When more can be less: the perceived value of additional FDI in the same host country

Thomas Hutzschenreuter, Ingo Kleindienst and Boris von Bieberstein

WHU – Otto Beisheim School of Management, Vallendar, Germany

Abstract

Purpose – The aim of this paper is to explore whether and how the depth of a company's operations in a given host country influences how shareholders value further investments in that country. Here, depth means the extent of a company's presence, that is, a company's accumulated foreign direct investment (FDI) in a given country prior to the focal investment.

Design/methodology/approach – This paper develops a theoretical framework postulating that the value of an additional FDI in a given host country decreases to the extent to which it is redundant to a company's accumulated FDI in that country prior to the focal investment. Hypotheses are advanced and tested using a sample that encompasses the FDIs of 91 German MNEs over a 20-year period from 1985 to 2004.

Findings – The empirical analysis shows that there is a negative relationship between depth of operations in a host country prior to the focal investment and the value that shareholders put on that investment. It is also found that the negative relationship is moderated by characteristics of the focal investment, as well as by characteristics of the country in which the additional investment is made.

Research limitations/implications – The theoretical framework developed in this study provides a starting-point for further research on the valuation effect of individual FDIs. This study focuses on cross-border acquisitions mainly because the value effect of such FDI can be calculated using an event study approach. However, it is believed that testing this study's theoretical framework using other forms of FDI would yield interesting results.

Originality/value – This is among the few studies that investigate how a company's path of FDI in a given host country affects the value of additional FDI in that country.

Keywords International investments, International business, Shareholder value analysis, Diversification, International strategy, FDI, Value effect, Sequential perspective

Paper type Research paper

1. Introduction

The past few decades have seen a surge in firm expansion through foreign direct investment (FDI). According to the UNCTAD FDI database, between 1984 and 2009 the volume of FDI inflows measured in US dollars increased from just shy of 57 million to over 110 billion, a compounded annual growth rate of 12.64 percent. In light of its importance, researchers in strategy, international business, finance, and other fields have investigated the relationship between a company's value and its portfolio

The Multinational Business Review
Vol. 19 No. 4, 2011
pp. 332-356

1525-383X
DOI 10.1108/15253831111190171

The authors are grateful for valuable comments and suggestions received from two anonymous *MBR* reviewers, Denis Schweizer, and *MBR* Editor-in-Chief Alan M. Rugman, which have significantly improved this article.

of foreign investments, also called its level of corporate international diversification (see for example, Denis *et al.*, 2002; Gande *et al.*, 2009; Morck and Yeung, 1991).

Somewhat less attention has been paid to the valuation effect of individual investments. Notable exceptions include Doukas and Travlos (1988), who found that when companies invest in countries where they have not previously been active, there is a positive valuation effect, but when they invest repeatedly in the same country abroad, there is no valuation effect; Doukas and Lang (2003), who showed that shareholders gain when companies make FDI in core-related businesses, whereas they lose if FDI is outside the company's core businesses; and Berry (2006), who focused on host-country characteristics and found that when FDI is made in advanced economies, it is valued differently than when it is made in developing countries, depending on a company's prior international expansion, capabilities and experience, and industry-specific knowledge. What has been learned about the company, industry, and host-country characteristics explored in these studies has contributed to a more fine-grained understanding of the valuation effects of individual investments. This study intends to take a further step forward by investigating how a *company's path of foreign investment in a given host country affects the value of additional FDI in that country*.

The tendency of companies to make sequential investments in the same host country has long been the subject of research (Chang, 1995; Chang and Rosenzweig, 1998; Shaver *et al.*, 1997). It is an important topic because there are substantial differences in terms of shareholder valuation of the benefits and costs associated with successive investments. What is surprising is that, as far as we have been able to determine, no research has been conducted on whether a company's history of FDI within a given host country affects the contribution of additional FDI in that country to the market value of a company, and if it does, how. Considering the possible effects of prior FDI on subsequent FDI within the same country is likely to add to our understanding of the value effects of a company's international expansion strategy (Kogut, 1983).

This paper explores whether and how the depth of a company's operations in a given host country influences how shareholders value further investments in that country. Here depth means the extent of a company's presence, that is, a company's accumulated FDI in a given country prior to the focal investment. The hypotheses are tested using a sample that encompasses the foreign investments of 91 German multinational companies over a 20-year period from 1985 to 2004. The empirical analysis shows that there is a negative relationship between depth of operations in a host country prior to the focal investment and the value that shareholders put on that investment. It is also found that that negative relationship is moderated by characteristics of the focal investment, as well as by characteristics of the country in which the additional investment is made. Taken together, the results suggest that shareholder valuation of a company's international expansion strategy within a focal host country depends upon the extent of the unique opportunities that the investing company is able to realize by expanding in that country.

2. Theory and hypotheses development

2.1 The benefits and costs of FDI

Internalization theory suggests that MNEs develop in response to imperfections in the goods or factor markets (Rugman, 1980, 1981). These imperfections act as barriers

to the free trade of goods and services across national borders. As a result, free trade is replaced by second best solutions, such as the MNE, because imperfections in the goods or factor markets create an incentive to bypass them by creating internal markets, that is, bringing under common ownership and control the activities that are linked by the market (Buckley and Casson, 1976). In this view, FDI is a response to some sort of externalities, which the MNE overcomes by internalization. However, given that companies strive to maximize their profits, it is evident that FDI occurs only as long as the benefits of internalization outweigh its costs.

Some researchers have, for example, argued that companies invest in international operations in order to benefit from differences in business cycles and the degree of real asset risk (Rugman, 1976, 1977). Consequently, MNEs may be able to reduce their level of risk, or alternatively, they may achieve higher returns given the same amount of risk (Kim *et al.*, 1993; Michel and Shaked, 1986). Multinational operations may also provide companies with opportunities to benefit from access to cheaper and idiosyncratic resources in a given foreign country, including cheaper labor, better technology, or other country-specific resources (Almeida and Kogut, 1999; Contractor *et al.*, 2003; Porter, 1990). Apart from those market failures, MNEs may also benefit with regard to exogenous governmental regulations, such as tariffs. Given production in the host country, the MNE can avoid the customs duty by replacing exports with on-site production (Rugman, 1980).

In other words, MNEs may enjoy benefits by internalizing markets for certain assets when they are able to organize activities more efficiently than external markets (Buckley and Casson, 1976; Hennart, 1982, 2001). For certain assets, in particular intangible assets, such as information and knowledge, there might even be no proper market. Given that intangible assets, such as technological know-how, marketing skills, or management quality, are based largely on proprietary information, these cannot be sold at arm's length. In order to nevertheless realize the value of these assets, the MNE is driven to create an internal market in order to overcome the failure of an external market to emerge for the sale of these assets (Rugman, 1980). In order to do so, the MNE engages in FDI (Morck and Yeung, 1991, 1992).

Finally, the benefits of multinational operations may grow out of an ability to organize activities as a network. Because they have affiliates in different geographic locations, MNEs can use their internal market to react more flexibly to country-specific environmental shocks and fluctuations by shifting factors of production and distribution across national borders (Allen and Pantzalis, 1996; Tang and Tikoo, 1999). In addition, as Kogut (1983, 1989) has argued, the beneficial effect of international diversification may originate from a company's ability to arbitrage institutional restrictions, to capture information externalities, and to save costs through joint production and marketing efforts.

The potential benefits of international diversification do not come without costs. As an MNE performs more and more FDIs, it also increases its number of subsystems, increasing the complexity with which it must contend (Daft, 2007). The larger and more diverse the portfolio of investments becomes, the greater the management and coordination costs (Contractor *et al.*, 2003; Tong and Reuer, 2007).

Moreover, when a company is active in markets that are geographically distant from its home country, it is likely to experience different economic, institutional and cultural settings (Ghemawat, 2001). Because new investments need to be integrated for

potential benefits to be realized, adaptations in its structures, systems, and processes must be made (Johanson and Vahlne, 1977). This, too, adds complexity and, so, affects coordination costs (Ruigrok and Wagner, 2003; Tong and Reuer, 2007). These include the costs of forging and maintaining communication links between various investments, of exchanging information along those links, of handling transactions between internal and also external partners, and of monitoring managerial decision making to check mismanagement and limit opportunistic behavior (Jones and Hill, 1988; Malone, 1987; Reeb *et al.*, 1998).

2.2 Value-effects of sequential FDI within the same foreign country

Assuming that there are effects of prior FDI on subsequent FDI within a focal host country, there should be substantial differences in the benefits and costs across successive investments in that country (Kogut, 1983). Accordingly, shareholder valuation of a company's international expansion is likely to depend upon the idiosyncratic characteristic of the focal investment.

As argued by Kogut and Chang (1996), a company's initial FDI in a country serves as a platform that provides benefits that the company otherwise would not be able to obtain. This platform FDI can create a string of benefits, such as a location in which to declare profits, an appropriate market in which to concentrate market power, or a low-cost location in which to raise capital (Morck and Yeung, 1991; Ruigrok and Wagner, 2003; Tang and Tikoo, 1999). Subsequent FDI in the same country increases the depth of company operations. Everything else equal, subsequent FDI can be conceptualized as non-platform FDI, because it is unlikely to provide an equivalent set of benefits as the platform FDI. Further, non-platform FDI is, at least partially, redundant, since its characteristics are likely to overlap with at least some of those of the platform FDI and any prior non-platform FDI (Belderbos and Zou, 2009). For example, each FDI is part of a company's configuration of domestic and foreign investments and, so, contributes to the company's ability to organize its activities as a network, enabling it to switch manufacturing operations relatively quickly between locations in response to changing cost differentials and market opportunities. However, the value of an additional investment in that regard is decreased by the number of investments already in place that share the same characteristics. Hence, while an investment in a foreign country increases an MNE's discretion in making value-maximizing decisions, the scope of additional benefits that comes along with each additional non-platform FDI in the same country is likely to decrease; that is, the marginal benefit of subsequent non-platform FDI is likely to decline. In sum, non-platform FDI is sub-additive to a company's FDI already in place (Belderbos and Zou, 2009; Tong and Reuer, 2007).

Similarly, there are also cost differences between platform and non-platform FDI. Platform FDI is more likely to incur higher costs due to the liability of foreignness (Hymer, 1976; Zaheer, 1995). Over time, however, as host-country experience is gained, local practices learned, relationships with local suppliers and governmental agencies built, and local employees recruited, the liability of foreignness diminishes (Petersen and Pedersen, 2002; Zaheer and Mosakowski, 1997). Hence, any costs stemming from the liability of foreignness are lower for later FDI than for earlier FDI. In contrast, coordination costs immediately increase with each investment in a foreign country as complexity increases. As a result, coordination, agency, and transaction costs increase

disproportionally with each additional investment (Geringer *et al.*, 1989; Gomes and Ramaswamy, 1999; Lu and Beamish, 2004).

In sum, it is concluded that the incremental benefits of making an additional investment in a given country decrease while its costs increase disproportionally. Hence:

H1. The value effect of FDI decreases with the depth of a company's operations in that country, that is, with the extent of its already existing FDI in that country.

The implicit assumption underlying this reasoning so far, in particular concerning the arguments of redundancy and sub-additivity, is that the focal investment is within the same business. Thus, it is assumed here that the role of platform FDI is restricted to only the initial FDI. However, an MNE may also choose to invest in the focal country in a different business. In this case, the distinction between platform and non-platform FDI is not so clear-cut. Indeed, investment in different businesses at the same time unifies non-platform and platform FDI characteristics. Still, every investment, including those in different businesses, results in an increase in complexity and, so, inevitably leads to an increase in costs. On the other hand, when a company invests in a different business for the first time in a country in which it is already active, it is the equivalent of creating some kind of industry-specific platform investment. Owing to industry-specificity, the new business investment is likely to provide new and valuable benefits, as prior investments in the country do not fulfill the same roles (Belderbos and Zou, 2009). There are several reasons why benefits not available with already existing FDI become available through business diversification. First, different businesses require different resources. Consequently, by diversifying a company can access resources that are available in the focal country but are unique to the new business, e.g. technology or natural resources (Ahuja and Katila, 2001; Robins and Wiersema, 1995). Second, diversification provides opportunities to further exploit company-specific intangible assets. If a company possesses excess capacity in given assets, it can realize economies of scope, for example, by using particular marketing skills or management qualities that would remain untapped if it did not diversify (Martin and Sayrak, 2003; Montgomery, 1994). Third, diversifying into different businesses is likely to increase an MNE's operating flexibility. Given that a company is already active in a given business outside the focal country, if it diversifies by investing in a different kind of business in the focal country, it increases its discretion to flexibly react to environmental shocks likely to be felt by one business but not the other. Through diversification, that is, through the creation of an industry-specific platform FDI, an MNE adds another dimension to its multinational network, creating the possibility of shifting factors of production and distribution to and from the focal country (Kogut, 1989; Tong and Reuer, 2007).

The more distant businesses are from each other, the more likely they will require different resources and, so, the less likely it is that an existing investment within a country will be able to duplicate the role of an industry-specific platform investment. Consequently, the extent to which diversification creates additional benefits for an MNE within a given foreign country is not a constant, but depends upon the distance between its already existing businesses and any new business in which it invests there. Hence, it is proposed:

H2. The extent to which the industry of the focal FDI differs from that of previous FDI in the country moderates the relationship between value-effect and depth of the MNE's operations in a focal country in such a way that high levels of distance between the focal FDI and the FDI already in place in the focal country reduce the negative value effect attributable to the existing depth of the MNE's operations in the focal country.

Previous research has suggested that country characteristics may have an impact on the relationship between MNE depth of operation in a foreign country and the value effect of an additional FDI in that country (Chan *et al.*, 2010; Davidson, 1980; Globerman *et al.*, 2006; Moeller and Schlingemann, 2005). However, not all drivers of value effect are equally affected by country characteristics.

First, the degree to which platform FDI is able to access the idiosyncratic resources of an entire country is likely to decrease with the size of the country. As Zhao and Zhu (2000) have argued, regional clusters may develop within larger countries, with different regions providing different strategic assets. In the case of particularly large countries, such as the USA and China, additional FDI might be the most expedient way to benefit from their full resource potential (Luo *et al.*, 2008; Porter, 2000). In other words, subsequent FDI made in different regions is only partially redundant, as they only partially duplicate prior investments. Take the case of specific spatially bound resources, for example. Within the USA there are at least two particularly important, high-tech knowledge clusters: Route 128 in the greater Boston area and Silicon Valley, and they are separated by the entire width of the country. Investing along Route 128 may enable an MNE to access qualified personnel and specialized suppliers located there, but it will not enable it to access all of those in Silicon Valley (Almeida and Kogut, 1999). To access the resources pooled in Silicon Valley would require investing there as well. This argument also applies to natural resources, which are often widely dispersed (Luo *et al.*, 2008; Porter, 2000).

Second, the degree to which entry in a country provides an opportunity to enlarge market share in order to exploit company-specific intangible assets depends upon market size, conceptualized as market potential (Davidson, 1980; Morck and Yeung, 1992). As Agarwal and Ramaswami (1992) have argued, countries with high market potential can yield greater long-term profitability, because they make it possible to achieve economies of scale and, consequently, lower marginal costs of production. Moreover, such countries can absorb additional productive capacity, hence motivating and justifying further investments (Globerman *et al.*, 2006).

Third, in contrast to these two drivers of the value effect, the benefit of being able to more flexibly react to country-specific environmental shocks and fluctuations by shifting factors of production and distribution to and from the focal country is reaped primarily through platform FDI. Hence, this benefit is less connected with country size. However, the existence of different regional and local governmental agencies within a large country may provide MNEs with the option to arbitrage institutional restrictions within a single country (Chan *et al.*, 2010; Luo *et al.*, 2008). Summarizing the previous reasoning, it is proposed:

H3. The size of the focal country moderates the relationship between value effect and depth of the MNE's operations in the respective country in such a way

that high levels of country size reduce the negative value effect attributable to the existing depth of the MNE's operations in the focal country.

3. Methodology

The theoretical framework developed in this paper applies to any form of FDI. However, in order to test the hypotheses, this study focuses on cross-border acquisitions. The rationale for doing this is twofold. First, as cross-border acquisitions make up almost 90 percent of total FDI inflows, they represent an important means by which companies increase the depth of their multinational operations (UNCTAD, 2008). Second, a cross-border acquisition is the kind of company-specific event that has been shown to influence a company's stock price. Hence, focusing on cross-border acquisitions enables the capture of the value effect of an individual investment.

3.1 Data

The sample consists of 637 cross-border acquisitions by major German companies between 1985 and 2004. Although most of the studies in the field have used data on the internationalization of companies based in the USA, German companies were chosen for two reasons. First, Germany's proximity to nine other countries with relatively low cultural and psychic distance (Johanson and Vahlne, 1977) ensures that, everything else constant, on average German companies will be more internationalized than US ones with just two close neighbors (Contractor, 2007). Second, there is almost no research in the field that uses a non-US sample. Yet, German companies are likely to be better suited for the analysis of the impact of foreign acquisitions on the stock price, because international acquisitions are, by and large, more important to German companies than to US companies, as cross-border acquisitions represent a bigger part of total company value for German companies.

To compile the sample, data on all of the German companies included in the HDAX segment of the German stock exchange during the observation period were gathered[1]. First, all of the companies doing business during our two-decades long observation window were identified, including those that were later no longer in the index, e.g. due to bankruptcy. This resulted in 195 potential companies, from which 34 companies comprising financial institutions, real estate companies, and purely financial holdings were excluded. Following Vermeulen and Barkema (2002), another 15 companies were excluded – four retailers and 11 cross-listed non-German companies.

The remaining companies were asked to provide their annual reports for the years they were in business during the 20-year period. Because there were 30 companies that had merged or gone out of business during that time, gaps were filled using public sources and archives, such as those at the German national library. This yielded 91 German companies having annual reports or equally complete information for at least five consecutive years.

Using the Thomson M&A database, 645 cross-border acquisitions made by these companies between 1985 and 2004 were identified. Each of those acquisitions was checked for confounding events that may have taken place during the observation window (the day of an acquisition announcement, one day prior to it, and one day after it). This led to the exclusion of eight cross-border acquisitions. In the end a total of 637 cross-border acquisitions were included in the analysis.

The respective annual reports and archival information were analyzed to determine the depth of the multinational operations of a company. For each company, data were extracted on the extent of its existing presence, measured as the number of existing subsidiaries, in each country prior to the period of analysis. The resulting portfolios served as a starting point, with all subsequent expansion steps captured from annual reports and other public information. Any and all new subsidiaries, regardless of whether they were greenfield investments or acquisitions, were included. Divestments of subsidiaries were also tracked. In this way, the complete country-specific portfolio of the subsidiaries of the companies in the sample during the period of analysis was determined.

This complex and time-consuming approach of extracting data on the expansion steps of the sample companies was necessary in order to have a complete country-specific portfolio of subsidiaries for each company. To check the accuracy of the data, each company was asked to verify its portfolio. Eight companies were willing to double-check the data for completeness and accuracy, and in each case all of the company's investments abroad had indeed been included.

3.2 Variables

3.2.1 Dependent variable. The dependent variable, acquisition performance, is measured through an event study analysis. Daily excess market returns of an event window centered on the date of an acquisition announcement were calculated. An event study approach assumes that financial markets are information efficient, so that a company's share price reflects all publicly available information, and share prices change as new information becomes available. Although some studies have documented anomalous evidence on market efficiency (Jensen, 1978; Shiller, 1981), the overwhelming majority of empirical studies provide evidence suggesting that financial markets do indeed respond rapidly to new information (for an overview and extensive discussion see, for example, chapter 17 of Elton *et al.*, 2009).

An acquisition announcement introduces new information into the financial market. The importance of the event may lead to an adjustment in the company's share price, and the impact of the acquisition may, in turn, be assessed by the amount of share price change. Excess market return, also called abnormal return (AR), is calculated as the difference between the actual stock return and the expected normal stock return, had the new information not been introduced into the market. Based on the CAPM, which has traditionally been used to calculate ARs, the AR of stock i for day t (AR_{it}) can be calculated as follows:

$$AR_{it} = R_{it} - (\alpha_i + \beta_i * R_{mt})$$

where R_{it} = return on stock i for day t, R_{mt} = return on the market portfolio for day t, α_i = constant that is estimated during a period prior to the event, and β_i = beta of stock i, reflecting the non-diversifiable risk that is estimated during a period prior to the event.

A 200 trading-day window, ending 30 days before an acquisition announcement, was used for the estimation of the correlation between the value of the company stock and that of the market (Laamanen, 2007), AR_{it} was then summed up over a chosen time window to form cumulative abnormal returns (CAR) for the period of observation for each acquirer.

Research has shown that acquisition-related information may leak out to some market participants earlier than to others (Asquith, 1983). Hence, looking at market response beginning on the day of an official announcement would, of course, miss any action taken by those who had information previous to that. On the other hand, including market changes over too long a period may incorporate changes that are not related to the focal acquisition announcement. Therefore, prior studies were followed and a three-day window was chosen, one day on either side of the day on which an official announcement was made (Carow *et al.*, 2004; Esty *et al.*, 1999; Laamanen, 2007).

Since all the acquiring companies in our dataset are based in Germany and listed on the Frankfurt stock exchange, that domestic stock market was used to calculate abnormal returns (Conn *et al.*, 2005). The historical stock prices and the daily values of the German stock market benchmark (HDAX) were retrieved from the Datastream database, and, where needed, were adjusted for corporate actions, such as capital increases. Finally, confounding effects during the event window that might affect the stock price were controlled for (MacKinlay, 1997; McWilliams and Siegel, 1997).

3.2.2 Independent variable. *Presence* was operationalized as the number of already existing subsidiaries a company had within a given country prior to the focal cross-border acquisition. The exact business portfolio for each company in each country at the time of the acquisition was determined by taking the number of past investments (acquisitions and greenfield investments) and adjusting it for divestments.

3.2.3 Interaction variables. *Target Country Size* refers to the size of the country in which the target is located. As stated previously herein, the size of a country may impact the potential benefits of an investment. Country size was measured by the number of inhabitants, which proxies for both the number of potential customers and the size of the pool of local talent. The data were taken from the CIA World Factbook.

Added Product Scope describes the extent to which the focal acquisition represents a diversification of the acquirer's product portfolio in the focal country. The established measure of Robins and Wiersema (1995) was used, which captures the similarity between industries by examining patterns of technology flow between industry groups. The closest distance between the existing industry codes of the acquirer within the focal country and the added industry code(s) of the target was calculated.

3.2.4 Control variables. Several variables to control for target country characteristics, as well as deal and acquirer characteristics, were included.

Target country controls were *Target Country Size* and *GDP Growth*, *GDP Size*, *Cultural Distance* and *Economic Freedom*. *Target Country Size* was included as control variable, since companies may more quickly succeed in penetrating a smaller country in order to obtain the available valuable options than a larger country. The size of the target country by its population was measured. Moreover, high economic growth in the target country can increase the attractiveness of local companies to foreign companies (Reuer *et al.*, 2004). A country's *GDP Growth* was measured as the growth of its gross domestic product (GDP) in the year of the acquisition (Nadolska and Barkema, 2007). *GDP Size* was also controlled for. *Cultural Distance* was included, since cultural distance between countries makes it more difficult to integrate an acquisition. To measure cultural distance between Germany and the target country, the Kogut-Singh index (Kogut and Singh, 1988) was used, which is based on the work of Hofstede (1980). Acquisition targets in countries with higher *Economic Freedom* may be seen as more attractive (Moeller and Schlingemann, 2005). The measure of economic freedom used

here is based on the *Economic Freedom of the World Index* published by the Cato Institute (www.cato.org/pubs/efw). The index is built from data on government size, legal structure and security of property rights, access to financing, freedom of trade, and regulation of credit, labor, and business.

Deal-related control variables include *Increase in Stake* and *Added Product Scope*. *Increase in Stake* controls for the presence of a pre-existing stake by the acquirer before the acquisition. *Added Product Scope* measures the extent to which the acquisition represents a diversification with regard to the company's previous investments in the focal country. This variable is grounded on the established measure of Robins and Wiersema (1995) and based on the four-digit SIC codes.

Capital Structure, *Company Performance*, *Cultural Diversity*, *Product Diversity*, *Company Size*, and *Tobin's Q* control for characteristics of the acquirer. The *Capital Structure* of the acquiring company was controlled for. A relatively high debt to equity ratio can hinder acquisitions, particularly if they are cash offers. Jensen (1986) has shown that managers of companies with high debt to equity ratios tend to be more prudent when choosing takeover candidates. The *Company Performance* of the acquiring company can also influence acquisition activity and success (Morck *et al.*, 1990). Company performance was operationalized as return on assets (ROA) in the year prior to the focal acquisition. The *Cultural Diversity* of the multinational operations of the acquirer was controlled for. Following Gómez-Mejia and Palich (1997), the average pairwise cultural distance between existing subsidiaries worldwide was calculated using the Kogut-Singh index (Kogut and Singh, 1988). The diversity of the existing product portfolio prior to the announcement was also controlled for. The *Product Diversity* of the portfolio is also based on the relatedness measure of Robins and Wiersema (1995) and the respective four-digit SIC codes per company. The size of the acquirer, *Acquirer Size*, was included, as it has been found to have a direct impact on the return to the acquirer of an acquisition announcement (Moeller *et al.*, 2004). The size of the acquiring company was measured by its number of employees in the year prior to the focal acquisition. In addition, *Tobin's Q* was introduced (Tobin, 1969). Values above 1 indicate unmeasured or unrecorded assets of the company. Values below 1 indicate that the stock market is undervaluing the company.

Finally, most studies control for possible influences of macroeconomic effects on acquisition activity and success. Especially during so-called merger waves, both the level of acquisition activity and the size of ARs may differ significantly from that of other years (Moeller and Schlingemann, 2005). Therefore, year dummies were included. Table I summarizes the variables used in our model, their operationalization and the data sources.

4. Analysis and results

4.1 Results

The sample includes 637 cross-border acquisitions, among which 77 were initial investments, that is, platform FDI, meaning that the company did not have a presence in the respective country prior to the focal acquisition. The remaining 560 cross-border acquisitions were subsequent investments, or non-platform FDI, in that the company already had at least one subsidiary within the respective foreign country prior to the focal acquisition. To test the hypotheses, OLS regression analysis was used. Table II shows the descriptive statistics and the correlations between the variables.

Table I.
Operationalization and sources of variables

Variable	Operationalization	Source
Presence	Acquirer's number of subsidiaries within the host country prior to the focal acquisition	Annual Reports
Target Country Size	Population of the host country in year of acquisition	CIA World Factbook
GDP Growth	Growth of the host country's GDP	International Monetary Fund
GDP Size	Host country's GDP	International Monetary Fund
Cultural Distance	Cultural proximity between Germany and the target country based on the Kogut-Singh index scores (Kogut and Singh, 1988) and Hofstede (1980)	Annual Reports, Kogut and Singh
Economic Freedom	EFW index per country	Cato Institute
Increase in Stake	Difference between acquirer's prior stake in target company and stake after acquisition	Thomson M&A Database, Annual Reports
Added Product Scope	Extent of diversification through the focal acquisition measured against the company's portfolio within the foreign country based on the diversification measure of Robins and Wiersema (1995)	Annual Reports, Robins and Wiersema
Capital Structure	Acquirer debt to total assets in the year prior to the focal acquisition	Datastream, Annual Reports
Performance	Acquirer's return on assets in the year prior to the focal acquisition	Datastream, Annual Reports
Cultural Diversity	Average pairwise cultural distance between the acquirer's existing subsidiaries worldwide	Annual Reports, Kogut and Singh
Size	Number of employees of the acquirer in the year prior to the focal acquisition	Datastream, Annual Reports
Tobin's Q	Acquirer's equity value (= common equity + preferred stock + liabilities) divided by total assets	Datastream
Product Diversity	Diversity of the company's product portfolio based on the relatedness measure of Robins and Wiersema (1995)	Annual Reports, Robins and Wiersema

HDAX (market model; (−1; +1)	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) *Acquisition Performance*	−0.003	0.036	1														
(2) *Presence*	8.123	11.619	−0.0623 (0.1129)	1													
(3) *Target Country Size* [a]	1.182	1.593	0.0004 (0.9910)	0.2861 (0.0000)	1												
(4) *GDP Growth*	0.027	0.022	−0.0023 (0.9526)	0.0552 (0.1439)	0.2366 (0.0000)	1											
(5) *GDP Size*	2314	2946	−0.0180 (0.6467)	0.5043 (0.0000)	0.6654 (0.0000)	0.1274 (0.0007)	1										
(6) *Cultural Distance*	1.157	1.029	0.0722 (0.0661)	−0.2037 (0.0000)	−0.1127 (0.0028)	0.0783 (0.0380)	−0.3379 (0.0000)	1									
(7) *Economic Freedom*	7.507	0.900	0.0073 (0.8541)	0.3118 (0.0000)	0.1185 (0.0018)	0.0318 (0.4049)	0.4825 (0.0000)	−0.3315 (0.0000)	1								
(8) *Increase in Stake*	0.908	0.190	−0.0468 (0.2337)	0.0762 (0.0436)	−0.0572 (0.1299)	−0.0607 (0.1080)	0.1171 (0.0019)	−0.1239 (0.0010)	0.2327 (0.0000)	1							
(9) *Added Product Scope*	1.844	0.799	0.0302 (0.4735)	−0.0902 (0.0260)	−0.0783 (0.0533)	−0.0249 (0.5393)	−0.0676 (0.0957)	0.0393 (0.3324)	−0.0430 (0.2919)	−0.0535 (0.1876)	1						
(10) *Capital Structure*	0.647	0.151	−0.0598 (0.1281)	0.1083 (0.0041)	−0.0117 (0.7579)	0.0153 (0.6860)	−0.0202 (0.5931)	−0.0873 (0.0208)	−0.0510 (0.1807)	−0.1460 (0.0001)	−0.0841 (0.0381)	1					
(11) *Company Performance*	0.081	0.053	−0.1753 (0.0000)	−0.0855 (0.0235)	0.0311 (0.4113)	0.0036 (0.9245)	0.0948 (0.0120)	−0.0625 (0.0979)	0.0539 (0.1571)	0.0889 (0.0184)	−0.0024 (0.9528)	0.0113 (0.7652)	1				
(12) *Cultural Diversity*	1.541	0.660	−0.0742 (0.0590)	0.0465 (0.2182)	0.0867 (0.0216)	0.1360 (0.0003)	0.1446 (0.0001)	0.0021 (0.9568)	0.0332 (0.3838)	0.0802 (0.0335)	−0.0100 (0.8057)	−0.0186 (0.6220)	0.3535 (0.0000)	1			
(13) *Product Diversity*	1.114	0.935	−0.164 (0.0000)	−0.1285 (0.0006)	0.0257 (0.5268)	−0.023 (0.5428)	−0.0432 (0.2531)	0.0084 (0.8234)	0.0328 (0.3850)	0.0826 (0.2773)	0.0976 (0.0287)	−0.2212 (0.0160)	0.305 (0.0000)	0.1436 (0.0000)	1		
(14) *Company Size*	123	143	0.0753 (0.0552)	0.3680 (0.0000)	0.0598 (0.1136)	−0.0174 (0.6453)	0.0103 (0.7853)	−0.0500 (0.1856)	−0.0220 (0.5648)	−0.0486 (0.1987)	−0.1820 (0.0000)	0.3907 (0.0000)	−0.2349 (0.0000)	−0.1115 (0.0031)	−0.4316 (0.0000)	1	
(15) *Tobins Q*	1.064	1.268	−0.0621 (0.1140)	−0.0683 (0.0706)	0.0135 (0.7216)	0.0627 (0.0967)	0.0793 (0.0358)	0.0272 (0.4712)	0.0723 (0.0577)	0.0698 (0.0644)	0.0523 (0.1973)	−0.1853 (0.0000)	0.5060 (0.0000)	0.3261 (0.0000)	0.2764 (0.0000)	−0.2685 (0.0000)	1

Note: [a]Target Country size measured in 100 million inhabitants

Table II.
Correlation matrix

A collinearity diagnosis showed no hints for multicollinearity, since the variance inflation factor for all continuous variables were below five and, hence, lower than the critical threshold value of ten. Moreover, all independent variables that constituted an interaction term were mean-centered to mitigate the potential threat of multicollinearity associated with testing interaction effects (Aiken and West, 1991).

In addition, the sample was tested for heteroskedasticity. A White-test confirmed the existence of heteroskedasticity (Wooldridge, 2002). To obtain consistent estimators, Aiken and West's (1991) suggestion was followed and heteroskedasticity robust Huber-White-Sandwich estimators (Laamanen, 2007) were used. Since the added product scope of an acquisition was assessed as the shortest distance between the industry code of the target and those of the existing country portfolio, using the measure of Robins and Wiersema (1995), the sample for the regression analysis consists of 560 cross-border acquisitions. The 77 platform investments could not be included as, by definition, there was no reference portfolio in the respective country. The OLS regression results for the sample are presented in Table III.

In the base model, CAR was regressed on a proxy of *Presence*, namely, the number of already existing subsidiaries of a company within a given country prior to the focal cross-border acquisition. The other control variables described in the previous section were also included. For *H1* to hold, the coefficient of *Presence* would be expected to be negative and significant. As predicted in *H1*, the coefficient of *Presence* in the

HDAX (market model; (−1; +1))	Control model Coef.	SE	Base model Coef.	SE	Full model Coef.	SE
Presence			−0.00047*	0.00022	−0.00080**	0.00026
Presence × *Target Country Size*					0.00025*	0.00012
Presence × *Added Product Scope*					0.00042†	0.00025
Target country level controls						
Target Country Size	0.00018	0.00099	0.00003	0.00098	0.00001	0.00092
GDP Growth	−0.03584	0.06290	−0.05226	0.06436	−0.06898	0.06445
GDP Size	0.00015	0.00081	0.00109	0.00087	0.00121	0.00086
Cultural Distance	0.00223	0.00180	0.00230	0.00181	0.00221	0.00180
Economic Freedom	0.00195	0.00178	0.00236	0.00178	0.00221	0.00179
Deal level controls						
Increase in Stake	−0.00827	0.00643	−0.00808	0.00645	−0.00871	0.00642
Added Product Scope	0.00208	0.00188	0.00214	0.00188	0.00199	0.00189
Acquiring company controls						
Capital Structure	−0.03473**	0.01298	−0.03320**	0.01270	−0.03083*	0.01277
Company Performance	−0.12153**	0.03955	−0.12947**	0.03915	−0.13041**	0.03807
Cultural Diversity	−0.00134	0.00260	−0.00095	0.00261	−0.00122	0.00262
Product Diversity	0.00030	0.00208	0.00011	0.00208	−0.00005	0.00207
Company Size	0.00001*	0.00001	0.00001**	0.00001	0.00001**	0.00001
Tobins Q	−0.00036	0.00204	−0.00032	0.00206	−0.00029	0.00200
F	2.11		2.31		2.30	
R^2	0.067		0.082		0.096	

Table III.
Impact of presence on CARs (using the standard market model)

Notes: Significant at: *$p < 0.05$, **$p < 0.01$ and †$p < 0.1$; time dummies are ommitted; SE – standard error; intercept not shown

base model of Table III is −0.00047 (or −0.047 percent) and is significant at the 5 percent level.

The full model tested for the influence of company-specific and country-specific variables, respectively. *Added target country size* and *added product scope* were interacted with our proxy for *Presence* and our base model was augmented with these interactive variables. For *H2* and *H3* to hold, the coefficients of both interactive variables would be expected to be positive and significant. Support was found for *H2* and *H3*. The coefficient of *Target Country Size* × *Presence* is positive (0.00025 or 0.025 percent) and significant at the 5 percent level. The coefficient of the interaction of *added product scope* (country portfolio) and *Presence* was also positive (0.00042 or 0.042 percent) and statistically significant at the 10 percent level. In the full model, the coefficient of *Presence* takes the value of −0.08 percent, significant at the 1 percent level.

Although the reported R^2 and the reported effects may appear relatively low, the magnitude is consistent with other studies using ARs as a dependent variable. As Gómez-Mejia (1992) has argued, studies examining the relationship between firm strategy and performance result in relatively low R^2. Haleblian and Finkelstein (1999), for example, using ARs as their dependent variable, reported R^2 ranging from 0.08 to 0.105 and effects ranging from 0.025 to 0.07 percent. To illustrate the economic relevance of our findings consider the following: the mean market value of the companies in the sample is €3,446.2 million. The mean CAR of an initial entry amounts to 0.11 percent, whereas the mean presence prior to an M&A is 8.12 subsidiaries. Accordingly, on average an initial entry into a foreign country results in a positive value effect of €3,790,600. In contrast, an average entry into a country results in a negative value effect of € −22,055,680 (mean CAR of mean presence based on the full model of −0.64 percent). Thus, the difference between an initial investment in a foreign country and an average investment amounts to €25,846,280.

Overall, in accordance with the hypotheses, an existing presence was found to negatively affect the value of cross-border acquisitions, as measured by cumulative AR. Specifically, the value effect of cross-border acquisitions decreases with an increase in presence, measured as the number of existing subsidiaries within a given country prior to the focal cross-border acquisition, even after controlling for other determinants of the value effects of cross-border acquisitions.

4.2 Robustness tests

A number of tests were performed to confirm the robustness of the findings. First, an alternative operationalization of the dependent variable *Acquisition Performance* was applied. The CAR calculated using the equation presented above is adjusted for both market and risk, assuming that the market beta is related to the return of the stock. However, findings in finance suggest that this may not be the case (Fama and French, 1992, 1996; Lakonishok and Shapiro, 1986). An alternative method for calculating ARs that has been used in the strategy (Haleblian and Finkelstein, 1999; Laamanen and Keil, 2008) and finance (Brown and Warner, 1980; Jensen and Murphy, 1990) literature is one that is market adjusted rather than both market and risk adjusted. Accordingly, ARs may be calculated as follows:

$$AR_{it} = R_{it} - R_{mt}$$

As shown in Table IV, the use of this approach does not change the direction and magnitude of the coefficients.

HDAX (only market adjusted; (−1; + 1))	Control model Coef.	SE	Base model Coef.	SE	Full model Coef.	SE
Presence			−0.00046*	0.00023	−0.00077**	0.00028
Presence × *Target Country Size*					0.00024†	0.00012
Presence × *Added Product Scope*					0.00045†	0.00025
Target country level controls						
Target Country Size	−0.00035	0.00098	−0.00049	0.00097	−0.00054	0.00088
GDP Growth	−0.02630	0.06594	−0.04224	0.06785	−0.05836	0.06865
GDP Size	0.00059	0.00081	0.00151†	0.00088	0.00164†	0.00087
Cultural Distance	0.00189	0.00187	0.00195	0.00189	0.00187	0.00188
Economic Freedom	0.00223	0.00185	0.00265	0.00186	0.00244	0.00187
Deal level controls						
Increase in Stake	−0.01090	0.00713	−0.01071	0.00713	−0.01133	0.00707
Added Product Scope	0.00117	0.00192	0.00123	0.00193	0.00110	0.00193
Acquiring company controls						
Capital Structure	−0.03272*	0.01335	−0.03172*	0.01315	−0.02902*	0.01317
Company Performance	−0.13403**	0.04199	−0.14176**	0.04197	−0.14269**	0.04214
Cultural Diversity	−0.00102	0.00262	−0.00072	0.00264	−0.00101	0.00265
Product Diversity	0.00094	0.00297	0.00758	0.00220	0.00060	0.00218
Company Size	0.00001*	0.00001	0.00001**	0.00001	0.00001**	0.00001
Tobins Q	0.00142	0.00216	0.00146	0.00219	0.00150	0.00214
F	1.90		2.07		2.04	
R^2	0.061		0.074		0.088	

Table IV.
Robustness checks (only market adjusted CAR)

Notes: Significant at: *$p < 0.05$, **$p < 0.01$ and †$p < 0.1$; time dummies are ommitted; SE – standard error; intercept not shown

To obviate a potential bias in using the German stock index HDAX as a proxy for returns on the market portfolio, the robustness of our results was checked using an alternative global stock index. In particular, the *MSCI World Index* was applied, which is designed to measure the market performance of developed markets and includes 1,500 stocks from 24 developed countries. The CAR was calculated based on the market model presented above. Again, the results based on the MSCI index were virtually identical in signs, magnitude, and significance level, as shown in Table V.

Alternative event windows, such as (0 to +1) or (−1 to 0), were also experimented with to calculate the CAR. Again, the results confirmed the robustness of the model. Different measures were also used for *Acquirer Performance*, *Target Country Size* and *Cultural Diversity*. Acquirer performance was measured by its return on equity, and the size of the target country by its surface area. Measures of cultural diversity derived from the GLOBE study were used. The results were unchanged.

5. Discussion

The key motivation in conducting the present study was to determine whether sequential FDI within a host country can explain the value effect of an individual investment, and if so, how. The results of the analyses clearly show that a company's cumulative FDI in a host country significantly impact the value effect of an additional investment in that country, and that this effect is moderated by characteristics of the host country, as well as those of the additional FDI itself.

MSCI (market model; (−1; +1))	Control model Coef.	SE	Base model Coef.	SE	Full model Coef.	SE
Presence			−0.00046*	0.00021	−0.00078**	0.00025
Presence × *Target Country Size*					0.00024*	0.00012
Presence × *Added Product Scope*					0.00040†	0.00023
Target country level controls						
Target Country Size	0.00030	0.00099	0.00016	0.00098	0.00013	0.00093
GDP Growth	−0.05344	0.06444	−0.06959	0.06575	−0.08573	0.06596
GDP Size	−0.00002	0.00082	0.00091	0.00088	0.00102	0.00087
Cultural Distance	0.00242	0.00188	0.00248	0.00189	0.00240	0.00188
Economic Freedom	0.00227	0.00186	0.00268	0.00186	0.00252	0.00188
Deal level controls						
Increase in Stake	−0.00966	0.00659	−0.00950	0.00661	−0.01010	0.00659
Added Product Scope	0.00209	0.00194	0.00214	0.00194	0.00201	0.00194
Acquiring company controls						
Capital Structure	−0.04368**	0.0154	−0.04221**	0.01530	−0.03989**	0.01516
Company Performance	−0.13352**	0.04093	−0.14136**	0.04176	−0.14204**	0.04096
Cultural Diversity	−0.00149	0.00263	−0.00111	0.00264	−0.00136	0.00212
Product Diversity	0.00015	0.00213	−0.00039	0.00213	−0.00039	0.00215
Company Size	0.00001*	0.00001	0.00001**	0.00001	0.00001**	0.00001
Tobins Q	−0.00053	0.00213	−0.00050	0.00215	−0.00047	0.00209
F	2.35		2.54		2.50	
R^2	0.082		0.095		0.107	

Notes: Significant at: $^{*}p < 0.05$, $^{**}p < 0.01$ and $^{\dagger}p < 0.1$; time dummies are ommitted; SE – standard error; intercept not shown; CAR calculated based on MSCI World

Table V.
Robustness checks

The results demonstrate that an MNE's presence in a host country represents an additional dimension that helps understanding the value effect of multinational operations expansion. Conventional international strategy research has long been dominated by studies that explore the valuation effects of an MNE's overall level of international diversification. Yet, despite more than 30 years of such work, the findings have been inconclusive (Contractor, 2007; Dos Santos *et al.*, 2008; Verbeke *et al.*, 2009). Another stream of international strategy research has shifted the focus away from the characteristics of MNEs themselves, and their level of international diversification, to the host countries in which they are active. Drawing on trade and economic geography theories, that research stream has focused on country characteristics, and, in particular, on differences between countries, arguing that it is the idiosyncratic characteristics of host countries, such as factor endowments, their cultural, economic, and institutional contexts, and governmental policies that are the critical determinants of the value effect associated with multinational operations expansion (Berry, 2006; Chan *et al.*, 2008; Dunning, 1988; Hofstede, 1980; Pantzalis, 2001). Other studies have explored within-country characteristics, suggesting that subnational regions within a host country vary in the types of economic activities that they support (Porter, 2000) or in other regional endowments such as market size and factor inputs (Venables, 2005). In this context, Chan *et al.* (2010) found that subnational regions constitute relatively homogeneous institutional environments that create both unique opportunities and challenges for foreign affiliates. As such, subnational regions may explain variation in value effects associated with foreign affiliates.

This study contributes to this evolving research stream, providing a finer-grained understanding of the valuation effects of FDI. By focusing on the often sequential nature of FDI within a host country, this study explicitly considers that the value effects of an investment in that country depend on the stock of FDI made by the company in that host country. One of the fundamental questions of international strategy research is what determines the international success or failure of companies. The findings here confirm those of some previous studies, in that they suggest we need to dig deeper and take into account characteristics at multiple levels: company, industry, and country.

Moreover, to date most research has focused on the initial entry into a country and has somewhat neglected subsequent FDI (Luo *et al.*, 2008). In contrast, this study has conceptualized MNE FDI as a dynamic and continuous process. In so doing, the study explicitly heeds Kogut's (1983) words of warning about failing to account for the sequential nature of FDI, which, according to him, is likely to lead to fallacies. MNE expansion may establish a presence in a new host country, or it may increase a company's presence in a previously entered host country. The number of existing subsidiaries within a foreign country prior to a focal investment is used here, rather than the ratio of foreign sales to total sales, an approach that has been highly criticized (Hennart, 2007). This has allows for showing that whether an acquisition in a given host country adds value to a company depends upon the characteristics of that acquisition, those of the host country, and those of the MNE's existing operations there.

While MNEs often try to increase their presence in a host country by repeatedly investing there, as has been shown, increasing the depth of operations by making additional non-platform FDI yields fewer benefits. Moreover, as Lu and Beamish (2004) have argued, costs rise with each additional non-platform FDI. Considering the diminishing marginal benefits and the rising costs, it is evident that, at some point, any benefit will be wiped out by costs. Thus, further investments that increase the depth of operations within the focal country are likely to lead to negative valuation effects (Contractor *et al.*, 2003; Lu and Beamish, 2004). It is calculated that the negative valuation effect amounts to more than €25 million for an average investment.

These conclusions based on the main effect are further corroborated by the interaction effects. Thus, in line with the theoretical reasoning set forth here, the results reveal that it is the prospect of obtaining valuable options that affects the value effects of FDI. By explicitly focusing on the value effect of an additional FDI, the study complements and extends the important work of Allen and Pantzalis (1996), and of Tang and Tikoo (1999). In contrast to those studies, this study focuses on how previous investments in a given host country affect the impact of a given acquisition on the value of a company. Thus, this paper provides important insights on the value effects associated with the international expansion strategy of MNEs.

The study also contributes to the literature on cross-border acquisitions. It is believed that this study is the first to show that the value effect of acquiring a target in a given host country depends upon the extent of an MNE's prior presence in that country. In particular, again consistent with the theoretical reasoning herein, the results show a negative relationship between the value effect of a cross-border acquisition and the extent of a company's existing presence in a given country. Cross-border acquisitions are a quick and efficient way to obtain or to build-up a presence in a target country (Li, 2007; Nadolska and Barkema, 2007). However, once entry into a foreign

country has been gained through an initial FDI, subsequent acquisitions are unlikely to provide a similar level of benefits.

The research to date on the value effect of cross-border acquisitions has yielded inconclusive results (Shimizu *et al.*, 2004; Slangen and Hennart, 2007). Some studies have found that cross-border acquisitions result in positive value effects (Markides and Ittner, 1994; Morck and Yeung, 1992), while others have found negative value effects (Datta and Puia, 1995; Fatemi and Furtado, 1988), and still others have found no effect at all (Biswas *et al.*, 1997; Eckbo and Thorburn, 2000; Moeller and Schlingemann, 2005). The lack of consensus suggests that idiosyncratic characteristics of cross-border acquisitions have an impact on the associated value effect. For example, Markides and Oyon (1998) showed that that effect depends on the governance characteristics of the acquiring company, and Moeller and Schlingemann (2005) that it is affected by the legal system of the target country. The current study has contributed an additional idiosyncratic characteristic that is likely to have an influence on the value effect of cross-border acquisitions, namely, the pre-existing FDI by the company in the host country. Hence, the results indicate that the lack of consensus about the value effects of cross-border acquisitions may be due to a failure to take into account all of the idiosyncratic characteristics of cross-border acquisitions.

Since no single study can embrace all aspects of an issue, there are some limitations to the current study. First, the data rarely included acquisition deal size. In many cases, transaction partners agree not to disclose the value of a transaction, and, thus, reliable information is only available for selected acquisitions of publicly listed companies. Had the study been limited to transactions of known size, or even relative target size, the study would have had a substantially smaller sample that contained only major cross-border acquisitions of listed companies. The study follows Morck and Yeung (1992), who have argued that it is likely the options that can be potentially obtained with an acquisition are more important than the size of an acquired company. A second limitation is that *Presence* was operationalized as the number of already existing subsidiaries a company has within a given country prior to the focal cross-border acquisition. While companies may be setting up a new subsidiary with each FDI transaction, it is also possible that FDI takes place within an already existing subsidiary. As a consequence, the parent company might increase the depth of its multinational operations without increasing the number of its subsidiaries. It is not possible in that case to assess the value effect. A third difficulty is that the study is unable to consider how different subsidiaries were integrated into the structure of the MNEs. That degree of integration is likely to impact a subsidiary's amount of discretion, and the latitude it has to act may be an important determinant in its potential to seize benefits in a host country. Moreover, research has shown that further firm-specific characteristics, e.g. experience of the management with integration of acquired companies, may have impacts on the value effects of cross-border mergers (Verbeke *et al.*, 2009). Finally, the results of the study may be only partly generalized, because it focuses on publicly listed companies, a necessity in order to measure the value effect of foreign investments.

6. Implications and conclusion

This study has theoretically argued and empirically shown that the value of an additional FDI in a given country decreases with the extent of a company's already existing presence in that country. Moreover, it has shown that the negative relationship between additional FDI and previous FDI in a given country is positively moderated by the characteristics of the later FDI and of that country. Future studies may be able

to identify additional characteristics that impact the relationship on which this study has focused. An MNE may have different reasons for increasing the depth of its operations in a country (Hutzschenreuter *et al.*, 2007). It may want, for instance, to enlarge its market share within a given group of customers, or to access an additional customer group. Future research might specifically take into account the motives for individual investments.

As stated previously, the study focuses on cross-border acquisitions mainly because the value effect of such FDI can be calculated using an event study approach. However, the theoretical framework developed in this paper should also be applicable to other expansion modes, greenfield investments for example. It is believed that testing this study's theoretical framework using other forms of FDI would yield very interesting results.

Future researchers may also want to use alternative operationalizations for the independent variable *Presence*. There are several possibilities, including the total value of an MNE's assets, or its market share, in a host country. Using total asset value would make it possible to take into account FDI in already existing subsidiaries, for instance.

Finally, it is likely that the value effect of an FDI depends on whether it is in production facilities, sales, distribution, or R&D. Future research that controls for this is likely to yield still further insights.

Managers have been encouraged to expand the international footprint of their companies to keep up with competitors and to increase shareholder value. Previous research on the MNE has emphasized such international expansion. At the same time, research on the effects of value creation from cross-border acquisitions has produced inconclusive results. The results shown in this paper have important implications for managers considering investment possibilities abroad, as they show that increasing the depth of their operations in a given country might actually decrease company value. It is not suggested that MNEs should categorically refrain from making further FDI in countries where they have invested previously. As was pointed out previously, a case might be made for making additional FDI, for example, when the size of a country is such that multiple investments yield still greater benefits. What the results highlight is the importance of carefully scrutinizing all of the factors related to each and every acquisition. Because more can be less, if the management of an MNE determines, in full knowledge of the possibility of diminishing returns with subsequent acquisitions, that an additional FDI will allow the MNE to access new and valuable benefits, it is incumbent on them to communicate this to the capital market.

Note

1. HDAX belongs to the group of All Share Indices of Deutsche Börse, comprising all shares included in the selection indices DAX, MDAX and TecDAX. HDAX is thus a broader variety of the DAX, covering all sectors and comprising the shares of the largest 110 companies listed in Prime Standard.

References

Agarwal, S. and Ramaswami, S.N. (1992), "Choice of foreign market entry mode: impact of ownership, location and internalization factors", *Journal of International Business Studies*, Vol. 23 No. 1, pp. 1-27.

Ahuja, G. and Katila, R. (2001), "Technological acquisitions and the innovation performance of acquiring firms: a longitudinal study", *Strategic Management Journal*, Vol. 22 No. 3, pp. 197-220.

Aiken, L. and West, S. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage, Newbury Park, CA.

Allen, L. and Pantzalis, C. (1996), "Valuation of the operating flexibility of multinational corporations", *Journal of International Business Studies*, Vol. 27 No. 4, pp. 633-53.

Almeida, P. and Kogut, B. (1999), "Localization of knowledge and the mobility of engineers in regional networks", *Management Science*, Vol. 45 No. 7, pp. 905-17.

Asquith, P. (1983), "Merger bids, uncertainty, and stockholder returns", *Journal of Financial Economics*, Vol. 11 Nos 1-4, pp. 51-83.

Belderbos, R. and Zou, J. (2009), "Real options and foreign affiliate divestments: a portfolio perspective", *Journal of International Business Studies*, Vol. 40 No. 4, pp. 600-20.

Berry, H. (2006), "Shareholder valuation of foreign investment and expansion", *Strategic Management Journal*, Vol. 27 No. 12, pp. 1123-40.

Biswas, R., Fraser, D.R. and Mahajan, A. (1997), "The international market for corporate control: evidence from acquisitions of financial firms", *Global Finance Journal*, Vol. 8 No. 1, pp. 33-54.

Brown, S.J. and Warner, J.B. (1980), "Measuring security price performance", *Journal of Financial Economics*, Vol. 8, pp. 205-58.

Buckley, P.J. and Casson, M. (1976), *The Future of the Multinational Enterprise*, Holmes and Meier, London.

Carow, K., Heron, R. and Saxton, T. (2004), "Do early birds get the returns? An empirical investigation of early-mover advantages in acquisitions", *Strategic Management Journal*, Vol. 25 No. 6, pp. 563-85.

Chan, C.M., Isobe, T. and Makino, S. (2008), "Which country matters? Institutional development and foreign affiliate performance", *Strategic Management Journal*, Vol. 29 No. 11, pp. 1179-205.

Chan, C.M., Makino, S. and Isobe, T. (2010), "Does subnational region matter? Foreign affiliate performance in the United States and China", *Strategic Management Journal*, Vol. 31 No. 11, pp. 1226-43.

Chang, S.J. (1995), "International expansion strategy of Japanese firms: capability building through sequential entry", *Academy of Management Journal*, Vol. 38 No. 2, pp. 383-407.

Chang, S.J. and Rosenzweig, P.M. (1998), "Industry and regional patterns in sequential foreign market entry", *Journal of Management Studies*, Vol. 35 No. 6, pp. 797-822.

Conn, R.L., Cosh, A., Guest, P.M. and Hughes, A. (2005), "The impact on UK acquirers of domestic, cross-border, public and private acquisitions", *Journal of Business Finance & Accounting*, Vol. 32 Nos 5/6, pp. 815-70.

Contractor, F.J. (2007), "The evolutionary or multi-stage theory of internationalization and its relationship to the regionalization of firms", in Rugman, A. (Ed.), *Regional Aspects of Multinationality and Performance*, Elsevier, Amsterdam, pp. 11-29.

Contractor, F.J., Kundu, S.K. and Hsu, C.-C. (2003), "A three-stage theory of international expansion: the link between multinationality and performance in the service sector", *Journal of International Business Studies*, Vol. 33 No. 1, pp. 5-18.

Daft, R.L. (2007), *Organization Theory and Design*, 9th ed., Thomson South-Western, Mason, OH.

Datta, D.K. and Puia, G. (1995), "Cross-border acquisitions: an examination of the influence of relatedness and cultural fit on shareholder value creation in US acquiring firms", *Management International Review*, Vol. 35 No. 4, pp. 337-59.

Davidson, W.H. (1980), "The location of foreign direct investment activity: country characteristics and experience effects", *Journal of International Business Studies*, Vol. 11 No. 2, pp. 9-22.

Denis, D.J., Denis, D.K. and Yost, K. (2002), "Global diversification, industrial diversification, and firm value", *Journal of Finance*, Vol. 57 No. 5, pp. 1951-79.

Dos Santos, M.B., Errunza, V.R. and Miller, D.P. (2008), "Does corporate international diversification destroy value? Evidence from cross-border mergers and acquisitions", *Journal of Banking & Finance*, Vol. 32 No. 12, pp. 2716-24.

Doukas, J. and Lang, L.H.P. (2003), "Foreign direct investment, diversification and firm performance", *Journal of International Business Studies*, Vol. 34 No. 2, pp. 153-72.

Doukas, J. and Travlos, N.G. (1988), "The effects of corporate multinationalism on shareholders' wealth: evidence from international acquisitions", *Journal of Finance*, Vol. 43 No. 5, pp. 1161-75.

Dunning, J.H. (1988), "The eclectic paradigm of international production: a restatement and some possible extensions", *Journal of International Business Studies*, Vol. 19 No. 1, pp. 1-31.

Eckbo, B.E. and Thorburn, K.S. (2000), "Gains to bidder firms revisited: domestic and foreign acquisitions in Canada", *Journal of Financial & Quantitative Analysis*, Vol. 35 No. 1, pp. 1-25.

Elton, E.J., Gruber, M.J., Brown, S. and Goetzmann, W.N. (2009), *Modern Portfolio Theory and Investment Analysis*, 8th ed., Wiley, New York, NY.

Esty, B., Narasimhan, B. and Tufano, P. (1999), "Interest-rate exposure and bank mergers", *Journal of Banking & Finance*, Vol. 23 Nos 2-4, pp. 255-85.

Fama, E.F. and French, K.R. (1992), "The cross-section of expected stock returns", *Journal of Finance*, Vol. 47 No. 2, pp. 427-65.

Fama, E.F. and French, K.R. (1996), "Multifactor explanations of asset pricing anomalies", *Journal of Finance*, Vol. 51 No. 1, pp. 55-84.

Fatemi, A.M. and Furtado, E.P.H. (1988), "An empirical investigation of the wealth effects of foreign acquisitions", in Khoury, S.J. and Ghosh, A. (Eds), *Recent Developments in International Banking and Finance*, Lexington Books, Lexington, MA.

Gande, A., Schenzler, C. and Senbet, L.W. (2009), "Valuation effects of global diversification", *Journal of International Business Studies*, Vol. 40 No. 9, pp. 1515-32.

Geringer, J.M., Beamish, P.W. and daCosta, R.C. (1989), "Diversification strategy and internationalization: implications for MNE performance", *Strategic Management Journal*, Vol. 10 No. 2, pp. 109-19.

Ghemawat, P. (2001), "Distance still matters: the hard reality of global expansion", *Harvard Business Review*, Vol. 79 No. 8, pp. 137-47.

Globerman, S., Shapiro, D. and Tang, Y. (2006), "Foreign direct investment in emerging and transition European countries", *International Finance Review*, Vol. 6, pp. 431-59.

Gomes, L. and Ramaswamy, K. (1999), "An empirical examination of the form of the relationship between multinationality and performance", *Journal of International Business Studies*, Vol. 30 No. 1, pp. 173-87.

Gómez-Mejia, L.R. (1992), "Structure and process of diversification, compensation strategy, and firm performance", *Strategic Management Journal*, Vol. 13 No. 5, pp. 381-97.

Gómez-Mejia, L.R. and Palich, L.E. (1997), "Cultural diversity and the performance of multinational firms", *Journal of International Business Studies*, Vol. 28 No. 2, pp. 309-35.

Haleblian, J. and Finkelstein, S. (1999), "The influence of organizational acquisition experience on acquisition performance: a behavioral learning perspective", *Administrative Science Quarterly*, Vol. 44 No. 1, pp. 29-56.

Hennart, J.-F. (1982), *A Theory of Multinational Enterprise*, University of Michigan Press, Ann Arbor, MI.

Hennart, J.-F. (2001), "Theories of the multinational enterprise", in Rugman, A. and Brewer, T. (Eds), *Oxford Handbook of International Business*, Oxford University Press, Oxford, pp. 127-49.

Hennart, J.-F. (2007), "The theoretical rationale for a multinationality-performance relationship", *Management International Review*, Vol. 47 No. 3, pp. 423-52.

Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-related Values*, Sage, Beverly Hills, CA.

Hutzschenreuter, T., Pedersen, T. and Volberda, H.W. (2007), "The role of path dependency and managerial intentionality: a perspective on international business research", *Journal of International Business Studies*, Vol. 38 No. 7, pp. 1055-68.

Hymer, S. (1976), *The International Operations of National Firms: A Study of Direct Foreign Investment*, MIT Press, Cambridge, MA.

Jensen, M.C. (1978), "Some anomalous evidence regarding market efficiency", *Journal of Financial Economics*, Vol. 6 Nos 2/3, pp. 95-101.

Jensen, M.C. (1986), "Agency costs of free cash flow, corporate finance, and takeovers", *American Economic Review*, Vol. 76 No. 2, pp. 323-9.

Jensen, M.C. and Murphy, K.J. (1990), "Performance pay and top-management incentives", *Journal of Political Economy*, Vol. 98 No. 2, pp. 225-64.

Johanson, J. and Vahlne, J.-E. (1977), "The internationalization process of the firm – a model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies*, Vol. 8 No. 1, pp. 23-32.

Jones, G.R. and Hill, C.W.L. (1988), "Transaction cost analysis of strategy-structure choice", *Strategic Management Journal*, Vol. 9 No. 2, pp. 159-72.

Kim, W.C., Hwang, P. and Burgers, W.P. (1993), "Multinationals' diversification and the risk-return trade-off", *Strategic Management Journal*, Vol. 14 No. 4, pp. 275-86.

Kogut, B. (1983), "Foreign direct investments as a sequential process", in Kindleberger, C. and Andretsch, D. (Eds), *The Multinational Corporation in the 1980s*, The MIT Press, Cambridge, MA, pp. 38-56.

Kogut, B. (1989), "A note on global strategies", *Strategic Management Journal*, Vol. 10 No. 4, pp. 383-9.

Kogut, B. and Chang, S.J. (1996), "Platform investments and volatile exchange rates: direct investment in the US by Japanese electronic companies", *Review of Economics & Statistics*, Vol. 78 No. 2, pp. 221-31.

Kogut, B. and Singh, H. (1988), "The effect of national culture on the choice of entry mode", *Journal of International Business Studies*, Vol. 19 No. 3, pp. 411-32.

Laamanen, T. (2007), "On the role of acquisition premium in acquisition research", *Strategic Management Journal*, Vol. 28 No. 13, pp. 1359-69.

Laamanen, T. and Keil, T. (2008), "Performance of serial acquirers: toward an acquisition program perspective", *Strategic Management Journal*, Vol. 29 No. 6, pp. 663-72.

Lakonishok, J. and Shapiro, A.C. (1986), "Systematic risk, total risk and size as determinants of stock market returns", *Journal of Banking & Finance*, Vol. 10 No. 1, pp. 115-32.

Li, J. (2007), "Real option theory and international strategy: a critical review", *Advances in Strategic Management*, Vol. 24, pp. 67-101.

Lu, J.W. and Beamish, P.W. (2004), "International diversification and firm performance: the s-curve hypothesis", *Academy of Management Journal*, Vol. 47 No. 4, pp. 598-609.

Luo, L.-J., Luo, Y.-Z. and Liu, C. (2008), "Multilevel determinants of subsequent FDI in China", *Thunderbird International Business Review*, Vol. 50 No. 2, pp. 105-20.

McWilliams, A. and Siegel, D. (1997), "Event studies in management research: theoretical and empirical issues", *Academy of Management Journal*, Vol. 40 No. 3, pp. 626-57.

MacKinlay, A.C. (1997), "Event studies in economics and finance", *Journal of Economic Literature*, Vol. 35 No. 1, pp. 13-39.

Malone, T.W. (1987), "Modeling coordination in organizations and markets", *Management Science*, Vol. 33 No. 10, pp. 1317-32.

Markides, C.C. and Ittner, C.D. (1994), "Shareholder benefits from corporate international diversification: evidence from US international acquisitions", *Journal of International Business Studies*, Vol. 25 No. 2, pp. 343-66.

Markides, C.C. and Oyon, D. (1998), "International acquisitions: do they create value for shareholders?", *European Management Journal*, Vol. 16 No. 2, pp. 125-35.

Martin, J.D. and Sayrak, A. (2003), "Corporate diversification and shareholder value: a survey of recent literature", *Journal of Corporate Finance*, Vol. 9 No. 1, pp. 37-57.

Michel, A. and Shaked, I. (1986), "Multinational corporations vs. domestic corporations: financial performance and characteristics", *Journal of International Business Studies*, Vol. 17 No. 3, pp. 89-100.

Moeller, S.B. and Schlingemann, F.P. (2005), "Global diversification and bidder gains: a comparison between cross-border and domestic acquisitions", *Journal of Banking & Finance*, Vol. 29 No. 3, pp. 533-64.

Moeller, S.B., Schlingemann, F.P. and Stulz, R.M. (2004), "Firm size and the gains from acquisitions", *Journal of Financial Economics*, Vol. 73 No. 2, pp. 201-28.

Montgomery, C.A. (1994), "Corporate diversification", *Journal of Economic Perspectives*, Vol. 8, pp. 163-78.

Morck, R. and Yeung, B. (1991), "Why investors value multinationality", *Journal of Business*, Vol. 64 No. 2, pp. 165-87.

Morck, R. and Yeung, B. (1992), "Internalization: an event study test", *Journal of International Economics*, Vol. 33 Nos 1/2, pp. 41-56.

Morck, R., Shleifer, A. and Vishny, R.W. (1990), "Do managerial objectives drive bad acquisitions?", *Journal of Finance*, Vol. 45, pp. 31-48.

Nadolska, A. and Barkema, H.G. (2007), "Learning to internationalise: the pace and success of foreign acquisitions", *Journal of International Business Studies*, Vol. 38 No. 7, pp. 1170-86.

Pantzalis, C. (2001), "Does location matter? An empirical analysis of geographic scope and MNC market valuation", *Journal of International Business Studies*, Vol. 32 No. 1, pp. 133-55.

Petersen, B. and Pedersen, T. (2002), "Coping with liability of foreignness: different learning engagements of entrant firms", *Journal of International Management*, Vol. 8 No. 3, pp. 339-50.

Porter, M.E. (1990), *The Competitive Advantage of Nations*, The Free Press, New York, NY.

Porter, M.E. (2000), "Locations, clusters, and company strategy", in Clark, G.L., Feldman, M.P. and Gertler, M.S. (Eds), *The Oxford Handbook of Economic Geography*, Oxford University Press, Oxford, pp. 253-74.

Reeb, D.M., Kwok, C.C.Y. and Baek, H.Y. (1998), "Systematic risk of the multinational corporation", *Journal of International Business Studies*, Vol. 29 No. 2, pp. 263-79.

Reuer, J.J., Shenkar, O. and Ragozzino, R. (2004), "Mitigating risk in international mergers and acquisitions: the role of contingent payouts", *Journal of International Business Studies*, Vol. 35 No. 1, pp. 19-32.

Robins, J. and Wiersema, M.F. (1995), "A resource-based approach to the multibusiness firm: empirical analysis of portfolio interrelationships and corporate financial performance", *Strategic Management Journal*, Vol. 16 No. 4, pp. 277-99.

Rugman, A.M. (1976), "Risk reduction by international diversification", *Journal of International Business Studies*, Vol. 7 No. 2, pp. 75-80.

Rugman, A.M. (1977), "Risk, direct investment and international diversification", *Review of World Economics*, Vol. 113 No. 3, pp. 489-500.

Rugman, A.M. (1980), "Internalization as a general theory of foreign direct investment: a re-appraisal of the literature", *Review of World Economics*, Vol. 116 No. 2, pp. 365-79.

Rugman, A.M. (1981), *Inside the Multinationals: The Economics of Internal Markets*, Columbia University Press, New York, NY.

Ruigrok, W. and Wagner, H. (2003), "Internationalization and performance: an organizational learning perspective", *Management International Review*, Vol. 43 No. 1, pp. 63-83.

Shaver, J.M., Mitchell, W. and Yeung, B. (1997), "The effect of own-firm and other-firm experience on foreign direct investment survival in the United States, 1987-92", *Strategic Management Journal*, Vol. 18 No. 10, pp. 811-24.

Shiller, R.J. (1981), "Do stock prices move too much to be justified by subsequent changes in dividends?", *American Economic Review*, Vol. 71, pp. 421-36.

Shimizu, K., Hitt, M.A., Vaidyanath, D. and Pisano, V. (2004), "Theoretical foundations of cross-border mergers and acquisitions: a review of current research and recommendations for the future", *Journal of International Management*, Vol. 10 No. 3, pp. 307-53.

Slangen, A. and Hennart, J.-F. (2007), "Greenfield or acquisition entry: a review of the empirical foreign establishment mode literature", *Journal of International Management*, Vol. 13 No. 4, pp. 403-29.

Tang, C.Y. and Tikoo, S. (1999), "Operational flexibility and market valuation of earnings", *Strategic Management Journal*, Vol. 20 No. 8, pp. 749-61.

Tobin, J. (1969), "A general equilibrium approach to monetary theory", *Journal of Money, Credit and Banking*, Vol. 1 No. 1, pp. 15-29.

Tong, T.W. and Reuer, J.J. (2007), "Real options in multinational corporations: organizational challenges and risk implications", *Journal of International Business Studies*, Vol. 38 No. 2, pp. 215-30.

UNCTAD (2008), *World Investment Report*, United Nations Press, Geneva.

Venables, A.J. (2005), "Spatial disparities in developing countries: cities, regions, and international trade", *Journal of Economic Geography*, Vol. 5 No. 1, pp. 3-21.

Verbeke, A., Li, L. and Goerzen, A. (2009), "Toward more effective research on the multinationality-performance relationship", *Management International Review*, Vol. 49 No. 2, pp. 149-61.

Vermeulen, F. and Barkema, H. (2002), "Pace, rhythm, and scope: process dependence in building a profitable multinational corporation", *Strategic Management Journal*, Vol. 23 No. 7, pp. 637-53.

Wooldridge, J.M. (2002), *Econometric Analysis of Cross Section and Panel Data*, MIT Press, Cambridge.

Zaheer, S. (1995), "Overcoming the liability of foreignness", *Academy of Management Journal*, Vol. 38 No. 2, pp. 341-63.

Zaheer, S. and Mosakowski, E. (1997), "The dynamics of the liability of foreignness: a global study of survival in financial services", *Strategic Management Journal*, Vol. 18 No. 6, pp. 439-64.

Zhao, H. and Zhu, G. (2000), "Location factors and country-of-origin differences: an empirical analysis of FDI in China", *Multinational Business Review*, Vol. 8 No. 1, pp. 60-73.

About the authors

Thomas Hutzschenreuter (PhD, Leipzig Graduate School of Management, Germany) is Professor of Corporate Strategy and Governance at WHU – Otto Beisheim School of Management in Vallendar, Germany. His research interests include paths of internationalisation and diversification, strategy processes and strategic change, and timing of strategies. Thomas Hutzschenreuter is the corresponding author and can be contacted at: th@whu.edu

Ingo Kleindienst (PhD, WHU – Otto Beisheim School of Management, Germany) is Assistant Professor of Strategy Processes at WHU – Otto Beisheim School of Management in Vallendar, Germany. His research interests include paths of internationalisation, strategy processes, CEO succession and strategic change, and mergers and acquisitions.

Boris von Bieberstein is a Doctoral Student at WHU – Otto Beisheim School of Management. His interests center on mergers and acquisitions.