Brownfield Entry in Emerging Markets

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This paper focuses on the brownfield entry mode, as a special case of acquisition, in which the resources transferred by the investor dominate over those provided by the acquired firm. We see this mode as having particular relevance for entry strategies in emerging markets. The choice of entry mode is analyzed on the basis of a framework utilizing both resource-based and transaction-cost theories. The resource requirements have to be matched with resources available to the investor through an acquired firm, and the decision has to account for the costs of acquiring and integrating the resources.

INTRODUCTION

The choice of appropriate mode of entry into new markets is a key strategic decision for international business. A greenfield project gives the investor the opportunity to create an entirely new organization specified to its own requirements, but usually implies a gradual market entry. An acquisition facilitates quick entry and immediate access to local resources, but the acquired company may require deep restructuring to overcome a lack of fit between the two organizations. In some situations, notably in emerging markets, this restructuring is so extensive that the new operation resembles a greenfield investment. We term such investment "brownfield", and present it as a hybrid mode of entry.

Our aim in this paper is to delineate the concept of brownfield entry and, drawing on an analytical framework that we derived from the literature (e.g. Hennart and Park, 1993; Barkema and Vermeulen, 1998; Buckley and Casson, 1998), identify the circumstances for its emergence. The framework draws upon both the resource-based view of the firm

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The authors wish their colleagues, especially Gabriel Benito, Keith Brouthers, Matts Forsgren, Sumantra Ghoshal, Torben Pedersen, Freek Vermeulen, seminar participants in Copenhagen Business School, London Business School and University of Reading as well as participants of the AIB conference in Vienna and this journal's referees for their helpful comments on earlier drafts of this paper.

and transaction cost analysis.[1] Brownfield projects are attractive if local resources are necessary but not sufficient for the envisaged operation, and if high transaction costs inhibit the traditional modes of entry.

The analysis builds on our empirical work on entry strategies of Western companies in Central and Eastern Europe (CEE) (Estrin et al., 1997; Meyer, 1998). Brownfield emerges as an important entry mode in this case study research. The emerging markets of CEE pose particular challenges to investors because the legal and institutional environment is poorly developed, markets - especially for capital and skilled labor - are thin and there are numerous market failures (EBRD, 1999). At the same time, few local firms match international standards in technology and management. Since such imperfect institutional frameworks and weak resource bases exist throughout emerging economies, our hybrid entry mode may be of significance in other developing regions. In the next section, we introduce the alternative entry modes. Our analytical framework is presented in the third section while the fourth section discusses how brownfield can substitute for either of the traditional modes. Implications and directions for further research are outlined in section five.

ALTERNATIVE MODES OF INVESTMENT

The literature distinguishes two primary modes of foreign direct investment (FDI); greenfield (start-up) and acquisition. A greenfield project entails building a subsidiary from bottom up to enable foreign sale and/or production. Real estate is purchased locally and employees are hired and trained using the investor's management, technology, know-how and capital. Acquisitions are 'purchase of stock in an already existing company in an amount sufficient to confer control' Kogut and Singh (1988, p. 412). The new affiliate joins the investing company as a going concern that normally possesses production facilities, sales force, and market share. The main distinction is therefore in the origin of the resources employed in the new operation. Whereas a greenfield uses the resources of the investor and combines them with assets acquired on local markets, an acquisition uses primarily assets of a local firm and combines them with the investor's resources, notably managerial capabilities.

Most research on mode choice analyzes a dichotomous decision between acquisition and greenfield. However, we found in our casework on CEE that many investments, which are formally an acquisition, in fact resemble greenfield projects. In such 'brownfield' cases, the foreign investor initially acquires a local firm but almost completely replaces plant and equipment, labor and product line (Estrin et al., 1997). The new operation is built quickly and primarily with resources provided by the investor. After only a short transformation period, often less than two years, the acquired local firm has undergone deep restructuring, and both its tangible assets and its intangibles such as brand names and organizational culture have been reduced to a supplementary role.

For instance, Schöller Lebensmittel, a medium-size German frozen-food manufacturer, acquired a majority share of the Hungarian ice-cream factory Budatej. Soon after their entry, Schöller reconstructed the factory replacing all but one production line. The factory infrastructure was rebuilt, new warehouses were established and new freezers provided to the retail outlets. Schöller initially even

discontinued the local brand, which was perceived to have a low-quality image, replacing it with their international brands. The motive for the choice of entry mode was to obtain faster access to the market and to benefit from the existing market share of the local firm. The new affiliate employed Schöller's production technology, international brand names and management know-how (Estrin et al., 1997).

Brownfield entry, like the one illustrated, represents a special form of an acquisition.[2] We suggest the following definition:

> *a brownfield is a foreign acquisition undertaken as part of the establishment of a local operation. From the outset, its resources and capabilities are primarily provided by the investor, replacing most resources and capabilities of the acquired firm.*

This definition focuses on the newly created subsidiary, and the process of combining the resources required for its operation. Most acquisitions involve some restructuring of the acquired firm, unbundling or even disposal of assets, and introduction of new management. In the longer run, most affiliates will moreover develop their own new resources and capabilities. What makes a brownfield acquisition special is that the deep restructuring is planned from the outset, and is implemented with the initial integration or restructuring strategy. Thus it is based on decisions taken when the investor first moves in, occurs within a short time (we consider 2 years as useful benchmark), and draws only to a limited extent on the existing resources of the acquired firm.

In other words, brownfield projects combine resources from the investor and the acquired business in such way that the former dominates over the latter in the initial post-acquisition integration, and that the acquired firm is fundamentally transformed from the outset. This includes all investments undertaken on the basis of integration strategies established before closing the deal and modified on the basis of the first comprehensive assessment of the acquired firm after the acquisition.

Brownfield investors often pursue strategic objectives that assign the acquired firm a clearly defined role within the MNE network, which may require the affiliate to pursue entirely new functions, product lines, or markets. Four of the five acquisition cases in Estrin et al. (1997) share these characteristics, making them more similar to the five greenfield operations in the same study than to conventional acquisitions.

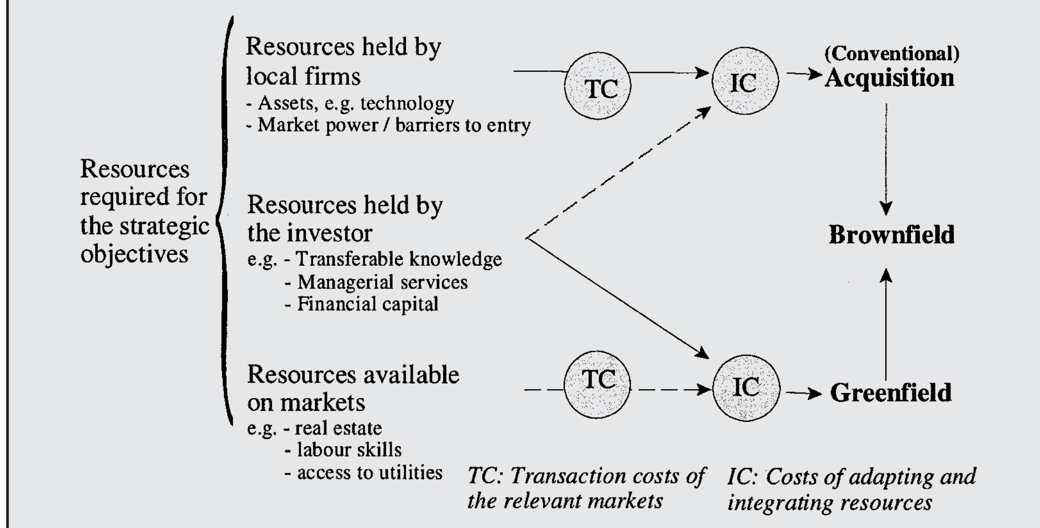
DETERMINANTS OF ENTRY MODE CHOICE

Firms grow through various ways of combining internal and external resources (Penrose, 1959). An optimal entry mode matches the resources required for the strategic objectives of the entry with those available within the multinational enterprise, in local firms, and in unbundled form on local markets, taking into account the pertinent transaction and integration costs (TC / IC). This logic illustrated in figure 1 sets the structure for our discussion of entry mode choice.

Strategic Resource Requirements

Foreign investors frequently pursue strategic objectives concerning the control of resources in oligopolistic markets. Their strategic intent often predetermines the entry mode, for instance for market-seeking and resource-seeking FDI. Market-oriented FDI may seek a local partner to provide market intelli-

FIGURE 1
A MODEL OF ENTRY MODE CHOICE



gence or access to distribution networks, brand names and market share, especially if pursuing first-mover advantages (Lieberman and Montgomery, 1998). Entrants could borrow brand names (Terpstra and Yu, 1990), build their own global brands, or purchase existing brands from local firms, but all these options are risky or slow. Therefore, the best way to attain control over marketing assets may be through the acquisition of a local firm (Chen and Zeng, 1996) even if these are the only interesting assets that the firm controls.

Resource-seeking investment may aim to utilize the local human capital to strengthen the global R&D of the investor. In this situation, the direct take-over of a research laboratory may be more efficient than hiring researchers individually to be able to capture team-embedded tacit knowledge. Similarly, firms pursuing a diversification strategy abroad may use acquisitions to obtain the industry-specific assets they lack (e.g. Hennart and Park, 1993). Thus, the strategic intent sets the stage for entry mode choice.

Sources of Resources

Greenfield, and to a lesser extent brownfield entry, is easier for investors controlling resources that can be transferred internally and can constitute core competences of the new business unit. Three kinds of resources of the investing firm are of particular relevance:

- Firm-specific assets that "partake of the character of a public good within the firm, such as knowledge fundamental to the production of a profitable saleable commodity" motivate horizontal expansion Caves (1971, p. 4). Such resources can be employed in a new foreign operation without incurring the initial sunk costs of their development. They include knowledge-based capabilities, such as technological know-how, and access to the inves-

tor's global network of production and distribution channels.

- Excess managerial resources that can be redeployed in greenfield operations stimulate the growth of firms (Penrose, 1959). Such organic growth is preferred by firms that develop their capabilities *internally* and can integrate a new project into their organizational learning process (Kogut and Zander, 1993; Barkema and Vermeulen, 1998). On other hand, firms with ambitious entrepreneurs may pursue rapid expansion relative to their own size and resources, and favor acquisitions.
- Financial resources also facilitate greenfield operations in distant and risky markets. External investors may be reluctant to finance these as they face difficulties in accessing and verifying information, which the firm may posses, on the merits of the project. Acquisitions, in contrast, can more easily be assessed by outsiders, based on the track record of the acquired organization (Chatterjee, 1990).

Second, resources of local firms can attract acquisition entry. They could provide for instance technological assets or market share in the target markets. In industrialized economies, potential targets may be commonly available, and the key issue is their valuation by the investor *viz.* current owners. In emerging markets, however, there may be few suitable firms with the sought assets (e.g. Caves, 1995, p. 72; Estrin et al., 1997). At the same time, industries are less likely to be concentrated and saturated, such that retaliatory moves by incumbent firms (Yip, 1982; Buckley and Casson, 1998) are only a minor concern.

Finally, local markets provide assets required in greenfield ventures, such as real estate, business licenses, local blue-collar workers, and supplies of intermediate goods. In emerging markets, their availability cannot be taken for granted. Certain resources, notably skills and material inputs, may be underdeveloped, which induces investors to consider acquisitions instead of a greenfield investment.

Transaction Costs

Bringing together resources previously held by different businesses incurs transaction costs either in the market for corporate control, or on local markets for complementary assets. Markets for corporate control are highly imperfect in emerging markets, which raises transaction costs of foreign acquisitions. Cost are incurred for instance for searching suitable targets, analyzing their economic viability, and negotiating with management, owners and government authorities. Brownfield investors can reduce these costs by considering a wider array of potential targets (as requirements are less specific). Yet, they may incur more conflicts during negotiations with local stakeholders, other than owners, as restructuring affects their interests (e.g. Antal-Mokos, 1998). In emerging markets, the transaction costs in equity markets can thus be a major constraint on foreign acquisitions.

Similarly, the markets for complementary resources are fairly efficient in developed economies, but not necessarily in emerging markets. Estrin et al., (1997) observe that inefficiencies in these markets led to substantial extra costs and delays, or deterred greenfield investments. For instance, inefficient bureaucracy in the local land registries inhibits real estate markets in CEE. The resultant

transaction costs inhibit greenfield projects. Yet they can be overcome through brownfield entry, which - in Estrin et al.'s cases - was motivated in particular by the control over real estate and access to local networks.

Integration and Adaptation

The investment is not complete with the collection and acquisition of resources; they have to be amalgated to create an efficient new business unit within the investors' network. Mode choice therefore has to reflect the costs and time lags required for integration and adaptation. Firms' ability to manage the post-entry integration process thus feeds back into their choice of entry strategy:

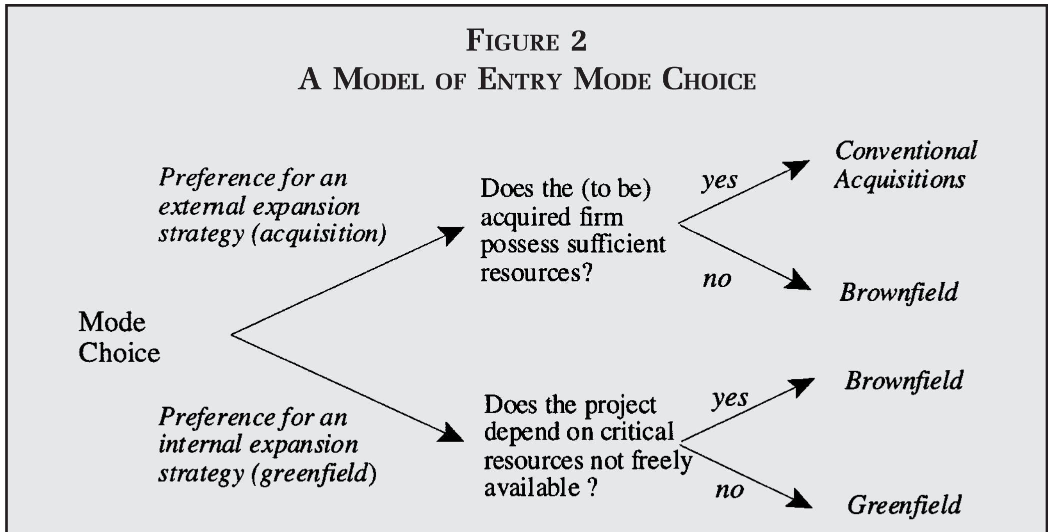
- Capabilities for integration are built through experience with acquisitions. This involves the management of the process (e.g. Buono and Bowditch, 1989; Haspeslagh and Jemison, 1991) and the development and implementation of a new strategy that utilizes synergies in the new organization, which is more diversified in terms of economic activities, national cultures and network relationships.
- Integration is furthermore facilitated by the prior 'fit' between two organizations in both strategic and organizational-cultural terms (e.g. Birkinshaw et al., 2000). Strategic fit reduces the need to restructure the acquired firm to fulfill its strategic role within the investor's network. However, if a local manufacturer is acquired to access local markets for the acquirer's global product line - a common occurrence in transition economies - then substantial operational changes are required. Organizational fit (Kogut and Singh, 1988) facilitates the creation of a common, or at least compatible, organizational culture in the merged firm (Nahavandi and Malekzadeh, 1988). Firms whose core competences are build on a unique corporate culture thus face greater challenges in integrating acquired firms, and would consider greenfield entry.
- International acquisitions are furthermore inhibited by the interaction between two national cultures (e.g. Barkema et al., 1996). Cultural distance between two firms increases communication problems, and less of the transferred capabilities can be adopted by the acquired organization. Firms without experience in the host country, or originating in high psychic distance countries, thus face more obstacles to integration and are more likely to choose greenfield entry.

Greenfield investors avoid the costs of integration, but are more sensitive to relocation costs associated with the international transfer of resources. They are not crossing organizational boundaries, but international ones, which also can result in considerable costs, e.g. for training and remunerating expatriates. In addition, organizational and technological assets have to be adapted to local cultures and standards; and marketing assets such as brand names may have to be recreated.

BROWNFIELD AS AN OPTION FOR ENTRY MODE

Figure 1 summarizes the arguments. The mode choice depends first on the resources required for the envisaged project, and on the resources available in local firms, in the investing firm, and on

FIGURE 2
A MODEL OF ENTRY MODE CHOICE



local markets. However, each resource has to be evaluated in the light of the costs of the transaction, incurred on markets for equity or on markets for unbundled resources. Subsequently, resources have to be transformed to meet the requirements of the project.

Brownfield projects can draw upon more sources of resources enabling projects that neither the foreign investor nor the local firm could implement themselves. They can overcome obstacles arising from the limited availability of certain assets or from high transaction costs in specific markets by considering a wider choice of potential target firms. However, brownfields typically incur high integration costs because the investor engages in deep restructuring *and* in major resource transfer. This requires in particular managerial resources for the complex post-acquisition process.

From a strategic perspective, brownfield projects can substitute for either conventional form. They offer an alternative if the pure strategies of conventional acquisition or greenfield are not feasible, or too costly. Firms may form their preferences on a bimodal choice based on the model presented in Figure 1. By extending the model to a two-stage decision tree (Figure 2), it can be shown how brownfield projects can be chosen in two situations.

First, an external expansion strategy may be inhibited by weak assets of local firms or by high transaction costs in markets for corporate control. If such concerns are overcome by the weight of other arguments, substantial new facilities may have to be added to an acquired firm. This need may be recognized during the due diligence stage when preparing the acquisition. It may also result from an 'emerging strategy' if the *ex-post* assessment of the acquired firm reveals a need for major restructuring. The latter case contains an element of bounded rationality, in that managers should be expected to do proper due diligence before acquisitions. However, Estrin et al. (1997) suggest that in many cases in CEE, acquisition decisions had to be made with incomplete information, leading to *ex post* surprises and failed acquisitions, due to the unexpectedly serious problems faced in restructuring former socialist enterprises.

Second, a brownfield can complement an internal expansion strategy if greenfield projects are inhibited because assets in possession of local firms are a *limiting factor to entry*. Firms may possess valuable transferable resources or favor a close integration of the local operation but still depend on a critical local asset. This can induce an acquisition if the asset is inseparable from the local firm, or if the firm is unwilling to sell the asset unbundled from its operations. Estrin et al. (1997) show a variety of such critical resources: a local partner who alone could provide legal permission, local distribution channels, and patents and brand names.

The cases suggest that a 'critical asset' motive driving the acquisition entry is typical for brownfield projects, and at least as important as brownfield as 'second best' acquisition. Having recognized brownfield as an option, it may in fact become the prime mode of international expansion for firms that combine highly competitive resources or high organizational integration with some crucial local assets.[3]

OUTLOOK

Entry mode choice is not only between acquisition and greenfield; we have identified a hybrid option: brownfield. It is chosen especially by firms with core competences based on a combination of firm-specific international resources with specific local assets. As companies are increasingly competing with global strategies that require both high integration and local resources, brownfield can be expected to be of increasing importance worldwide.

For local stakeholders, the distinction between brownfield and conventional acquisition should help form their expectations. In a brownfield, the acquired firm can expect radical restructuring, as many of its assets are not interesting to the investor. The new operation takes characteristics of the investor, like a *de novo* greenfield investment, while offering little continuity for the local firm.

Future research should address in particular two issues. We observed the phenomenon in transition economies, where corporate strategies are adapted to the specific institutional context (Peng, 2000; Meyer, 2001). Similarities of institutions across emerging markets suggest that it should be of wider relevance, yet not necessarily for developed economies. We have been able to identify incidences in for example Egypt, India and Vietnam. Yet, the relation between institutional variation across countries and the emergence of brownfield as entry strategy remains to be explored by future research.

Empirical research should incorporate brownfield into analyses of both determinants of entry mode choice, and the impact of entry modes on subsidiary performance. In particular, we encourage analysis of the empirical relevance of the alternative proposed decisions processes leading to brownfield: how important are critical assets for acquisition decisions, and to what extend does brownfield investment emerge out of insufficient pre-acquisition due diligence?

NOTES

1. Many empirical studies have also been taken into account. These focus on firm-specific characteristics that foster the ability to manage either mode, or to enhance the benefits investors can obtain from them (e.g. Caves and Mehra, 1986; Hennart and Park, 1993; Andersson and Svensson, 1994; Chen and Zeng, 1996; Barkema and Vermeulen, 1998). While most studies consider a two-way choice

between acquisitions and greenfield, Kogut and Singh (1988) consider a three-way choice that includes joint-ventures.

2. Acquisitions can vary from legal transactions without changes in operations to cases where a single critical asset controlled by a local firm induces the take-over. Examples of the former are take-overs of suppliers to increase control in a corporate network (Forsgren, 1989). At the other end of the spectrum of acquisitions stands the East German acquisition by Danisco A/S, a Danish food-conglomerate (Meyer and Møller, 1998). Danisco sought a quota under the EU sugar market regulation; regulatory constraints on refining capacity imply that firms can expand only by acquiring quotas from other producers. When East Germany joined the system, each of its small refineries received a quota. Although the facilities were technologically obsolete, sharp competition emerged over acquisition of these firms.

3. We encountered one such firm: in the US, the "fastest growing health care maintenance organization . . . made no large acquisitions, though it does buy tiny firms to save it from having to apply for operating licences in states (of the USA) it wants to enter" (Economist, 1997).

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