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# The Impact of Corporate Rebranding on the Firm's Market Value

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# The Impact of Corporate Rebranding on the Firm's Market Value

#### Abstract

Rebranding corresponds to the creation of a new name, term, symbol, design or a combination of them for an established brand with the intention of developing a differentiated position in the mind of stakeholders and competitors. Increased competition has led firms to an avenue of differentiation, and rebranding has been approached by firms in order to differentiate themselves and to promote the corporate image. Corporate rebranding, although commonly referred in the press, has received little attention from academia. This paper tends to contribute to fill this gap in the academic literature, by analysing the impact that corporate image through rebranding has on the firms' stock market value, using event study methodologies. We focus on firms listed on the Lisbon Stock Market in the period 2000 – February 2009. We do not find evidence of a positive impact of corporate rebranding on firm value, in Portuguese firms. In fact, our results suggest that these events may have a negative impact on firm value, even though our empirical evidence is weak, in supporting this conclusion.

JEL codes: G14, M31

Keywords: corporate image, rebranding, market value, event study

#### 1. Introduction

Increasing global competition has led firms toward an even higher need for distinctiveness. When looking at the variables that are most qualified to sustain a competitive advantage, the corporate image emerges (Kay, 2006). Adopting the definition proposed by Muzellec and Lambkin (2006), rebranding corresponds to the creation of a new brand element aiming to create a new image or position in the mind of stakeholders. A good and strong corporate image can have a positive impact on workers, managers, investors, and customers' evaluations. On the other hand, rebranding is a strategy involving considerable risks, as strong brands take years to be successfully built in order to provide higher margins, loyal customer bases and a continuous stream of income for the firm representing the brand (Aaker, 1996; Keller, 2002).

As corporate rebranding decisions aim to add value to the firm, by sending a positive sign to stakeholders, the success and economical rationale of these decisions may be judged by identifying its impact on firm value, i.e., the impact on the firm's stock price. In fact, the market value of a firm's traded securities reflects an unbiased estimate of future cash flows (Simon and Sullivan, 1993). A corporate rebranding signals the market that something in the firm has changed, hopefully implying a more positive outlook.

In evaluating the impact of these types of events, we use event study methodologies, which have been previously applied extensively in different fields of economic, finance and management studies. Under the assumption that markets are efficient, the impact of corporate branding decisions on stock prices should occur on the day of the announcement, or in the next day, if the market is already closed when the news is disclosed. Therefore, event study methodologies try to detect abnormal returns in stock prices on and around the event day. Evidence of the effect that corporate rebranding decisions have on firm value is relevant both for the firm's managers and for investors.

In this paper, we apply event study methodology to Portuguese firms, to analyze the impact of corporate rebranding on their market value, thus adding both to the empirical evidence on this type of event and to the understanding on smaller capital markets. To the best of our knowledge, there are no previous studies covering the impact of rebranding actions in the Portuguese stock market. The remainder of the paper is organised as follows. In section 2, we present some of the more relevant previous studies on corporate rebranding, including studies that analyse empirically its impact on firm value. Section 3 presents the data and section 4 presents the event study methodologies and statistical tests applied to the data. In section 5 we present the empirical results. Finally, in section 6, we present the conclusions.

#### 2. Literature Review

#### 2.1. Corporate rebranding

A brand is usually defined as 'a name, term, symbol, design or a combination of them intended to identify goods or services of one seller or group of sellers and to differentiate them from those of competitors' (Kotler, 2008). Brands are increasingly viewed as one of the major assets firms possess. Tadelis (1999) defined a firm's reputation (and its associated name) as a valuable intangible asset. Brands differentiate, protect and convey meaning to what firms communicate to customers. Competition increases the power of brands, as these allow non-price differentiation (Aaker, 1991). Brand names are somewhat different than corporate brand names and corporate brands are more than just trade names (see Muzellec, 2006 for a review on the subject). Following Einwiller and Will (2002, p.101), corporate branding is considered a 'systematically planned and implemented process of creating and maintaining a favourable image and consequently a favourable reputation of the firm as a whole by sending signals to all stakeholders by managing behaviour, communication and symbolism'. Kay (2006) adds that corporate branding is the way an organization communicates its identity. As product brands, corporate brands are designed to evoke positive associations from stakeholders (Dacin and Brown, 2002). Corporate brands are said to be more central and strategic, controlled by top management (Hatch and Schultz, 2003), more abstract, representing higher-order values (de Chernatony, 2002) and more complex, with possible different meanings for different stakeholders (Balmer and Greyser, 2002), when compared to product brands.

The issue of corporate branding has been adequately discussed in the literature, but corporate rebranding has been somehow neglected from academic research, despite firms' evidence of such moves. Most of the existing research on corporate rebranding focuses on revolutionary rebranding, such as the creation of a new name (Horsky and Swyngedouw, 1987; Delattre, 2002; Muzellec and Lambkin, 2006; Muzellec, 2006). In

this paper, we approach all the continuum of rebranding, trying to include minor and major changes to corporate branding.

A good and strong corporate image influences current workers (Riordan et al., 1997), investors (Fombrun and Shanley, 1990), future applicants (Dowling, 1988) and customers' evaluations and preferences (Bravo et al., 2009; Howcroft, 1991). That is to say that managing a strong corporate brand is different than managing strong product brands: corporate brands are communicated to different stakeholders and may have lesser impact on consumers (Kay, 2006). A well conceived, solid, strong corporate branding strategy provides management with a holistic framework to integrate the firm's activities, its vision and mission; it allows the firm to express its distinctiveness, that is, to differentiate itself in the relationship with stakeholders (Schultz and de Chernatony, 2002), and represents an opportunity to increase the future incomes of the firm.

Sometimes, despite the high budgets spent on communicating the corporate positioning, firms fail to create a distinctive image and have to rebrand (Bravo et al., 2009). The reasons to rebrand can come from changing external conditions, weaker competitive position, changing ownerships structures and/or changes in corporate strategy (Fombrun and Shanley, 1990; Muzellec and Lambkin, 2006). Delattre (2002) finds four categories of reasons to rebrand: new corporate image, new management or shareholding structure, new activity, and change of legal status. Despite the motivation and the investment involved, rebranding has its risks: part of existing accumulated goodwill, in the form of name recognition, corporate image, and routinized purchase behaviour, can be lost (Horsky and Swyngedouw, 1987).

Hence, corporate rebranding can be distinguished from corporate branding as the former refers to a change between an initially formulated corporate brand and a new formulation (Merrilees and Miller, 2008). Muzellec and Lambkin (2006) define rebranding as the creation of a new name, term, symbol or design for an established brand, in order to create a differentiation in the mind of stakeholders and competitors. As a brand is composed of tangible and intangible elements, rebranding may consist of changing one or all of these elements along a continuum (Daly and Moloney, 2004): from minor improvements to the visual identity of the corporate brand (i.e., logos and slogans) defining an evolutionary rebranding, to major changes such as the creation of a new name, i.e. revolutionary rebranding (Daly and Moloney, 2004; Muzellec and Lambkin, 2006). Delattre (2002) divides corporate name changes into 'level 1' changes

(when reorganising the elements of a whole system that remains unchanged) and 'level 2' changes (when the system is modified). We can consider these two levels as similar to the evolutionary/revolutionary continuum.

Rebranding strategies are directly linked with brand equity management. Firms wanting to add value to their offer through corporate rebranding have to evaluate and manage their brand equity. One approach to assess the value of brand equity derives from finance theory and uses the stock price as the evaluation basis (Aaker, 1991). The argument is that the stock market will adjust the price of a firm to reflect future prospects of its brands. Stakeholders' define their image of the firm based on the signals that emanate from it. Corporate rebranding is a very strong formal signal that stakeholders receive that something about the corporate rebranding actions will impact the corporate market value and thus constitute a signal that shareholders will use when they evaluate the firm. One mentioned disadvantage of working with the stock market relates to the need of events to be sufficiently large to be detected. Corporate rebranding exercises are considered major events and so noticeable.

#### 2.2. From Corporate rebranding to Market value

This financial market perspective derives from the 'efficient markets' literature, that forecasts that in a well functioning capital market, stock prices are the best available unbiased estimates of the value of the assets of a firm (Simon and Sullivan, 1993; Fama, 1970). It is preferable to use the financial market valuation than historic accounting measures that fail to incorporate the expected future returns of rebranding actions. Additionally, by using objective market based measures, comparisons over time and industries are possible. Dowling (2006) presents a framework linking corporate reputation to the creation of shareholder value, based on the four-part valuation model of Copeland, Koller and Murrin (2000). He claims that a good corporate reputation will be a part of the firm's intrinsic value which will be factored into the firm's share price. Einwiller and Will (2002) find evidence that a strong corporate brand and a favourable reputation contribute to higher stock prices. Successful corporate branding strategies will provide an opportunity for generating a significant future income stream (Schultz and de Chernatony, 2002), which, under the hypothesis of efficient markets, will be reflected on the stock price.

A common approach to analyse this financial market perspective, i.e., the impact of corporate rebranding in market value, is provided by event study methodology. In marketing, event studies have been published across research streams linked to product, promotion and services (see Johnston (2007) for a metanalysis on the subject). Under the promotion research area, corporate name changes have been analysed by several researchers including Howe (1982), Horsky and Swyngedouw (1987), Bosch and Hirschey (1989), Simon and Sullivan (1993), Karpoff and Rankine (1994), Karbhari, Sori and Mohamad (2004), Kilic and Dursun (2006). Most of these studies find a non significant market reaction as a consequence of a corporate name change. One possible reason presented by Karpoff and Rankine (1994) is that those changes are anticipated by the market. However, Kilic and Dursun (2006) conclude that a name change has a positive impact on the firm's value. Horsky and Swyngedouw (1987) claim that name changes signal to the market that measures to improve the performance will be adopted by the firm, which can contribute to a positive impact on shareholders' value.

#### 3. Data

In this paper, we aim to study the impact on firm value of corporate rebranding events, of Portuguese firms quoted in the Lisbon Stock Exchange (Euronext Lisbon). To that purpose, we consider all the rebranding events that occurred in the period from January 2000 to April 2010. The identification of the event dates results from an extensive research on the media and corresponds to the day of the public announcement of the corporate rebranding campaign. After controlling for confounding effects (contemporary events), such as dividend distribution announcements and capital increases, and for the lack of liquidity, we end up with a sample of 17 observations.

#### 4. Methodology

The method chosen to analyse the impact of corporate rebranding on market value is event study methodology. This method measures the stock price reaction to the unanticipated announcement of an event. In our case, the event is the announcement of a corporate rebranding action. The event study methodology is based on the hypothesis of efficient markets (Fama, 1970). If stock prices reflect all the available information of firms, then when the market faces an event that is not anticipated, abnormal returns should happen with a positive or negative impact on stock prices. An appropriate event is an event likely to have a financial impact on the firm, providing new information that

is unanticipated by the market and where there are no confounding effects (McWilliams and Siegel, 1997).

We define the event day as the day when the new corporate brand is announced in the media. In a fully efficient market, we would expect that the impact on stock prices occurs either on the event day (day 0) or in the following day (day  $\pm$ 1), if the information only became available after the market closing of the event day. In practice, it is normal to consider a larger set of days around the event window. We define the event window including days  $\pm$ 5 to  $\pm$ 5, relative to the event day. This allows for the possibility that the arrival of information to the market, about the corporate rebranding, has been leaked before the event day, which could lead to an effect on price occurring on the days before day 0. Also, allowing for the possibility of some market rigidities, or a lagged response by investors, we analyze price behaviour until day  $\pm$ 5.

It is important to note that the broadening of the event window to include more days has the disadvantage that prices, in that period, might be affected by confounding effects, including other significant announcements about the firm. Therefore, it is important to use an event window as narrow as possible, balancing the pros and cons of smaller and larger windows. As the event window of [-5; +5] is arbitrarily chosen, we also observe the behaviour of returns in two smaller windows [-2;+2] and [+1,+3], to confirm the robustness of our results.

The appraisal of the event's impact requires measuring abnormal returns around the event day. The abnormal return is the return of the stock during the event window, deducted by the normal return of the firm, over the same period. The normal return is defined as the expected return if the event did not take place. Following MacKinlay (1997), we define for firm i and event date t, the abnormal return as:

$$AR_{it} = R_{it} - E(R_{it} \mid X_t)$$
<sup>(1)</sup>

where  $AR_{it}$ ,  $R_{it}$  and  $E(R_{it} | X_t)$  are the abnormal, actual and normal returns respectively for firm *i* in time period *t*.  $X_t$  is the conditioning information for the normal return model. We take the common approach of defining  $X_t$  as the market return, and thus we estimate the market model for each firm as:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \tag{2}$$

where  $R_{it}$  is the log return on the share price of firm *i* on day *t*,  $R_{mt}$  is the log return on the PSI 20 stock market index on day *t*,  $\alpha_i$  is the intercept term,  $\beta_i$  is the systematic risk of stock *i*, and  $\varepsilon_{it}$  is the error term with  $E(\varepsilon_{it}) = 0$ .

From estimation of the above equation, we estimate the daily abnormal returns for the *i*th firm using the following equation:

$$AR_{it} = R_{it} - \left(a_i + \beta_i R_{mt}\right) \tag{3}$$

where  $a_i$  and  $\beta_i$  are the ordinary least squares (OLS) parameter estimates obtained from the regression of  $R_{it}$  on  $R_{mt}$  over an estimation period preceding the event, including returns from the estimation window [-150;-30]. The abnormal returns thus represent returns earned by the firm after adjustment for the "normal" expected return, which is determined by the market model. It is, therefore, the disturbance term of the market model calculated on the estimation window.

Given the market model parameter estimates, we can measure and analyze the abnormal returns. Under the null hypothesis (no abnormal returns on the event window), conditional on the event window market returns, the abnormal returns will be jointly normally distributed with a zero conditional mean and conditional variance given by:

$$\sigma^2 (AR_{it}) = \sigma_{\varepsilon_i}^2 + \frac{1}{L} \left[ 1 + \frac{(R_{mt} - \hat{\mu}_m)}{\hat{\sigma}_m^2} \right]$$
(4)

where  $\sigma_{\varepsilon_i}^2$  is the disturbance variance from (2), *L* is the number of daily returns in the estimation window,  $\hat{\mu}_m$  is the average market return in the estimation window of firm *i*, and  $\sigma_m^2$  is the variance of market returns in the same period. We have:

$$\hat{\sigma}_{\varepsilon_i}^2 = \frac{1}{L-2} \sum_{t=-150}^{-30} (R_{it} - a_i - b_i R_{mt})^2$$
(5)

$$\hat{\mu}_m = \frac{1}{L} \sum_{t=-150}^{-30} R_{mt} \tag{6}$$

The second component of (4) is additional variance due to the sampling error in  $\alpha_i$  and  $\beta_i$ . Given that *L*=120 is sufficiently large, the second term is very close to zero, and so we take the approximation that the variance of the abnormal return will be  $\sigma_{\varepsilon_i}^2$ , and the abnormal return observations will become independent through time, as suggested by MacKinlay (1997).

Under the null hypothesis,  $H_0$ , that the corporate rebranding event has no impact on the behaviour of returns (mean or variance), the distributional properties of the abnormal returns can be used to draw inferences over any period within the event window. Under the null hypothesis, the distribution of the sample abnormal return of a given observation in the event window is:

$$AR_{it} \sim N(0, \sigma^2(AR_{it}))$$
<sup>(7)</sup>

The next step is the aggregation of the abnormal returns with the purpose of drawing overall inferences for the event window. The aggregation is performed through time (days in the event window) for each firm, and across firms. We define CAR(-5,+5) as the cumulative abnormal return in the event window, i.e., from day -5 to day +5, and is computed as the sum of the included abnormal returns for firm *i*:

$$CAR_{i}(-5,+5) = \sum_{t=-5}^{+5} AR_{it}$$
 (8)

Asymptotically (as L increases) the variance of  $CAR_i$  approximates

$$\sigma_i^2(-5,+5) = 11.\sigma_{\varepsilon_i}^2 \tag{9}$$

and so, the distribution of the cumulative abnormal return under  $H_0$  is

$$CAR_{i}(-5,+5) \sim N(0,11.\sigma_{\varepsilon_{i}}^{2})$$

$$\tag{10}$$

The final step involves aggregation across firms. For this aggregation, we assume that there is no overlapping of the event windows of the included securities, which implies that the abnormal returns and the cumulative abnormal returns will be independent across securities. Assuming independence, we aggregate through firms computing

$$\overline{CAR}(-5,+5) = \frac{1}{N} \sum_{i=1}^{17} CAR_i(-5,+5)$$
(11)

and

$$\operatorname{var}\left(\overline{CAR}(-5,+5)\right) = \frac{1}{N^2} \sum_{i=1}^{17} \sigma_i^2 (-5,+5).$$
(12)

Inferences about the cumulative abnormal returns can be drawn using

$$\overline{CAR}(-5,+5) \sim N\left[0, \operatorname{var}\left(\overline{CAR}(-5,+5)\right)\right]$$
(13)

to test the null hypothesis that the abnormal returns are zero. Given that  $\sigma_{\varepsilon_i}^2$  is unknown, we use the sample variance measure of  $\sigma_{\varepsilon_i}^2$  from the market model regression in the estimation window. Therefore,  $H_0$  can be tested using

$$\theta = \frac{\overline{CAR}(-5,+5)}{\operatorname{var}(\overline{CAR}(-5,+5))} \sim N(0,1)$$
(14)

which is asymptotic with respect to the number of securities N and to the length of the estimation window L.

Alternatively, the individual securities' abnormal returns can be aggregated by *t*-day, using the  $AR_{it}$  from (3),

$$\overline{AR_t} = \frac{1}{N} \sum_{i=1}^{17} AR_{it}$$
(15)

with variance,

$$\operatorname{var}\left(\overline{AR_{t}}\right) = \frac{1}{N^{2}} \sum_{i=1}^{17} \sigma_{\varepsilon_{i}}^{2}$$
(16)

which we will use to analyze the abnormal returns in each of the *t*-days in the event window.

As McWilliams and Siegel (1997) point out, these test statistics tend to be very sensitive to outliers, and in a small sample, any one of firm's returns can affect the results. Another problem of small samples is that the assumption of normality of abnormal returns may not be valid, thus affecting the quality of conclusions based on statistical inference. To cope with both these problems, we compute and report the results of two nonparametric test statistics: the Wilcoxon signed rank test and the sign test.

The Wilcoxon signed rank test ranks all abnormal values in the *t*-day or set of *t*-days under analysis, and then assigns the sign of each abnormal return to the respective rank. If positive abnormal returns tend to be in greater number than negative abnormal returns, and/or have relatively higher absolute values, the sum of the signed ranks will tend to be a higher positive number (or the opposite, if negative abnormal returns are more prevalent than positive abnormal returns). If positive and negative abnormal returns tend to cancel each other, the sum of signed ranks will tend to be close to zero. A sum of signed ranks statistically different from zero will reject the null hypothesis of no abnormal returns in the event window.

The sign test uses only the signs of the abnormal returns in the *t*-day or set of *t*days under analysis. Under the null hypothesis of no abnormal returns, we expect the proportion of positive (or negative) signs to be close to 50%. *p*-values can be determined from the binomial distribution. Note that these tests are not affected by outliers, as the absolute values of abnormal returns are dropped, and only ranks or signs are retained.

#### 5. Results

Figure 1 depicts the development of the cumulative average abnormal returns during the event window [-5, +5]. We observe negative abnormal returns in days -5 and -4, followed by positive abnormal returns in days -3 to 0 and again, a decline in returns in the three days following the event, +1, +2 and +3. The cumulative average abnormal return in the 11 days included in the event window is positive, 0.412%.



Figure 1 Sample cumulative average abnormal return

Notes: This figure shows the cumulative average abnormal return (CAR) for the overall sample of 17 corporate rebranding announcements within the event window of 11 days. Day 0 is the day when the announcement of corporate rebranding was disclosed in the media. The cumulative average abnormal return in [-5, +5] is positive, 0.412%.

In our statistical tests, we examine both in cumulative terms and individually, the abnormal returns in the 11 days included in the event window. For robustness, we also test a smaller window, [-2,+2], and given the observation of a negative impact on firm value on days +1, +2 and +3, we also study the aggregated results for these three days. These smaller event windows are more in line with the efficient market hypothesis, which implies that the stock price adjustment should occur very close to day 0. The event window [+1, +3] is consistent with the presumption that there are no leakages of information prior to the announcement in the media, and that there are some

rigidities in the market, implying that the adjustment of the stock price to the news does not occur entirely on days 0 and +1, but also on days +2 and +3.

Table 1 presents the results of our parametric and nonparametric tests, on the abnormal returns in each of the 11 days under study, and also for cumulative abnormal returns in event windows [-5,+5], [-2,+2] and [+1,+3].

# Table 1Sample parametric and nonparametric tests

		Parametric Test			Wilcoxon Signed Ranks Test		Sign Test	
t (day)	# of							
	Observ	Average		<i>p</i> -value		<i>p</i> -value	%	<i>p</i> -value
		Average	CAR	(2-	z-value	(2-	positive	(2-
		AK		tailed)		tailed)	AR	tailed)
		-	-					
-5	17	0.145%	0.145%	0.822	-0.0118	0.991	0.5294	1.000
		-	-					
-4	17	0.663%	0.809%	0.304	-1.3846	0.166	0.3529	0.332
-3	17	1.501%	0.693%	$0.020$ $^{*}$	2.6628 **	0.008	0.8235 *	0.013
-2	17	0.936%	1.629%	0.147	0.0592	0.953	0.4706	1.000
-1	17	0.123%	1.752%	0.849	0.5326	0.594	0.5882	0.629
0	17	0.150%	1.901%	0.816	0.7692	0.442	0.5882	0.629
		-						
1	17	0.610%	1.291%	0.344	-1.0059	0.314	0.4706	1.000
		-						
2	17	0.499%	0.792%	0.439	-0.8639	0.388	0.4706	1.000
		-						
3	17	0.626%	0.166%	0.331	-1.6213	0.105	0.4118	0.629
4	17	0.518%	0.684%	0.422	0.8166	0.414	0.5294	1.000
		-						
5	17	0.272%	0.412%	0.674	-0.3905	0.696	0.5294	1.000
[-5,+5]	187		0.412%	0.847	-0.274	0.784	0.5241	0.559
[-2 + 2]	85		0 099%	0 945	-0 334	0 738	0.5176	0 828
נ <i>≃, ∙ ב</i> ן	00		-	0.710	0.001	0.700	0.0170	0.020
[+1,+3]	51		1.736%	0.120	-2.004 *	0.045	0.4510	0.576

Notes: Daily average abnormal returns (AR) and cumulative average abnormal returns (CAR) for all the days in the event window, aggregated across the 17 firms. The *p*-values test if the average AR in each of the days of the event window [-5,+5] are different from zero. In the bottom lines of the table, we present CAR for three alternative event windows, [-5,+5], [-2,+2] and [+1,+3], and the respective *p*-values. The Wilcoxon signed rank test is non-parametric, and tests if the sum of the signed ranks is different from zero, as expected under the null hypothesis. The sign test is also non-parametric, and tests if the proportion of positive (or negative returns) is significantly different from 0.5, as expected under the null hypothesis. The null hypothesis is that that there are no positive or negative abnormal returns in the days of the event window.

\* Null hypothesis rejection significant at the 5% level. \*\* Null hypothesis rejection significant at the 1% level.

The table shows that the cumulative average abnormal returns in the event window [-5,+5] is positive, 0.412%, but not statistically different from zero. In the smaller event window [-2,+2], cumulative abnormal returns are very close to zero. In the parametric test, the strongest positive average abnormal return is found on *t*=-3,

which is significant at the 5% level. The null hypothesis is not rejected in any of the remaining days included in the event window. The global results for the window [+1,+3] are also not statistically different from zero.

The Wilcoxon signed ranks test also finds a positive abnormal return in day -3, significant at the 1% level. There are no abnormal returns in windows [-5, +5] and [-2,+2], but the negative CAR in window [+1,+3] is significant at the 5% level. The sign test does not find any evidence against the null hypothesis, except in day -3, at the 5% level, and confirming the results of both the parametric and the Wilcoxon signed ranks test. Note that the first of these two nonparametric tests is more powerful, so we attribute higher relevance to its findings.

Overall, our results do not allow rejecting the null hypothesis of no abnormal returns in the event window, and particularly, there is no evidence that the announcement of corporate rebranding has an immediate positive impact on firm value. The stronger evidence for a negative impact is detected by the Wilcoxon signed ranks test, in the three days following the disclosure of the corporate rebranding.

#### 6. Conclusions

The event study methodology is a valuable approach to better understand and evaluate the performance of marketing strategies. This methodology, as Hozier and Schatzberg (2000) argue, contributes to solving the problem of integrating firm-level financial data with strategic marketing variables.

Our results are consistent with previous studies (Howe, 1982, Bosch and Hirsche, 1989, Karpoff and Rankine, 1994), which do not find evidence of a significant positive impact on firm value, resulting from corporate rebranding decisions. In our study, not only we do not find such a positive impact, but the evidence from the days after the event (weakly) points in the opposite direction, i.e., corporate rebranding strategies seem to be unfavourably viewed by investors. However, we do not find our results as necessarily implying this conclusion, as there are alternative explanations. Firstly, it is possible that the information on corporate rebranding decisions is frequently leaked to the market well before the official announcement, so that the impact on stock price may occur prior to day -5. Secondly, some studies have found that the Portuguese market has been less than fully efficient in the period under study (Borges, 2009), so it is possible that the "good" or "bad" news implicit in the corporate rebranding are not immediately incorporated in the stock price, nor in the five days following the event.

The main limitation of our study is that we were able to identify only 17 events in the Portuguese market, in the period under study, which is a consequence of a narrow number of quoted firms in the Lisbon stock market, and may also reflect the postponing of rebranding decisions by firms, in the context of sluggish economic growth experienced by Portugal over the last decade. Nevertheless, the size of our sample is similar to other studies (Hozier and Schatzberg, 2000; Pruitt et al., 2004).

#### References

Aaker, D. (1991), Managing Brand Equity, Free Press, New York, NY.

- Aaker, D. (1996), "Resisting Temptations to Change a Brand Position/Execution: The Power of Consistency Over time", *Journal of Brand Management*, Vol. 3 No. 4, pp.251-258.
- Balmer, J. and Greyser, S. (2002), "Managing the Multiple Identities of the Corporation", *California Management Review*, Vol. 44 No. 3, pp.76-86.
- Borges, M. (2009) "Random Walk Tests for the Lisbon Stock Market", *Applied Economics*, forthcoming, first published online on 17 February 2009.
- Bosch, J. and Hirschey, M. (1989), "The Valuation Effects of Corporate Name Changes", *Financial Management*, Vol. 18 No. 4, pp.64-73.
- Bravo, R., Montaner, T. and Pina, J. (2009), "Corporate Brand Image in Retail Banking: Development and Validation of a Scale", *The Service Industries Journal*, DOI: 10.1080/02642060802311260.
- Copeland, T., Koller, T. and Murrin, J. (2000), *Valuation: Measuring and Managing the Value of Companies*, John Wiley & Sons, New York, NY.
- Dacin, P. and Brown, T. (2002), "Corporate Identity and Corporate Associations: A Framework for Future Research", *Corporate Reputation Review*, Vol. 5 No. 2/3, pp.254-263.
- Daly, A. and Moloney, D. (2004), Managing Corporate Rebranding, *Irish Marketing Review*, Vol. 17 No. 1/2, pp.30-36.
- de Chernatony, L. (2002), "Would a Brand Smell Any Sweeter by a Corporate Name?", *Corporate Reputation Review*, Vol. 5 No. 2/3, pp.114-132.
- Delattre, E. (2002), "Business Name Changes: The French Experience", *Journal of Small Business Management*, Vol. 40 No. 4, pp.360-367.
- Dowling, G. (1988), "Measuring Corporate Images: A Review of Alternative Approaches", *Journal of Business Research*, Vol. 17 No. 1, pp.27-34.

- Dowling, G. (2006), "How Good Corporate Reputations Create Corporate Value", *Corporate Reputation Review*, Vol. 9 No. 2, pp.134-143.
- Einwiller, S. and Will, M. (2002), "Towards an Integrated Approach to Corporate Branding – An Empirical Study", *Corporate Communications*, Vol. 7 No. 2, pp.100-109.
- Fama, E. (1970), "Efficient Capital Markets: A Review of Theory and Empirical Work", *Journal of Finance*, Vol. 25, pp.383-417.
- Fombrun, C. and Shanley, M. (1990), "What's in a Name? Reputation Building and Corporate Strategy", *Academy of Management Journal*, Vol. 33 No. 2, pp.233-258.
- Hatch, M. and Schultz, M. (2003),"Bringing the Corporation into Corporate Branding", *European Journal of Marketing*, Vol. 37 No. 7/8, pp.1041-1064.
- Horsky, D. and Swyngedouw, P. (1987), "Does It Pay to Change Your Company's Name? A Stock Market Perspective", *Marketing Science*, Vol. 6 No. 4, pp. 320-335.
- Howcroft, J. (1991), "Customer Satisfaction in Retail Banking", *The Services Industries Journal*, Vol. 11 No. 1, pp.11-17.
- Howe, J. (1982), "A Rose by Any Other Name? A Note on Corporate Name Changes", *Financial Review*, Vol. 17 No. 4, pp.271-278.
- Hozier, G. and Schatzberg, D. (2000), "Advertising Agency Terminations and Reviews: Stock Returns and Firm Performance", *Journal of Business Research*, Vol. 50 No. 2, pp.169-176.
- Jerrel, G. and Peltzman, S. (1985), "The Impact of Product Recalls on the Wealth of Sellers", *Journal of Political Economy*, Vol. 93 No. June, pp.512-536.
- Johnston, M. (2007), "A Review of the Application of Event Studies in Marketing", *Academy of Marketing Science Review*, Vol. 11 No. 4, pp. 1-31.
- Karbhari, Y., Sori, Z. and Mohamad, S. (2004), "Shareholder Wealth Effects and Corporate Name Changes: Evidence from Malaysia", *Corporate Ownership & Control*, Vol. 2 No. 1, pp. 38-49.
- Karpoff, J. and Rankine, G. (1994), "In Search of a Signaling Effect: The Wealth Effects of Corporate Name Changes", *Journal of Banking and Finance*, Vol. 18 No. 6, pp.1027-1045.
- Kay, M. (2006), "Strong Brands and Corporate Brands", *European Journal of Marketing*, Vol. 40 No. 7/8, pp.742-760.
- Keller, K. (2002), Branding and Brand Equity, Marketing Science Institute, Cambridge, MA.

- Kilic, C. and Dursun, T. (2006), "The Effect of Corporate Identity Changes on Firm Value: An Empirical Investigation", *Journal of the American Academy of Business*, Vol. 10 No. 1, pp.234-240.
- Kotler, P. and Keller, K. (2008), *Marketing Management* (13<sup>th</sup> Ed.), Prentice-Hall, Upper Saddle River, NJ.
- MacKinlay, A. (1997) "Event Studies in Economics and Finance", Journal of Economic Literature, Vol. 35, pp.13-39.
- McWilliams, A. and Siegel, D. (1997), "Event Studies in Management Research: Theoretical and Empirical Issues", *Academy of Management Journal*, Vol. 40 No. 3, pp.98-107.
- Merrilees, B. and Miller, D. (2008), "Principles of Corporate Rebranding", *European Journal of Marketing*, Vol. 42 No. 5/6, pp.537-552.
- Muzellec, L. (2006), "What is a Name Change? Re-Joicing Corporate Names to Create Corporate Brands", *Corporate Reputation Review*, Vol. 8 No. 4, pp.305-321.
- Muzellec, L. and Lambkin, M. (2006), "Corporate Rebranding: Destroying, Transferring or Creating Brand Equity?", *European Journal of Marketing*, Vol. 40 No. 7/8, pp.803-824.
- Pruitt, S., Cornwell, T. and Clark, J. (2004) "The NASCAR Phenomenon: Auto Racing Sponsorships and Shareholder Wealth", *Journal of Advertising Research*, Vol. 44 No. 3, 281-296.
- Riordan, C., Gatewood, R. and Bill, J. (1997), "Corporate Image: Employee Reactions and Implications for Managing Corporate Social Performance", *Journal of Business Ethics*, Vol. 16 No. 4, pp.401-412.
- Schultz, M. and de Chernatony, L. (2002), "The Challenges of Corporate Branding", *Corporate Reputation Review*, Vol. 5 No. 2/3, pp.105-112.
- Simon, C. and Sullivan, M. (1993), "The Measurement and Determinants of Brand Equity: A Financial Approach", *Marketing Science*, Vol. 12 No. 1, pp.28-52.
- Tadelis, S. (1999), "What's in a Name? Reputation as a Tradeable Asset", American Economic Review, Vol. 89 No. 3, pp.548-563.