can readily be applied to both domestic firms and MNEs (Caves, 2007; Hennart, 1993). Thus, the theory is "not international in and of itself" (Grosse, 2004: 90). Furthermore, the possession of ownership advantages is neither a necessary nor sufficient condition for a firm to go abroad (Dunning, 1988; Kay, 2005). The ownership advantage-based exploitation approach also does not explain why firms carry out FDI in markets where they have ownership *dis*advantages.

More importantly, neither of the two research approaches provides a clear answer to the question why a particular firm implements both exploitative and explorative FDI (Galan, Gonzalez-Benito & Zuniga-Vicente, 2007). Both are developed with a focus on a single foreign market entry that seeks to *either* exploit firm-specific resources *or* explore firm-specific strategic assets. However, firms typically conduct multiple foreign market entries, with both motives of exploitation and exploration. Makino, Lau and Yeh (2002) find that both asset-exploitation and asset-seeking motivations significantly influence a MNEs' location choice into developed and less-developed countries, and this influence is moderated by MNEs' capabilities. Moon and Roehl (2001) maintain that firms implement FDI to redress the imbalance within their asset portfolio, and that it is both ownership advantages and ownership *dis*advantages that motivate firms to implement FDI. Given that FDI is a process rather than a point-of-time 'go/no-go' decision (Buckley, Devinney & Louviere, 2007a), we need a theoretically-grounded framework

that enables a better explanation for a series of foreign market entry at the firm level that consists of both exploitative and explorative FDI.

We maintain that an exploitation approach, if properly joined to the exploration approach, can provide valuable insights regarding the process of FDI. Makino, Lau and Yeh emphasize the necessity of joining these theories as follow:

> .... most previous studies have examined only either side of the motivations [i.e., asset-seeking and asset-exploitation] in explaining the location of FDI. Future studies should incorporate both aspects of FDI motivations into the analysis simultaneously. Especially, more comprehensive studies are needed to investigate how asset-seeking and asset-exploitation aspects of FDI are dynamically linked in the choice of FDI location, and how the choice of FDI location influences the process of development of competitive advantage of the MNC (2002: 418).

In an attempt to join these two approaches, the current paper draws on the resource-based view to develop a balancing-process approach to explain a firm's FDI pattern. Both exploitation and exploration approaches emphasize firm-specific resources/capabilities (Rugman & Verbeke, 2001). The exploitation approach emphasizes firm-specific resources and capabilities that enable competition in foreign markets, while the exploration approach focuses on how location-specific resources help build firm-specific resources and capabilities. The resource-based view, which focuses on heterogeneous firm-level resources (Mahoney & Pandian, 1992; Nelson, 1991; Peteraf, 1993), thus provides a useful lens for joining these two approaches (Peng, 2001; Pitelis, 2007; Tan & Meyer, 2010). The next section describes the balancing-process approach.

THE BALANCING-PROCESS APPROACH

The resource-based approach considers the firm as a bundle of resources and capabilities (Amit & Schoemaker, 1993; Mahoney & Pandian, 1992). The exploitation of underutilized resources leads to the growth of the firm (Penrose, 1959; Teece *et al.*, 1994). However, the exploitation of existing resources often requires the firm to search for new and complementary resources and capabilities (Rubin, 1973; Wernerfelt, 1984). Given that explorative activities place substantial demand on a firm's limited resources, it is important to maintain an appropriate balance between exploitation of existing resources & capabilities and exploration of new resources and capabilities (Mahoney & Pandian, 1992; March, 1991). Thus, the current paper introduces the concept of a balancing process, which is defined as the process of a firm adjusting its resource bundle by simultaneous exploitation and exploration in different temporal and spatial dimensions to achieve profitable growth and sustainable competitive advantage. The balancing process consists of four stages: (1) *initial balance*; (2) *specialization of resources*; (3) *binding constraints*; and (4) *exploration via exploitation.* We discuss these four stages in turn.

Initial Balance: A firm can be conceived as having *n* different resources and capabilities. The initial balance is defined as a state without locally-binding constraints that impede the growth of the firm. The initial balance is not an equilibrium position since a firm continuously develops new knowledge, and never reaches a "state of rest" (Penrose, 1959: 68).

Specialization of Resources: A firms has incentives to increase outputs from its productive resources and thus takes on specialization of the resources. Because some resources are indivisible, specialization requires the firm to maintain a level of production that corresponds to the 'least common multiple' of the various maximum outputs of each individual resource (Penrose 1959: 68). Therefore, the extent of specialization depends on the scale of the firm's

operations. Likewise, the firm must have an appropriate extent of specialization to achieve efficient operations and maintain its competitiveness in the market. This reasoning leads to "the 'virtuous circle' in which 'specialization leads to higher common multiples, higher common multiples to greater specialization'" (Penrose 1959: 73).

Binding Constraints: Imbalance occurs when, among the *n* resources and capabilities comprising the firm, any resource or capability falls below the level of the least common multiples required for the optimal specialization. This shortage in resources constitutes a bottleneck or a binding constraint that impedes the rate of the growth of the firm (Penrose, 1959).

Exploration via Exploitation: To recover from an imbalance, the firm will explore the strategic factors that constitute the binding constraint of the firm. However, exploration typically requires substantial investments. As March (1991) notes, exploration is a resource-*consuming* process while exploitation is a resource-*generating* process. To generate sufficient resources to support a firm's explorative activities requires the firm to exploit its current under-utilized resources and capabilities, which highlights that exploration and exploitation are interdependent, and mutually enabling (Farjoun, 2010). Thus, a firm can explore and exploit *simultaneously*, which, in turn, leads to ambidexterity (Luo & Rui, 2009; O'Reilly & Tushman, 2008).

Returning to the Initial Balance: The successful exploration of strategic assets relieves the firm from its binding constraint, which enables the firm to re-establish its initial balance. This path leads to new learning and capabilities that induce further exploitation (Cohen & Levinthal, 1990). The next binding constraint may arise from the shortage of a different strategic factor due to a different subjective opportunity set (Penrose 1959). Figure 1 illustrates the balancing process.

Place Figure 1 here

We illustrate this approach with the following example. Consider a firm possessing two types of competencies: *Market* (M) and *Technology* (T). Suppose the profit-generating market competence (M) is derived from economies of scale that are protected by isolating mechanisms (Mahoney & Pandian, 1992; Rumelt, 1984), while the technology competence (T) is derived from R&D capabilities (Cheng & Bolon, 1993; Nelson & Winter, 1982). Then the competitiveness of resources and capabilities of the firm will show a bi-modal distribution as depicted in *the Initial Balance* of Figure 2.[2]

Place Figure 2 here

The initial balance graph (a) shows the initial balance between the two types of resources and capabilities. A firm's current resources and capabilities are unique because they result from the firms' past decisions, opportunities, and initial endowments (Chang, 1995; Madhok & Liu, 2006). These unique resources and capabilities then lead to unique patterns of specialization of resources. Graph (b) of Model A shows that Firm A pursues a higher degree of specialization in technology, while Graph (b) of Model B illustrates that Firm B pursues a relatively high specialization in market access. The specialization process results in an imbalanced situation in both firms. As specialization raises the level of lowest common multiples in each firm, the stock of market competence of Firm A (in Graph (b) of Model A) and the stock of technology of Firm B (in Graph (b) of Model B) fall below the level of the lowest common multiple and become the binding constraints, hindering the growth of both firms.

[2] For a generalization of the discussion, one can expand the number of competencies to three or four or even *n*, thus resulting in tri-modal, quarto-modal, or *n*-modal distribution.

In order to sustain the growth of the firm, the firm must explore the strategic assets that form the binding constraints. To support the explorative activity requires the firm to exploit other underutilized resources and capabilities. Therefore, the firm in Model A would exploit its technological capabilities so as to explore its market competence (Graph (c) in Model A). Likewise, the firm in Model B would exploit market competence in order to support its exploration of the lacking technological capabilities. The two firms would continue exploring the strategic assets until the stocks of the strategic assets rise above the lowest common multiples required for the current specialization. Then these firms would return to the initial balance (Graph (d) in Model A and B), a status that is free from binding constraints. In the next cycle of the balancing process, the firms may initiate the same or a different balancing process, depending on their subjective opportunity set (Penrose, 1959).

The so-called "Penrose Effect" (Shen, 1970; Tan, 2003; Tan & Mahoney, 2005) provides another illustration of the balancing process. Penrose (1959) maintains that a lack of managerial capabilities would be the binding constraint on the rate of the growth of the firm. Therefore, a fast growth rate in one time period would result in slower growth rate in the next time period. The balancing-process approach is readily applicable to the "Penrose Effect." Since a firm has incentives to increase the valuable services of its specialized resources and capabilities, it increases its scale of operations so that it can raise the lowest level of least multiple commons. However, in so doing, the firm faces managerial constraints. In order to be released from the bottleneck, the firm should internally explore the managerial capabilities with supports from exploiting other under-utilized resources and capabilities. During the time period of exploration of managerial capabilities, the firm experiences slower rate of growth due to dynamic adjustment costs. In this light, March's point that: "it is clear that exploration of new alternatives reduces the

speed with which skills at existing ones are improved" (1991: 72) corresponds to the main idea of the "Penrose Effect."

The nature of the balancing process is of critical strategic importance and recognizes that firm-level exploration and exploitation activities are interdependent, and mutually enabling for value creation (Farjoun, 2010). Therefore, a firm can simultaneously implement both activities by exploring *one* (or more) resources and capabilities while exploiting *other* resources and capabilities (Miller et al., 2008; Wesson, 1999). Exploration and exploitation at the level of *a particular resource or capability,* however, follows a temporally sequential process since it cannot be both exploited and explored simultaneously. As the "Penrose Effect" illustrates, managerial capabilities are exploited and explored in a sequential manner, which results in *differential* firm-level growth rates across periods. Thus, the balancing process is sequentially constrained in a temporal dimension. It provides an important strategic implication, however, *that a firm can mitigate the temporal constraint of the balancing process by spreading the balancing process over a spatial dimension*. We discuss this point in a later part of this paper.

THE BALANCING APPROACH TO MOTIVES AND LOCATION CHOICES OF FDI

We now apply the balancing-process approach to address the two key research questions posed at the beginning of this paper concerning: *motivations* and *location choice* of FDI. We consider foreign markets both as a place in which a firm can exploit its current resources and capabilities, and as a source from which the firm can explore new strategic assets. While domestic markets may also offer an opportunity for exploitation and exploration, foreign markets typically differ from the domestic market in at least two important attributes: (1) a higher level of market frictions; and (2) a higher degree of heterogeneity.

Higher market frictions: Countries differ in cultural, administrative/political, geographic, and economic dimensions (Ghemawat, 2001; 2003, 2007). Due largely to these distances, firms typically experience much higher informational asymmetry in foreign markets than in domestic markets since they face multiple layers of uncertainty in foreign markets, and are subject to local government discrimination (Miller, 1992). They also lack legitimacy in host countries and lack local knowledge and relationships (Dunning, 1998; Teece, 1981; Vernon, 1966). All of these problems add to the costs of doing business abroad and/or give rise to the liability of foreignness (Miller & Richards, 2002; Petersen & Pedersen, 2002; Zaheer, 2005). However, market frictions may also provide opportunities for value creation and economic rent appropriation (Foss & Foss, 2005), because these frictions prevent complete movement of strategic assets, enabling firms to achieve competitiveness in certain host countries based on firm-level capabilities that generate only competitive rates of economic returns at home. For instance, firms can exploit their current resources and capabilities in foreign markets that lack services that their resources can provide.

Higher degree of heterogeneity: Foreign markets are a greater source of diverse resources and capabilities than domestic markets. Countries differ not only in factor endowments but also in socio-political institutions and cultural aspects (Brouthers *et al*., 2008; Cheng, 1994; Henisz & Macher, 2004; Ricart *et al.* 1994). Countries also differ in their technological and organizational principles (Kogut 1991); and as a result, the set of characteristics of resources and capabilities tend to be more homogeneous among the firms within the same country but are more heterogeneous among the firms across countries. Firms thus can gain access to diverse location-specific strategic assets from foreign markets. Such location-specific strategic assets, once obtained, can often resist imitation because such assets are locally embedded and are difficult to transfer across national borders (Szulanski, 1996; Teece, 1977 von Hippel, 1994).

The Question of Motivation

So why do firms conduct FDI? Our balancing-process approach points to three closely related explanations: (1) access to strategic factors to maintain internal balance, (2) faster growth, and (3) the development of sustained competitive advantages via isolating mechanisms (Rumelt, 1984; Sovell & Zander, 1998). The first motivation represents the case of firms forced to implement FDI, while the latter two motivations are for firms implementing FDI as an active strategy even though strategic factors are available in domestic markets.

First, when strategic factors in domestic strategic factor markets are *unavailable* or *competitively preempted*, domestic firms may be forced to source at *higher* costs from foreign strategic factor markets in order to secure the supply of strategic factors to balance the level of resources and capabilities and, thus, to maintain the growth of the firm. When the competitive pressure in the domestic market is high, strategic assets acquired at home could also be accessible by competitors at home, and hence are subject to imitation (Tong *et al.*, 2008) . Given national difference, foreign markets are a better source for heterogeneous strategic assets, albeit more costly due to the higher market frictions in foreign markets (Tseng *et al.*, 2007). Given that a MNE is a superior vehicle to transfer strategic factors across country borders (Kogut & Zander, 1993), a firm can explore strategic assets in foreign markets through FDI. This reasoning leads to our first proposition.

Proposition 1: The greater the difficulty of accessing strategic factors in a domestic market, the greater the likelihood of the firm exploring strategic assets in foreign markets through implementing FDI.

Second, our balancing-process approach suggests that international expansion facilitates firm growth. International expansion reduces the time that a firm requires to regain its balance since an international presence enables the firm to spread its temporal sequence of the balancing process geographically. In so doing, a MNE can explore and exploit the same strategic factors in different countries simultaneously. This move reduces the time the firm needs to build up the resources for exploration, speeding up the balancing process, and thus enabling firm growth.

The "Penrose Effect" provides an exemplar of the benefits of simultaneous exploitation and exploration. Tan and Mahoney (2007) find that Japanese MNEs sending a greater number of expatriates to their US subsidiaries upon entry achieve, in successive time periods, high growth rates measured as changes in total employment. If a MNE would rely solely on the temporal dimension of the balancing process, managerial capabilities of the subsidiary should first be internally (or locally) developed in order to be exploited later for the exploration of new (human) resources, otherwise, under-developed managerial capabilities in the subsidiary would become the binding constraint. By sending expatriates to the subsidiary, the MNE can extend the balancing process from temporal into the spatial dimension by exploiting underutilized resources in the headquarters or other subsidiaries for the purpose of exploration of new resources in the new subsidiary. In this way, the MNE can *simultaneously* exploit expatriates in the headquarters or other subsidiaries and explore the local employment, thus reducing the time for the balancing process and achieving higher growth rates. This logic leads to our second proposition.

***Proposition* 2:** *A multinational firm achieves faster growth than a domestic firm.*

Third, international expansion also facilitates sustained competitive advantage via isolating mechanisms. Foreign strategic markets provide opportunities for discovering and developing isolating mechanisms[3] (Rumelt, 1984). A firm's resources and capabilities, when coupled with location-specific strategic assets, potentially create new competitive advantages that are not only unique but also have a high level of causal ambiguity due to the two attributes of foreign markets - asymmetric information across national borders and a higher degree of heterogeneity. Such unique and causally ambiguous advantages are an isolating mechanism that protects the firm from imitation. Specifically, foreign markets can provide both *ex ante* and *ex post* limits to competition (Peteraf, 1993). As a result, successful FDI are more likely to generate sustainable competitive advantages. This reasoning leads to the following proposition.

Proposition 3: Firms expanding into foreign markets are more likely to generate sustained competitive advantage via isolating mechanisms and thus are expected to show sustained superior economic performance.

The Question of Location Choice

We next consider the location patterns of FDI. Our balancing-process approach suggests that a multinational firm has mixed location choices consisting of developed and less-developed countries, which provide different opportunities for exploitation of current resources and exploration of new strategic assets.

From a balancing process approach, given that firms are endowed with heterogeneous resources and capabilities, and have different patterns of resource specialization, they likely face different types of binding constraints and thus needs to explore different strategic assets. Such

[3] The isolating mechanisms refer to 'barriers to imitation' to sustain competitive advantage (Mahoney & Pandian, 1992), or "phenomena that limit the *ex post* equilibration of rents among individual firms" (Rumelt, 1984: 567).

heterogeneity explains why firms explore strategic assets in different countries. Firms also have different market (exploitation) opportunities in different countries because the level of competitiveness of their capabilities is high in some countries but low in others. In other words, existing resources and capabilities constrain available location choice of international expansion (Tseng *et al.,* 2007). Such a balancing process leads the firm to conduct explorative and exploitative FDI in different locations (Dunning, 2001; Miller *et al*., 2008). This logic enables us to explain why firms with different types and degrees of resources and capabilities show different location patterns in the FDI process (Berry, 2006; Fernhaber, Gilbert & McDougall, 2008).

The balancing-process approach suggests that, a particular firm, at a given time, invests in both developed and less-developed countries because it needs to simultaneously exploit and explore different types of resources and capabilities that may be embedded in different countries (Galan, Gonzalez-Benito & Zuniga-Vincente, 2007). For example, a firm may exploit one of its resources and capabilities in one country to support its exploration of other resources and capabilities in another country. In this way, the firm can extend the temporal dimension of the balancing process to a spatial dimension, and can reduce the time it needs to recover from its binding constraints and to reach balance.

As a firm again deviates from internal balance, the firm's preference for locations of exploitation and exploration may change because the new binding constraints may require different types of exploitation and exploration from the previous one. As a result, the firm may reallocate their exploitative and explorative FDI. This process can trigger new FDI in some countries and divestments in others. This reasoning leads to the following proposition.

Proposition 4: Each MNE chooses and maintains a different set of locations or geographical portfolios that provide strategic assets and market opportunities to continue the balancing process and, thus, to sustain its growth.

A firm's initial location choice will be largely influenced by the characteristics of resources and capabilities available in its domestic market. Firms are embedded in the location of the firms' operation in terms of: resources and capabilities (Shan & Hamilton, 199)1, social relationships (Granovetter, 1985), and historically-determined economic conditions and political institutions (Hamilton & Biggart, 1988). Before utilizing foreign strategic factor markets, a firm is embedded only in its home country and, therefore, the domestic market or "home base" (Porter, 1990) may exert significant influences on the path of the firm's balancing process by providing and limiting the supply of resources and capabilities with which the firm can implement specialization and attenuate its binding constraints. As the firm invests in an increasing number of countries, the influence of the domestic market will gradually decrease because the strategic factors acquired from other countries will also increase the firms' resource endowments and thereby influence the formation of the new balance. As the MNE is an internationally integrated inter-organizational network (Ghoshal & Bartlett, 1990) and a superior vehicle to transfer strategic resources such as valuable and tightly-held knowledge (Kogut & Zander, 1993), the collection of each locally-embedded subsidiary comprises a unique set of resources and capabilities (Birkinshaw & Hood, 1998), which can influence the subsequent explorative and exploitative FDI location choice in the process of a firm attempting to regain its balance.

The degree of coordination or integration among the subsidiaries in the multinational network will affect the process of a firm regaining its balance (Bartlett & Ghoshal, 1989; Porter, 1986). Coordination refers to the linkage or the integration of functional activities deployed in different locations. A higher degree of coordination among the subsidiaries increases the transfer of strategic assets between subsidiaries in different locations, thus decreasing the influence of the home market on the subsequent location choice. This logic leads to the following proposition.

Proposition 5: The influence of the home country on the location choice will gradually decrease as the firm increases its geographical scope of operations.

Figure 3 illustrates the balancing-process approach to firm internationalization developed in the current paper. In summary, when market frictions in domestic strategic factor markets are high, firms can find it advantageous to expand abroad to obtain strategic assets required to restore their balance. FDI also enables the firms to extend the sequence of the balancing process from the temporal into the spatial dimension through simultaneous exploitation and exploration across different countries, thus enabling faster growth and the development of sustained competitive advantage.

Place Figure 3 here

In the process of implementing FDI, firms choose locations that provide strategic assets and market opportunities to continue the balancing process. As can be seen in Figure 3, the firm can use the services from the exploitation of one set of resources (R_1 and R_3) for the exploration of another set of resources (R_2 and/or R_4). In the next cycle, R_2 and R_4 may be exploited for the exploration of other resources and capabilities. In this way, MNEs can potentially benefit from a synergistic locational portfolio of complementary knowledge assets (Cantwell, 2009).

DISCUSSION AND CONCLUSIONS

This paper draws on the resource-based view to develop a balancing-process approach that explains a firm's FDI motivations and location choices. This approach posits that a firm exploits its current under-utilized resources and capabilities in an attempt to support its exploration of strategic assets to achieve higher growth rates of the firm. In this approach, FDI is viewed as a means to support the balancing process.

The balancing-process approach maintains that both exploitative and explorative FDI are essential drivers by which a firm balances its level of resources and capabilities (Galen *et al.*, 2007; Makino *et al.*, 2002). It suggests that a firm can implement explorative FDI in developed countries to tap into state-of-the-art technology, while exploiting its current technological capabilities in less-developed countries. In this way, this approach can explain both exploitative and explorative FDI in a single framework. *In this light, exploitative and explorative FDI are not country-specific but rather firm-specific phenomena.*

This point highlights that firm internationalization can be a strategic option for faster growth. Due to the sequential nature of the balancing process, *a particular* resource cannot be simultaneously exploited and explored in a single market. By extending the sequencing from the temporal to the spatial dimension, the particular resource can be exploited and explored in a different market at the same time, thus reducing the time for the balancing process and facilitating firm growth.

The balancing process approach also suggests that the difference between explorative and exploitative FDI is the type of binding constraints a firm attempts to address. That is, technology is typically the binding constraint for firms implementing explorative FDI, while market access is typically the binding constraint for firms implementing exploitative FDI. Both types of FDI

serve the same purpose of exploring strategic factors and overcoming binding constraints with the support from exploitation of under-utilized resources and capabilities. In the case of FDI from less-developed countries, a firm can explore advanced technology in developed countries with supports from its strong network (Elango & Pattnaik, 2007; Yiu, Lau & Bruton, 2007) or exploiting capital market imperfections, special ownership advantages, and institutional support from home country (Buckley *et al.*, 2007).

The balancing-process approach can be directly applied to the analysis of MNEs' global expansion strategy, such as Porter's (1986) configuration-coordination model, and Bartlett and Ghoshal's (1989) *transnational solution.* These models emphasize geographical dispersion and global integration, two key factors influencing the simultaneous exploitation and exploration in different spatial dimensions. Future research studies can apply the balancing-process approach to explain the global expansion strategy of MNEs.

The balance process approach also enriches the implication from the Boston Consulting Group (BCG) business matrix. From the approach, the BCG matrix can be seen as a process of a firm balancing its exploitation and exploration through configuring its product portfolio. The BCG matrix suggests that a firm should compare its strategic business units against each other based on its relative market share and growth prospect. It maintains that through proper configuration of a firm's product portfolio, strategic business units with relative high market shares (i.e., cash cows) could provide financial support to nurture the development of business units with high but unrealized growth prospects (i.e., question marks). The balance process approach extends the BCG matrix by adding a geographical dimension. It suggests that MNEs should evaluate foreign strategic factor markets and their own resources and capabilities based on their potential to achieve competitiveness and to gain location-specific strategic assets in

these foreign markets, and that based on this evaluation, MNEs should maintain a FDI location choice set in which they can simultaneously explore and exploit strategic assets. Future research could join both BCG matrix and the balance process approach to analyze how a firm designs its product and geographical portfolios to maintain its balance of exploitation and exploration.

Lastly, by focusing on the geographical scope of strategic factor markets, the current paper considers only external sources of strategic factors (Barney, 1986). Further research studies can usefully apply the balancing-process approach to explain the process of the internal asset stock accumulation of the firm and the balancing of resources *stocks* and *flows* (Dierickx & Cool, 1989; Mahoney, 2005; Makadok, 2001).

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Figure 1: The Balancing Process

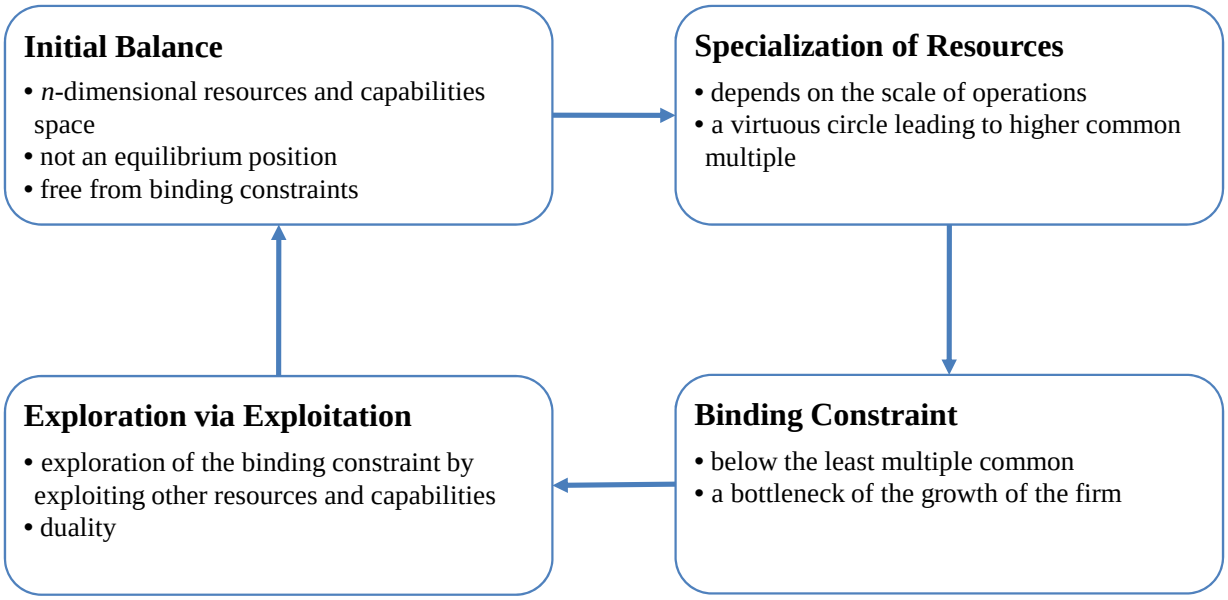
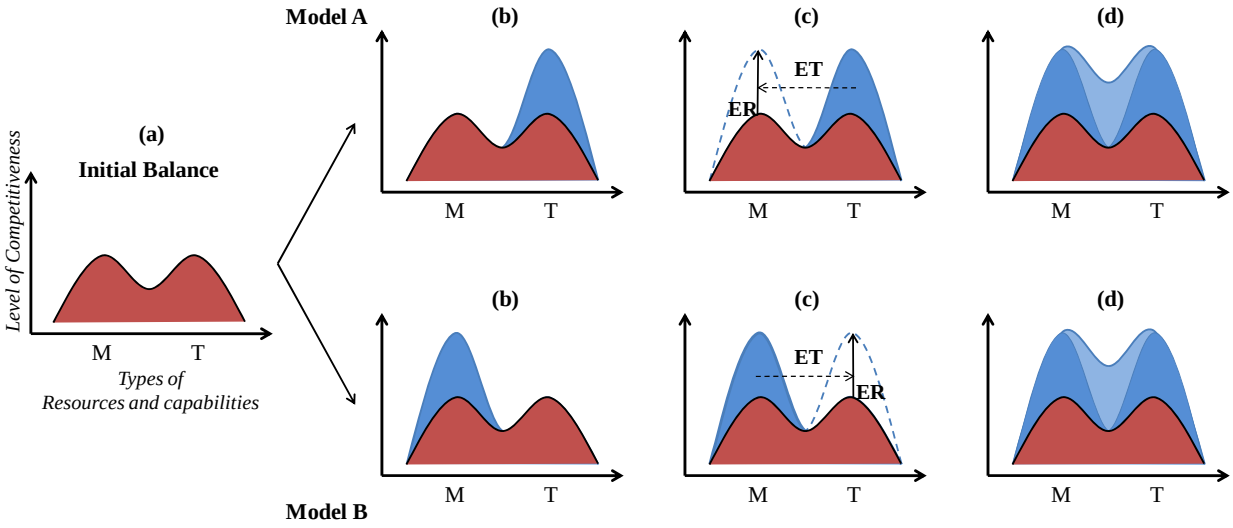
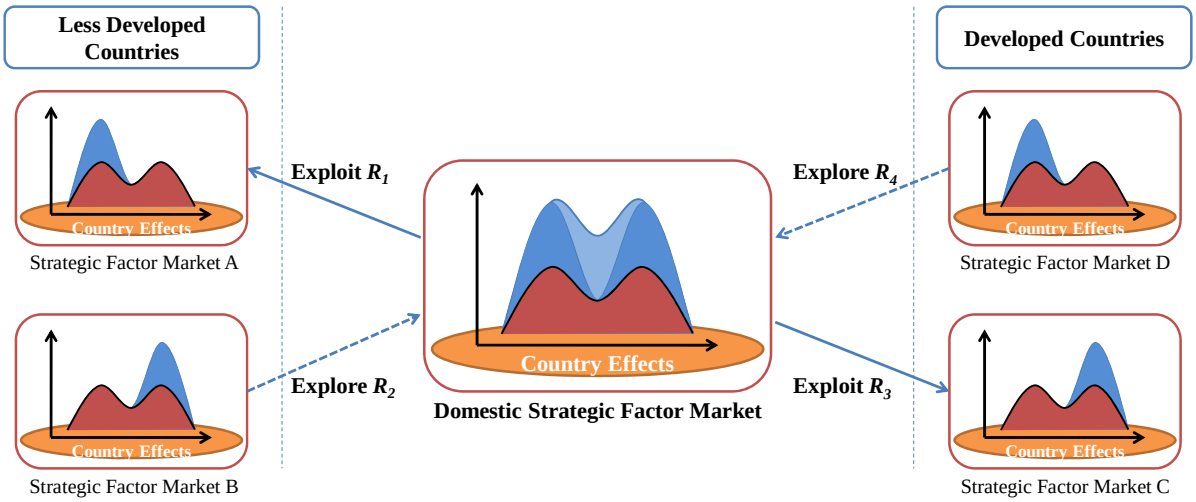


Figure 2: An Example of the Balancing Process



M: market; T: technology; ET: exploitation; ER: exploration

Figure 3: A Balancing-Process Approach to the Firm Internationalization



R_i: the i^{th} item in the vector of a firm's resources and capabilities.