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Dancing with a Giant: The Effect of Wal-Mart's Entry into the United Kingdom on the Stock Prices of European Retailers (07-106)

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2007

WORKING PAPER SERIES

ISSUE TWO

NO. 07-002

M A R K E T I N G   S C I E N C E   I N S T I T U T E

MSI Reports

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MSI Reports (ISSN 1545-5041) is published quarterly by the Marketing Science Institute.

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Dancing with a Giant: The Effect of Wal-Mart's Entry into the United Kingdom on the Stock Prices of European Retailers

Katrijn Gielens, Linda M. Van de Gucht, Jan-Benedict E.M. Steenkamp, and Marnik G. Dekimpe

Wal-Mart's 1999 bid for ASDA, Britain's third-largest supermarket group, sent shock waves through the European retail industry. Some firms were hindered, while others were helped by the incursion.

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Report Summary

On June 14, 1999, Wal-Mart announced that it had placed a bid for ASDA Group Plc, Britain's third-largest supermarket group. At the time of the takeover bid, Wal-Mart's sales were about six times those of the British supermarket leader and almost one-tenth of Britain's economic output. The move substantially expanded Wal-Mart's sales in Europe, sending shock waves through the European retail industry. Analysts described the move as a "knockout blow" that would change not only British retailing, but Europe's retailing in general.

The authors examine the effects of the giant player's foreign entry on incumbents operating in that region. They study Wal-Mart's entry into the United Kingdom and develop hypotheses as to why some incumbents are negatively affected, while others might benefit from the entry of a giant, paradigm-shifting competitor. Their measure of performance impact is the change in shareholder value around the time of the announcement—a key metric for evaluating the effectiveness of marketing actions. They test their hypotheses on nearly 100 European retailers, finding support for a conceptual model in which they distinguish between the seriousness of the threat to the incumbents and their capacity to withstand that threat.

What should a company do if a competitor such as Wal-Mart is contemplating entering its home country? By acting proactively, it can mitigate negative performance consequences, while benefiting from the positive implications of a large competitor's entry. The authors find that financial markets can and will place a monetary value on these strategic actions, providing an important link between marketing strategies and financial outcomes.

The authors show that to fully understand the performance implications of major strategic marketing actions, one needs to examine marketing, finance, and strategic management actions as well. None of the three gives the full picture; combined, however, they describe the performance implications of a major, paradigm-shifting entry in the marketplace. ■

Introduction

In many industries, ranging from telecom to banking and from automotive to retailing, firms are increasingly entering foreign markets to maintain their growth and profitability (Yip 2003). Reflecting the importance of foreign market entry, academic research has made important progress in understanding the antecedents of foreign entry decisions such as timing, size, and mode of entry, and the subsequent performance implications for the *foreign entrants* themselves (see Mitra and Golder [2002] for a comprehensive review of the literature).

However, significant gaps in our understanding of foreign market entry remain. First, little is known about the performance implications for local incumbents. So far, research taking the incumbent perspective was mostly conducted at an aggregate country or industry level, ignoring firm-specific differences (e.g., Liu et al. 2000). Micro-level studies, in contrast, dealt primarily with one specific outcome, such as overall productivity or R&D spillovers (see, e.g., Görg and Greenaway [2004]). As such, no complete picture can be drawn of all the value-destroying or -enhancing powers at work. Also, questions of why some firms are hurt (or gain) more than others have been only partially addressed.

Second, most foreign market entry studies have examined firms of comparable size. Rarely have researchers studied the effect of such an entry by a giant company that can significantly reshape industry relations (Aitkin and Harrison 1999) by "pioneering a new model of competitive advantage by using its huge size to develop and exploit tangible and intangible assets in novel ways" (Bryan and Zanini 2005, p. 48).

Third, scant attention has been given to the effect of entry in one national market on the performance of firms in *other* countries in that region. Given the growing interconnectedness of countries, such cross-effects are becoming increasingly important, from both an academic (Gielens and Dekimpe 2007; Mitra and Golder 2002) and a managerial (Yip 2003) perspective.

Fourth, existing research on international entry has mostly measured performance with traditional measures such as sales (growth) and market share. Although these are important metrics, marketing scientists increasingly recognize the importance of financial performance metrics (Srinivasan and Bharadwaj 2004; Srivastava, Shervani, and Fahey 1998).

The purpose of this paper is to address these gaps in the foreign market entry literature by studying the performance implications for local (British) incumbents of the entry of a giant company (i.e., Wal-Mart) in the United Kingdom, as well as the performance implications on retailers in other European countries, using shareholder value as a performance metric. We do so using the financial event-study methodology (Srinivasan and Bharadwaj 2004). With over $300 billion in annual revenues, Wal-Mart is clearly the giant among the world's retailers. The event we study is Wal-Mart's 1999 entry into the United Kingdom through its takeover of Britain's number three retailer, ASDA. This takeover offers an important test market for our hypotheses. Through the $11 billion ASDA acquisition, Wal-Mart's international sales more than doubled, and the entry was widely seen as a bridgehead leading toward the rest of Europe (Dawley 1999). We study the stock market reaction for approximately 100 key U.K.-based and continental European listed retailers and test hypotheses on why some retailers were affected more than others.

The Wal-Mart Phenomenon

With sales of $316 billion in 2005, Wal-Mart is by far the world's largest retailer. The revenues of its nearest rival, France's Carrefour, are less than one-third of Wal-Mart's, while revenues of the other retailers in the global top five (Home Depot, Germany's Metro, and Britain's Tesco) are one-fourth or less. The usually staid *Economist* (2006) refers to Wal-Mart as "the behemoth from Bentonville," while a special *BusinessWeek* report wonders whether Wal-Mart is becoming too powerful (Bianco and Zellner 2003). Moreover, Wal-Mart continues to expand both nationally and internationally. This evolution has important consequences for suppliers as well. Not only does Wal-Mart's size vastly exceed their own size, it also accounts for an increasing share of their business. Companies such as Del Monte (26%), Mattel (20%), Kellogg's (17%), and Sara Lee (13%) rely increasingly on Wal-Mart as primary retail outlet.

Academic research on Wal-Mart has taken three directions. A first stream examines the role Wal-Mart plays in the power distribution between manufacturers and retailers. Ailawadi, Borin, and Farris (1995) documented the huge impact Wal-Mart has on the (alleged) power shift from manufacturers to retailers. After excluding Wal-Mart from their sample, their original conclusion that retailers are better off than manufacturers was no longer supported in several product markets. They concluded that even though there is strong support for the growing power of Wal-Mart, many other retailers have actually become weaker relative to their suppliers.

Bloom and Perry (2001) investigated whether Wal-Mart uses its power to squeeze concessions from its suppliers, or whether these suppliers actually benefit from their association with Wal-Mart. Ceteris paribus, smaller suppliers with Wal-Mart as a primary customer were found to perform more poorly financially. Still, large-share suppliers to Wal-Mart derive more profits from their market share than suppliers achieving this high share through other retailers. Dukes, Gal-Or, and Srinivasan (2006) showed analytically that manufacturers' complaints of lower profits because of the growing channel dominance of power retailers such as Wal-Mart may not be valid. Even though manufacturers may be forced to charge Wal-Mart lower wholesale prices, they could experience higher total profits by negotiating better terms with other, less efficient, and less powerful retailers. Raju and Zhang (2005), in turn, discuss pricing mechanisms that suppliers can use to profitably coordinate the channel in the presence of a dominant retailer.

A second stream of research has focused on the micro-level implications for incumbent local retailers when Wal-Mart enters their geographical market. Stone (1995) showed that local stores whose assortments did not overlap with Wal-Mart's benefited from the extra customers pulled into the trading zone. Stores selling the same goods as Wal-Mart, however, lost a substantial fraction of their sales. Singh, Hansen, and Blattberg (2006) studied the entry of Wal-Mart on the sales of a traditional supermarket in a local market. The incumbent supermarket was found to lose 17% in volume. The bulk of this loss was due to fewer store visits that customers made to that store, with a much smaller impact attributed to a reduction in the average basket size per visit.

A third research stream has focused on the impact of Wal-Mart's growth on retail prices and consumer welfare. Hausman and Leibtag (2005) observe lower average prices in geographic markets with Wal-Mart stores. Not only does Wal-Mart charge lower retail prices, other players also lower their prices to remain competitive. Basker (2005) analyzed the prices of 10 items in 165 U.S. cities before and after the entry of Wal-Mart. For many items, short-run price reductions of 1.5%–3% and long-run reductions up to four times as large were found. Chen (2003) proposed an alternative explanation for the lower retail prices following the emergence (entry) of a dominant retailer. He argues that prices may fall because suppliers, in an attempt to counter the rise of the dominant retailer, may actually reduce the price to other retailers (in contrast to the higher manufacturer price in the aforementioned Dukes, Gal-Or, and Srinivasan [2006] model).

In sum, some academic work has started to consider the implications of Wal-Mart's entry on a variety of dimensions, such as incumbent sales, retail margins, and/or prices. We extend prior research that focused on the impact on local U.S. markets by examining a foreign entry where Wal-Mart encountered other global players. We study the impact on the performance not only of local retailers in that country, but also of retailers in other, nearby countries. Finally, no study has considered the *combined* or net effect across the different performance dimensions mentioned above. The business community's best estimate of this net effect on the performance of an incumbent retailer is the resultant change in the latter's shareholder value, as expressed in the financial metric of its stock price (Srivastava, Shervani, and Fahey 1998).

Conceptual Framework

Shareholder value as performance metric

Scholars in finance have long argued that the market value of the firm is the net present value of all future cash flows expected to accrue to the firm. This view has gained widespread acceptance in the business literature (McWilliams and Siegel 1997). Importantly, it has been argued that shareholder value is the ultimate metric for studying company performance in a competitive marketplace (Srivastava, Shervani, and Fahey 1998). It is also the performance metric that guides the decisions of top management (Lehmann 2004).

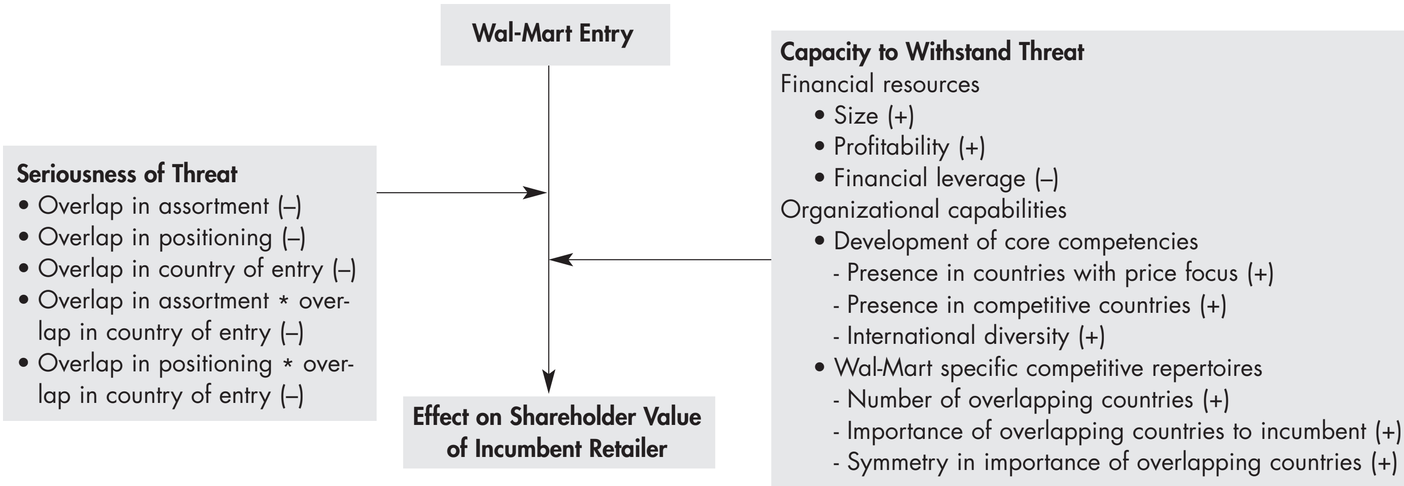
Srivastava, Shervani, and Fahey (1998) propose that shareholder value is inherently driven by four components, viz., the expected *level* of cash flows, the expected *timing* of these cash flows, the expected *risk* associated with them, and the expected *residual* or "extra" *value* of the firm, over and beyond expected cash flows generated in a planning horizon. The residual value reflects, for example, the market's assessment of the likelihood of the firm being taken over (which typically involves a stock-price premium) or chances of long-term failure (bankruptcy, which leads to a stock-price discount). Strategic moves by a company may affect its own as well as its competitors' shareholder value through changes in any of these components.

Effect of Wal-Mart's entry on the performance of European retailers

The entry of a paradigm-shifting "behemoth" retailer in the United Kingdom could have both negative and positive effects on the performance (i.e., shareholder value) of European retailers. On the negative side, Wal-Mart's entry would exert a downward pressure on the prices other retailers can charge, their number of store visits, and/or their average basket size (Singh, Hansen, and Blattberg 2006). Wal-Mart's entry could also impact wholesale prices. Being such an important customer, it can demand and receive the best wholesale prices. Suppliers may seek compensation by charging higher prices to Wal-Mart's competitors (Dukes, Gal-Or, and Srinivasan 2006). The risk of future cash flows may increase because the competitive landscape is altered dramatically. The residual value may drop because of increased risk of bankruptcy.

However, Wal-Mart's entry might also have positive effects on the performance of incumbents. A shift in the power distribution between ASDA and its suppliers could have a cascading effect on suppliers' negotiating position with other supermarkets (Bloom and Perry 2001). Lower wholesale prices for incumbents could also result because of deliberate attempts by suppliers to curtail Wal-Mart's power (Chen 2003). Moreover, the arrival of Wal-Mart may be seen as a prelude to European-wide retail productivity increases and cost decreases, similar to those in the

Figure 1
Conceptual Framework



United States (Johnson 2002; Shahrur 2005). Suppliers collaborating with Wal-Mart are often forced to implement various efficiency-improving strategies to continue their relationship, which may in turn benefit their other corporate customers. Rival retailers may also enjoy "spillovers" from Wal-Mart by imitating its methods or (in the longer run) recruiting employees trained by Wal-Mart and steeped in its know-how. After all, more than half of Wal-Mart's productivity edge over its U.S. competitors stems from managerial innovations and training (Johnson 2002). Finally, performance may increase due to a rise in the residual value if the ASDA takeover increases the probability that they will be acquired as well—either by Wal-Mart or by another retailer (Shahrur 2005). In the years preceding the ASDA takeover, the volume of acquisitions in the European retail sector had already quadrupled. The arrival of Wal-Mart could be seen as an impetus for a next round of consolidation (Gurdjian et al. 2000).

In sum, Wal-Mart's acquisition of ASDA could have both positive and negative performance implications for its rivals. For some retailers, the effect of Wal-Mart's entry could be negative; for others, it might be negligible, while for other retailers, the effect might be positive. What can explain the cross-sectional differences in the expected impact on the performance of rival retailers? Inspired by the strategy literature (Chen 1996), we posit that the effect of the entry of Wal-Mart on an incumbent systematically varies depending on (1) the *seriousness of the threat* to the retailer in question, and (2) the retailer's *capacity to withstand the threat*. These two drivers are multifaceted constructs in that specific components can be distinguished as to the seriousness of the threat posed by Wal-Mart's entry and the incumbent's ability to withstand that threat. This provides a rationale for the likely wide range of stock-price reactions.

Figure 1 gives our conceptual framework, delineating these factors and the direction of their expected moderating effect.

Seriousness of the threat

The more serious the threat the entry poses to a particular incumbent retailer, the more negative its performance implications. Competition theory holds that new entrants pose the greatest threat to competitors with which they exhibit high market overlap (Chen 1996). Chen and Miller (1994) refer to this as "the centrality of the attack" (p. 89). Market overlap can occur on different dimensions, including product assortment, positioning, and geographic location.

Overlap in Assortment. Retailers carrying assortments that overlap Wal-Mart's to a great degree will be more vulnerable. Wal-Mart's logistical efficiency and global purchasing power allow it to offer its assortment at considerably lower prices than most of its competitors. To stay competitive, these competitors are forced to reduce their prices, thereby reducing their margins and cash flows. The more closely Wal-Mart competes with the existing outlets, the greater the downward pressure on the latter's prices (Hausman and Leibtag 2005). On the other hand, Wal-Mart's downward pressure on prices generates huge cost savings for households. In the United States alone, Wal-Mart generates annual savings of $2,300 for each household (Samuelson 2006). Consumers can spend these savings on other items, benefiting retailers that do not suffer from much assortment overlap with Wal-Mart.

Overlap in Positioning. A central concept in Wal-Mart's strategy is its everyday low pricing (EDLP), backed by an aggressive marketing strategy with slogans such as "Dare to Compare" and "Low Prices Always." Retailers with a similar EDLP positioning would be expected to suffer more from Wal-Mart's entry. A direct price comparison is easier to make with another EDLP store than with a Hi-Lo store, and is likely to be unfavorable for EDLP retailers. Moreover, incumbents with a similar EDLP positioning have been found to respond more aggressively to Wal-Mart entries (Simpson 2001). Price reductions in an (often unsuccessful) attempt to match Wal-Mart's prices tend to reduce their expected performance.

Overlap in Country of Entry. Wal-Mart entered a specific geographical entity, viz., the United Kingdom. Despite current trends toward globalization, retailing still has an important local component. We submit that retailers who are active in the U.K. are more directly threatened by the entry of Wal-Mart than retailers without operations there.

The importance of local competition in the retailing industry also suggests that overlap in assortment and overlap in positioning between Wal-Mart and an incumbent retailer are especially threatening if the incumbent is active in the United Kingdom. Thus, we hypothesize that overlap in assortment and overlap in positioning interact with overlap in country of entry.

Retailers differ not only in the extent to which the entry of Wal-Mart poses a serious threat to them, but also in their capacity to *withstand* the threat. The lower an incumbent's capacity to withstand the new threat, the more its performance will be adversely affected. An organization's ability to withstand a threat depends on both its financial resources and its organizational capabilities (Day 1997). Neither gives the full picture, but together they describe how retailers differ in their capacity to withstand the threat posed by Wal-Mart's entry.

Capacity to withstand threat: Financial resources

We consider three components of financial capacity or resilience commonly employed in the finance literature: size, cash-flow generation, and the extent of financial leverage.

Retailer Size. In general, larger retailers have more resources and will be better able to withstand the entry of Wal-Mart because they have already demonstrated their competitiveness through prior growth (cf. Barkema and Vermeulen 1998). Larger retailers are also more powerful and hence better able to negotiate more favorable conditions with their suppliers.

Profitability. Incumbents with a healthy cash-flow margin are better poised to withstand the increased competition. They have more room to respond to the low-price strategy of Wal-Mart and to invest in strategic changes. As argued in Miller and Chen (1996a), "Large and wealthy firms may be able to buffer themselves from external threats" (p. 1214). They have the financial resources to try out new strategic responses, which might be necessitated if their previous competitive repertoire is ineffective when a paradigm-shifting competitor enters the market (Miller and Chen 1996a). Their chances of bankruptcy are also more remote.

Financial Leverage. Highly leveraged firms have substantial periodic debt payments. As such, they are more likely to lack the financial flexibility to make the strategic investments needed to respond to a significant change in the competitive environment due to Wal-Mart's entry (Chevalier 1995). Liquidity-constrained firms also charge higher prices than less constrained firms (Chevalier and Scharfstein 1996), making it more difficult for them to remain competitive once a dominant low-cost retailer enters (Hausman and Leibtag 2005). Finally, their probability of bankruptcy is higher, which will negatively affect their residual value.

Capacity to withstand threat: Organizational capabilities

Due to their specific past experiences, we hypothesize that some retailers have learned distinct organizational capabilities that will allow them to be more likely to survive and prosper in the new competitive environment than other retailers. Accumulated experiences can span a wide variety of learnings, but not all of these will be equally helpful. Two key insights from the organizational learning literature are: (1) the most significant forms of learning are not product- or technology-specific, but are about ways of doing business, and (2) learning occurs best through direct experience (Easterby-Smith 1997). Which key organizational learnings of "doing business," based on direct experience, are implicated in the Wal-Mart case? First, a company may have developed specific organizational skills or *core competencies* that are especially relevant in the battle with Wal-Mart. Moreover, the retailer may have acquired *Wal-Mart-specific competitive repertoires*, based on prior contact with Wal-Mart in other countries.

Core Competencies. Core competencies are "the collective learning in the organization" (Prahalad and Hamel 1990, p. 82). Strong and successful firms have developed core competencies on which they can draw when encountering new and unanticipated circumstances. In the battle with Wal-Mart, three core competencies appear especially relevant: (1) the extent to which the incumbent retailer has built up experience in countries with a price focus, (2) its exposure to the rigor of competitive countries, and (3) its international diversity.

Countries with Strong Price Focus. Incumbent retailers accustomed to operating in countries dominated by price fighters have learned either to match competing price offers or to differentiate themselves (Liang 2003). Moreover, to these incumbents, the new entrant (i.e., Wal-Mart) does not offer a totally new service or product to the market. Incumbents that have considerable experience in countries with a strong price focus should thus expect less negative effects on their performance than retailers with little experience in price-driven markets.

Competitiveness of Countries. Strategy researchers have pointed to the importance of the competitiveness of the countries in which the firm already operates for its ability to compete in the global marketplace (Porter 1990). Countries differ dramatically in the competitiveness of their business environment. Retailers active in competitive countries sharpen their core competencies because of challenges posed by these markets. They continue to develop their organizational competencies, being continuously challenged by strong rivals, aggressive suppliers, and demanding customers. Retailers in protected countries have had less opportunity to develop and refine their competitive skills. Hence, they may not have the necessary experiences to deal with the threat of what is arguably the most competitive retailer in the world.

International Diversity. International diversity is an important concept in theories of organizational learning of competencies (Barkema and Vermeulen 1998). Retailers who operate in multiple national settings have been exposed to diverse ways of competing and to different cultural, economic, legal, and institutional contexts. They are forced to develop strategic flexibility and an array of marketing competencies to create competitive advantages vis-à-vis various rivals in different countries. These qualities benefit the retailer when faced with a rival like Wal-Mart that has the potential to upset established patterns of rivalry (Baum and Korn 1996). Miller and Chen (1996b) found that organizational learning about a broad array of competitive actions positively impacts subsequent firm performance, especially in times of high market uncertainty. From a financial perspective, international diversity acts as a "portfolio," stabilizing firm earnings and increasing the chances of survival (Zahra, Ireland, and Hitt 2000).

Wal-Mart-specific Competitive Repertoires. The larger the stock of accumulated experiences of previous encounters with Wal-Mart, the greater the retailer's organizational capacity to withstand the threat posed by Wal-Mart's entry into the United Kingdom. In this context, the concept of competitive repertoire is useful. It refers to a firm's ability to initiate a set of concrete marketing actions to attract, serve, and keep customers in the face of competitive threats. Competitive repertoires are very much shaped in the context of *direct* and *extensive* contact with rivals (Miller and Chen 1996b, p. 420). A retailer that has had direct and extensive contact with Wal-Mart in other countries is more likely to have learned effective competitive repertoires to withstand Wal-Mart's threat. *Direct* contact with Wal-Mart is reflected by overlap in countries, while *extensiveness* of contact is reflected in the importance of these countries to the incumbent and the symmetry of the stakes that both retailers hold in those countries.

Number of Overlapping Countries. Organizational learning theory indicates that if a firm has already encountered a competitor in other countries, it may have learned through its prior encounters how to best cope with this competitor (Gimeno and Woo 1999) and obtained some insight into which strategies work and which do not. As such, it should be more likely to avoid costly mistakes and do some things well (Baum and Korn 1996). Cash flows of these companies are expected to suffer less from Wal-Mart's entry.

Importance of Overlapping Countries to Incumbent. Simply meeting each other in different countries is not the entire story. After all, if the contact is only in peripheral, unimportant countries, learning should be much less, compared to when a retailer encounters Wal-Mart in its key countries. Indeed, firms are more aware of their competitors in countries on which they are highly dependent (Chen and McMillan 1992) and will monitor them more closely. As such, the development of Wal-Mart-specific competitive repertoires is higher when previous experience is built up in countries that are important to the incumbent.

Symmetry in Importance of Overlapping Countries for Wal-Mart vs. Incumbent. A final component is the symmetry in relative country importance. The extent of learning about a competitor is highest when the relative importance of various countries is symmetric (Gimeno 1999). If there is low symmetry, i.e., countries where the incumbent meets Wal-Mart are either unimportant to the incumbent while being important to Wal-Mart or vice versa, organizational learning about Wal-Mart will be more limited. In the first case, incumbent learning will be lower because there is little at stake and hence less motivation to learn (Chen 1996), while in the latter case, Wal-Mart's best practices may not be fully exhibited (cf. Gimeno 1999).

Method

We use event-study methodology to calculate, using daily data, the cumulative abnormal returns for the rival retailers as a result of Wal-Mart's acquisition of ASDA. These cumulative abnormal returns are calculated over a time window centered on the announcement day of the takeover. Next, we cross-sectionally relate these abnormal returns to the aforementioned characteristics describing the seriousness of the threat and the capacity to withstand the threat.

Event-study methodology

Event-study methodology is a technique for measuring the effect of new information on the market value of a firm's stock. It is based on the premise of market efficiency. According to the semi-strong version of the efficient-market hypothesis, the stock price accurately reflects all publicly available information about the firm, including new value-relevant information that has just been made public. Under this assumption, when new information arrives, the market price of the firm's stock immediately and unbiasedly changes to reflect this new information (see Brown and Warner [1985] for a detailed exposition). This assumption is less stringent than it may appear. In fact, even when not all *individual* investors and analysts have all the relevant information, *markets* exhibit information aggregation behavior, through which they act as if they were fully informed and rational (Mizik and Jacobson 2004; Surowiecki 2004).

When an event occurs, i.e., when new information is made public, investors update their expectations about the aforementioned four components of shareholder value (level, timing, and risk of future cash flows, and residual value) and react by buying or selling shares of firms they feel will be affected. Hence, if Wal-Mart's entry is expected to impact the performance of other retailers by decreasing or increasing their expected revenue stream, e.g., by changing the cost structure in the industry or by affecting wholesale and/or retail prices, investors will bid the price down or up in anticipation of lower or higher future cash flows and residual value (Hosken and Simpson 2001).

The continuously compounded daily return in the stock price between $t - 1$ and t is given by:

$$R_{it} = \ln\left(\frac{P_{i,t}}{P_{i,t-1}}\right), \qquad (1)$$

where $P_{i,t}$ is the stock price of retailer i at time t. R_{it} reflects the market's expectations of the long-term financial impact of all relevant information that became available between $t - 1$ and t. By choosing the time window in such a way that it captures the announcement of Wal-Mart's takeover bid (while not including information on other, potentially confounding events), an objective indication of the event's financial consequences is obtained.

The raw stock return R_{it} on the event day (i.e., the day Wal-Mart's bid for ASDA was announced) is compared to $E(R_{it})$, the return expected if the event had not taken place. In line with Brown and Warner (1985), we use the market model to obtain estimates of a retailer's expected returns. According to this model, the expected return $E(R_{it})$ is expressed as a linear function of the returns on a benchmark portfolio of marketable assets R_{mt}:

$$E(R_{it}) = \hat{\alpha}_i + \hat{\beta}_i R_{mt}, \qquad (2)$$

where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are the OLS estimates obtained from regressing R_{it} on R_{mt} over an estimation period preceding the event. In our setting, the estimation sample will cover 10 to 260 days prior to Wal-Mart's takeover bid. The difference e_{it} between the observed actual return and the estimated expected return is a measure of "Abnormal Return" (*AR*) for retailer *i* at time *t*:

$$e_{it} = R_{it} - E(R_{it}) = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}). \quad (3)$$

This abnormal return, or prediction error, is the unexpected change in the stock price caused by the new information arriving in $[t-1, t]$. e_{it} provides an unbiased estimate of the future earnings generated by the event, and is a random variable with zero mean (Fama 1970). Firms that are expected to suffer greatly from Wal-Mart's entry will experience large, negative, abnormal returns, while e_{it} will be small (or positive) for retailers that are expected to be little affected (benefit) by the event.

Thus far, we have assumed that there is no information leakage prior to the event day, and that all information is completely disseminated during the event day. In practice, these assumptions may be violated (McWilliams and Siegel 1997). As soon as information leaks, the event period should include one or more days prior to the announcement so that abnormal returns associated with the leakage are also captured. Similarly, an allowance can be made for dissemination effects on some days following the announcement. When leakage (for t_1 periods before the event) and/or dissemination over time (for t_2 time periods after the event) occur, the abnormal returns for a firm are aggregated over the "event period" $[-t_1,t_2]$ into a cumulative abnormal return (*CAR*) to draw overall inferences on the event of interest:

$$CAR_i[-t_1,t_2] = \sum_{t=-t_1}^{t_2} e_{it}. \quad (4)$$

The extent of information leakage and dissemination is an empirical issue.

Because the event study is conducted across *K* different retailers, this *CAR* can be averaged into a cumulative average abnormal return (*CAAR*):

$$CAAR_i[-t_1,t_2] = \sum_{i=1}^{K} CAR_i[-t_1,t_2]/K. \quad (5)$$

We assess the significance of the *CAAR* through the Patell (1976) statistic, in which the abnormal returns are standardized by the standard deviation of the estimation-period abnormal returns. This reduces the effect of stocks with large-return standard deviations.

Test of moderator effects

We test our hypotheses on the differential impact of Wal-Mart's entry on incumbent retailers through a cross-sectional regression on the cumulative abnormal returns:

$$\begin{aligned} CAR_i[-t_1,t_2] &= b_0 + b_1 OA_i + b_2 OP_i + \\ &\quad b_3 OCE_i + b_4 OA_i{*}OCE_i + b_5 OP_i{*}OCE_i \\ &+ b_6 Size_i + b_7 Profit_i + b_8 FinLev_i \\ &+ b_9 PriceFocus_i + b_{10} Comp_i + b_{11} IntDiv_i \\ &+ b_{12} GO_i + b_{13} IMP_i + b_{14} Symm_i + \varepsilon_i. \end{aligned} \quad (6)$$

OA, *OP*, and *OCE* denote the seriousness-of-threat constructs overlap in assortment, positioning, and country of entry (U.K.), respectively. *Size*, *Profit*, and *FinLev* indicate the financial-resources constructs—retailer size, profitability, and financial leverage. *PriceFocus*, *Comp*, and *IntDiv* indicate the core competencies constructs—presence in countries with a strong price focus, presence in competitive countries, and international diversity. Finally, *GO*, *IMP*, and *Symm* are the Wal-Mart-specific competitive repertoire variables—global geographic overlap between the incumbent and Wal-Mart, importance of the overlapping countries, and symmetry in importance. Following Jain (1982), standardized CAR_i are used as dependent variable to reduce heteroskedasticity problems that might arise when the estimated variances of the market-model residuals vary across different retailers. To correct for a potential violation of the statistical-independence assumption induced by the fact that some retailers have the same country of origin, a generalized estimation equations (GEE) approach is used (Liang and Zeger 1986).

Data

The ASDA takeover

In a surprise move, Wal-Mart announced on June 14, 1999, that it placed a bid for ASDA Group Plc, Britain's third-largest supermarket group, offering to buy the company for £6.72 billion ($10.8 billion), corresponding to a value of 220 pence per share (*Wall Street Journal Europe*, June 15, 1999). At the time of the takeover bid, Wal-Mart's sales were about six times those of the British supermarket leader, and almost one-tenth of Britain's economic output. Moreover, the move substantially expanded Wal-Mart's sales in Europe, which thus far included only limited operations in Germany. In 1998, ASDA realized revenues of $6.8 billion, achieving a 7.5% share of the U.K. grocery retail market. It was generally believed that ASDA would benefit from Wal-Mart's global purchasing and cost-reduction capabilities.

The news sent shock waves through the European retail industry. On June 15, Britain's *Independent* called Wal-Mart's arrival, "The nightmare coming true," the *Times* headlined "U.S. price-busters invade Britain," while other press reports echoed the fears of European retailers and suppliers. Analysts described the move as a "knockout blow" that would change not only British retailing, but Europe's retailing in general.

Sample selection and composition

We constructed a dataset that identifies Wal-Mart's most important retail rivals in Europe. Through Thompson Analytics, we selected all firms which (1) reported retail activities in at least one European Union country, and (2) were listed on a European stock exchange. Next, we eliminated those firms where retail activities were not part of their main activities (e.g., Christian Dior). The source used for this exercise is Thompson Analytics, which distinguishes a firm's activities according to "main" versus "other". We further eliminated those retail companies whose assortment had no overlap with Wal-Mart. A typical Wal-Mart's assortment comprises groceries, hard goods, soft goods and apparel, pharmaceuticals and personal care, and electronics (www.planetretail.net). As such, car dealers, for example, were excluded from our sample. Following Song and Walkling (2000), we deleted 26 retail firms with more than 190 days of missing returns in Datastream in the estimation period (total estimation period = 250 days). This resulted in a sample of 98 retail firms, of which 50 originated in the United Kingdom. The remaining 48 retailers came from various other European countries.[1] Of the 98 retailers, 30% are predominantly grocery retailers (e.g., Carrefour, Tesco). The other 70% are primarily active in various nongrocery retail activities such as apparel (16%; e.g., H&M, Inditex), electronic appliances (5%; e.g., Dixons, Kingfisher), and furniture and do-it-yourself (9%; Bricorama, Hornbach).

Operationalization of the measures

Financial Performance. We used daily stock prices from Datastream to calculate the actual returns R_{it}. As proxies for the market returns, we used returns on the respective Datastream value-weighted equity market indices for the different European countries in the sample.

Seriousness of the Threat. Overlap in assortment is the extent to which product markets where an incumbent retailer meets Wal-Mart are important to that retailer, and is operationalized as the sum of the shares of retailer *i*'s sales realized in businesses markets where it meets Wal-Mart. Overlap in positioning is operationalized as a dummy variable that equals one if the incumbent is an EDLP player and zero if another pricing strategy is pursued. Overlap in country of entry is the percentage of total revenue the retailer generates in the United Kingdom.

Financial Resources. Firm size is measured by the total global sales of the company, and profitability as funds from operations divided by sales (see, e.g., Fee and Thomas 2004). Financial leverage is measured as the debt-to-total-assets ratio (Moeller, Schlingemann, and Stulz 2004).

Core Competencies. The price orientation of countries is given by the weighted average of the proportion of discount-format sales in the total retail sales of those countries in which the incumbent firm operates. The weights are the shares of the incumbent retailer's sales realized in that country. National competitiveness is the weighted average of the IMD World Competitiveness Scores based on all countries in which the incumbent firm operates. The weights are the shares of incumbent retailer *i*'s sales within the different countries.

International diversity is expressed as a Herfindahl-type quantitative index

$$1 - \sum_{j=1}^{TN} S_{i,j}^2,$$

with $S_{i,j}$ indicating the proportion of a firm *i*'s sales reported in country *j*, and *TN* the total number of countries in which the retailer operates (Barkema and Vermeulen 1998).

Wal-Mart-specific Competitive Repertoires. Geographical overlap between the incumbent and Wal-Mart is operationalized as a count measure of the total number of countries in which both the incumbent retailer and Wal-Mart operate. The importance of the overlap to the incumbent is operationalized as the sum of the shares of retailer *i*'s sales realized in those countries where it meets Wal-Mart. The symmetry in importance of geographical overlap for Wal-Mart vs. the incumbent is computed as

$$1 - \sum_{n=1}^{N} |S_{i,n} - S_{WM,\mathrm{n}}/N,$$

where $S_{i,\mathrm{n}}$ ($S_{WM,\mathrm{n}}$) represents the share of firm *i*'s (Wal-Mart's) total sales that is realized in country *n* (Fuentelsaz and Gómez 2006), while *N* gives the number of countries where Wal-Mart and the incumbent have contact. In case of total symmetry, these measures equal 1.0. In the absence of any contact, we set their value to zero. Higher scores thus correspond to higher levels of symmetry. [2]

Table 1 presents descriptive statistics for the variables used in the empirical study. Data for all moderators were from 1998, i.e., the year before the acquisition of ASDA.

Results

Effect of Wal-Mart's entry on the performance of European retailers

Table 2 presents the daily average abnormal returns for the 98 retail incumbents for a window of ten trading days around the event day. On the announcement day, the incumbent retailers experienced on average a negative impact of −.42%, which is marginally significant (p = .12). On day $t + 1$, they experienced on average a significant negative abnormal return of −.34% ($p < .05$). No evidence was found of information leakage prior to the announcement, which is consistent with the numerous press reports that the move took all market participants by surprise. The total average effect over days 0 and 1 (i.e., *CAAR*[0,1]) is significant ($p < .05$), and amounts to −.76%. No significant effects were found after day +1. Moreover, neither *CAAR*[2,5] nor *CAAR*[2,10] nor *CAAR*[2,15] were significant. As such, our results suggest a rapid adjustment in shareholder value following the announcement. We also computed the additional abnormal returns cumulated from day +2 onward, for up to 100 trading days after the event, i.e., CAR_i[2,2], CAR_i[2,3], CAR_i[2,100]. A pooled regression against the number of trading days since the takeover announcement showed no significant drift ($p > .10$), indicating that the initial negative

Table 1
Descriptives of Moderators

	Mean	Range	Sources
Seriousness of Threat			
Overlap in assortment	72.8	23.6 – 100.0	Compustat, Planet Retail, company reports
Overlap in positioning	13%	.0 – 1.0	Planet Retail, company reports
Overlap in country of entry	.47	.0 – 1.0	Compustat
Capacity to Withstand Threat			
Financial capacity			
Size (billion $)	3.6	.3 – 46.9	Datastream
Profitability (%)	6.7	–10.1 – 21.9	Datastream
Financial leverage (ratio)	.2	.0 – .5	Datastream
Organizational capacity			
Development of core competencies			
Presence in countries with price focus	3.4	.1 – 14.5	Compustat, Planet Retail, company reports
Presence in competitive countries	69.9	15.1 – 90.1	Compustat, IMD World Competitiveness Yearbook
International diversity: Herfindahl	19.3	.0 – 83.0	Compustat, Planet Retail
Wal-Mart-specific competitive repertoires			
Number of overlapping countries	.8	.0 – 5.0	Compustat, Planet Retail, company reports
Importance of overlapping countries	35.5	5.2 – 100.0	Compustat, Planet Retail, company reports
Symmetry in importance	62.6	4.8 – 95.2	Compustat, Planet Retail, company reports

Data for all moderators were from 1998, i.e., the year before the acquisition of ASDA.

Table 2
Results: Mean Daily Abnormal Return

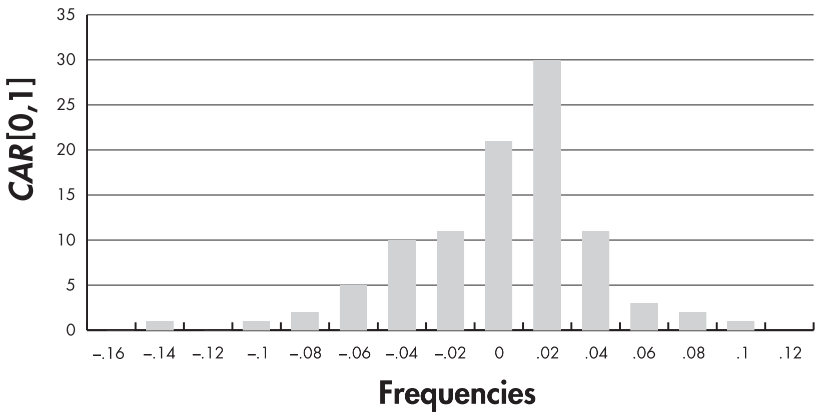
Day	Mean AR	% pos	Patell *t*-statistic	*p*-value
–5	–.0004	39.8	–.04	.48
–4	–.0027	55.1	1.11	.86
–3	–.0013	42.9	–.34	.37
–2	.0032	60.2	1.22	.89
–1	–.0034	32.7	–.71	.24
0	–.0042	58.2	–1.17	.12
1	–.0034	41.8	–1.70	.04
2	–.0023	42.8	–1.03	.15
3	–.0016	46.9	–.59	.28
4	–.0003	48.9	–.45	.33
5	.0006	41.8	.17	.56

evaluation was not just a short-run drop that was corrected in the subsequent weeks.

Factors explaining performance differences between incumbent retailers

More interesting than the overall negative value for $CAAR[0,1]$ is the variation in the $CAR_i[0,1]$ across individual retailers. Figure 2 gives the frequency distribution for the cumulative abnormal returns in the [0,1] window. It shows that some incumbent retailers were very negatively affected, while for others, the *CAR* was positive. Clearly, the collective wisdom of the financial markets did not evaluate the entry of Wal-Mart in the U.K. market as a unitary phenomenon, affecting all incumbent retailers with equal strength. To understand these substantial differences in performance for individual retailers, we estimated Equation

Figure 2
Frequency Distribution of Cumulative Abnormal Returns



6 with the individual firms' *CAR*[0,1] as dependent variable. Results are presented in Table 3.

Consistent with our expectations, we found that the degree of overlap in assortment between the incumbent and Wal-Mart had a negative effect on the incumbent's performance ($b_1 = -.006$, $p < .001$). Further, retailers that exhibited overlap in positioning with Wal-Mart were more negatively affected ($b_2 = -.070$, $p < .001$). Our results also underline the notion that despite current trends of international expansion, retailing still has an important local component. The performance of retailers active in the United Kingdom is affected more adversely than the performance of other retailers ($b_3 = -.081$, $p < .001$). Moreover, presence in the United Kingdom exacerbates the negative performance implications of overlap in positioning ($b_5 = -.065$, $p < .001$). The interaction with overlap in assortment is in the expected direction but does not reach statistical significance.

Not only does the seriousness of the threat matter, but the incumbent retailer's financial and organizational capacity to withstand the threat posed by Wal-Mart matters as well. The performance of incumbent retailers that are larger ($b_6 = .007$, $p < .10$), more profitable ($b_7 = .002$, $p < .01$), and less financially leveraged ($b_8 = -.026$, $p < .01$) is less negatively (more positively) affected than that of smaller, less profitable, or more leveraged retailers. The former types of retailers are best placed to respond to the threat that the entry of Wal-Mart brings to the European scene.

Financial markets also recognize the importance of nonfinancial, organizational factors in firm success. Incumbent retailers that have honed their skills in countries with a strong focus on price ($b_9 = .148$, $p < .05$), in competitive countries ($b_{10} = .001$, $p < .05$), and in international markets ($b_{11} = .029$, $p < .05$) are expected to perform better than other retailers. Finally, the development of competitive repertoires that directly involve Wal-Mart contributes to company performance. Incumbent retailers that have extensive prior geographical overlap with Wal-Mart ($b_{12} = .011$, $p < .01$) and that meet Wal-Mart in key countries ($b_{13} = .024$, $p < .10$) and in countries where there is symmetry in stakes ($b_{14} = .014$, $p < .05$) are expected to perform better.

Discussion

In this paper, we examined the effect of Wal-Mart's entry into the United Kingdom on the expected performance of European retailers. Drawing on marketing, strategy, and finance literatures, we developed hypotheses as to why some retailers are expected to be affected differently than others. Our measure of performance is shareholder value, which has recently been recognized as a key metric for evaluating the effect of marketing actions (Lehmann 2004). Our hypotheses were tested on nearly 100 European retailers.

Our findings provide broad support for our conceptual model and the relevance of distinguishing between the seriousness of a threat to an incumbent and that incumbent's capacity to withstand the threat. We find that the

Table 3
Results: Moderator Analysis

	Expected Sign	b	$\lvert t \rvert$
Intercept		–.006	.34
Seriousness of Threat			
Overlap in assortment (b_1)	–	–.006	4.62[a]
Overlap in positioning (b_2)	–	–.070	4.06[a]
Overlap in country of entry (b_3)	–	–.081	4.70[a]
Overlap assortment * Overlap country of entry (b_4)	–	–.002	.64
Overlap positioning * Overlap country of entry (b_5)	–	–.065	3.84[a]
Capacity to Withstand Threat			
Financial capacity			
Size (b_6)	+	.007	1.60[d]
Profitability (b_7)	+	.002	2.50[b]
Financial leverage (b_8)	–	–.026	2.80[b]
Organizational capacity			
Development of core competencies			
Presence in countries with price focus (b_9)	+	.148	2.31[c]
Presence in competitive countries (b_{10})	+	.001	2.20[c]
International diversity (b_{11})	+	.029	1.97[c]
Wal-Mart-specific competitive repertoires			
Number of overlapping countries (b_{12})	+	.011	2.59[b]
Importance of overlapping countries to incumbent (b_{13})	+	.024	1.53[d]
Symmetry in importance of overlapping countries (b_{14})	+	.014	2.13[c]
R^2 = .515, R^2(adj) = .422			

[a]: $p < .001$ (one-sided), [b]: $p < .01$ (one-sided), [c]: $p < .05$ (one-sided) , [d]: $p < .10$ (one-sided).

expected performance of incumbents is negatively affected by the degree of overlap with Wal-Mart in assortment, positioning, and country of entry. Overlap in country of entry amplifies the negative implications of overlap in positioning.

We find that the incumbent's capacity to withstand the threat matters as well. Small, less healthy, and financially highly leveraged firms are much more negatively affected than firms with stronger financial resources. Next to the financial capacity, the organizational capacity to withstand the threat plays an important role too. Retailers that have built organizational experience in countries with a strong price focus, in competitive countries, and in international markets are less negatively affected than retailers that have not built up these experiences. Finally, development of a competitive repertoire based on direct competition with the entrant (Wal-Mart) in other countries also plays a significant positive role.

We further highlight our findings by considering the 2x2 matrix in Figure 3, where we distinguish between incumbents that rate low versus high in seriousness of the threat, and incumbents that are low versus high in their capacity to withstand the threat. We use our model estimates from Table 3 along with the 25th and 75th percentiles on the moderator constructs to predict the corresponding *CAR* for each cell. We also include a few illustrative examples of retailers whose profile resembles the profile of each cell. Consistent with our theorizing, our model predicts that incumbent retailers in Cell 2—high on seriousness of the threat and low on capacity to withstand the threat—should be worst off, their predicted *CAR* being –7.3%. A retailer whose profile was similar to this cell is the British drugstore chain Boots, which relies almost entirely on the U.K. market and has little or no experience in price-focused and competitive markets. Its actual *CAR* was –6.0%, which implies that the financial markets assessed that Wal-Mart's entry in the United Kingdom decreased shareholder value by $703 million.[3]

If seriously threatened retailers have a high rather than a low capacity to withstand the threat (Cell 4 versus Cell 2), our forecasted performance impact increases from –7.3% to –3.1%. Electronics retailer Dixons, based in

Figure 3
Average Predicted Performance with Examples of Firms

Capacity to withstand threat	Seriousness of threat: LOW	Seriousness of threat: HIGH
LOW	2.9% (Karstadt, Austin Reed) (1)	–7.3% (Boots, JJB) (2)
HIGH	5.7% (Casino, Axfood) (3)	–3.1% (Dixons, Tesco) (4)

Note: Each cell represents the average predicted cumulative abnormal returns based upon the model estimates of Table 2 and the value representing the 25th and 75th percentiles of the independent variables used to measure seriousness of and capacity to withstand the threat. The firms mentioned are examples of companies closely matching the profile of the cell in question.

the United Kingdom but with operations in almost 30 European countries (including price-focused markets like Germany), is an example characterizing this cell. Its actual *CAR* was –2.8%. Although it still lost $226 million in shareholder value, if Dixons had not developed a high capacity to withstand the threat posed by the entry of a giant competitor, its shareholder value would have been expected to decline by nearly $600 million.

Retailers that are not seriously threatened by Wal-Mart, but have a low capacity to withstand its threat (Cell 1), are predicted to mildly benefit from the positive changes Wal-Mart would bring to European marketing systems, as reflected in a predicted *CAR* of 2.9%. An example is the German department store and specialty retailer Karstadt, whose two main business principles are service and the quality of its assortments. Karstadt experienced a positive *CAR* of 3.1% following Wal-Mart's announcement. The entry of Wal-Mart added $128 million to shareholder value. If the retailer also has a strong capacity to withstand the threat, however remote it may appear (Cell 3), performance increases to 5.7%. The French supermarket chain Casino is an example of a retailer that continuously tries to improve its capacities and experiences. While expanding internationally with over 5,000 stores in different European, Asian, and North and South American countries (including markets important to Wal-Mart such as Mexico and the United States), it also focuses strongly on diversifying its assortment and store format. Its shareholder value increased by $390 million (*CAR* of 5.6%).

It is also noteworthy that when the threat is perceived to be very serious (75% percentile), performance implications are always negative, implying that negative aspects outweigh positive aspects. However, by building financial and organizational capacities, retailers can considerably mitigate the negative performance consequences, as the *CAR* forecast in Cell 4 is 65% lower than the one in Cell 2.

Across all incumbent retailers in our sample, the net performance effect is –5.68 billion dollars. As point of comparison, the change in market value for the ASDA shareholders between the end of the last trading day before the offer and the end of day + 1 was $1.47 billion. When combining all positive and negative performance effects across all retailers in our study (including the wealth creation for ASDA shareholders), Wal-Mart's entry in the United Kingdom wiped out $4.21 billion in retailer firms' value.

Managerial implications

We find that incumbents are significantly affected by the entry of a paradigm-shifting retailer. Some performance effects will be positive, for example, because of channelwide productivity increases that giant retailers may bring. However, other effects will be negative, leading to a net adverse effect on the expected performance for many retailers (Table 2). Is this unavoidable, or can retailers be proactive to mitigate the negatives? We believe that proactive strategies can indeed be employed by incumbent retailers when faced with the prospect of the possible entry of a paradigm-shifting competitor such as Wal-Mart.

To contain the seriousness of the threat, an incumbent retailer can proactively reduce the overlap in assortment with Wal-Mart by focusing on niches that Wal-Mart does not cover. Given Wal-Mart's focus on low prices, it is a less attractive place to purchase specialty products. Fancy ready-made meals or a wide assortment of fresh produce do not fit well with Wal-Mart. The overlap in assortment can be further reduced by carrying exclusive, high-margin brands not available at Wal-Mart. Two possibilities are upscale *manufacturer* brands that do not want to be sold at Wal-Mart for fear of damaging their brand image, and the retailer's own line of premium *store* brands. Finally, retailers using EDLP may consider moving to a Hi-Lo strategy to render direct price comparisons with Wal-Mart more difficult.

However, an incumbent retailer's ability to reduce the seriousness of the threat is limited. Overlap in the country of entry is difficult to avoid, as the incumbent will typically not know which countries Wal-Mart will enter next. Exit from every country Wal-Mart may consider is not an option, especially in light of Wal-Mart's continued ambition to expand internationally, despite occasional setbacks. Moreover, what should a company do if Wal-Mart is contemplating entering its home country? Wal-Mart is also expanding its assortment, adding more upscale items. Also the sophistication of its own store-brand assortment is continuously improving, introducing niche items such as lactose-free powdered milk, low-sugar orange juice (for low-carb dieters), and microwavable turkey gravy (Kumar and Steenkamp 2007). As such, the number of niches not yet covered by Wal-Mart becomes smaller.

If options to reduce the seriousness of the threat are depleted, firms may consider proactively improving their capacity to *withstand* the threat. Our results show that financial resources matter a lot. Firms can increase size and profitability through mergers and acquisitions, while taking care to keep financial leverage manageable. This is the route the French retailer Carrefour took. In response to Wal-Mart's move, it acquired Promodès, becoming the largest European retailer by far. Less glamorous, but equally important, is honing organizational learning skills. Rather than avoiding difficult markets—competitive countries with a strong price focus—an incumbent my acquire skills by operating in those countries that prove to be highly valuable when confronted with Wal-Mart. The importance of these skills is illustrated by Wal-Mart's disappointing experience in Germany. Although many things went wrong—including being totally unaware of the German culture—a key reason is that it had to compete with the super-efficient hard discounter Aldi. Aldi has built such an efficient marketing system that its costs of goods sold are only half Wal-Mart's (Kumar and Steenkamp 2007). Wal-Mart met its match in a retailer that had perfected its skills in one of the world's most price-focused countries.

International expansion also helps. From a financial point of view, it stabilizes cash flows, in that the retailer is less dependent on one market. From an organizational learning point of view, international diversity is a major factor in the acquisition of core competencies and strategic flexibility (Barkema and Vermeulen 1998). Withdrawing to one's home country bastion is not a realistic option in today's world. In this respect, it is interesting to see that not only Wal-Mart, but also other retailers are actively expanding internationally (Gielens and Dekimpe 2007). Finally, it helps if the retailer develops Wal-Mart-specific competitive repertoires by competing with Wal-Mart in other countries.

Thus, when an incumbent firm is faced with the possibility of entry by Wal-Mart, there are a number of actions it can take proactively to prepare for this eventuality. We find that financial markets can and will place a monetary value on these strategic actions, providing an important link between marketing strategies and financial outcomes.

Limitations and future research

In this paper, we use change in shareholder value (stock price) as performance metric. This metric has important strengths. First, it is the metric that is used in the boardroom (Lehmann 2004). Second, it provides the "purest" assessment of the net result of various performance-reducing and -enhancing effects of marketing actions. Alternative measures such as change in market share, cash flow, or profitability are only revealed over subsequent years, depend on accounting rules, and confound the effect of Wal-Mart's entry with other events that have transpired during those years. But perhaps the financial markets are wrong in that they provide an erroneous assessment of the expected performance effect of Wal-Mart's entry? This calls into question the validity of shareholder value as a performance metric for marketing actions.

For three reasons, we believe that our performance metric is indeed valid. First, the measure is firmly grounded in the financial theory of efficient markets (Mizik and Jacobson 2004). Even though individual market experts may make erroneous assessments, through aggregation behavior, markets approach full information and rational behavior (Surowiecki 2004). Second, the fact that changes in shareholder value in an event-study context have been used successfully as a performance metric in marketing (see Srinivasan and Bharadwaj [2004] for an overview) does suggest that the method has validity. Third, the support for our theory-grounded hypotheses provides evidence for the construct validity of our performance metric. However, the validity of a measure can never be fully proven; hence it makes sense to assess the relative merits of alternative performance metrics.

Future research could also test and refine our model on other foreign market entries by Wal-Mart and other giant companies, in retailing and in other industries as well. Further, Wal-Mart entered the United Kingdom through the acquisition of an existing player. An alternative mode of market entry is by starting a greenfield operation. It would be interesting to examine to what extent the relative importance of the various moderators is itself moderated by mode of entry—acquisition versus greenfield.

Our paper shows that to fully understand the performance implications of major strategic marketing actions, one needs to include marketing (e.g., assortment, positioning), finance (e.g., financial leverage), and strategic management (e.g., international diversity, symmetry in geographical overlap) constructs. None of these three theoretical lenses gives the full picture; combined, however, they describe the performance implications of a major, paradigm-shifting entry in the marketplace. Marketing, as an inherently interdisciplinary science, is ideally placed to achieve this.

Acknowledgments

The authors gratefully acknowledge financial support from the Flemish Science Foundation (F.W.O.) under grant number G.0116.04.

Notes

1. Our sample composition reflects the dominance of U.K.-listed firms in the European equity market. For example, in 2004, the London exchange listed 2,837 firms, compared to 1,333 firms listed on Euronext (Brussels, Amsterdam, Paris, and Lisbon), and 819 in Germany (http://www.world-exchanges.org).

2. For example, Wal-Mart and Delhaize are both active in multiple countries. Still, they overlap only in the United States through Delhaize's Food Lion stores. Wal-

Mart (Delhaize) generated 83.9% (71.3%) of its revenue in the United States. Hence, Delhaize's symmetry index equals .874 (= 1.0 – |.713 –.839|).

3. We follow Moeller, Schlingemann, and Stulz (2004) in estimating the dollar abnormal return made by the rival-firm shareholders. We subtract from the gross change in the value of the rival's equity (stock price times the number of shares outstanding) the predicted change from the market model.

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