

## Dancing with a giant: The effect of Wal-Mart's entry into the U.K. on the performance of European retailers

Authors	Gielens,K.; Van de Gucht,L.; Steenkamp,J.E.B.M.; Dekimpe,M.G.
Published in	Journal of Marketing Research
Publication Date	2008
Link	<a href="https://research.tilburguniversity.edu/en/publications/a21e889a-5712-4934-9545-045e4381cd8b">https://research.tilburguniversity.edu/en/publications/a21e889a-5712-4934-9545-045e4381cd8b</a>
Citation	Gielens, K, Van de Gucht, L, Steenkamp, J E B M & Dekimpe, M G 2008, 'Dancing with a giant : The effect of Wal-Mart's entry into the U.K. on the performance of European retailers', Journal of Marketing Research, vol. 45, no. 5, pp. 519-534.
Download Date	2026-06-18 00:33:38
Rights	<p>General rights</p> <p>Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.</p> <ul style="list-style-type: none"> <li>- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.</li> <li>- You may not further distribute the material or use it for any profit-making activity or commercial gain</li> <li>- You may freely distribute the URL identifying the publication in the public portal"</li> </ul> <p>Take down policy</p> <p>If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.</p>

KATRIJN GIELENS, LINDA M. VAN DE GUCHT, JAN-BENEDICT E.M. STEENKAMP, and MARNIK G. DEKIMPE\*

The authors examine the value-destroying and value-enhancing effects of a giant player's foreign entry on incumbents operating in that region. They use Wal-Mart's entry into the United Kingdom, through its acquisition of Asda, as the empirical context. Drawing on the marketing, strategy, and finance literature streams, the authors develop hypotheses as to why some incumbents are negatively affected whereas others actually may benefit from the entry of a giant competitor. Their measure of performance impact is the change in shareholder value around the announcement date, which has recently been recognized as an important metric to evaluate the effectiveness of marketing actions. The authors find strong support for the conceptual model, which distinguishes between the seriousness of the threat to the incumbents and their capacity to withstand the threat. The authors validate their findings using three alternative measures of company performance: percentage growth in the incumbent retailer's sales, earnings before interest and taxes, and return on assets between 1998 (the year before the Asda takeover) and 2002 (three years after the takeover). The authors discuss various managerial implications of their results. By acting proactively, incumbents can mitigate the negative performance consequences, while maximally benefiting from the positive implications of a giant competitor's entry.

*Keywords:* retail power, international retailing, event study, Wal-Mart

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

In many industries, ranging from telecommunications, to banking, to automotive, to retailing, firms are increasingly entering foreign markets to maintain their growth and prof-

itability. Reflecting the importance of foreign market entry, academic research has made important progress in understanding the antecedents of foreign entry decisions and the subsequent performance implications for the foreign entrants themselves (Mitra and Golder 2002).

---

\*Katrijn Gielens is Associate Professor of Marketing (e-mail: katrijn\_gielens@unc.edu), and Jan-Benedict E.M. Steenkamp is C. Knox Massey Distinguished Professor of Marketing and Marketing Area Chair (e-mail: JBS@unc.edu), Kenan-Flagler Business School, University of North Carolina at Chapel Hill. Linda M. Van de Gucht is Professor of Finance, Catholic University Leuven (e-mail: linda.vandegucht@econ.kuleuven.be). Marnik G. Dekimpe is Research Professor of Marketing and CentER Fellow, Marketing Department, Tilburg University, and Professor of Marketing, Catholic University Leuven (e-mail: m.g.dekimpe@UvT.nl). The authors gratefully acknowledge financial support from the Flemish Science Foundation (F.W.O.) under Grant No. G.0116.04. They also thank the anonymous *JMR* reviewers, as well as the seminar participants at the Catholic University of Leuven, Columbia University, Emory University, University of North Carolina, and University of Cologne. Gerard Tellis served as associate editor for this article.

Much less is known about the performance implications for local incumbents. Research taking the incumbent perspective has mostly been conducted at an aggregate country or industry level, ignoring firm-specific differences (e.g., Liu et al. 2000). In contrast, microlevel studies have dealt primarily with one specific outcome, such as overall productivity or research-and-development spillovers (Görg and Greenaway 2004). Previous studies have not considered multiple value-destroying or -enhancing powers that might be at work, and questions as to why some firms are hurt (or gain) more than others have been only partially addressed. In addition, 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 relationships (Aitken and Harrison 1999). Scant attention has also 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 (Gielens and Dekimpe 2007).

The purpose of this article is to address these gaps in the foreign market entry literature by studying the performance implications for local (British) incumbents of the entry by a giant company (i.e., Wal-Mart) in the United Kingdom, as well as the performance implications on retailers in other European countries. We do so through an event study. Our performance metric is shareholder value, the importance of which is increasingly recognized by marketing scientists (Srinivasan and Hanssens 2007; Srivastava, Shervani, and Fahey 1998).

With more than \$350 billion in annual sales, Wal-Mart is 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 third-largest retailer, Asda. We study the stock market reaction for approximately 100 key listed U.K.-based and continental European retailers, and we test hypotheses as to why some retailers were affected more than others. As such, we extend prior research by Singh, Hansen, and Blattberg (2006) and Stone (1995), who study the impact of Wal-Mart's entry on U.S. incumbents in terms of conventional metrics, such as sales, number of stores visits, and/or average basket size.

### CONCEPTUAL FRAMEWORK

#### *Shareholder Value as Performance Metric*

Finance scholars have long argued that the market value of a firm is determined by the expected future cash flows and the discount rate applied to these cash flows. This view has gained widespread acceptance in the business literature (McWilliams and Siegel 1997). Indeed, shareholder value is an important metric for studying company performance in a competitive marketplace (Srivastava, Shervani, and Fahey 1998). Strategic moves by a company may affect its own and its competitors' shareholder value through changes in cash flows and discount rates. It is a performance metric that guides the decisions of top management (Lehmann 2004). The advantages of using shareholder value as a performance metric are that it is forward looking, integrates multiple dimensions of performance, and is less easily manipulated by managers than other measures (Geyskens, Gielens, and Dekimpe 2002; Srinivasan and Bharadwaj 2004).<sup>1</sup>

#### *Effect of Wal-Mart's Entry on the Performance of European Retailers*

Wal-Mart's entry into the United Kingdom could have both negative and positive effects on the performance (shareholder value) of European retailers. On the negative side, Wal-Mart is likely to exert a downward pressure on the prices other retailers can charge. Hausman and Leibtag (2005) observe lower average prices in U.S. markets with

Wal-Mart stores. Not only does Wal-Mart charge lower retail prices, but other players also tend to lower their prices to remain competitive (Basker 2005). The number of visits to incumbent stores and the average basket size per visit might also be reduced (Singh, Hansen, and Blattberg 2006). Wal-Mart's entry could also affect wholesale prices. Because it is such an important customer, Wal-Mart can obtain the best wholesale prices. Suppliers might subsequently seek compensation by charging higher prices to Wal-Mart's competitors (Dukes, Gal-Or, and Srinivasan 2006). Moreover, the discount rate applied to cash flows might increase because the competitive landscape has become riskier as a result of the entry of a giant new player.

In contrast, Wal-Mart's entry could 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 might be viewed as a prelude to Europe-wide retail productivity increases and cost decreases, similar to those in the 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 in turn may benefit their other corporate customers. Rival retailers could also enjoy "spillovers" from Wal-Mart by imitating its methods or by 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, incumbents' stock price might also increase 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 summary, Wal-Mart's acquisition of Asda could have both positive and negative performance implications for its rivals. For some retailers, the negatives will predominate, and for others, the positives will weigh more heavily. Drawing on the strategy literature (Chen 1996), we expect that the net performance effect depends on (1) the seriousness of the threat posed by Wal-Mart's entry into the United Kingdom to the incumbent retailer in question and (2) the retailer's capacity to withstand the threat. If the seriousness of the threat posed by Wal-Mart's entry is low and the retailer's capacity to withstand the threat is high, positive consequences will tend to outweigh the negative impacts. However, we expect the converse to hold when the threat is high and the capacity to withstand it is low, with various scenarios in between these extremes.

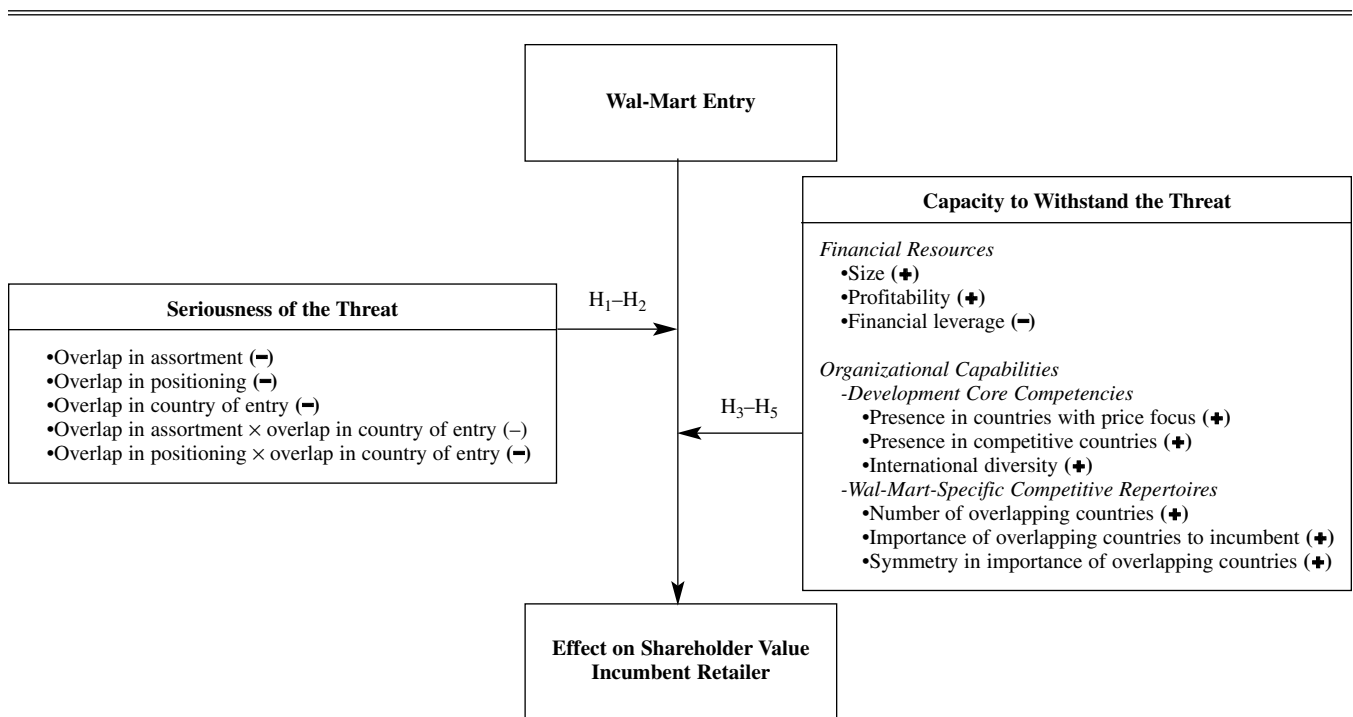
These two drivers are multifaceted constructs in that specific components can be distinguished in the seriousness of the threat posed by Wal-Mart's entry and the incumbent's ability to withstand that threat. This provides a rationale for why a wide range of stock price reactions is likely. Figure 1 shows our conceptual framework, delineating these factors and the direction of their expected moderating effects.

#### *Seriousness of the Threat*

The more serious the threat the entry poses to a particular incumbent retailer, the more negative are its performance

<sup>1</sup>Mizik and Jacobson (2007) show how myopic firms might still be able to inflate their stock market valuation temporarily. However, such practices are not easy and come at a high cost.

Figure 1  
CONCEPTUAL FRAMEWORK



Notes: Hypotheses supported in our empirical analyses are in bold.

implications. According to competition theory, new entrants pose the greatest threat to competitors with which they exhibit high market overlap (Chen 1996). Chen and Miller (1994, p. 89) refer to this phenomenon as “the centrality of the attack.” Market overlap can occur on different dimensions, including product assortment, positioning, and geography.

*Overlap in assortment.* Retailers carrying assortments that overlap substantially with Wal-Mart’s will be more vulnerable than retailers with assortments that do not overlap much. Wal-Mart’s logistical efficiency and global purchasing power enable 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, thus reducing their margins and cash flows. The more closely Wal-Mart competes with existing outlets, the greater is the downward pressure on the latter’s prices (Hausman and Leibtag 2005).

*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 are 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 pricing positioning respond more aggressively to Wal-Mart entries than other retailers (Khanna and Tice 2000). Price reductions in an (often unsuccessful) attempt to match Wal-Mart’s prices tend to reduce other retailers’ expected performance.

*Overlap in country of entry.* Wal-Mart entered a specific geographical entity (i.e., the United Kingdom). Despite current trends toward globalization, retailing still has an important local component. Thus, retailers that are highly dependent on the United Kingdom as a source of revenues are more directly threatened by Wal-Mart’s entry than retailers that are less dependent.

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

$H_1$ : The more serious the threat posed by Wal-Mart’s entry into the United Kingdom, the more negative are the performance implications for the incumbent retailer. Specifically, the performance of the incumbent is negatively affected by the degree of overlap with Wal-Mart on (a) assortment, (b) positioning, and (c) country of entry.

$H_2$ : The more dependent an incumbent retailer is on the United Kingdom as a source of revenues, the stronger are the negative performance implications of (a) overlap in assortment and (b) overlap in positioning with Wal-Mart.

#### *Capacity to Withstand the Threat*

Retailers differ not only in the extent to which Wal-Mart’s entry 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 are 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.

#### *Financial Resources*

We consider three components of financial capacity or resilience commonly employed in the finance literature: (1) size, (2) cash flow generation, and (3) the extent of financial leverage. First, larger retailers have more resources and are better able to withstand Wal-Mart's entry because they have already demonstrated their competitiveness through prior growth (see Barkema and Vermeulen 1998). Second, incumbents with a healthy cash flow margin are better poised to withstand the increased competition than less profitable retailers. They have more room to respond to Wal-Mart's EDLP strategy, to invest in strategic changes, and to buffer themselves from external threats (Miller and Chen 1996a). They have the financial resources to try out new strategic responses, which might be necessary if their previous competitive repertoire is ineffective when a major competitor enters the market. Third, highly leveraged firms are more likely to lack the financial flexibility to make strategic investments in response to Wal-Mart's entry than more conservatively financed retailers (Chevalier 1995). Liquidity-constrained firms also charge higher prices than less constrained firms (Chevalier and Scharfstein 1996), making it more difficult for the former to remain competitive when a dominant, low-cost retailer enters the market (Hausman and Leibtag 2005). Thus:

H<sub>3</sub>: The greater the incumbent's financial capacity to withstand the threat posed by Wal-Mart's entry into the United Kingdom, the more positive are the performance implications. Specifically, the performance of the incumbent is positively affected by its (1) size, (2) profitability, and (3) financial leverage.

#### *Organizational Capabilities*

Because of their specific past experiences, some retailers may have learned distinct organizational capabilities that render them more likely to survive and prosper in the new competitive environment than other retailers. Accumulated experiences can span a wide variety of learning, but not all of these will be equally helpful. Two key insights from the organizational learning literature are as follows: (1) The most significant forms of learning are about ways of doing business, and (2) learning occurs best through direct experience (Easterby-Smith 1997). In relation to the Wal-Mart case, there are two possibilities in terms of organizational learning. First, the company may have developed specific core competencies that are especially relevant in the battle with Wal-Mart. Second, the retailer may have acquired Wal-Mart-specific competitive repertoires as a result of 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). Successful firms have developed core competencies on which they can draw when encountering new and unanticipated circumstances. In the battle with Wal-Mart, at least three core competencies appear to be especially pertinent: (1) countries with a strong price focus, (2) competi-

tiveness of countries, and (3) international diversity. First, 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. Second, countries differ dramatically in the competitiveness of their business environment (Porter 1990). Retailers that are active in competitive countries have sharpened their core competencies because they are 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. Third, retailers that operate in multiple national settings have been exposed to diverse ways of competing and to different institutional contexts. They are forced to develop strategic flexibility and an array of marketing competencies to create competitive advantages over various rivals in different countries. These qualities benefit the retailer when it is faced with a rival such as Wal-Mart, which has the potential to upset established patterns of rivalry (Baum and Korn 1999). Miller and Chen (1996b) find that organizational learning about a wide array of competitive actions positively affects 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).

H<sub>4</sub>: Incumbents that have acquired certain core competencies are better able to withstand the threat posed by Wal-Mart's entry into the United Kingdom than retailers that have not acquired these competencies. Specifically, the performance of the incumbent is positively affected by (a) the extent to which the incumbent has built up experience in countries with a price focus, (b) the degree to which it has been exposed to the rigor of competitive countries, and (c) its international diversity.

*Wal-Mart-specific competitive repertoires.* The larger the stock of accumulated experiences of previous encounters with Wal-Mart, the greater is 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 shaped in the context of direct and extensive contact with rivals (Miller and Chen 1996b, p. 420). Direct contact with Wal-Mart is reflected by overlap in countries, and 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.

If a retailer has already encountered Wal-Mart in other countries, it may have learned how best to cope with this competitor (Gimeno and Woo 1999) and may have obtained insight into which strategies work and which do not. Such retailers should be more likely to avoid costly mistakes than those that have never encountered Wal-Mart before (Baum and Korn 1999).

Simply "meeting" Wal-Mart in different countries is not the entire story. If the contact is only in peripheral, unimportant countries, a retailer's learning would be much less

than if it were to encounter Wal-Mart in its key countries (Miller and Chen 1996b). Indeed, firms are more aware of their competitors in countries on which they are highly dependent (Chen and MacMillan 1992) and thus will monitor them more closely. The development of Wal-Mart-specific competitive repertoires is greater when previous experience is built up in countries that are important to the incumbent than when such experience is built up in countries that are unimportant.

The extent of learning about a competitor is greatest when the relative importance of various countries is symmetric across the two competitors (Gimeno 1999). If countries in which the incumbent meets Wal-Mart are unimportant to the incumbent but are important to Wal-Mart, incumbent learning will be lower because there is little at stake and, thus, less motivation to learn (Chen 1996). If the reverse is true, the development of Wal-Mart-specific repertoires will be hurt because Wal-Mart's best practices may not be fully exhibited (see Gimeno 1999). Thus:

$H_3$ : Incumbents that have acquired Wal-Mart-specific competitive repertoires are better able to withstand the threat posed by Wal-Mart's entry into the United Kingdom than retailers that have not acquired such competitive repertoires. Specifically, the performance of the incumbent is positively affected by (a) the number of countries in which it has already encountered Wal-Mart, (b) the importance of these overlapping countries to the incumbent, and (c) the symmetry in importance of overlapping countries for Wal-Mart versus the incumbent.

### METHOD

We use an event study to calculate the cumulative abnormal stock returns for the rival retailers as a result of Wal-Mart's announcement that it would acquire Asda. We calculate these abnormal returns over a time window centered on the announcement day of the takeover. Next, we cross-sectionally relate these abnormal returns to the aforementioned characteristics that describe the seriousness of the threat Wal-Mart poses and the incumbent firm's capacity to withstand the threat.

#### Event Studies

Event studies measure the effect of new information on the market value of a firm's stock. The approach rests on the assumption that financial markets are efficient. According to the semistrong version of the efficient-market hypothesis, the stock price accurately reflects all publicly available information about the firm. Under this assumption, the market price of the firm's stock immediately and unbiasedly changes to reflect new information that arrives in the market (for a detailed exposition, see Brown and Warner 1985).

When an event occurs (i.e., when new information is made public), investors update their expectations about the firm's future performance and react by buying or selling shares of firms they believe will be affected. The continuously compounded daily return in the stock price between day  $t - 1$  and day  $t$  is given by

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

where  $P_{i,t}$  is the closing stock price of retailer  $i$  at the end of trading day  $t$  and  $R_{it}$  reflects the market's expectations of the long-term financial impact of all relevant information that became available between  $t - 1$  and  $t$ . The observed stock return  $R_{it}$  on the event day (i.e., the day Wal-Mart's bid for Asda was announced) is compared with  $E(R_{it})$ , the return expected if the event had not taken place. In line with Brown and Warner's (1985) approach, we use the market model to obtain estimates of a retailer's expected returns. According to this model, we express the expected return  $E(R_{it})$  as a linear function of the returns on a benchmark portfolio of marketable assets  $R_{mt}$ :

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

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

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

The term  $e_{it}$  provides an unbiased estimate of the future earnings generated by the event and is a random variable with a zero mean (Fama 1970). Firms that are expected to suffer greatly from Wal-Mart's entry will experience large negative abnormal returns, but  $e_{it}$  will be small (or positive) for retailers that are affected only a little by (or may even benefit from) the event.

To allow for information leakage before the event day and for the possibility that not all information is disseminated completely on the event day (McWilliams and Siegel 1997), we aggregate the abnormal returns for a firm over the "event period"  $[-t_1, t_2]$  into a cumulative abnormal return (CAR) to draw overall inferences on the expected performance impact of the event of interest:

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

where  $t = 0$  on the event day. Because we conducted the event study across  $K$  different retailers, this CAR can be averaged into a cumulative average abnormal return (CAAR):

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

We assess the significance of the CAAR through Patell's (1976) statistic, in which the abnormal returns are standardized by the standard deviation of the estimation period abnormal returns. This statistic reduces the effect of stocks with large return standard deviations. The extent of information leakage and dissemination is an empirical issue and is determined on the basis of the significance of the respective daily average abnormal return (AAR) terms on the days surrounding the event day. Expanding the event window with insignificant AARs reduces the precision of the estimated effects because more unrelated noise is averaged into

the effect (Whinston and Collins 1992; for a review of event-study applications in marketing, see Srinivasan and Bharadwaj 2004).

#### *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 abnormal returns:

$$(6) \quad \text{CAR}_i[-t_1, t_2] = b_0 + b_1\text{OA}_i + b_2\text{OP}_i + b_3\text{OCE}_i \\ + b_4\text{OA}_i \times \text{OCE}_i + b_5\text{OP}_i \times \text{OCE}_i \\ + b_6\text{Size}_i + b_7\text{Profit}_i + b_8\text{FinLev}_i \\ + b_9\text{PriceFocus}_i + b_{10}\text{Comp}_i + b_{11}\text{IntDiv}_i \\ + b_{12}\text{GO}_i + b_{13}\text{IMP}_i + b_{14}\text{Symm}_i + \varepsilon_i,$$

where OA, OP, and OCE denote the seriousness-of-threat constructs of overlap in assortment, positioning, and country of entry (the United Kingdom), respectively. Size, Profit, and FinLev indicate the financial resources constructs of retailer size, profitability, and financial leverage. PriceFocus, Comp, and IntDiv indicate the core competencies constructs of 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 of global geographical overlap between the incumbent and Wal-Mart, importance of the overlapping countries, and symmetry in importance. Following the work of Jain (1982), we use standardized  $\text{CAR}_i$  as the 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 that exists because some retailers have the same country of origin, we use a generalized estimation equations approach (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 £6.7 billion (\$1.8 billion), corresponding to a value of 220 pence per share (Nelson and Beck 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. The move substantially expanded Wal-Mart's sales in Europe, which thus far included only limited operations in Germany. In 1998, Asda had realized revenues of \$6.8 billion, achieving a 7.5% share of the U.K. grocery retail market. In general, it was believed that Asda would benefit from Wal-Mart's global purchasing and cost-reduction capabilities.

The news sent shockwaves through the European retail industry. On June 15, Britain's *The Independent* called Wal-Mart's arrival "the nightmare coming true" (Cope 1999), *The Times* headlined "U.S. Price-Busters Invade Britain" (Whitworth 1999), and 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 also Europe's retailing in general.

##### *Sample Selection and Composition*

We constructed a data set that identifies Wal-Mart's most important retail rivals in Europe. Through Thompson Analytics, we selected all firms that (1) reported retail activities in at least one European Union country and (2) were listed on a European stock exchange. Next, we eliminated firms that did not have retail activities as part of their main activities (e.g., Christian Dior). The source we used for this exercise is also Thompson Analytics, which distinguishes a firm's activities according to "main" versus "other." We further eliminated retail companies whose assortment had no overlap with Wal-Mart's. A typical Wal-Mart store's assortment comprises grocery, candy and tobacco, soft goods, shoes, cosmetics, pharmaceuticals, jewelry, electronics, health and beauty, sports goods and toys, stationery and books, photo processing, and hard goods ([www.planetretail.net](http://www.planetretail.net)). As such, car dealers, for example, were excluded from our sample. Following the work of Song and Walkling (2000), we deleted 26 retail firms with more than 190 days of missing returns in Datastream in the estimation period (250 days).

Thus, the sample comprised 98 retail firms, 50 of which originated in the United Kingdom. The remaining 48 retailers came from various other European countries.<sup>2</sup> Of the 98 retailers, 30% are predominantly grocery retailers (e.g., Ahold, Carrefour, Delhaize, Jeronimo Martins, Kesko, Metro Group, Tesco). The other 70% were primarily active in various nongrocery retail activities, such as candy (e.g., Thorntons), clothing (e.g., Etam, Hennes & Mauritz, Inditex, Matalan), shoes (e.g., Brantano, Stylo, Wedins Skor), cosmetics and pharmaceuticals (e.g., The Body Shop, Boots, Douglas Holding, Marionnaud Parfumeries), jewelry (e.g., Signet Group), sports (e.g., Black Leisure Group, Gresvig, JJB Sports), toys (e.g., Clinton Cards, Game Group), stationery and books (e.g., Ottakar's, WHSmith), electronic appliances (e.g., Dixons, Sodice Expansion), furniture (e.g., Moebel Walther), and do-it-yourself (e.g., Bricorama, Kingfisher, Hornbach).

##### *Operationalization of the Measures*

**Financial performance.** We used daily stock prices from Datastream to calculate the observed returns  $R_{it}$ . For  $R_{mt}$ , we used the respective stock market indexes for the different European countries, as reported in Datastream. A given market index consists of a stock portfolio of the most important companies in that country; the individual stocks are weighted by their firm's market value.

**Seriousness of the threat.** Overlap in assortment reflects the extent to which product markets, in which an incumbent retailer meets Wal-Mart, are important to that retailer. Overlap in positioning captures whether the incumbent retailer has experience as an EDLP player. Overlap in country of entry reflects the stake of the incumbent retailer in the United Kingdom.

<sup>2</sup>Our sample composition reflects the dominance of U.K.-listed firms in the European equity market. For example, in 2004, the London exchange listed 2837 firms, compared with 1333 firms listed on Euronext (Brussels, Amsterdam, Paris, and Lisbon) and 819 in Germany (<http://www.world-exchanges.org>).

*Financial resources.* We measured firm size by the total global sales of the company and profitability as funds from operations divided by sales. We measured financial leverage as the ratio of debt to total assets.

*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 the countries in which the incumbent firm operates. Presence in competitive countries is the weighted average of the IMD World Competitiveness Scores of all countries in which the incumbent firm operates. We express international diversity as a Herfindahl-type quantitative index, based on the proportion of a retailer's sales reported in the different countries in which the retailer operates.

*Wal-Mart-specific competitive repertoires.* Geographical overlap between the incumbent and Wal-Mart reflects the total number of countries in which both the incumbent retailer and Wal-Mart operate. The importance of the overlap to the incumbent is based on the shares of a retailer's sales realized in countries in which it meets Wal-Mart. The symmetry in importance of geographical overlap for Wal-Mart versus the incumbent reflects absolute differences in an incumbent retailer's and Wal-Mart's stakes in a specific geographic market. In the case of total symmetry, these measures equal 100. In the absence of any contact, we set their value to 0. Thus, higher scores correspond to higher levels of symmetry.

Data for all moderators were from 1998 (i.e., the year before Wal-Mart's acquisition of Asda). A detailed description of all measures appear in the Appendix, along with an illustration involving the Belgian retailer Delhaize, which also operates in the United States under the Food Lion banner. Table 1 presents descriptive statistics for the variables used in the empirical study, and Table 2 reports the correlations between the covariates. According to Judge and colleagues (1988), bivariate correlations exceeding .8

and variance inflation factors exceeding 5 are indications of potential multicollinearity problems. In our case, the absolute value of all correlations is below .70, and the largest variance inflation factor is 3.42.

## RESULTS

### *Effect of Wal-Mart's Entry on the Performance of European Retailers*

Table 3 presents information on daily AARs for the 98 retail incumbents for a window of ten trading days around the event day. On the announcement day, the incumbent retailers experienced an average negative impact of  $-42\%$ , which is close to significance ( $p = .12$ ). On day  $t + 1$ , they experienced an average significant negative abnormal return of  $-34\%$  ( $p < .05$ ). We found no evidence of information leakage before 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  $-76\%$ . We find no significant effects after Day +1. Moreover, neither  $CAAR[2, 5]$  nor  $CAAR[2, 10]$  nor  $CAAR[2, 15]$  is significant. As such, our results suggest a rapid adjustment in shareholder value following the announcement. We also computed the additional CARs 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 shows no significant drift ( $p > .10$ ), indicating that the initial negative evaluation was not just a short-term drop that was corrected in the subsequent weeks (for a similar test procedure, see Geykens, Gielens, and Dekimpe 2002). The short event window and the insignificance of the subsequent drift are in line with the presumed efficiency of the stock markets (Kothari and Warner 2007).

Table 1  
DESCRIPTIVES OF THE COVARIATES

	<i>M</i>	<i>Mdn</i>	<i>SD</i>	<i>Range</i>	<i>Sources</i>
<i>Seriousness of the Threat</i>					
Overlap in assortment	72.8	67.7	29.5	23.6–100	COMPUSTAT, Planet Retail, company reports
Overlap in positioning	.17			.0–1.0	Planet Retail, company reports
Overlap in country of entry	.5	.4	.3	.0–1.0	COMPUSTAT
<i>Capacity to Withstand the Threat</i>					
<i>Financial Capacity</i>					
Size (in billions of dollars)	3.6	4.8	7.9	.3–46.9	Datastream
Profitability (%)	6.7	5.6	6.3	–10.1–21.9	Datastream
Financial leverage (ratio)	.2	.2	.1	.0–.5	Datastream
<i>Organizational Capacity</i>					
Development of core competencies					
Presence in countries with price focus	3.4	3.6	3.1	.1–14.5	COMPUSTAT, Planet Retail, company reports
Presence in competitive countries	69.9	71.9	9.8	15.1–90.1	COMPUSTAT, IMD World Competitiveness Yearbook
International diversity: Herfindahl	19.3	13.5	24.5	.0–83.0	COMPUSTAT, Planet Retail
Wal-Mart-specific competitive repertoires					
Number of overlapping countries	.8	1	3.5	.0–5.0	COMPUSTAT, Planet Retail, company reports
Importance of overlapping countries	17.2	11.4	17.0	5.2–100.0	COMPUSTAT, Planet Retail, company reports
Symmetry importance	29.8	20.6	30.1	4.8–95.2	COMPUSTAT, Planet Retail, company reports



Table 3  
RESULTS: MEAN DAILY ABNORMAL RETURN

Day	Mean Abnormal Return	% Positive	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

Notes: N = 98.  $AR_{i,t}$  measures the abnormal return on a specific day t for firm i. We report the mean  $AR_t$ , which is averaged across all firms on day t. We report the results for the ten days surrounding the announcement date on day 0.

In dollar terms, across all incumbent retailers in our sample, the net performance effect is -\$5.68 billion.<sup>3</sup> As a 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 we

<sup>3</sup>We follow Moeller, Schlingemann, and Stulz's (2004) approach in estimating the dollar returns. Specifically, 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.

combine all positive and negative performance effects across all retailers in our study (including the wealth creation for Asda shareholders), Wal-Mart's entry into the United Kingdom wiped out \$4.21 billion in value for the European retail firms. As for Wal-Mart itself, there is a negative  $CAR[0, 1]$  of -.83%, corresponding to a value loss of \$1.66 billion. This result is consistent with that of Moeller, Schlingemann, and Stulz (2004), who find that shareholders of small bidders gain on average but that the abnormal returns for shareholders of large bidders are negative.

#### Factors Explaining Performance Differences Between Incumbent Retailers

More notable than the overall negative value for  $CAAR[0, 1]$  is the variation in  $CAR_i[0, 1]$  across individual retailers. Table 3 already indicates that there is considerable variation in the abnormal returns across retailers. The collective wisdom of the financial markets did not evaluate the entry of Wal-Mart into the U.K. market as a unitary phenomenon, affecting all incumbent retailers equally. To understand these substantial differences in performance for individual retailers, we estimated Equation 6 with the individual firms'  $CAR[0, 1]$  as dependent variable. Table 4 presents the results.

*Seriousness of the threat.*  $H_1$  and  $H_2$  pertain to the seriousness of the threat to the incumbent posed by Wal-Mart's entry into the United Kingdom as a driver of the expected future performance of that retailer. We find strong support for its anticipated negative effect on incumbent perform-

Table 4  
RESULTS: MODERATOR ANALYSIS

Dependent Variable: $CAR[0, 1]$	Hypothesis	Expected Sign	b	t
Intercept			-.006	.34
<i>Seriousness of the Threat</i>	$H_1-H_2$			
Overlap in assortment ( $b_1$ )	<b><math>H_{1a}</math></b>	-	-.006	4.62*
Overlap in positioning ( $b_2$ )	<b><math>H_{1b}</math></b>	-	-.070	4.06*
Overlap in country of entry ( $b_3$ )	<b><math>H_{1c}</math></b>	-	-.081	4.70*
Overlap assortment $\times$ overlap country of entry ( $b_4$ )	$H_{2a}$	-	-.002	.64
Overlap positioning $\times$ overlap country of entry ( $b_5$ )	<b><math>H_{2b}</math></b>	-	-.065	3.84*
<i>Capacity to Withstand the Threat</i>	$H_3-H_5$			
<i>Financial Capacity</i>				
Size ( $b_6$ )	<b><math>H_{3a}</math></b>	+	.007	1.60 <sup>†</sup>
Profitability ( $b_7$ )	<b><math>H_{3b}</math></b>	+	.002	2.50**
Financial leverage ( $b_8$ )	<b><math>H_{3c}</math></b>	-	-.026	2.80**
<i>Organizational Capacity</i>				
Development of core competencies				
Presence in countries with price focus ( $b_9$ )	<b><math>H_{4a}</math></b>	+	.148	2.31***
Presence in competitive countries ( $b_{10}$ )	<b><math>H_{4b}</math></b>	+	.001	2.20***
International diversity ( $b_{11}$ )	<b><math>H_{4c}</math></b>	+	.029	1.97***
Wal-Mart-specific competitive repertoires				
Number of overlapping countries ( $b_{12}$ )				
Importance of overlapping countries to incumbent ( $b_{13}$ )	<b><math>H_{5a}</math></b>	+	.011	2.59**
Symmetry importance of overlapping countries ( $b_{14}$ )	<b><math>H_{5b}</math></b>	+	.024	1.53 <sup>†</sup>
	<b><math>H_{5c}</math></b>	+	.014	2.13***

N = 98;  $R^2 = .52$

\* $p < .001$  (one-sided).

\*\* $p < .01$  (one-sided).

\*\*\* $p < .05$  (one-sided).

<sup>†</sup> $p < .10$  (one-sided).

Notes: Hypotheses that are supported are in bold.

ance. The greater the degree of overlap in assortment ( $b_1 = -.006, p < .001$ ), positioning ( $b_2 = -.070, p < .001$ ), and country of entry ( $b_3 = -.081, p < .001$ ) between the incumbent and Wal-Mart, the lower was the performance of the incumbent. These findings support  $H_{1a-c}$ .

Not only were retailers that were more dependent in the United Kingdom affected more adversely than other retailers ( $H_{1c}$ ), but their dependence also exacerbated the negative performance implications of overlap in positioning ( $b_5 = -.065, p < .001$ ), in support of  $H_{2b}$ . The interaction with overlap in assortment is in the expected direction ( $H_{2a}$ ) but does not reach statistical significance.

*Capacity to withstand the threat.* The incumbent retailer's financial ( $H_3$ ) and organizational ( $H_4$ – $H_5$ ) capacities to withstand the threat posed by Wal-Mart matter as well. The performance of incumbent retailers that are larger ( $H_{3a}$ :  $b_6 = .007, p < .10$ ), more profitable ( $H_{3b}$ :  $b_7 = .002, p < .01$ ), and less financially leveraged ( $H_{3c}$ :  $b_8 = -.026, p < .01$ ) was less negatively (more positively) affected than the performance of smaller, less profitable, and more leveraged retailers. The former types of retailers are best positioned to respond to the threat that the entry of Wal-Mart brings to the European scene. Collectively, these findings provide support for the role of the incumbent's financial resilience in offsetting possible negative performance implications due to the seriousness of the threat posed by Wal-Mart.

Financial markets also recognize the importance of non-financial, organizational factors in firm success.  $H_4$  outlines the role of relevant core competencies in withstanding the threat posed by Wal-Mart's entry into the United Kingdom. In support of this hypothesis, we find that incumbents that honed their skills in countries with a strong focus on price ( $H_{4a}$ :  $b_9 = .148, p < .05$ ), in competitive countries ( $H_{4b}$ :  $b_{10} = .001, p < .05$ ), and in a variety of international markets ( $H_{4c}$ :  $b_{11} = .029, p < .05$ ) performed better than retailers that had been less active in these markets.

$H_5$  highlights the importance for a company's performance in having developed Wal-Mart-specific competitive repertoires. Incumbent retailers that had extensive prior geographical overlap with Wal-Mart ( $b_{12} = .011, p < .01$ ) and that already met Wal-Mart in key countries ( $b_{13} = .024, p < .10$ ) performed better than retailers that had not encountered Wal-Mart in other countries or only in countries that were relatively unimportant to the incumbent. Finally, the more symmetric the incumbent's and Wal-Mart's stake in different countries, the higher was the expected performance ( $b_{14} = .014, p < .05$ ). These findings support  $H_{5a-c}$ .

## VALIDATION ANALYSES

### *Alternative Ways to Compute Abnormal Returns*

Our dependent measure is the CAR over Days 0 and 1 ( $CAR_i[0, 1]$ ), where "abnormal" is operationalized as the difference between the observed actual return and the estimated expected return based on the market-return model. Alternatives to our measure can be envisaged with respect to the time window considered and the benchmark used to compute the expected returns. We performed validation checks along both dimensions.

*Different time windows.* Because it is common to include the day of the announcement in the event window (MacKinlay 1997) and given that it is advisable to work

with a small event window (McWilliams and Siegel 1997; Srinivasan and Bharadwaj 2004), we opted to work with the firms'  $CAR_i[0, 1]$  as the dependent variable in our base model. However, although  $AAR[1]$  was significant when we used commonly accepted cutoffs, this was not the case for  $AAR[0]$ , for which we obtained a  $p$ -value of .12 (Table 3). Given the modest  $p$ -value for  $AAR[0]$ , the question emerges whether our results are robust to limiting our analyses to the abnormal returns for Day 1 only.

To address this issue, we replicated the analyses using  $AR_i[1]$ . As such,  $CAR_i[0, 1]$  and  $AR_i[1]$  were correlated (.89,  $p < .01$ ), and the moderator analysis using  $AR_i[1]$  as the dependent variable yielded the same substantive results. All moderators had the expected sign, and all significant effects reported in Table 4 were replicated using  $AR_i[1]$  as the dependent variable.

Alternatively, it could be argued that if we include  $AR_i[0]$ , we should also include  $AR_i[2]$  because  $AAR[2]$  and  $AAR[0]$  have roughly comparable  $p$ -values (Table 3). The correlation between  $CAR_i[0, 1]$  and  $CAR_i[0, 2]$  was .68 ( $p < .01$ ), and the moderator analysis was robust to using  $CAR_i[0, 2]$  as the dependent variable. All coefficients had the expected sign, and we replicated 11 of the 13 significant effects reported in Table 4.

*Different model for expected return.* Two common choices for modeling the expected return for a share in a small window are the market-return model, which we use, and the constant-mean-return model, which assumes that the return of a security is constant over time (MacKinlay 1997).<sup>4</sup> We replicated our analyses using the constant-mean-return model. Our main findings were robust across the two models. Again,  $CAAR[0, 1]$  was significant ( $p < .05$ ) and of comparable magnitude ( $-.86\%$ ) to the market-return model ( $-.76\%$ ). The two operationalizations of  $CAR_i[0, 1]$  were correlated (.81,  $p < .01$ ). The moderator analysis was also robust across the two models. All coefficients had the expected sign, and we replicated 12 of the 13 significant effects reported in Table 4 using the constant-mean-return model.

### *Other Measures of Company Performance*

Although event studies are well established in finance, the assumption of efficient markets, which underlies this method, has been contested (for reviews of this debate, see Ball 1995; Fama 1998). A vast body of literature in marketing and elsewhere has documented bounded rationality and judgment biases. Event study proponents argue that such biases may well occur at the individual level but that markets exhibit information aggregation behavior through which they act as if they were fully informed and rational (Ball 1995; Surowiecki 2004). Still, the possibility cannot be ignored that initial reactions to a major event might be biased.

<sup>4</sup>A third alternative is Fama and French's (1993) three-factor model. We did not consider this model in our validation analyses, because the required daily data for the Fama–French factors were not available for the ten international markets. Moreover, when working with event windows of some days around the announcement day (as we do here), the difference between the market-return model and the Fama–French model is typically inconsequential (Kothari and Warner 2007).

To address these concerns, we considered three alternative performance metrics: the percentage growth in (1) sales, (2) earnings before interest and taxes (EBIT), and (3) return on assets (ROA) between 1998 (the year before the Asda takeover) and 2002 (three years after the takeover). Although there might have been many confounding events in the three years following the takeover, it might be expected that these variables at least moved in the same direction as the initial stock market reaction. We collected data on these alternative performance measures from Datamonitor.

We find evidence that, indeed, the three alternative performance measures (i.e., percentage change in Sales<sub>*i*</sub>, EBIT<sub>*i*</sub>, and ROA<sub>*i*</sub> on the one hand and CAR<sub>*i*</sub>[0, 1] on the other hand) moved in the same direction; the correlations were .170 ( $p = .08$ ), .237 ( $p = .05$ ), and .161 ( $p = .11$ ), respectively. Of these three measures, sales growth is most closely aligned with the marketing discipline. Note that sales growth exhibits a higher correlation with CAR<sub>*i*</sub>[0, 1] than with percentage change in EBIT<sub>*i*</sub> (.081,  $p = .41$ ) or with percentage change in ROA<sub>*i*</sub> (.085,  $p = .45$ ).

We replicated the moderator analysis using each of these alternative performance measures as the dependent variable. As Table 5 details, significant effects in these new analyses were always of the same sign as in our base model. Notably, however, each alternative measure was

affected by a distinct subset of drivers. Sales growth was primarily affected by the seriousness of the threat, change in EBIT by the incumbents' core competencies, and change in ROA by Wal-Mart-specific competitive repertoires and financial capacity. The combined evidence from these three models supports both our conceptual model (all components mattered for at least one of these alternative performance metrics) and our empirical results (significant effects had the "right" sign). It also illustrates our contention that the stock market considers multiple dimensions in arriving at its consensus reaction to the event.

#### DISCUSSION

In this article, we examined the effect of Wal-Mart's entry into the United Kingdom on the performance of European retailers. Drawing on the marketing, strategy, and finance literature streams, we developed hypotheses as to why some retailers are expected to be affected differently than others. Our focal measure of performance is shareholder value, which has recently been recognized as an important metric for evaluating the effect of marketing actions (Lehmann 2004), but we validated our findings using alternative performance metrics and tested our hypotheses on nearly 100 European retailers.

Our findings provide broad support for our conceptual model and the relevance of distinguishing between the seri-

Table 5  
MODERATOR ANALYSIS FOR ALTERNATIVE MEASURES OF COMPANY PERFORMANCE

Dependent Variable	Expected Sign	sales <sub>2002</sub> - sales <sub>1998</sub>		EBIT <sub>2002</sub> - EBIT <sub>1998</sub>		ROA <sub>2002</sub> - ROA <sub>1998</sub>	
		b	t	b	t	b	t
Intercept		.141	2.02 <sup>††</sup>	.307	2.24 <sup>††</sup>	-.134	.01
<i>Seriousness of the Threat</i>							
Overlap in assortment (b <sub>1</sub> )	-	-.159	1.47 <sup>†</sup>	-.009	.51	-.139	.26
Overlap in positioning (b <sub>2</sub> )	-	-.241	6.87*	-.046	4.43	-.216	1.34 <sup>†</sup>
Overlap in country of entry (b <sub>3</sub> )	-	-.101	5.32*	-.191	1.06	-.051	1.46 <sup>†</sup>
Overlap assortment × overlap country of entry (b <sub>4</sub> )	-	-.183	1.96***	-.060	.04	-.041	.70
Overlap positioning × overlap country of entry (b <sub>5</sub> )	-	-.301	.90	-.259	.11	.077	1.40
<i>Capacity to Withstand the Threat</i>							
<i>Financial Capacity</i>							
Size (b <sub>6</sub> )	+	.012	.37	.029	.37	.011	.08
Profitability (b <sub>7</sub> )	+	.116	14.4*	.035	.22	.142	5.11*
Financial leverage (b <sub>8</sub> )	-	-.075	.58	-.602	6.20*	-.627	9.59*
<i>Organizational Capacity</i>							
Development of core competencies							
Presence in countries with price focus (b <sub>9</sub> )	+	-.671	1.19	.287	6.20*	.282	4.90*
Presence in competitive countries (b <sub>10</sub> )	+	-.024	.90	.067	1.66***	.086	1.06
International diversity (b <sub>11</sub> )	+	.096	.02	.302	2.61**	-.303	.04
Wal-Mart-specific competitive repertoires							
Number of overlapping countries (b <sub>12</sub> )	+	-.05	.10	-.279	.56	.778	6.04*
Importance of overlapping countries to incumbent (b <sub>13</sub> )	+	.155	.34	.376	.33	.782	2.19***
Symmetry importance of overlapping countries (b <sub>14</sub> )	+	-.023	.00	-.210	.77	.193	1.95***
N = 98			R <sup>2</sup> = .31		R <sup>2</sup> = .30		R <sup>2</sup> = .29

\* $p < .001$  (one-sided).

\*\* $p < .01$  (one-sided).

\*\*\* $p < .05$  (one-sided).

<sup>†</sup> $p < .10$  (one-sided).

<sup>††</sup> $p < .05$  (two-sided).

ousness of a threat to an incumbent and the incumbent's capacity to withstand the threat. We find that the 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 profitable, and financially highly leveraged firms are much more negatively affected than firms with stronger financial resources. In addition to the financial capacity, the organizational capacity to withstand the threat plays an important role. 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.

In Table 4, we detail the effect of specific factors belonging to the two metaconstructs that constitute our conceptual framework, namely, seriousness of the threat and capacity to withstand the threat. We further highlight our findings by considering the  $2 \times 2$  matrix in Figure 2, in which we distinguish between incumbents that rate low and those that rate high on our two metaconstructs, based on an approximate median split.<sup>5</sup> We focus on these two metaconstructs rather than on specific moderators because they subsume multiple factors. This enables us to incorporate all relevant

<sup>5</sup>The median split was an approximation because the classification was based on a combination of multiple variables.

Figure 2

CAR[0, 1] AND MEAN PERCENTAGE GROWTH IN THE 1998–2002 PERIOD FOR SALES, EBIT, AND ROA FOR DIFFERENT LEVELS OF SERIOUSNESS OF THE THREAT AND CAPACITY TO WITHSTAND THE THREAT

		Seriousness of the Threat	
		Low	High
Capacity to Withstand the Threat	High	CAR[0, 1] = 1.3% Sales = 66% EBIT = 9% ROA = 29%  N = 30 (1)	CAR[0, 1] = -4.9% Sales = 51% EBIT = 1% ROA = -43%  N = 25 (2)
	Low	CAR[0, 1] = 3.8% Sales = 96% EBIT = 26% ROA = 29%  N = 22 (3)	CAR[0, 1] = -1.3% Sales = 47% EBIT = -11% ROA = -1%  N = 21 (4)

covariates to illustrate our findings. For each cell, we provide mean CAR[0, 1].

Consistent with our theorizing, incumbent retailers in Cell 2—high on seriousness of the threat and low on capacity to withstand the threat—are worse off, with a CAAR of -4.9%. If seriously threatened retailers have a high rather than low capacity to withstand the threat (Cell 4 versus Cell 2), the CAAR increases from -4.9% to -1.3%. Retailers that are not seriously threatened by Wal-Mart but have a low capacity to withstand its threat (Cell 1) are expected to benefit mildly from the positive changes Wal-Mart brings to European marketing systems, as reflected in a CAAR of 1.3%. If the retailer also has a strong capacity to withstand the threat, however remote it may appear (Cell 3), the average performance increases to 3.8%.

Note that when the threat is perceived as serious (Cells 2 and 4), the performance implications are negative on average, implying that negative aspects outweigh positive aspects. However, by building financial and organizational capacities, retailers can considerably mitigate the negative performance consequences; the average performance in Cell 4 is 73% higher than the one in Cell 2.

Figure 2 further reports in each cell the means for the three alternative performance metrics considered—the mean percentage growth in the period 1998–2002 in sales, EBIT, and ROA. In general, the picture is consistent with the results for CAR[0, 1].

#### Managerial Implications

We find that incumbents are significantly affected by the entry of a giant retailer. Some performance effects will be positive, for example, because of channelwide productivity increases that giant retailers may bring. 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 act proactively to mitigate the negatives? We believe that incumbent retailers can indeed employ proactive strategies when they are faced with the prospect of the possible entry of a much larger competitor, such as Wal-Mart.

To contain the seriousness of the threat, an incumbent retailer using an EDLP strategy might consider moving to a hi-lo strategy to render direct price comparisons with Wal-Mart more difficult. Incumbent retailers might also reduce the overlap in assortment with Wal-Mart by focusing on the niches Wal-Mart does not cover. Although we acknowledge that our operationalization of overlap in assortment is at a higher level of abstraction (because of a lack of more detailed data), we believe that our results are sufficiently intriguing to begin to shed light on this issue. Given Wal-Mart's focus on low prices, it is a less attractive place to purchase specialty products (which also fall within the broad categories previously mentioned). Target is arguably the best example of a retailer that has consciously strived to minimize assortment overlap with Wal-Mart. Although 70% of Target stores are in markets in which a Wal-Mart is present, only 30%–40% of the merchandise assortments overlap (Slywotzky 2007), and the financial markets reward its strategy. Target's stock return has significantly outperformed Wal-Mart's over the last years.

Retailers can reduce the overlap in assortment by carrying exclusive, specialized, niche, or service-augmented

products that are difficult to reconcile with the big-box retailing formula that drives Wal-Mart's success. A possibility is upscale manufacturer brands that do not want to be sold at Wal-Mart for fear of damaging their brand image. Another option is the retailer's own line of premium store brands or exclusive items. For example, consider the Isaac Mizrahi items sold exclusively at Target or the Vera Wang line at Kohl's. Grocery retailer Kroger is resurging on sales of prepared and semicooked foods. Best Buy has successfully withstood Wal-Mart's push into consumer electronics by adding (high-margin) installation and other services alongside personal computers and flat-screen televisions (McWilliams 2007).

However, it would be unwise to underestimate Wal-Mart's ability to respond to these strategic moves by its competitors. For example, it recently began selling installation services at some of its stores (McWilliams 2007). It is also expanding its assortment, and the sophistication of its own store-brand portfolio is continuously improving (Kumar and Steenkamp 2007). Moreover, overlap in the country of entry is difficult to avoid. Therefore, firms should also consider proactively improving their capacity to withstand the threat. Size and profitability can be increased 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 Europe's largest retailer.

Less glamorous, but equally important, is honing organizational learning skills. Rather than avoiding difficult markets—competitive countries with a strong price focus—an incumbent can acquire these skills by operating in 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 the insensitivity of Wal-Mart to the German culture, a key reason it failed was because it was competing with the efficient hard discounter Aldi. Aldi has built such an efficient marketing system that its costs of goods sold are half those of Wal-Mart (Kumar and Steenkamp 2007). Wal-Mart found 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 the home country bastion is not a realistic option in today's globalizing world. In this respect, Wal-Mart and 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. The important role of organizational learning in company performance reveals that both

large and small retailers have a chance to prosper after a massive competitor enters the market: the former by virtue of their financial resources and the right organizational competencies and the latter by having acquired the right organizational competencies.

Thus, when an incumbent retailer is faced with the possibility of entry by a much larger competitor, there are several actions it can take to prepare proactively 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 Further Research*

Our study has several limitations that offer avenues for further research. First, we study the effect of one foreign acquisition by a giant retailer on the performance of incumbent retailers using the metric of shareholder value, though we validate our framework with alternative performance measures. Further research could study other foreign acquisitions by giant retailers. It is also necessary to investigate the extent to which our results hold when market entry takes place by starting a greenfield operation. It would be worthwhile to examine the extent to which the relative importance of the various moderators is itself moderated by mode of entry (i.e., acquisition versus greenfield).

Second, our framework could be tested in other industries. This would make it possible to assess whether the negative net effect we observe across all parties studied (i.e., the different European retailers in our sample, Asda, and Wal-Mart) is observed when a giant enters a foreign market or whether this is a Wal-Mart-specific or retail-industry-specific finding. Further research could also examine the role of the size of the acquiring firm on the stock market reaction for incumbent players.

Finally, it would be worthwhile considering to which market parties the net performance effect of  $-\$5.68$  billion was dissipated. Did key suppliers of the European retailers benefit or Wal-Mart's U.S. retail competitors in the anticipation that Wal-Mart would lose its focus? Did the market view the entry of Wal-Mart as a loss for retailers but a gain for consumers in terms of more intense competition and lower prices (for a quantification of the consumer surplus following Wal-Mart's entry into local U.S. markets, see Hausman and Leibtag 2005)?

We show that to understand the performance implications of major strategic marketing actions, it is necessary 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 entry into the marketplace. Marketing, an inherently interdisciplinary science, is ideally suited to achieve this.

Appendix  
MEASUREMENTS

<i>Measure</i>	<i>Operationalization</i>	<i>Example</i>
Overlap in assortment	<p>Operationalized as the sum of the shares of retailer <i>i</i>'s sales,</p> $\sum_{p=1}^P S_{i,p},$ <p>realized in the <i>P</i> product markets in which it meets Wal-Mart, where <math>S_{i,p}</math> represents the share of retailer <i>i</i>'s sales made in product market <i>p</i> (see Fuentelsaz and Gómez 2006).</p>	In 1998, the Belgian retailer Delhaize operated in the grocery and drugstore market and generated, respectively, 78% and 22% of its sales in these two markets. Because Wal-Mart was active in both product markets, Delhaize's overlap index equals 100%.
Overlap in positioning	Operationalized as a dummy variable that equals 1 if retailer <i>i</i> has experience as an EDLP player and 0 if otherwise.	In 1998, Delhaize acquired EDLP experience through its U.S. subsidiary, Food Lion. Therefore, the positioning dummy equals 1 for Delhaize.
Overlap in country of entry	Expressed as the share of sales $S_i$ generated by retailer <i>i</i> in the United Kingdom in 1998.	In 1998, Delhaize was not active in the United Kingdom. Therefore, its overlap in the United Kingdom equals 0.
Firm size	Total global sales of retailer <i>i</i> .	In 1998, Delhaize's total sales were \$12 billion.
Firm profitability	Retailer <i>i</i> 's funds available from operations divided by sales (Fee and Thomas 2004).	In 1998, Delhaize's profitability amounted to 4.9%.
Financial leverage	The ratio of debt to total assets (Moeller, Schlingemann, and Stulz 2004).	In 1998, Delhaize's leverage was .16.
Presence in countries with price focus	<p>Expressed as</p> $\sum_{c=1}^C S_{i,c} D_c,$ <p>where <math>D_c</math> equals the share of discount activity in country <i>c</i>'s retail sector, <math>S_{i,c}</math> refers to the share of sales realized by retailer <i>i</i> in country <i>c</i>, and <i>C</i> equals the total number of countries in which the retailer is active.</p>	In 1998, Delhaize was present in ten countries: Belgium, the Czech Republic, France, Greece, Indonesia, Luxembourg, Singapore, Slovakia, Thailand, and the United States. In these countries Delhaize obtained, respectively, 21%, 2%, 2%, 3%, .1%, .2%, .6%, .1%, .1%, and 71% of its sales. In these countries, the share of discount activities amounted to, respectively, 10.8%, 9.7%, 6.1%, 2.4%, .07%, 2.9%, 0%, 1.8%, 0%, and 1.16%. Thus, the weighted share of discount operations of the countries in which Delhaize was active in 1998 amounted to 3.8%.
Presence in competitive countries	<p>Expressed as</p> $\sum_{c=1}^C S_{i,c} COMP_c,$ <p>where <math>COMP_c</math> refers to country <i>c</i>'s IMD World Competitiveness Score (an index between 0 and 100) in country <i>c</i> and <math>S_{i,c}</math> refers to retailer <i>i</i>'s share of sales in country <i>c</i>, where <i>C</i> is the total number of countries in which the retailer is operating.</p>	In 1998, the IMD national competitiveness ranks for the ten countries in which Delhaize operated ranged from 34.4 (Indonesia) to 100 (the United States). When the previously mentioned shares of operations in these countries are used as weights, Delhaize's national competitiveness index amounted to 90.1.
International diversity	<p>Expressed as a Herfindahl-type index,</p> $1 - \sum_{i=1}^C S_{i,c}^2,$ <p>based on <math>S_{i,c}</math>, the proportion of retailer <i>i</i>'s sales in country <i>c</i>, where <i>C</i> refers to the total number of countries in which the retailer operates (see Barkema and Vermeulen 1998).</p>	Given the shares of sales in the ten countries in which Delhaize operated, the international diversity index for Delhaize amounted to .49.
Geographical overlap	The number of countries in which both the retail firm and Wal-Mart are present.	In 1998, Wal-Mart operated in seven geographic markets: its U.S. home market (in which it realized 83.9% of its total sales), Mexico (9%), Germany (4.8%), Argentina (.8%), Brazil (.5%), South Korea (.3%), and China (.2%). In turn, Delhaize was present in ten countries. However, because Wal-Mart and Delhaize met in only one market, the United States, Delhaize's geographic market overlap with Wal-Mart equals 1.

Appendix  
CONTINUED

Measure	Operationalization	Example
Importance of geographic overlap	Operationalized as the sum of the shares of retailer <i>i</i> 's sales, $\sum_{mc=1}^{MC} S_{i,mc},$ <p>realized in geographic markets in which it meets Wal-Mart, where <math>S_i</math> represents the share of retailer <i>i</i>'s total sales realized in mutual host country <i>mc</i> and <i>MC</i> expresses the total number of markets in which the incumbent retailer and Wal-Mart meet.</p>	In Delhaize's case, the geographic importance index equals 71.3%, the share of Delhaize's total sales made through its U.S. operations.
Symmetry of geographic overlap	Operationalized as $1 - \sum_{mc=1}^{MC}  S_{i,mc} - S_{WM,mc} /MC,$ <p>where <math>S_{i,mc}</math> (<math>S_{WM,mc}</math>) represents the share of retailer <i>i</i>'s (Wal-Mart's) total sales realized in mutual host country <i>mc</i> and <i>MC</i> expresses the number of markets in which they have contact (see Fuentelsaz and Gómez 2006).</p>	Delhaize realized 71.3% of its sales in the United States, the market it shared with Wal-Mart. Because Wal-Mart realized 83.9% of its 1998 sales in the U.S. market, Delhaize's geographic symmetry index equals 87.4 (= 100 -  71.3 - 83.9 ).

Notes: To avoid potential endogeneity issues, we calculated all measures using 1998 (the year before Wal-Mart's acquisition of Asda) data.

## REFERENCES

- Aitken, Brian J. and Ann E. Harrison (1999), "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela," *American Economic Review*, 89 (June), 605–618.
- Ball, Ray (1995), "The Theory of Stock Market Efficiency: Accomplishments and Limitations," *Journal of Applied Corporate Finance*, 8 (Spring), 4–17.
- Barkema, Harry G. and Freek Vermeulen (1998), "International Expansion Through Start-Up or Acquisition: A Learning Perspective," *Academy of Management Journal*, 41 (February), 7–26.
- Basker, Emek (2005), "Selling a Cheaper Mousetrap: Wal-Mart's Effect on Retail Prices," *Journal of Urban Economics*, 58 (2), 203–229.
- Baum, Joel A.C. and Helaine J. Korn (1999), "Dynamics of Dyadic Competitive Interaction," *Strategic Management Journal*, 20 (March), 251–28.
- Bloom, Paul N. and Vanessa G. Perry (2001), "Retailer Power and Supplier Welfare: The Case of Wal-Mart," *Journal of Retailing*, 77 (Autumn), 379–96.
- Brown, Stephen J. and Jerold B. Warner (1985), "Using Daily Stock Returns: The Case of Event Studies," *Journal of Financial Economics*, 14 (March), 3–31.
- Chen, Ming-Jer (1996), "Competitor Analysis and Interfirm Rivalry: Toward a Theoretical Integration," *Academy of Management Review*, 21 (January), 100–134.
- and Ian C. MacMillan (1992), "Nonresponse and Delayed Response to Competitive Moves: The Roles of Competitor Dependence and Action Irreversibility," *Academy of Management Journal*, 35 (August), 539–70.
- and Danny Miller (1994), "Competitive Attack, Retaliation and Performance: An Expectancy-Valence Framework," *Strategic Management Journal*, 15 (February), 85–102.
- Chen, Zhiqi (2003), "Dominant Retailers and the Countervailing-Power Hypothesis," *RAND Journal of Economics*, 34 (Winter), 612–25.
- Chevalier, Judith A. (1995), "Do LBO Supermarkets Charge More? An Empirical Analysis of the Effects of LBOs on Supermarket Pricing," *Journal of Finance*, 50 (September), 1095–1112.
- and David S. Scharfstein (1996), "Capital-Market Imperfections and Countercyclical Markups: Theory and Evidence," *American Economic Review*, 86 (September), 703–725.
- Cope, Nigel (1999), "Asda Takeover Threatens Price War," *The Independent*, (June 15), 5.
- Day, George S. (1997), "Maintaining the Competitive Edge: Creating and Sustaining Advantages in Dynamic Competitive Environments," in *Wharton on Dynamic Competitive Strategy*, George S. Day and David J. Reibstein, eds. New York: John Wiley & Sons, 48–75.
- Dukes, Anthony, Esther Gal-Or, and Kannan Srinivasan (2006), "Channel Bargaining with Retailer Asymmetry," *Journal of Marketing Research*, 43 (February), 84–97.
- Easterby-Smith, Mark (1997), "Disciplines of Organizational Learning: Contributions and Critiques," *Human Relations*, 50 (September), 1085–1113.
- Fama, Eugene F. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance*, 25 (May), 383–417.
- (1998), "Market Efficiency, Long-Term Returns and Behavioral Finance," *Journal of Financial Economics*, 3 (September), 283–306.
- and Kenneth R. French (1993), "Common Risk Factors in Returns on Stocks and Bonds," *Journal of Financial Economics*, 33 (1), 3–56.
- Fee, C. Edward and Shawn Thomas (2004), "Sources of Gains in Horizontal Mergers: Evidence from Customer, Supplier and Rival Firms," *Journal of Financial Economics*, 74 (December), 423–60.
- Fuentelsaz, Lucio and Jaime Gómez (2006), "Multipoint Competition, Strategic Similarity and Entry into Geographic Markets," *Strategic Management Journal*, 27 (May), 477–99.
- Geyskens, Inge, Katrijn Gielens, and Marnik G. Dekimpe (2002), "The Market Valuation of Internet Channel Additions," *Journal of Marketing*, 66 (April), 102–119.
- Gielens, Katrijn and Marnik G. Dekimpe (2007), "The Entry Strategy of Retail Firms into Transition Economies," *Journal of Marketing*, 71 (April), 196–212.
- Gimeno, Javier (1999), "Reciprocal Threats in Multimarket Rivalry: Staking Out 'Spheres of Influence' in the US Airline

- Industry," *Strategic Management Journal*, 20 (February), 101–128.
- and Carolyn Y. Woo (1999), "Multimarket Contact, Economies of Scope, and Firm Performance," *Academy of Management Journal*, 43 (June), 239–59.
- Görg, Holger and David Greenaway (2004), "Much Ado About Nothing? Do Domestic Firms Really Benefit from Foreign Direct Investment?" *World Bank Research Observer*, 19 (Fall), 171–97.
- Hausman, Jerry and Ephraim Leibtag (2005), "Consumer Benefits from Increased Competition in Shopping Outlets: Measuring the Effect of Wal-Mart," National Bureau of Economic Research, Working Paper No. 11809.
- Jain, Prem C. (1982), "Cross-Sectional Association Between Abnormal Returns and Firm Specific Variables," *Journal of Accounting and Economics*, 4 (December), 205–228.
- Johnson, Bradford C. (2002), "Retail: The Wal-Mart Effect," *McKinsey Quarterly*, (1), 40–43.
- Judge, George G., William E. Griffiths, R. Carter Hill, Helmut Lütkepohl, and Tsoung-Chao Lee (1988), *Introduction to the Theory and Practice of Econometrics*. New York: John Wiley & Sons.
- Khanna, Naveen and Sheri Tice (2000), "Strategic Responses of Incumbents to New Entry: The Effect of Ownership Structure, Capital Structure, and Focus," *Review of Financial Studies*, 13 (Autumn), 749–79.
- Kothari, S.P. and Jerold B. Warner (2007), "Econometrics of Event Studies," in *Handbook of Corporate Finance: Empirical Corporate Finance*, Vol. 1, B. Espen Eckbo, ed. Amsterdam: Elsevier, 3–36.
- Kumar, Nirmalya and Jan-Benedict E.M. Steenkamp (2007), *Private Label Strategy: How to Meet the Store Brand Challenge*. Cambridge, MA: Harvard Business School Press.
- Lehmann, Donald R. (2004), "Metrics for Making Marketing Matter," *Journal of Marketing*, 68 (October), 73–75.
- Liang, David (2003), "The Big Store Goes Global," *Stern Business*, (Spring–Summer), 34–39.
- Liang, Kung-Yee and Scott L. Zeger (1986), "Longitudinal Data Analysis Using Generalized Linear Models," *Biometrika*, 73 (1), 13–22.
- Liu, Xiaming, Pamela Siler, Chenqi Wang, and Yingqi Wei (2000), "Productivity Spillovers from Foreign Direct Investment: Evidence from UK Industry Level Panel Data," *Journal of International Business Studies*, 31 (3), 407–425.
- MacKinlay, A. Craig (1997), "Event Studies in Economics and Finance," *Journal of Economic Literature*, 35 (March), 13–39.
- McWilliams, Abigail and Donald Siegel (1997), "Event Studies in Management Research: Theoretical and Empirical Issues," *Academy of Management Journal*, 40 (June), 626–57.
- McWilliams, Gary (2007), "Wal-Mart Era Wanes Amid Big Shifts in Retail," *The Wall Street Journal*, (October 3), A1.
- Miller, Danny and Ming-Jer Chen (1996a), "Nonconformity in Competitive Repertoires: A Sociological View of Markets," *Social Forces*, 74 (June), 1209–1234.
- and ——— (1996b), "The Simplicity of Competitive Repertoires: An Empirical Analysis," *Strategic Management Journal*, 17 (June), 419–39.
- Mitra, Debanjan and Peter N. Golder (2002), "Whose Culture Matters? Near-Market Knowledge and Its Impact on Foreign Market Entry Timing," *Journal of Marketing Research*, 39 (August), 350–65.
- Mizik, Natalie and Robert Jacobson (2007), "Myopic Marketing Management: Evidence of the Phenomenon and Its Long-Term Performance Consequences in the SEO Context," *Marketing Science*, 26 (3), 361–79.
- Moeller, Sara B., Frederik P. Schlingemann, and René Stulz (2004), "Firm Size and the Gains from Acquisitions," *Journal of Financial Economics*, 73 (August), 201–228.
- Nelson, Emily and Ernest Beck (1999), "Wal-Mart Seeks U.K. Supermarket Firm: Cash Offer of \$10.8 Billion for Asda Gives Jitters to European Retailers," *The Wall Street Journal (Europe)*, (June 15), A3.
- Patell, James M. (1976), "Corporate Forecasts of Earnings per Share and Stock Price Behavior: Empirical Tests," *Journal of Accounting Research*, 14 (Autumn), 246–76.
- Porter, Michael E. (1990), *The Competitive Advantage of Nations*. New York: The Free Press.
- Prahalad, C.K. and Gary Hamel (1990), "The Core Competence of the Corporation," *Harvard Business Review*, 68 (May–June), 79–91.
- Shahrur, Husayan (2005), "Industry Structure and Horizontal Takeovers: Analysis of Wealth Effects on Rivals, Suppliers, and Corporate Customers," *Journal of Financial Economics*, 76 (April), 61–98.
- Singh, Vishal P., Karsten T. Hansen, and Robert C. Blattberg (2006), "Market Entry and Consumer Behavior: An Investigation of a Wal-Mart Supercenter," *Marketing Science*, 25 (September–October), 457–76.
- Song, Moon H. and Ralph A. Walkling (2000) "Abnormal Returns to Rivals of Acquisition Targets: A Test of the Acquisition Probability Hypothesis," *Journal of Financial Economics*, 55 (February), 143–71.
- Slywotzky, Adrian J. (2007), *The Upside*. New York: Crown Business.
- Srinivasan, Raji and Sundar Bharadwaj (2004), "Event Studies in Marketing Strategy Research," in *Assessing Marketing Strategy Performance*, Christine Moorman and Donald R. Lehmann, eds. Cambridge, MA: Marketing Science Institute, 9–28.
- Srinivasan, Shuba and Dominique M. Hanssens (2007), "Marketing and Firm Value," working paper, Anderson Graduate School of Management, University of California, Los Angeles.
- Srivastava, Rajendra K., Tasadduq A. Shervani, and Liam Fahey (1998), "Market-Based Assets and Shareholder Value: A Framework for Analysis," *Journal of Marketing*, 62 (January), 2–18.
- Stone, Kenneth E. (1995), "Impact of Wal-Mart Stores on Iowa Communities: 1983-1993," *Economic Development Review*, 13 (Spring), 60–69.
- Surowiecki, James (2004), *The Wisdom of Crowds*. New York: Doubleday.
- Whinston, Michael D. and Scott D. Collins (1992), "Entry and Competitive Structure in Deregulated Airline Markets: An Event Study of People Express," *RAND Journal of Economics*, 23 (Winter), 445–62.
- Whitworth, Damian (1999), "U.S. Price-Busters Invade Britain," *The Times*, (June 15), 1.
- Zahra, A. Shaker, R. Duane Ireland, and Michael A. Hitt (2000), "International Expansion by New Venture Firms: International Diversity, Mode of Market Entry, Technological Learning, and Performance," *Academy of Management Journal*, 43 (October), 925–50.