This is the accepted manuscript of the article:
Nicolau, J. L. (2002). Assessing new hotel openings through an event study. *Tourism Management*, *23*(1), 47-54.
https://doi.org/10.1016/S0261-5177(01)00062-0

ASSESSING NEW HOTEL OPENINGS THROUGH AN EVENT STUDY

Abstract

The main objective of this paper is to analyse the impact that the announcement of the opening of a new hotel has on the performance of its chain. For this evaluation, an event study is carried out on a hotel chain that trades on the Spanish Stock Exchange. The results that the empirical application arrives at are noteworthy as, on average, the reaction to such news releases is highly positive. Additionally, and from a first-approach perspective, several factors seem to exert an influence on the firm´s performance, the most important of these being its geographical location.

1. INTRODUCTION

The decisions made by a hotel´s management are obviously aimed at increasing the value of the company, and, as a final objective, the creation of profits for the firm´s investors. Consequently, a value-creating decision-maker must choose worth-creating investments, not just for present prosperity but for the future stability as well. It is not suprising, therefore, that the economic value of strategic marketing decisions has been attracting greater interest in Marketing literature (Agrawal y Kamakura, 1995).

Accurate strategic decision-making, however, implies a complex process that entails satisfying the following principles (Klammer, 1994): i) To relate investment decisions to the strategic plans and operating goals of the company, by considering both its long-term and short-term objectives; ii) To evaluate the investment alternatives consistently, by recognizing the inter-relationships among major investments; iii) To evaluate investment alternatives by using multiple decision attributes that include both financial and non-financial criteria; iv) To assess risk in evaluating investment alternatives; and v) To establish a management system that provides the cost and performance data needed to evaluate investment decisions.

In short, there are a great number of factors that affect the viability of the project to be developed and which have to be taken into consideration. This leads us to the co-alignement principle, which is applied to the hotel industry and is systemitized in a four-stage process (Olsen et al., 1998): i) *Environmental Events*, a phase during which the different aspects of the current atmosphere in the marketplace that could influence the firm´s strategic decisions, either positively or negatively, are analysed to find opportunities of increasing the value of the hotel chain; ii) *Choice of Strategy*, when methods are developed for exploiting such threats and opportunities. In the hotel industry portfolios of products and services are designed to pool the unique resources and capabilities of the firm in order to achieve some advantage in

the marketplace; iii) The *Firm's Structure*, which implies identifying the capacities to be developed and efficiently allocating the available resouces to each of them; and, iv) The *Firm's Performance*, when an evaluation is done on the progress of the strategy employed to decide whether its objetives are being achieved, especially those related to profit-maximization.

In this respect, one of the most important decisions that are made in the hotel industry is to open a new hotel within an existing chain. In this article, we analyse the impact that the opening of a new establishment has on a hotel chain´s performance. In the following section, we examine the decision to open a new hotel as the result of a chosen strategy. The methodology proposed and the data employed for the empirical application are then explained, and finally, we present the results found and the main conclusions that can be drawn from them.

2. THE OPENING OF A NEW HOTEL

In general terms, when a chain decides to open a new hotel in a specific geographical area, it aims, among other things, to increase its market share, to maintain or boost its image, or to implement a segmentation strategy (Withiam, 1985). Regardless of its reasons, however, such a decision is particularly important in the hotel industry as it implies an enormous financial investment which often involves appealing to the banking sector for finance and, therefore, undertaking the subsequent additional loan expenses (Mestres, 1999). Before a chain can decide on the amount of money which is required to establish itself in a given area, it has to estimate the real potential of the market involved (Wynegar, 1994). In fact, a pre-opening market study and analysis can be a crucial element in determining the ultimate success of a lodging facility (Peters, 1978).

This justifies the existence of several studies that analyse the elements that influence a new hotel's success. Along these lines, Rushmore (1994) highlights the importance of recognizing the forces that affect hotel values, which, at the same time, provide a basis for making well-informed, low-risk hotel investments. Turkel and Stewart (1996) focus on the operational realm, and show the significance of paralleling external factors with internal ones that are controllable by the company. Zhao and Olsen (1997) analyse the opening mode by means of factors related to the external environment or macro-environment, and factors of the task environment or micro-environment, as well as other aspects like the location of the new hotel, the choice of a partners if necessary, and the human factor.

Other studies have analysed special circumstances surrounding the opening of new hotels, like the determining factors of success in acquisition processes (Kim and Olsen, 1999), the optimal way of investing in public relations in advance of the opening (Weiner, 1984), the cyclical trend of the hotel industry (Rushmore and Goldhoff, 1997), or the so-called territotorial encroachment, which is a specially controversial topic in franchisor-franchisee relationships (Roginsky, 1995). Equally interesting are those studies that evaluate specific zones as possible host markets for hotel investments (Dunning y McQueen, 1982; Bell, 1992), and those that analyse the different outlooks for the opening of a vacation-oriented hotel as opposed to one that is bussines-oriented (Mattila, 1997).

The opening of a new hotel, therefore, is directly connected to the process described in the previous section, since, once the decision has been made, the following step is to determine the optimum allocation of resources, specifying the areas in which to invest, and subsequently, to estimate expected profits. In other words, to evaluate the viability of a new establishment, the economic returns are considered by means of some future-oriented measure of the cash-flow (Tarras, 1991). Olsen et al. (1998) claim that the instrument that is most

commonly used is that of cash-flow per share of owner's or investor's equity. (For an accurate revision of cash-flow-based techniques, see Rushmore and DeRoos (1999)).

So, given that share prices are deemed to be the present value of cash-flow per share, the main aim of this study is, firstly, to observe whether this measure subsumes news releases related to new hotel openings, and secondly, to determine the magnitud of such a change to then use it as a measure of performance[1]. Additionally, and as a first approach, we attempt to explain this variation in returns, simultaneously, by aggregate zones and hotel segmentation (vacational vs. business). As a novelty for the tourism industry, the analysis is done by means of the event-study methodology.

3. METHODOLOGY

The method used for developing the empirical application consists of two stages: A primary stage in which the expected returns on a new hotel are estimated through an event study, which implies the identification of the date of the first announcement. And secondly, a regression analysis is used to explain the results obtained in the preceding step from the geographical area and segmentation which characterise the hotel.

Evidently, the core of the methodology is the event-study technique, which seems to be suitable for examining decisions concerned with the opening of new lodging facilities. The most common way of evaluating the success of an establishment is to use its accounting data, but considering the frequency with which such data are made available, and the fact that sundry obsevations would also be required, a long time interval would have to be used to be able to measure the opening effect. On the other hand, it is well-known that accounting figures are not always reliable indicators of a firm's true economic performance, due not only to the diversity of accounting procedures that exists, but also because of the CEO's discretion in choosing such a procedure.

Furthermore, in the years following the inauguration, the so-called "champagne effect" could appear, as it does in the case of theme parks (*El País*, 1998). In other words, the firm´s performance during its initial years could be misleading with regard to the real business trend and, a few years later, a decrease in activity reveals that the business is gradually losing its "froth". If such were the case, the revenue obtained would conceal the real situation, since it would not implicitly indicate the future cash-flow.

An alternative way of measuring the "surplus" revenue that comes from the event that is being analysed is to employ capital market data (Horsky and Swyngedouw, 1987; McWilliams and Siegel, 1997). That is to say, assuming a rational behaviour of the investors, the share price should reflect the firm's real value. In other words, it shows the present value of future cash flows, and immediately changes in response to any fact that could potentially affect them. Consequently, any excess in returns found on a particular day arises as a result of positive information. Hence, the method´s fundamental logic lies in the comparison of real returns to expected returns, that is, to those not being influenced by new information.

To calculate the volume of abnormal returns, the market model is used. The rate of returns on the share price of firm *i* on day *t* is therefore expressed as:

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

where R_{it} is the rate of returns on the share price of firm *i* on day *t*, R_{mt} is the rate of returns on a market portfolio of stocks on day *t.*The parameters α_i and β_i are the constant and the systematic risk of stock *i*, respectively, and ε_{it} is the error term.

The estimation of the abnormal returns in the event window is, thus, computed as:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt})$$

where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are the estimates obtained from the regression of R_{it} on R_{mt} over an estimation period preceding the event window.

Once the abnormal returns have been obtained, we test to see whether they are significantly distinct from zero for each day within the event window. To do so, we rely on the parametric test proposed by Boehmer et al. (1991), which is specified as

$$t_1 = \frac{\frac{1}{N}\sum_{i=1}^{N} SAR_{i0}}{\sqrt{\frac{1}{N(N-1)}\sum_{i=1}^{N}\left(SAR_{i0} - \sum_{i=1}^{N}\frac{SAR_{i0}}{N}\right)^2}}$$

where N is the number of news items issued and SAR_{i0} is the standardized abnormal return on day 0 or the event day, which is defined by dividing AR_{i0} by the standard deviation of the asset i obtained from the estimation period.

Nonetheless, this test requires that the abnormal returns are normally distributed. So, following McWilliams and Siegel (1997)'s indications, the nonparametric test of Corrado (1989) is also used.

$$t_2 = \frac{\frac{1}{N}\sum_{i=1}^{N}\left[K_{io} - \frac{1}{2}(T+1)\right]}{\sqrt{\frac{1}{T}\sum_{t=1}^{T}\left[\frac{1}{N}\sum_{i=1}^{N}\left[K_{it} - \frac{1}{2}(T+1)\right]\right]^2}}$$

where K_{it} is the rank of the abnormal returns in the time series estimated for the security i, and T is the total number of days being observed.

4. EMPIRICAL APPLICATION

4.1. Data

An empirical application was designed to analyse the impact of the opening of a new hotel on the chain's performance. To be more precise, a case study was carried out following the suggestions of Anyansi-Archibong (1987) and Zhao and Olsen (1997) for such decisions. These authors argue that this approach is more adequate for strategic management studies, and even more so considering that *"the multinational lodging industry is still in its early theory-building stage"*. Likewise, Bromiley and Marcus (1989) indicate that in an event study, aggregate results can be misleading under a variety of conditions, as, for example, if the stock market's reaction to an event differs across companies or if there is an outlier in the sample.

Thus, to avoid any outside effects coming from these different circumstances in which each hotel chain is involved, and which in turn could hinder an accurate reflection of the incorporation of information regarding the opening of a new hotel, a sample of news releases concerning a given hotel chain that trades in the Madrid Stock Exchange is collected.

Exactly 72 news items on new hotel projects were gathered from newspapers during the period from 1997 to 1999. This information was taken from the *Baratz* database[2]. Nevertheless, the original sample was filtered to avoid any possible confounding effects, considering the following aspects: on one hand, any news items in whose event day other news releases were published that could have had disturbing effects on returns were discarded; in other words, if on the same day as the news release on the future opening, any other relevant information is also made available, one could hardly determine to what extent any departure from "normal" returns is attributable to the actual opening. To be more precise, whenever other important facts were published on the same day as the opening

announcement, such as executive appointments, declarations of profits, increases in capital, awards for high quality, the incorporation of new services and announcements of tenders, the opening announcements were eliminated. In doing so, the individual effect of the new opening project is exclusively recognized. On the other hand, we discarded any announcements of new establishments that were very close, in time, to one another, (those appearing within a 5-day event window, to be explicit), otherwise, it would not have been possible to determine which of them was generating abnormal returns, if any. Finally, after all of these adjustments were made, 42 news releases remained.

The study period covers 153 days, of which 148 comprise the estimation period and 5 the event window. At this point, we should mention that since the sample contains announcements of different openings by the same chain, the possible impact of a given announcement within the estimation period of another release has also been taken into account, as otherwise, the estimation of the abnomal returns from one might well be affected by those of an earlier announcement, which would obviously influence the estimation of α_i and β_i. A dummy variable is, therefore, included in the market model[3]:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \beta_2 D_{it} + \varepsilon_{it}$$

where D_{it} has a value of 1 when there has been another announcement on day t of i's estimation period and a value of 0 otherwise[4].

Returns are adjusted by dividends, capital increases and splits, so that they are expressed by $R_{it}=Ln(P_t \cdot SF_t+r_t+d_t)-LnP_{t-1}$, where P_t is the price, SF_t the split factor, r_t the suscription right and d_t the dividend paid, all of which refer to day t. The data were obtained from the *Madrid Stock Exchange Information Service* (SIB).

4.2. Estimating the Abnormal Returns

Several authors suggest that disturbances in the market model might well not fulfill the basic hypotheses of the linear regression model, which would cause some loss of efficiency in the ordinary least squares (OLS) estimate. The existence of kurtosis and heteroskedasticity, which have been detected in various empirical applications, would lead to defective estimates (Morgan and Morgan, 1987; Connolly and McMillan, 1989; Gómez Sala, 1999; Abad and Rubia, 1999). For this reason, alternative models were examined in an effort to find the one that best fits the model. The ones expressly considered are the autoregressive conditional heteroskedasticity models whose main purpose is to be able to model the conditional variance of the returns. Such models distinguish between unconditional variance, which is constant and stationary, and conditional variance, which is modified by the available information[5]. The specific ones appraised here are the symmetric models, ARCH by Engle (1982) and GARCH by Bollerslev (1986), and the asymmetric ones, EGARCH by Nelson (1990) and TGARCH by Glosten et al. (1993) and Zakoïan (1994).[6]

A symmetric model assumes that the effect of new information on the variance is independent of its sign. Thus, letting p be the number of lags, returns defined by means of an ARCH(p) model are obtained by the expression

$$R_{it} = \alpha_i + \beta_i R_{mt} + \beta_2 D_{it} + \varepsilon_{it}$$

where

$$\varepsilon_{it} = h_{it}^{1/2}\eta_{it} \text{ and } \varepsilon_{it}/\varepsilon_{it-1}, \varepsilon_{it-2}, \ldots \sim N(0, h_{it})$$

being

$$\eta_{it} \text{ i.i.d. with } E(\eta_{it})=0 \text{ and } E(\eta^2_{it})=1$$

In this context, h_{it} is the conditional variance and is represented as

$$h_{it} = c_i + \sum_{j=1}^{p} \lambda_{ij} \varepsilon^2_{it-j}$$

where c_i and λ_{ij} are parameters to be estimated.

The generalization of this model gives rise to GARCH(p,q) models, where q is the number of lags of the autoregressive part. In this case, the conditional variance is expressed as

$$h_{it} = c_i + \sum_{j=1}^{p} \lambda_{ij} \varepsilon_{it-j}^2 + \sum_{k=1}^{q} \gamma_{ik} h_{it-k}$$

Notwithstanding, returns can sometimes show a different degree of sensitivity in the face of good or bad events. Considering such possible asymmetry, other generalizations have been proposed. The first of these is the EGARCH(p,q) model, in which the conditional variance is

$$h_{it} = \exp\left\{ c_i + \sum_{j=1}^{p} \left(\lambda_{ij} \left| \frac{\varepsilon_{t-j}}{h_{it-j}^{1/2}} \right| + \delta_{ij} \frac{\varepsilon_{t-j}}{h_{it-j}^{1/2}} \right) + \sum_{k=1}^{q} \gamma_{ik} \ln(h_{it-k}) \right\}$$

and finally, the TGARCH(p,q) model, whose conditional variance is represented by the expression

$$h_{it} = c_i + \sum_{j=1}^{p} \lambda_{ij} \varepsilon_{it-j}^2 + \phi_i \varepsilon_{it-1}^2 D_{it-1} + \sum_{k=1}^{q} \gamma_{ik} h_{it-k}$$

where $D_{it-1} = 1$ if $\varepsilon_{it-1}^2 < 0$ and $D_{it-1} = 0$ otherwise.

Table 1 shows each model's fit[7]. The selection of the best model is done by employing Schwarz's and Akaike's Information Criteria, defined as SIC=log(L_{ML})-(k/2)log(M) and AIC=log(L_{ML})-k respectively, in which L_{ML} represents the likelihood function of the model evaluated in the ML estimate, M is the number of observations and k the number of parameters in the model. These measures, apart from considering the likelihood function, take the parsimony of the model into account by adjusting for the number of parameters, which are considered as a penalty. The model with highest value will obviously be preferred.

The specification which appears to be the optimum one is the GARCH(1,1) model. In fact, although in Table 1 only a small number of the total alternatives tested are presented, we should stress that, as a thumb-rule, as the values of p and q increase, the models fit worse. This evidence agrees, in general, with Lamoreaux and Lastrapes (1990)'s and Bollerslev et al. (1994)'s conclusions which led them to prefer this model, and in particular, for the Spanish market, with Abad and Rubia (1999).

Once the model that best fits the return series has been determined, we proceeded to calculate the abnormal returns. Second column of Table 2 presents the average abnormal returns derived from the announcements within the 5-day event window, the event-day return appearing to have the largest gain in excess returns over this period. What is more, the 1.55% of abnormal returns for the event day is statistically significant at 1 per cent. The results, therefore, show that, on average, announcements of hotel openings are associated with positive excess returns. Column 5 presents that 61.9% of returns on the event day are positive, being significantly higher (at 5% using a Binomial test) than the percentage of positive residuals observed over the estimation period, which is 47.1%.

This high level of significance is first found through Boehmer et al.'s parametric test, t_1. Nevertheless, an analysis of the behaviour of the abnormal returns on day 0 indicates that its distribution is skewed slightly to the right and presents lepto-kurtosis; in fact, the Jarque-Bera test does not validate the hypothesis of normality ($\chi_2^2 = 75.09$; $p<0.000$). Those prior conclusions, therefore, must be corroborated by a nonparametric test that is robust in the absence of normality, such as that proposed by Corrado (1989). As seen in Table 2, the t-value of the event day estimates derived from this test t_2 is 3.10, which is statistically significant ($p<0.01$)[8]. Furthermore, two outliers are detected when a box-plot analysis is employed. So these are excluded by the minimum trimming fraction of 0.05 to permit the

replication of the entire analysis without their potential effect, arriving at the same levels of significance.

4.3. Explaining the Abnormal Returns

Once the abnormal returns have been estimated and tested, it is interesting to evaluate which factors better explain their levels. In this paper, the regression analysis is employed, using at the same time two factors as explicative variables: the geographical area and the segment selected by the hotel.

Area definition is realised by aggregation, considering four territories that essentially match the divisions made by the chain itself: The Mediterranean Area (26.19% of openings), Urban Europe (7.14%), Latin America (59.52%) and Asia (7.14%). To include its effects on the regression equation, dummy variables are used in such a way that they have a value of 1 if the chain opens a hotel in a specific zone. In order to avoid problems of singularity, which would not permit the calculation of the inverse matrix of explanatory variables, and thus the estimation of the model, the Asian zone is taken as the base alternative.

The effect of the new hotel's segmentation strategy (business vs. vacational) is also taken into consideration, so that as 63.41% of the openings in the sample used here are vacation-oriented hotels, another dummy variable is defined to represent this situation.

In addition, a control variable is included, represented by the assets of the chain in the previous semester to that of the opening announcement. This value falls into the interval 44.8-54.5 billions of pesetas. This information comes from the *National Security Market Comission* (CNMV).

Two equations are estimated, varying the factors related to the areas being analysed (Table 3). A previous analysis of residuals was done to observe the fulfilment of the basic

hypotheses of the models. By using normality tests, such as those of Jarque-Bera, Shapiro-Wilk and Kolmogorov-Smirnov, the assumption that residuals are normally distributed cannot be rejected. As to correlation, its absence is accepted by means of Durbin-Watson and Breusch-Godfrey tests. With respect to heteroskedasticity, all tests carried out, White and Breusch-Pagan tests, detect a lack of homoskedasticity, so the White heteroskedasticity-consistent variance and covariance matrix is computed.

Finally, the application of the Ramsey's Reset test for certain types of regression specification errors, under which least squares estimators would be biased and inconsistent, and conventional inference procedures invalidated, recommends to introduce the assets-squared variable so as to avoid possible misspecifications.

Both equations have a global level of significance of 1%, having acceptable values in R-squared measures. Likewise, looking at Schwarz Information Criterion the second model is sligthly superior, but almost comparable.

Both equations show a positive effect derived from opening a hotel in any area with respect to that of Asia, the Mediterranean zone reaching the highest levels in returns in both models at 1% of significativity, while Urban Europe does only at 10%. Although Latin America is significant at 1%, when the effect is broken down, it is observed that the highest impact comes from South America (44% of openings from Latin America). The fact that those hotels being announced to be put up in the Asian region have less positive returns is, to some extent, in agreement with Mattila (1997)'s findings, which indicated that hotel management companies were little optimistic with respect to the Asian lodging industry outlook.

Evidently, if this last part of the analysis had been conclusive rather than tentative, a more disaggregate appraisal would have been required. In other words, to obtain refined

conclusions, destination characteristics, on an individual-basis, should be used, such as image, proximity to the beach, existing and potential competition and so on.

The variable explaining the hotel's segmentation appears to be relevant in none of the cases. The assets-related variables are significant at 5%, and the signs obtained indicate that, although the effect on the returns is negative, as the asset value increases this impact turns out to be less negative.

5. CONCLUSIONS

This article has found that a new hotel opening is a news item which has an impact in the share price, which at the same time is reflecting the present value of the firm, so the excess in returns encountered can be assigned to this announcement, showing an increase in the chain's worth. To measure this, and as a novelty for the tourism industry, the event-study methodology has been used, which is able, at the same time, to dodge several of the nuisances of the company's accounting system. As a kind of a future-oriented measure of cash-flow, it can be useful, complementing others, for hoteliers analysing the future success of their hotel.

Moreover, it is important to stress that the amount of this impact is depending on several factors. Here, and as a first-approach perspective, the geographical factor has proved to be relevant, showing that Mediterranean countries, Urban Europe and Latin America have excess returns over the base alternative, which is Asia. Also, the company's assets appear to be highly explicative of the results. To do this, a regression analysis has been carried out, satisfactory levels of explanation being reached.

In this respect, the study has important management implications: i) once the opening of a hotel has been announced, managers might observe the evolution of share prices to determine how valuable this news item is perceived to be by the shareholders. If the

shareholders' perceptions of it are not as favourable as the managers would have expected, they may want to discover whether this is due to a lack of information (or even to erroneous information), or, what might be even worse, to the fact that the future opening is not really a worthwhile investment. In the former situation, a new flow of information should be released, in order to clarify the hotel's strategy; the latter could lead management to re-examine the decision in such a way that a new formulation of the profile of the new establishment could be considered; ii) On the other hand, hoteliers could find out the *a priori* key success-determining factors of new lodging facilities by analysing its characteristics in a disaggregate way as far as possible, so that a "successful profile" could be determined.

In short, decision makers can employ the method described here as a market research technique, adopting it as an additional tool to move adequately from the original idea for the proposed hotel to its final and full implementation.

This study has showed the usefulness of this methodology. A remarkable aspect of it, is its versatility to be applied to several features belonging to other fields in the tourism industry, i.e., changing levels of service quality in travel agencies, or incorporating new technologies in transport companies.

6. REFERENCES

Abad, D. and Rubia, A. (1999) Evaluation of the fixing trading system in the Spanish market, working paper, serie EC 99-17, Instituto Valenciano de Investigaciones Económicas.

Agrawal, J. and Kamakura, W.A. (1995) The economic worth of celebrity endorsers: an event study analysis, *Journal of Marketing*, 59, 56-62.

Akaike, H. (1973) Information theory and an extension of the maximum likelihood principle. In B. Petrov and F. Csake, (Eds.), S*econd International Symposium on Information Theory*, Budapest: Akademiai Kiado.

Alonso, F. (1995) The modelization of the volatility of the Spanish market, working paper 9507, Bank of Spain.

Anyasnsi-Archibong, C. (1987) Problems and challenges in using the case study method in a foreign based field research project, *Case Research Journal,* Autumn, 1-18.

Bell, C.A. (1992) Opening up Eastern Europe: new oportunities and new challenges, *Cornell Hotel and Restaurant Administration Quaterly*, 33(6), 53-63.

Boehmer, E., Musumeci, J. and Poulen, A. (1991) Event-study methodology under conditions of event-induced variance, *Journal of Financial Economics,* 30, 253-272.

Bollerslev, T. (1986) Generalized autoregressive conditional heteroskedasticity, *Journal of Econometrics,* 31, 307-327.

Bollerslev, T. Engle, R. and Nelson, D. (1994) ARCH models. In Engle, R. and McFadden, D. (Eds), *Handbook of Econometrics*, vol. 4.

Breusch, T. (1978) Testing for autocorrelation in dynamic linear models, *Australian Economic Papers*, 17, 334-355.

Breusch, T. and Pagan, A. (1979) A simple test for heteroskedasticity and random coefficient variation, *Econometrica*, 47, 1287-1294.

Bromiley, P. and Marcus, A. (1989) The deterrent to dubious corporate behaviour: profitability, probability and safety recalls, *Strategic Management Journal,* 10, 33-50.

Chaney, P.K., Devinney, T.M. and Winer, R.S. (1991) The impact of new product introductions on the market value of firms, *Journal of Business*, 64, 4, 573-610.

Connolly, R.A. and McMillan, H. (1989) Time conditional variances and event studies: the case of capital structure changes, working paper, University of California.

Corrado, C. (1989) A nonparametric test for abnormal security-price performance in event studies, *Journal of Financial Economics,* 23, 385-395.

Dunning, J.H. and McQueen, M. (1982) Multinational corporations in the international hotel industry, *Annals of Tourism Research,* 9, 69-90.

Durbin, J. and Watson, G. (1971) Testing for serial correlation in least squares regression-III, *Biometrika*, 58, 1-42.

El País (1998) Emociones y beneficios, August 30, p. 10-11.

Engle, R.F. (1982) Autoregressive conditional heteroskedasticity with estimates of variance of UK inflation, *Econometrica,*50, 987-1007.

Glosten, L.R., Jagannathan, R. and Runkle, D. (1993) On the relation between the expected value and the volatility of the normal excess return on stocks, *Journal of Finance*, 48, 1779-1801.

Godfrey, L. (1978) Testing against general autoregressive and moving average error models when the regressors include lagged dependent variables, *Econometrica*, 46, 1293-1302.

Gómez Sala, J.C. (1999) Rentabilidad y liquidez alrededor de los splits, working paper, serie EC 99-01, Instituto Valenciano de Investigaciones Económicas.

Horsky, D. and Swyngedouw, P. (1987) Does it pay to change your company's name? A stock market perspective, *Marketing Science*, 6, 4, 320-335.

Jarque, C. and Bera, A. (1987) A test for normality of observations and regression residuals, *Interantional Statistical Review*, 55, 163-172.

Kim, K-H. and Olsen, M.D. (1999) Determinants of successful acquisition processes in the US lodging industry, *International Journal of Hospitality Management*, 18, 285-307.

Klammer, T. (1994) *Managing strategic and capital investment decisions*, New York: Irwin.

Lamoureaux, C, and Lastrapes, W. (1990) Persistence in variance, structural change and the GARCH model, *Journal of Business and Economic Statistics*, 8(2), 225-234.

León, L. and Mora, J. (1999) Modelling conditional heteroskedasticity: application to the "Ibex-35" stock-return index, *Spaninsh Economic Review*, 1, 215-238.

Mattila, A. (1997) Investment Returns and Opportunities for hotels in Asia, *Cornell Hotel and Restaurant Administration Quaterly*, 38(1), 72-78.

McWilliams, A. and Siegel, D. (1997) Event studies in management research: theoretical and empirical issues, *Academy of Management Journal,* 40(3), 626-57.

Mestres, J.R. (1999) *Técnicas de gestión y dirección hotelera,*Barcelona: Gestión 2000,.

Morgan, A. and Morgan, I. (1987) Measurement of abnormal returns from small firms, *Journal of Business and Economic Statistics,* 5,121-129.

Nelson, D.B. (1990) Conditional heteroskedasticity in asset returns: a new approach, *Econometrica,* 41, 867-887.

Olsen, M.D., Tse, E. C-Y and West, J.J. (1998), *Strategic Management in the Hospitality Industry*, New York: John Wiley & Sons.

Patell, J.M. (1976) Corporate forecasts for earnings per share and stock price behavior: empirical tests, *Journal of Accounting Research*, 14, 246-276.

Peters C.H. (1978) Pre-opening marketing analysis for hotels, *Cornell Hotel and Restaurant Administration Quaterly*, 19(1), 15-22.

Ramsey, J.B. (1969) Tests for specification errors in classical linear least squares regresssion analysis, *Journal of the Royal Statistcal Society*, series B, 31, 350-371.

Roginsky R.J. (1995) A critical analysis of hotel-impact issues, *Cornell Hotel and Restaurant Administration Quaterly*, 36(4), 18-26.

Rushmore, S. (1994) An overview of the hotel industry: past, present and future, *The Real Estate Finance Journal*, Spring, 5-14.

Rushmore, S. (1997) Hotel value trends: yesterday, today and tomorrow, *Cornell Hotel and Restaurant Administration Quarterly*, 38, 6, 18-29.

Rushmore, S. and DeRoos, J. (1999) Hotel valuation techniques. In L.E. Raleigh and R.J. Roginsky, (Eds.), *Hotel investments: issues & perspectives*, Lansing, Mich.: Educational Institute of the American Hotel & Motel Association.

Shapiro, S.S. and Wilk, M.B. (1965) An analysis of variance test for normality, *Biometrika*, 52, 591-611.

Schwarz, G. (1978) Estimating the dimension of a model, *Annals of Statistics*, 6, 461-464.

Simon, J.C. and Sullivan, M.W. (1993) The measurement and determinants of brand equity: a financial approach, *Marketing Science*, 12, 1, 28-52.

Tarras, J.M. (1991) *Practical guide to hospitlatiy finance*, New York: Van Nostrand Reinhold.

Turkel, S. and Stewart, R. (1996) A landmark decision: the Stouffer Valley Forge Hotel, *FIU Hospitality Review*, 14, 1, 37-47.

Weiner, K. (1984) A PR primer for the hotel opening: the case of Vista International, *Cornell Hotel and Restaurant Administration Quaterly*, 25(1), 70-81.

White, H. (1980) A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity, *Econometrica*, 48, 817-838.

Withiam, G. (1985) Hotel companies aim for multiple markets, *Cornell Hotel and Restaurant Administration Quaterly*, 26(3),39-51.

Wynegar, D. (1994) Estimating the potential of international markets. In J.R.B. Ritchie and C.R. Goeldner (Eds.) *Travel, Tourism and Hospitality Research*, New York: John Wiley & Sons.

Zakoïan, J.M. (1994) Threshold heterokedastic models, *Journal of Economics Dynamics and Control,* 18, 931-995.

Zhao J.L. and Olsen M.D. (1997) The antecedent factors influencing entry mode choices of multinational lodging firms, *International Journal of Hospitality Management*, 16(1), 79-98.

Table 1. Alternative Model Specifications

SIC	**AIC**	**SIC**	**AIC**	**SIC**	**AIC**	**SIC**	**AIC**
OLS		GARCH(1,1)		EGARCH(1,1)		TGARCH(1,1)	
370.64[a]	375.15	375.03	384.08	372.98	383.55	373.24	383.81
(6.55)	(6.55)	(7.92)	(8.12)	(7.40)	(7.62)	(7.88)	(8.11)
ARCH(1)		GARCH(1,2)		EGARCH(1,2)		TGARCH(1,2)	
374.48	382.02	373.22	383.79	373.23	385.32	371.45	383.53
(7.73)	(7.77)	(7.88)	(8.08)	(7.42)	(7.66)	(7.82)	(8.08)
ARCH(2)		GARCH(2,1)		EGARCH(2,1)		TGARCH(2,1)	
373.12	382.17	373.51	384.08	369.86	383.46	370.94	383.02
(7.73)	(7.92)	(7.86)	(8.08)	(7.44)	(7.71)	(7.61)	(7.86)

[a]These values are the means of all the series for both criteria. In brackets, standardized means.

Table 2. Excess Returns Derived from Hotel Opening Announcements

Event Day	Average Abnormal Returns	Boehmer et al.'s Test[a] t_1	Corrado's Test t_2	% of Positive Abnormal Returns
-2	0.0062	0.3873	0.4473	50.0
-1	0.0102	0.4942	0.6185	50.0
0	0.0155	2.8095***	3.1003***	61.9**
+1	0.0007	0.6948	0.5835	47.6
+2	0.0029	0.7624	0.6107	52.4

**p<0.05; ***p<0.01

[a]Considering that the GARCH(1,1) model has been employed to gauge the abnormal returns, the t_1-statistic has been calculated by computing the predicted values of the conditional variance for every day within the event window and for each serie.

Table 3. Factors Explaining the Abnormal Returns

Constant	Mediter-ranean	Urban Europe	Latin America	Central America	South America	Vac-Buss.	Assets	Assets-squared	R^2	Adj-R^2	SIC	F statistic
4.1259**	0.0344***	0.0288*	0.0255***			-0.0117	-0.0001**	1E-9**	0.383	0.274	78.63	$F_{6,35}$= 3.526***
(1.76)	(0.008)	(0.015)	(0.009)			(0.013)	(7E-5)	(7E-10)				
4.5950**	0.0321***	0.0312*		0.0144	0.0338**	-0.003	-0.0001**	1E-9**	0.409	0.284	78.70	$F_{7,34}$= 3.268***
(1.89)	(0.010)	(0.018)		(0.012)	(0.014)	(0.011)	(7E-5)	(8E-10)				

*p<0.1; **p<0.05; ***p<0.01. In brakets, White heteroskedasticity-consistent standar errors.

[1] The relation between share prices and future cash flows is well established in the event-study literature (Bromiley and Marcus, 1989; Chaney et al., 1991; Simon and Sullivan, 1993; McWilliams and Siegel, 1997). Horsky and Swyngedouw (1987) literally point out that the price of a security is the discounted value of future cash flows that are expected to accrue to the asset. They also note, however, that this statement is only true providing the efficient markets/rational expectations hypothesis is fulfilled. This implies that the asset's price reflects all the relevant information available and that there is no opportunity of making a profit by buying (selling) assets whose prices are too low (high). On many occasions, however, investors hope to make gains through merely speculative movements in share prices; in such cases, stock markets are not driven by analyses of future cash flows. Bearing this caveat in mind, suffice it to say that if the market for a particular share is bullish, it would be a tricky task to try relating movements in the stock market to movements in the marketplace.

[2] From the newspapers included in this database, we have obtained the date of the event as well as the hotel's characteristics. At this stage, it is essential that such news items be the very first announcements made, so that we operate strictly on the moment that new information is reflected, if indeed it is, in share prices. Once the first announcement has been identified, its publication date is considered as the "event day" for that specific opening.

[3] As a proxy of the market portfolio the IBEX-35 index is used.

[4] A preliminary regression analysis carried out including collectively all the estimation periods (6216 observations) indicates that the coefficient β_2 appears to be significative at a level of 1%.

[5] The financial literature indicates that the risk premium imposed on a stock is a function of the conditional variance of the return (Abad and Rubia, 1999).

[6] In the Spanish case, there exists contradictory evidence as to the selection of the optimum especification: Alonso (1995) and Abad and Rubia (1999) (this last work, for stocks which trade under the call auction system) found that the symmetric models better represent the returns, whereas León and Mora (1999) claim that the asymmetric ones are superior.

[7] To estimate all of these models the maximum likelihood method has been employed, using, at the same time, the Marquardt optimization algorithm.

[8] Apart from both tests indicated here, three tests were additionally performed to further examined the significance of the results: two of them being parametric, such as the cross-section test with constant variance and the Patell's standardized residuals one, and the nonparametric test of Wilcoxon, arriving at the same conclusions in all cases. For the sake of briefness neither the mathematical expressions nor the results are reported in the text.