Entry Mode Choice in Emerging Markets: Greenfield, Acquisition, and Brownfield

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Multinational firms expanding into emerging markets can choose between entry through a greenfield project and via an acquisition. This paper analyzes this strategic decision. Among the options for entry mode, brownfield is delineated as a special case of acquisition, in which the resources transferred by the investor dominate over those provided by the acquired firm.

Our analytical framework draws upon both resource-based and transaction-cost theories. The resource requirements have to be matched with resources available to the investor through an acquired firm, or otherwise. Beyond this, the decision has to account for the costs of acquiring and integrating the resources. The model presented complements the literature with insights gained through our case research on foreign investment into Eastern Europe.

On this basis, we discuss the hybrid form of brownfield entry. Two distinct situations lead to brownfield investment: external growth strategies that are inhibited by poor quality of local firms, and internal growth strategies that depend on specific local resources. Brownfield entry can also become a key strategy for firms that possess strong core competences which need to be complemented with specific resources controlled by local firms.

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1. Introduction

The choice of appropriate mode of entry into new markets, especially emerging markets, is a key strategic decision for international business. A greenfield project gives the investor the opportunity to create an entirely new organization to its own specification, but usually implies a gradual market entry. An acquisition facilitates speedy entry to the local market and access to resources, but the acquired firm will not necessarily match the organization of the investor. In emerging markets, acquired firms are often extensively restructured to resemble a greenfield investment. We term such investment ‘brownfield’, and present it as a distinct mode of entry.

The choice of entry mode has been addressed frequently in the international business and marketing literatures. However, relatively few studies address the choice between entry via acquisition or greenfield project, and these focus on the investing firm, developing propositions and empirical tests primarily from transaction cost or resource-based perspectives [Hennart and Park 1993, Barkema and Vermeulen 1998]. Yet no comprehensive theoretical model has been presented, apart from Buckley and Casson [1998].

We devise a model that draws upon the resource-based view of the firm as well as transaction cost analysis. The model considers the entry mode choice as a decision over the origins of the resources that shall be employed in the new venture. The relevant resources then have to be acquired and integrated into the new affiliate, causing costs of two kinds: transaction costs in the markets where resources are acquired, and costs of adapting an acquired resource to the needs of the project. The model is applied to discuss characteristics and determinants of brownfield projects. They are attractive if local resources are necessary but not sufficient for the envisaged operation, and if high transaction costs inhibit both of the traditional modes, greenfield and conventional acquisition.

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2 Most of this work focuses on the choice of ownership, between a joint-venture (JV) and a wholly-owned affiliate, from a theoretical [e.g. Anderson and Gatignon 1986, Beamish and Banks 1987, Hennart 1988, Hill et al. 1990] or an empirical perspective [e.g. Gatignon and Anderson 1988, Gomes-Casseres 1991, Hennart 1991]. JVs are a hybrid form between market and intra-firm coordination, which reduces market transaction costs at the expense of higher coordination costs between the parents.

3 Empirical studies have focused on firm-specific characteristics that foster the ability to manage either mode, or to enhance the benefits investors obtain from it. Propositions consider e.g. cultural distance, international experience, firm size, and R&D expenditures [Caves and Mehra 1986, Forsgren 1989, Zejan 1990, Hennart and Park 1993, Andersson and Svensson 1994, Hennart et al. 1995, Svensson 1996, 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 JV as a separate mode.
The theoretical model has been developed using a deductive approach on the basis of our empirical work on investment in Central and Eastern Europe (CEE) [Estrin et al. 1997, Meyer 1998]. The case research on entry strategies of Western companies in transition economies, see the appendix, provided insights that led to the distinction of brownfields as a separate mode, and the consideration of local factors in mode choice. The emerging markets in CEE pose particular challenges to investors because multiple market failures have to be accommodated and it is not feasible to work with the efficient-market assumptions suitable for developed economies. By exploring foreign direct investment (FDI) in these countries we found aspects of the decision that otherwise have gone unnoticed. Therefore, our research should be highly relevant for investment in all emerging markets.

In the next section, we introduce the alternative entry modes, noting besides greenfield and acquisition also ‘brownfield’ as a hybrid form. Sections 3 and 4 discuss, respectively, the resource-dimension, and the transaction and integration costs of entry mode choice to develop an analytical framework and to introduce testable propositions to guide future empirical research. Section 5 discusses brownfield entry showing how it can substitute either of the traditional modes. Conclusions are drawn in section 6.

2. Alternative Modes of Investment

The literature distinguishes two primary modes of investment; 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 and know-how. The local operation becomes highly integrated with the global operations of the investor [e.g. Harzing 1998].

Acquisitions are ‘purchase of stock in an already existing company in an amount sufficient to confer control’ [Kogut and Singh 1988:412]. The new affiliate starts as a going concern, that normally possesses production facilities, sales force, and market share. The foreign investor attains control over these local assets, though they may not be structured to match the strategic needs of the investor, and the integration of the acquired firm may require considerable effort [Jemison and Sitkin 1986]. The main distinction is therefore in the origin of the resources employed in the new operation. Whereas a greenfield uses resources of the investor and combines them with assets acquired locally, 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, many investments that are formally an acquisition, we found in our casework to resemble greenfield projects. In such ‘brownfield’ projects, the foreign investor acquires a firm but almost completely replaces plant and equipment, labor and product line. The acquisition may yield a local brand name or market share, and perhaps valuable supply or customer relations, but the production processes and organizational structures are effectively reconstructed from scratch [Estrin et al. 1997]. The new operation is build primarily with resources provided by the investor, including production technology, management expertise, international brand names and financial capital to build new facilities. After only a short transformation period, often less than two years, the acquired local firm has gone through deep restructuring and its resources, including not only its tangible assets but also intangibles such as brand names and organizational culture, are only of secondary importance for the new operation.

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, they reconstructed the factory and introduced four new production lines, replacing all but one line. In addition, the factory infrastructure was rebuild, 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. Four years after the entry, Schöller acquired full ownership. 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 [Estrin et al. 1997:136]. The new affiliate employs Schöller’s imported production technology and international brand names, and engaged in intensive training to transfer its managerial know-how. In establishing its Hungarian operations, the investor used only a few of the assets of the local firm. A few key resources in possession of the local firm and the institutional framework led formally to an acquisition, but effectively to an operation that resembled a greenfield.

Brownfield entry, like the one illustrated, represents a special form of an acquisition. We suggest the following definition: a brownfield is a foreign entry that starts with an acquisition but
builds a local operation that uses more resources, in terms of their market value, from the parent firm than from the acquired firm (figure 1). Acquisitions thus 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 for the former are the internatization of existing transaction to increase control in a corporate network [Forsgren 1989], and acquisitions that aim at diversifying the financial risk of the investor. At the other end of the spectrum of acquisitions stands the East German acquisition by Danisco A/S, a Danish food-conglomerate [Meyer and Bjerg-Møller 1998]. Danisco pursued a quota under the EU sugar market regulation because sugar refining capacity in the EU is constrained, and firms can expand their output only by acquiring quotas from other producers. These quotas are location bound and require procurement from the local sugar farmers. 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 the firms because of their quotas.

3. The Resource Dimension
The brownfield projects show that investors face a wide array of opportunities to combine resources from alternative origins, which reflect different ownership and locational advantages
[Dunning 1993] of the firms and countries involved. From a resource-based perspective [Penrose 1959, Teece 1982, Cantwell 1991] a brownfield may resemble a greenfield in all but the legal incidence of having acquired some resources through acquisition. Consequently, the acquired firm needs not be identical, nor even close, to the aspired operation the investor intends to establish. The acquisition may be only a minor element in the process of building up a new operation, with transfer of resources from the parent being equally if not more important. Moreover, a small set of resources in possession of the local firm can induce an acquisition even though most assets and activities of the firm are of no interest to the investor. Even the core competences, as perceived by local management, may be of minor importance to the acquirer.

To understand the emergence of brownfield, it is necessary to review factors that influence mode choice. We do so, following the structure in figure 2, starting with the resource dimension. Resources can be acquired in bundled form by taking over an existing local firm - an acquisition - or they can be redeployed within the firm to establish a greenfield venture, combining them with resources bought on local markets, such as real estate. This choice depends first on the resources needed, behind which lie the strategic objectives of the project, and second on the resources that are found (i) within the entering multinational enterprise, (ii) in unbundled form on local markets, and (iii) in bundled form in local firms.

3.1. Strategic Resource Requirements
The strategic intent of an investment often predetermines its entry mode. Frequently, FDI is undertaken to pursue strategic objectives concerning the control of some local resources in oligopolistic markets. The type of resources sought varies with the strategic intent, for instance for market-seeking and resource-seeking investment.

Market-seeking FDI is a prime example that depends in particular on access to local customers. A local partner can provide market intelligence, access to networks or other assets that provide access to a substantial market share. To build market share, foreign investors may pursue first-mover advantages [Lieberman and Montgomery 1988, 1998], and acquire local brand names or distribution networks. Entrants could borrow brand names [Terpstra and Yu 1990], build their own global brands [Kotler 1986] or purchase existing brands from local firms [Landes and Posner 1987], 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 is the only interesting assets the firm controls.  

In CEE, many early investors pursued market seeking strategies, especially in (fast-moving) consumer goods industries with world-wide oligopolistic market structures [e.g. Kogut 1996]. ‘Buying a market share’ and ‘first-mover advantages’ are reported as a major motive for FDI in CEE in investor surveys [Lankes and Venebles 1996, Pye 1998]. Among the cases of Estrin et al. [1997], especially Schöller and United Biscuits pursued such strategy, and consequently choose acquisition entry. Even though some first-movers could not sustain their advantage [Estrin and Meyer 1998], the perceived advantage was essential for the decision over mode choice.

Resource-seeking investment may aim at utilizing the human capital of a local firm for global operations. For instance, acquired research laboratories can contribute to the global R&D of the investor. To access local human capital, a direct take-over may be more efficient because setting
up a new operation and hiring key individuals does not permit the entrant to tap team-embedded tacit knowledge.

Resources in the target industry are also essential for firms pursuing a diversification strategy abroad as they lack industry-specific assets. They face higher operating costs in the new markets because they are less well equipped to build an operation *de novo* [Teece 1982]. Therefore, entry in an unrelated industry is more likely to be in form of an acquisition - as has been established empirically e.g. by Hennart and Park [1993] and Hennart et al. [1995].

Thus, resource requirements arising from the strategic intent may shift the balance of arguments between the investment modes, often in favor of an acquisition. If the local resources are a necessary but not sufficient condition for the success of the new operation, then investors may choose brownfield rather than conventional acquisitions. Hence,

*Proposition 1:* If the strategic intent of an investment depends on local resources (e.g. for resource seekers, first-mover-advantage seekers) it is less likely to be a greenfield project.

### 3.2. Resources of the Investor

Availability of resources is a major driving force of firm’s expansion because they aim to make best use of their assets in the presence of limited divisibility of resources [Penrose 1959]. The redeployment of resources can in part offset the costs of entry, reducing entry costs of greenfield vis-à-vis acquisitions [Chatterjee 1990]. Thus, greenfield, and to a lesser extent brownfield, are more feasible for investors with resources that can be transferred and constitute core competences of the new business unit. Three kinds of resources in particular are driving international expansion: (i) knowledge with quasi-public-good character, (ii) managerial resources, and (iii) financial resources.

(i) Caves [1971] argues that horizontal foreign investments are profitable if firms possess some firm-specific assets that “partake of the character of a public good within the firm, such as

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5 There are fewer examples of strategic objectives to be pursued primarily by greenfield investment. Graham’s [1985] exchange-of-threats hypothesis offers one. He proposes that firms finding their domestic market invaded by a rival retaliate by attacking the monopolistic position of the rival in its home market. Here, the investment is undertaken with the objective to increase competition, which can be better accomplished by a new entry to the industry. Another case would be strategies that require a local presence, e.g. a representative office, but initially not a sizeable operation. The office may act as contact for local partners.
knowledge fundamental to the production of a profitable saleable commodity” [Caves 1971:4]. Such resources can be employed in a foreign operation without incurring the initial sunk costs of their development, and the affiliate can attain competitiveness from competences and resources shared with the investing firm.

This makes greenfield a natural choice for firms with a strong competitive advantage [Kim and Lyn 1987]. Transferable resources include knowledge-based capabilities, especially advanced technological know-how, and access to the investor’s global network of production and distribution channels. Firms that wish to build an operation which replicates the production technology and/or organizational structure of their existing operation already possess the key resources necessary. On the other hand, firms with competences that are embedded in the (immobile) current labor force or otherwise bound to the location need to acquire new resources for project.

(ii) Penrose [1959] argues that firms develop excess managerial resources through the accumulation of expertise and the limited divisibility of specialized managerial labor. She distinguishes ‘managerial services’ from ‘entrepreneurial services’ that include “those required for the creation or acceptance of proposals for innovation and for initiating and making decisions on proposals for expansions” [Penrose 1959:183]. An expansion via greenfield requires “a programme of internal expansion where managerial planning and execution cannot be avoided in the very process of expansion” [1959:189]. Through redeployment in a new operation, the services of existing excess resources can be utilized more profitably. Such gradual redeployment would typically be in form of greenfield projects as managerial services are activated by building new operations. On other hand, firms with ambitious entrepreneurs may pursue rapid expansion plans relative to their own size and their limited managerial resources and favor acquisitions.

Thus, the nature of the resources that firms possess determines whether it is pursuing an internal growth strategy via greenfield operations, or an external growth strategy through acquisitions.

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6 R&D intensive firms have frequently been shown to favor greenfield entry over acquisitions [see Kogut and Singh 1988, Hennart and Park 1993, Andersson and Svensson 1994, Hennart et al. 1995, Meyer 1998, Svensson 1996].

7 This proposition has been tested by Hennart and Park [1993]. They proxied ‘managerial constraints’ by the rate of growth of domestic (Japanese) employment to growth of sales, and found a positive significant association of this variable to the probability of the firm entering the US with an acquisition, which is evidence against the proposition. They suggest that Japanese firms may offer their ‘excess’ managers career opportunities in acquired US firms.
Recent resource-based literature focuses on organizational learning as a process. Organic growth is preferred by firms that develop their capabilities internally and can integrate a greenfield project into their organizational learning process [Kogut and Zander 1993]. Through involvement in different markets, firms are confronted with a broader array of demand and competition characteristics. This fosters their innovation capabilities [Ghoshal 1987], their returns on innovation and R&D expenditures [Kobrin 1991, Kim et al. 1993]. Multinational diversity and product diversification thus increase technological capabilities and induces firms to expand into activities that use these resources as inputs [Penrose 1959, Foss 1998]. Firms with such internally developed assets embedded in the organization prefer to establish new operations as greenfield [Barkema and Vermeulen 1998]. If they acquire a firm, they may still redeploy their resources leading to a brownfield.

(iii) Financial resources controlled by management are an advantage in the presence of asymmetric information about investment projects [Myers and Majluf 1984]. Chatterjee [1990] argues that external investors can assess acquisitions better than greenfield projects, which raises the costs of raising capital for the latter. Therefore, firms with internal funds, or low leverage, are more likely to choose greenfield entry while firms that need to raise funds externally prefer acquisitions. Chatterjee [1990] finds empirical support in a domestic context, but international entry mode analysis could not find such effects [Hennart and Park 1993]. Since the outcome of deep restructuring in a brownfield is also difficult for external investors to value, similar information-asymmetries as for greenfields can emerge.

The resources of the investing firm thus determine its ability to establish operations that draw on the investors own transferable resources, i.e. greenfield and brownfield investments:

**Proposition 2:** Firms with transferable resources (e.g. public good character competences, excess management, access to finance) are more likely to choose greenfield or brownfield entry.

### 3.3. Resources of Local Firms

The investment mode choice crucially depends on the assets of the local firms, especially their technology, and the competitive structure of the industry. These local economic conditions favoring or inhibiting acquisitions has been largely neglected in the entry mode literature.

An acquisition needs first and foremost a target firm that possesses the sought assets. In developed economies, potential targets may be commonly available, and the key issue is their
valuation. In emerging markets, there may be no suitable firm in the targeted industry [e.g. Caves 1995:72] which leads to a lower proportion of FDI in form of acquisitions [UN 1998:206]. In CEE, several foreign investors could not find suitable partners and thus abstained from investing or invested in a greenfield. For instance, British Vita’s CEO described the situation [Estrin et al. 1997:171]:

“In general, we found the companies were overmanned and the equipment old. For example, we currently employ 38 people in production to manufacture 8-9,000 tonnes per year; a company we looked at in Lodz produced 4,000 tonnes per year using 350 people”

As a consequence, British Vita invested in a greenfield site in Poland, although it had been expanding through acquisitions for more than thirty years. A similar case is ice-cream manufacturer Schöller who established a greenfield plant in Poland, but in Hungary, where the industry is more developed, they chose a brownfield mode [Estrin et al. 1997:134]. This illustrates how the position of local firms can impede acquisitions. Their technology may not be internationally competitive, their assets may be incompatible with those of the multinational investor, or there is simply no firm in the industry.

In advanced local industries, the entrant has to consider the costs of overcoming barriers to entry created by incumbants. For instance, in concentrated industries, a greenfield entrant has to anticipate retaliatory moves by incumbent firms. A greenfield plant expands industry capacity and could incite a competitive battle, thereby raising entry costs [Yip 1982, Chatterjee 1990]. The acquisition of a local firm would not affect market concentration and could secure the investor an initial market share and considerable market power, as in the model of Buckley and Casson [1998].

Other barriers to entry may exist in form of regulatory constraints that protect incumbents’ market power. Local competitors in emerging markets frequently try to activate local bureaucracy

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8 If a local industry is highly concentrated, not all potential foreign investors can pursue an entry via acquisition. Followers may have no choice but to establish a greenfield. Thus, concentration increases the likelihood of a single entrant choosing an acquisition. However, if several foreign investors enter the same industry, or if local firms are not for sale, then at least some of the investors will opt for greenfield entry. We would thus not necessarily expect a positive association between industry concentration and acquisition (A concentration index is significant in Caves and Mehra [1986] and Chen and Zeng [1996] but not in Hennart and Park [1993] while Hennart et al. [1995] found an inverse relationship).
and policy makers to protect their domestic interests when threatened by competition from entrants. A brownfield investor can overcome some barriers to entry such as operating licenses and network access. Yet the deep restructuring of the acquired firm usually entails capacity expansion and technological upgrading and thus puts severe competitive pressure on local rivals unless the market is growing fast. Resources of local firms can thus attract acquisition entry, in conventional or brownfield form, in two ways:

**Proposition 3a:** Entry via acquisition is more likely if the local industry possesses assets that are valuable for foreign investors, for example internationally competitive technology.

**Proposition 3b:** Entry via acquisition is more likely if incumbents in the industry are protected by high barriers to entry.

### 3.4. Resources on Open Markets

To engage in a greenfield venture, complementary local resources are needed. This includes for instance real estate, business licences, local blue-collar workers, and supplies of intermediate goods and raw materials. In emerging markets, however, their availability cannot be taken for granted. Certain resources, notably skills and local material inputs, may be underdeveloped. Quality resources may be held by local firms who are unwilling to sell them as they are part of their respective competitive advantages, or - for state-owned firms - for political considerations. In addition, legal constraints may inhibit, or prohibit, the sale of land or natural resources to foreigners.

Hence, lack of resources available on local markets - other than markets for corporate control - can induce investors to consider an acquisition instead of a greenfield. This aspect has not previously been discussed in the literature, but our case research suggests that supply of some resources, especially real estate, may be a significant constraint:

**Proposition 4:** Entry into a country with low quality of resources available on free markets (e.g. real estate, skilled labor), relative to those available in firms, is more likely in form of acquisition.

### 4. Transaction and Integration Costs

After identifying available resources, investors have to acquire and to integrate them in a costly
process. All resources employed in the new operation have to be transformed by restructuring and integrating an acquired firm and by adapting transferred assets to local conditions. Prior literature focused on markets for corporate control, which are highly imperfect in emerging markets, and on the management of the post-acquisition integration. Greenfield projects also require substantial set-up costs, especially for the redeployment of resources within the firm. Brownfield projects are exposed to all these costs, but may bypass any specific obstacles by drawing upon a wider choice of alternative sources.

4.1. Transaction Costs

a) Markets for corporate control

Acquisitions require a transaction on the markets for corporate control. Their organization and efficiency varies considerably, which raises transaction costs of foreign acquisitions. In Anglo-Saxon countries, with their stock-market based systems of corporate governance, firms can be taken-over via a friendly or hostile bid after acquiring a substantial proportion of the equity [e.g. Shleifer and Vishny 1997]. This enables foreign entrants to acquire local firms. If systems of corporate governance rely on key stakeholders controlling major shares of equity, as in Germany and Japan [e.g. Franks and Mayer 1997], acquisition negotiations become more complex.

In CEE, state-ownership of industry was the norm until privatization began. In the privatization process, foreign investors found negotiations with the local firms difficult and time-consuming as they had to deal with both company management and the privatization agencies [Antal-Mokos 1998, Brouthers and Bamossy 1997]. These agencies had political objectives along with revenue maximization, for instance to retain partial control over the firm, or to transfer a minority share to the voucher scheme or firm-insiders. In this, they were subject to political pressures as well as, notably in Poland, to the de facto control of managers and employees over firms. The British Vita case illustrates such obstacles:

“The Ministry of Privatization insisted that significant shareholdings had to be retained in the hands of other Polish groups ... Vita entered serious negotiations for an acquisition, but in this case the Ministry of Privatization sought to give the workers a 40% stake. There was no room for compromise.

On different methods of privatization in transition economies see e.g. Estrin [1998], World Bank [1996].
Vita would not accept a minority shareholding but, from the Polish side, the authorities felt that the workers needed to be persuaded to accept the privatization, with a 40% stake being their minimum price” [Estrin et al. 1997:170].

While the conditions surrounding privatization are specific to CEE, and in fact to each individual country, they illustrate that the efficiency of the markets for firms have a major impact on foreign companies’ ability to acquire local firms. The costs of searching for suitable targets, analysing their economic viability, negotiating with management and owners, and fulfilling side-conditions imposed by governments are examples for transaction costs. Brownfield investors can reduce these costs by considering a wider array of potential targets, but during negotiations they may incur more conflicts 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. Hence

*Proposition 5: Entry into countries with less developed markets for corporate control is more likely in form of greenfield.*

**b) Markets for complementary resources**

The markets for complementary resources are fairly efficient in developed economies, but not necessarily in emerging markets. In our research on CEE, we observed that inefficiencies in these markets led to substantial extra costs and delays, or deterred greenfield investments.

For instance, real estate markets in CEE are inhibited by inefficient bureaucracy in the local land registries. As the registries had to be reestablished after 1989, and restitution claims led to additional uncertainty, ownership titles were often unclear. This substantially increased search costs and legal costs - both before and after buying property. Such obstacles were experienced by General Bottlers:

“[General Bottlers] approached each site differently, ... In Poznan they leased a warehouse. Purchasing would have been very time consuming because the Ministries of Interior and Defence were involved. The Bydgoszcz site was purchased, which took 6 months to arrange. In Wroclaw, a greenfield site was leased to build warehousing etc. Of the other seven sites, only one has been purchased, though in two others purchase is an option in the lease” [Estrin et al. 1997:189].
Similarly, investors faced obstacles in obtaining access to local infrastructure as a result of inefficiency in the local bureaucracy. E.g., British Vita experienced a nine month delay to starting its greenfield operations in Poland due to lengthy negotiations concerning the supply of electricity [Estrin et al. 1997].

Also when operating in unfamiliar local markets, foreign investors may incur higher transaction costs than local firms, e.g. for identifying local suppliers for raw materials or intermediate inputs [Meyer 1998, ch. 5] and for recruitment of local staff. In our brownfield cases, we observed that control over real estate, access to local networks, and access to labour skills were important considerations. An acquisition reduces transaction costs as the local firm not only controls key assets but is embedded in local networks and labor markets. Hence:

**Proposition 6:** Entry into countries with less efficient markets for complementary local assets such as real estate and labor is less likely in form of greenfield.

### 4.2. Integration and Adaptation of Resources

The investment does not stop with the collection of resources, they have to be amalgamated to create an efficient new business unit within the investors’ network. Mode choice therefore has to reflect the efforts required for integration and adaptation. The costs and time-lags incurred in this process affect mode choice in similar ways to transaction costs, in that they increase actual costs over the (market) price paid for the acquisition (figure 2). The costs of the integration process depend on the capabilities of the investing firm to manage the process, on the strategic and organizational ‘fit’ between acquirer and acquiree, and on their psychic distance.

**a) Investor capabilities**

Post-acquisition integration is a challenging task for the top management of the organization, for which some businesses are better qualified than others. It requires process management, effective communication, and sensitivity to individual concerns and expectations [e.g. Buono and Bowditch 1989, Hasplagh and Jemison 1991, Cartwright and Cooper 1993]. Management has to lead a new organization with greater diversity in terms of economic activities, national cultures and network relationships. It needs to develop a strategy to utilize synergies, and to provide a vision for the acquired firm [Hasplagh and Jemison 1991]. The capabilities to manage this process can be built through experiences in acquisitions and in management of a variety of different activities. Hasplagh and Jemison [1991:ch.14] observe that some firms make explicit efforts to learn from acquisitions.
Several empirical studies found evidence that large and diversified firms prefer acquisitions over greenfield, e.g. Caves and Mehra [1986] (to their own surprise), Forsgren [1989], Zejan [1990] and Andersson and Svensson [1994].

On the other hand, small firms without prior experience may easily overstretch their managerial resources if they engage in an acquisition. This happened to Lycett, a small British firm. Extensive travels by the CEO to Hungary to identify a suitable partner and to manage the post-acquisition restructuring in a brownfield appear to have contributed to the bankruptcy of the investing firm which proved unable to manage its relatively large investments along with its original business [Estrin et al. 1997: 128]. In contrast, Pyramid Junger, a small German musical instruments maker, established a greenfield workshop in the Czech Republic with initially only 6 local employees. Starting small, they could grow as they accumulated experience [Estrin et al. 1997:97].

b) Strategic and organizational fit

The post-acquisition integration has to merge corporate strategies and organizational cultures [e.g. Birkinshaw et al. 1997]. The strategic integration restructures the acquired firm to fulfill its strategic role within the investor’s network. It is facilitated if the acquired firm is continuing its operation with few changes, i.e. if it is placed on the left of the spectrum of acquisitions in figure 1. An acquisition that is motivated by financial motives without aiming at major synergy effects would thus cause least integration costs. Similarly, an acquisition of a firm that is already part of the investor’s supplier or customer network, but will become more closely integrated, induces few operational changes [Forsgren 1989, Andersson et al. 1997]. On the other hand, an acquisition that aims at exploiting core competences in another country by building a local organization that is closely integrated with the parent firm, and matches its global structure, requires deep restructuring and may lead to a brownfield. Greenfields can bypass restructuring and create a new organization that fits the strategy and structure of the parent firm.

The organizational integration needs to create a common, or at least compatible, organizational culture in the new, merged firm [Sales and Mirvis 1984, Nahavandi and Malekzadeh 1988]. Especially the ‘human side of acquisitions’ [Blake and Mouton 1985] is inversely affected by

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10 Several empirical studies found evidence that large and diversified firms prefer acquisitions over greenfield, e.g. Caves and Mehra [1986] (to their own surprise), Forsgren [1989], Zejan [1990] and Andersson and Svensson [1994].
conflicting corporate cultures, or lack of ‘organizational fit’ [Jemison and Sitkin 1986, Kogut and Singh 1988]. Firms whose core competences are build on a unique corporate culture, thus face greater challenges in integrating acquired firms. Greenfield entry is therefore also preferred by firms with product-specific or industry-specific core competences that are best exploited by an integrated organizational structure.\footnote{A third aspect of fit, which has been less discussed in the literature, is the compatibility of technology. Fölster and Nyberg [1994] suggest that high technology firms often face obstacles in the integration of acquired firms as they may use specific internal technological standards that are not compatible with that of other firms. To integrate a firm, technical interfaces would have to be changed to the standards and norms of the parent firm.}

All our cases of acquisition required major restructuring, both strategical and organizational. Strategic restructuring included for instance establishment of a sales organization for the investor’s imported products; and organizational restructuring was necessary to introduce Western management to previously state-owned firms [see also Uhlenbrock and DeCastro 1998]. The most extensive restructuring was required in the brownfield cases, which also required most involvement from headquarters management, e.g. for Schöller and Lycett. The greenfield investors include pharmaceuticals company Glaxo-Welcome, which operates a highly integrated global organization, and General Bottlers, which replaced a local distribution network for PepsiCo Cola that had - despite restructuring efforts - performed unsatisfactory. The fit argumentation receives strong support in empirical studies. R&D intensive firms, who are presumed to face most obstacles to both strategic and organizational fit, have a strong preference for greenfield entry (see footnote 6), also in CEE [Meyer 1998, ch. 8].

c) Distance

International acquisitions are inhibited not only by the interaction between two organizational cultures but by different national cultures. Acquired firms face a ‘double-layered acculturation’ because of the corporate and national dimension of the organizational differences [Barkema et al. 1996]. The higher the cultural distance between the two firms, the more communication problems may emerge, and the less of the transferred capabilities can be adopted by the acquired organization.

In the transition economies, joint-ventures and acquisitions are plagued by organizational conflict, especially in Russia [Puffer 1996, Fey and Beamish 1997]. Foreign investors often face
an organizational culture that is not conducive to competitive business. Post-acquisition restructuring may therefore have to address aspects of national culture that evolved during the socialist regime. Inherited attitudes and values often conflict with competitive business culture [e.g. Sztompka 1991], such that foreign investors become involved in the process of cultural change [Meyer and Bjerg Møller 1998].

Firms with experience in the host economy, experience in similar environments, or originating from nearby are better prepared to engage in this organizational restructuring. The post-acquisition costs of integrating an acquired firm thus increase with the psychic distance between the origins of the investor and the acquired firm [Kogut and Singh 1986]. Hence, firms from distant origins are more likely to choose greenfield entry, as has been strongly confirmed by Kogut and Singh [1988], Hennart et al. [1995], and Barkema and Vermeulen [1998].

The costs of integrating an acquired firm thus lead to three propositions:

**Proposition 7a** Firms with specific capabilities in managing acquisitions, e.g. build through a history of acquisitions, can lower post-acquisition costs and are more likely to choose acquisition entry.

**Proposition 7b** Firms whose performance is highly sensitive to the strategic and/or organizational fit between business units are more likely to choose greenfield entry. If companies requiring a good fit between business units acquire a firm then they are likely to pursue a brownfield strategy.

**Proposition 7c** Firms with experience in the host country, or originating in low psychic distance countries, face less obstacles to post-acquisition integration and are more likely to choose acquisition entry.

d) Transfer of Resources

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 results in considerable costs, e.g. for training and remunerating expatriates. Managers in the case firms indicated that operations in CEE required more expatriates than operations of similar size elsewhere because of the lack of managerial skill in the region. In addition, technology transfer can be very costly, as shown by Teece [1987]; organizational or technological assets have to be adapted to local cultures and standards; and
marketing assets such as brand names may have to be recreated. These costs can be avoided if resources can be acquired locally.

*Proposition 8:* Investors facing high costs for the international transfer of their resources are less likely to choose greenfield entry.

5. **Brownfield as an Option for Entry Mode Choice**

Figure 2 summarizes the arguments in form of a general model. The mode choice depends first on the resources required for the envisaged project ($P_1$), and on the resources available in local firms ($P_{3a,b}$), in the investing firm itself ($P_2$), and on local markets ($P_4$). However, each resource has to be evaluated under consideration of the costs of the transaction, and the subsequent adaptation to the investors’ needs. In buying the desired resources, transaction costs are incurred on markets for equity ($P_3$) or on markets for unbundled resources ($P_6$). Subsequently, resources have to be transformed to meet the requirements of the project; firms vary considerably in their ability to transfer their resources internationally ($P_9$), and to manage the integration of acquired firms ($P_{7a-c}$).

Brownfields combine aspects of both modes and can therefore draw upon more sources of resources enabling projects that neither the foreign investor nor the local firm could implement themselves. As a hybrid between acquisitions and greenfield, brownfield projects 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 (as requirements are less specific) and by reducing exposure to particular markets.

However, brownfields incur higher integration costs than conventional acquisitions because the investor engages in deeper restructuring and in major resource transfer. This requires in particular managerial resources for the complex post-acquisition process. In addition, transaction costs may increase if local stakeholders mobilize their interests during acquisition negotiations.

From a strategic perspective, brownfield project can substitute either traditional 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 above, i.e. assessing their own resources, the relevant local resources, and the relevant transaction and integration costs (figure 2). By extending the model to a two-stage decision tree (figure 3), it can be shown how brownfield projects are chosen in two situations.

First, an external expansion strategy may be inhibited by weak assets of local firms (proposition 3a) or by high transaction costs in markets for corporate control (proposition 5). 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, our East European research suggests that in many cases acquisition decisions had to be made with incomplete information, leading to *ex post* surprises, and failed acquisitions like Lycett Danubius [Estrin et al. 1997]. Thus, Estrin et al. [1997] report that their more successful cases are those involving greenfield entry, such as General Bottlers and British Vita. This is due to the “unexpectedly serious problems faced in restructuring former socialist enterprises and the problems taking over and developing brand identity in a transition economy” [1997:218].

Secondly, a brownfield can complement an internal expansion strategies if greenfield projects are inhibited because assets in possession of local firms are a *limiting factor to entry*. Firms may possess valuable transferable resources (proposition 2) or favor a close integration of the local operation (proposition 7b) 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 it operations. Our cases showed a variety of such critical resources: Guardian Glass entered at an early stage of transition, when only the local partner could provide legal permission. Schöller and United Biscuits aimed at the local distribution channels of the local firm, while Lycett was interested in the qualified labor force.
Other examples of critical assets are operating licenses, patents and brand names.\(^{12}\)

The cases suggest that a ‘critical asset’ motivating an acquisition is typical for brownfield projects, and at least as important as brownfield as ‘second best acquisition’. Having recognized brownfield as a distinct 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 critical local assets.\(^{13}\)

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 \textit{de novo} greenfield investment, while offering little continuity for the local firm.

\(^{12}\) Brand names can lead to acquisitions e.g. if different firms hold the rights to a brand name in different countries, such as in the infamous Budweiser / Cesky Budvar case.

\(^{13}\) 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].
6. Conclusion

Entry mode choice is not only between acquisition and greenfield; we have identified a hybrid option - brownfield. We present a framework for the analysis of entry mode choice that is based on recent theoretical and empirical literature, and can incorporate the brownfield option. The resource based view has been complemented with transaction cost analysis as each investor needs to assess available resources and the costs of acquiring and deploying them for the firm’s operations (figure 2). Wherever a resource is acquired or redeployed, the costs and benefits of its acquisition and associated transaction and integration costs need to be considered.

The model is intended to guide further empirical research, and may be developed into a managerial decision making tool as well. In particular, it incorporates aspects of the local environment as determinants of mode choice which has been neglected in prior research. Future empirical work should pay more attention to the impact of local conditions on entry mode choice.

The concept of brownfield is hoped to enrich both business analysis and public policy discussion on FDI by showing a more differentiated spectrum of entry modes for international business. Brownfield 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.

However, further research on brownfield is required: How common is it, in transition economies and elsewhere? How important are critical assets for acquisition decisions, relative to the bundle of assets possessed by acquired firms? Which resources do the foreign and local firms contribute to the new operations? To what extend are brownfields planned ex ante, and to what extend do they emerge out of decisions taken after the acquisition?

Appendix: The Cases

Estrin et al. [1997] analyse the direct investment of 10 firms from the three Western countries (UK, USA and Germany) into three East European countries (Poland, Hungary and the Czech Republic) describing their strategies and operations in view of the implications for host economies. The cases represent the main source and host countries and a variety of industries. This paper uses this case material to motivate an advanced theoretical framework on one aspect of entry strategy, the choice between acquisition and greenfield. Figure A1 summarizes the cases.

The case studies focused on both corporate headquarters as well as local subsidiaries.
Interviews were carried out for each case both at headquarters and in the subsidiary. The number of interviews varied according to overall size of the company and size of the subsidiary. On average, about four or five interviews were undertaken in headquarters and six to eight in the subsidiaries. Prior to this, a series of interviews in the three CEE countries with relevant government ministries, academics, and other institutions were undertaken to obtain an initial overview of opinions about the nature and experience of multinational companies in each country. The case study interviews were based on a semi-structured questionnaire to ensure compatibility across cases while allowing sufficient flexibility to incorporate the company specific aspects of each case. Separate questionnaires were developed for the headquarters and subsidiary interviews respectively on the basis of an analytical framework of FDI and transition. Headquarter interviews focused on the decision process leading to the establishment of subsidiaries in general and specifically in CEE, as well as on experiences and headquarter-subsidiary relationships. Interviews in the subsidiaries focused on the experience of establishing and operating the subsidiary, including the subsidiary’s view of headquarters motivation and relations with headquarters.

**Figure A1: The Cases**

<table>
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<tr>
<th>Industry</th>
<th>Acquisition</th>
<th>Brownfield</th>
<th>Greenfield</th>
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<tbody>
<tr>
<td>Food and Drink</td>
<td>Conventional</td>
<td>United Biscuits (UK-HU)</td>
<td>General Bottlers (US-PL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Schöller (D-HU)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Lycett (UK-HU)</td>
<td></td>
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<tr>
<td>Engineering</td>
<td></td>
<td>Guardian (US-HU)</td>
<td></td>
</tr>
<tr>
<td>Bulk Intermediates</td>
<td>Otis (US-CR)</td>
<td>Pyramid (D-CR)</td>
<td></td>
</tr>
<tr>
<td>(Glass / Foam)</td>
<td></td>
<td>VW-Bordnetze (D-PL)</td>
<td></td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td></td>
<td>British Vita (UK-PL)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glaxo (UK-CR)</td>
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</tr>
</tbody>
</table>

Abbreviations: home Countries: D = Germany, UK = United Kingdom, US = USA; host countries: CR = Czech Republic, HU = Hungary, PL = Poland.
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